

## Department of Information Technology

### Bid – EoI No. 507 dated 15 March 2023

#### Expression of Interest (EoI) for setting up of new Data Center, DR Site and Near DR Site on Colocation model/Dedicated Hosting/Infrastructure as a Service (IaaS) (Private/Sovereign) model- Replies to Pre EoI Queries

S.No	Bid Document	Clause	Details	Queries	Remarks
1	Eligibility Criteria	Point 2 in table under clause 5.1.1, Point 2 in table under Clause 6.3 Annexure- III	The respondent should have minimum three years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022.	Duplication of point 7	Kindly refer to Sr. No. 3 and 4 of the corrigendum
2	Eligibility Criteria	Point 3 in table under clause 5.1.1, Point 3 in table under Clause 6.3 Annexure- III	The respondent should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020- 21 & FY 2021-22.	The respondent (Group Company / Joint Venturer / Subsidiary / Associate Company) should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 & FY 2021-22.	Kindly refer to point no. 3 of the table in Clause 5.1.1 Eligibility Criteria and in the table under Clause 6.3
3	Eligibility Criteria	Point 4 in table under Clause 5.1.1, Point 4 in table under Clause 6.3 Annexure- III	The respondent should have positive net worth and operating profit in atleast two out of three Financial Years i.e., FY 2019-20, FY 2020-21 & FY 2021-22.	The respondent (Group Company / Joint Venturer / Subsidiary / Associate Company ) should have positive net worth and operating profit in atleast two out of three Financial Years i.e., FY 2019-20, FY 2020-21 & FY 2021-22.	Kindly refer to point no. 4 of the table in Clause 5.1.1 Eligibility Criteria and in the table under Clause 6.3
4	Eligibility Criteria	Point 6 in table under Clause 5.1.1, Point 6 in table under 6.3 Annexure- III	ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force.	In process of audit, certification will be awarded before RFP	Kindly refer to Sr. No. 5 and 6 of Corrigendum

5	Eligibility Criteria	Point 7 in table under Clause 5.1.1, Point 7 in table under Clause 6.3 Annexure- III	<p>a) The respondent must be providing DC, DR and NDR co-location/dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date.</p> <p>b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.</p>	<p>a) The respondent ((Group Company / Joint Venture / Subsidiary / Associate Company ) must be providing DC/ DR/ NDR on colocation/dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date.</p> <p>b) Of the above submitted credentials, atleast one (1) credential should be of a BFSI who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site</p>	Kindly refer to Sr. No. 1 and 2 of the corrigendum.
6	Eligibility Criteria	Point 8 in table under Clause 5.1.1, Point 8 in table under Clause 6.3 Annexure- III	The proposed site should be owned or at least should have residual lease for minimum 10 years by the respondent. Respondent may be part of a consortium but the respondent shall ensure that all the related parties are in the same line of activity and the financials of the main/prime respondent shall be considered for evaluation purpose.	Clarity needed: 10 years or 12 years' experience basis EOI document	Kindly refer to point 8 in table under Clause 5.1.1 and 6.3
7	Appendix- I	Page 21, Point 2	Facility should be owned by respondent or on lease with unexpired lease duration of at least 12 years as on date of the EOI. The site should be up and running and existing BFSI clients should be functional at proposed site.	Eligibility clause asks 10 years of experience	Kindly refer to Sr. No. 7 of the corrigendum

8	Appendix- VII	Page 36, Clause 6.7	Respondent shall indicate the approximate cost of the proposed solution for the 5 years. Detailed breakup including year wise, product/component wise consisting of SOC, NOC, backups, storage, firewalls, switches, cost of licenses etc., service wise, maintenance wise etc. shall be provided by the respondent i	Kindly provide existing hosting or colocation footprint of NABARD in detail	Not required as per our understanding. Description, if needed, will be shared with the finalised bidder.
9	Project Scope	Clause 4.2, Point- 5, Page- 17	Entire Infra to be hosted in Tier IV equivalent Data Centre. Scope to remain the same as Co-located model above.	Eligibility clause asks Tier 3/Tier 4 certified premises	Kindly refer to Sr. No. 9 of the corrigendum
10				Is there a preferred OS, Virtualization platform, DB platform?	Bidder may propose the best available solution as per the EoI
11				What is the data bandwidth requirement (MPLS/ILL)? How the end-users are going to access the application on (Internet/VPN/MPLS, etc.)?	Bidder may propose the best available solution as per the EoI
12				What is the estimated workload sizing requirements (CPU, Memory and Disk details)?	Kindly refer to the corrigendum
13				DC/DR connectivity details in terms of bandwidth and connection type?	Bidder may propose the best available solution as per the EoI
14				Will the ERP DC / DR / Near DR connect with the Primary NABARD DC? If yes, what will be the connectivity type and bandwidth?	Bidder may propose the best available solution as per the EoI
15				Define the scope of Managed Services?	As per industry standards
16				What is the scope of Backup Services required? What is the retention period for the backup archival?	Bidder may propose the best available solution as per the EoI

17				Do we need to have a dedicated/isolated infrastructure for the control plane?	Bidder may propose the best available solution as per the EoI
18				Is there a requirement of Central Service Portal for self-service?	Bidder may propose the best available solution as per the EoI
19				Is there any migration efforts in scope?	Facilitation, if needed, needs to be factored.
20	Introduction and Disclaimers	Clause 1.1 Preface, Page No- 7	This Expression of Interest document ('EOI document' or EOI) has been prepared solely for the purpose of enabling NABARD to shortlist prospective respondents for implementing the project for Setting up of new Data Centre, DR site and Near DR Site on Colocation/Dedicated Hosting/Infrastructure as a Service (IaaS) (Private / Sovereign Cloud) model.	NABARD should be open to host workloads to the Meity empanelled Hyperscaler Public Cloud service providers to benefit from IT costs savings. These workloads include applications, websites, databases, storage, physical or virtual servers, or entire data centres.	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				Public cloud allows to provision elastic compute power, storage, and other resources in the cloud on demand. Hosting applications on the Public Cloud can help to reduce upfront expenses by using pay-as-you-use pricing structure. NABARD can also minimize support and administrative costs through shared responsibility model and use of Cloud Support while retaining performance, security, and reliability requirements.	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				Key drivers that compel businesses to migrate to the cloud :-	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Substantial IT costs savings	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Digital transformation	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Improvements in staff productivity and business agility	Kindly refer to Sr. No. 14 and 17 of the corrigendum

				>Improved security and operational resilience	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Data centre consolidation	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Approaching hardware/software end-of-life	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Going global, mergers, and acquisitions	Kindly refer to Sr. No. 14 and 17 of the corrigendum
				>Exploring new technologies (e.g., Artificial intelligence/Machine learning, Blockchain and Internet of Things)	Kindly refer to Sr. No. 14 and 17 of the corrigendum
21	Project Scope	Clause 4.1, Page 16	The data center to conform to all the requirements of a tier IV data center		Kindly refer to Sr. No. 8 of the corrigendum
22	Appendix- I	Page 21	The data center to conform to all the requirements of a tier IV data center	Are you looking for deploying applications in an active-active N+1 configuration, so that in the highly unlikely event of a data center failure, there is sufficient capacity to enable traffic to be load balanced to the remaining “availability zone”.	Yes
			The DC, DR and NDR Environmental Infrastructure and services uptime should be 100% on monthly basis.	Applications can also be architected for near-zero RPO and RTO that can be achieved through synchronous replication of data across the primary and secondary sites. This is possible only when the data centers are close enough to allow high-speed low latency links for synchronous replication but at the same physically distinct and far apart so that even uncommon disasters such as fires, tornados, or flooding do not simultaneously impact both the facilities.	Kindly refer to EoI

23	Eligibility Criteria	Point No. 2 in the table of Clause 5.1.1, Page 18	The Respondent should behaving minimum 3 years of experience of providing DC/ DR and NDR co-location services/ Dedicated hosting services/ Iaas for at least 5 different entities in India as on 31/03/2022	This clause maybe relaxed for any type of services to an entities either DC or DR or NDR for atleast 5 different entities	Kindly refer to Sr. No. 3 and 4 of the corrigendum
		Point No. 4 in the table of Clause 5.1.1, Page 19	The Respondent should have positive network and operating profit in atleast two out of 3 financial years	BSNL being 100%CentralGovernmentorganisation, the clause of positive operating profit may be relaxed, however positive net worth may hold.	Kindly refer to Sr. No. 4 of table in the Clause 5.1.1 and 6.3
24	Critical Information	Point No 4 in table	Last Date and Time for submission of responses	Since it is Financial year closing, it is requested to kindly extend the last date of submission of bid by at least 2weeks time.	Kindly refer to Corrigendum
25				In this EOI, as the PQC mentioned is only for CSP, we request you to please share or confirm is there any eligibility for MSP.	CSP as well as MSP are allowed. Further, kindly refer to EoI and corrigendum
26	Project Scope, Colocation Model	Clause 4.1, Page 16	Under this model it is expected that NABARD will provide all the hardware and networking requirements which are to be hosted on a fully functional Tier IV equivalent data center site for DC, DR and Near DR.	All our data centres are Rated 4 Certified as per TIA 942B standard from EPI.	Kindly refer to corrigendum and EoI

27	Appendix- I	Point 1, Page 21	Facility should have sufficient electrical connections and power per rack, STS power in some rack, Air conditioning, backup power through UPS and Generator in redundant mechanism, network communication facilities, surveillance, access control system, fire suppression system, physical security, soft services and all other services as applicable for DC, DR and NDR and as required for the IT's equipment on 24 x 7 x 365 basis in order to maintain 100% uptime of all such facilities.	NABARD to clarify on the, 1) Number of Racks, Name plate rated power for Rack, 2) BCP seats required if any. 3) Reservation space required. 4) Number of Cross connects required. 5) What is the current location DC,DR and NDR of NABARD, is it a complete new set up? if yes than kindly advice any preferred location of DC,DR & NDR	Kindly refer to corrigendum
28	IT Infrastructure, Proposed Setup	Clause 3.4, Point I, Page- 14	Dedicated SOC and NOC – SOC to be run by different vendors in order to avoid conflict of interest	Can you allow bidder itself to run SOC as well?	No – Applicable in RFP Stage only.
31	Appendix- I	Co-Location Model, Page No 21 and 22		What is the estimated sizing of required hosting infrastructure?	Kindly refer to corrigendum
32	Appendix- II	Iaas Model, Page 23			Kindly refer to corrigendum

33	Eligibility Criteria	Point 5 in the table, Page 19	<p>Criteria: The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant. Documents to be submitted as a proof/declaration :</p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier IV requirements. b) A valid certification copy from the authorized agency to be submitted. c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>	<p>Kindly confirm can we propose NDR at our partner's DC.</p> <p>Documents to be submitted as a proof/declaration :</p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier III / IV requirements. b) A valid certification copy from the authorized agency to be submitted. c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>	Yes, Kindly refer to Sr. No. 11 and 12 of corrigendum
34	Appendix I	Point 2, Page 21	Facility should be owned by respondent or on lease with unexpired lease duration of at least 12 years as on date of the EOI. The site should be up and running and existing BFSI clients should be functional at proposed site.	Kindly amend the clause as: Facility should be owned by respondent or on lease with unexpired lease duration of at least 10 years as on date of the EOI.	Kindly refer to Sr. No. 7 of the Corrigendum
35	Colocation Model	Point 3, Clause 4.1, Page 16	Datacenter will co-ordinate and co-operate for external MPLS/ILL and other links.	1. Kindly confirm bank will bring his own MPLS and ILL network or Service provider will provide the links.	Bidder has to provide everything as part of the solution



36	Dedicated Hosting Model	Point 1, Clause 4.2, Page 16	Respondents under dedicated hosting model shall provide dedicated hardware including servers, backups, backup devices, storages, firewalls, SDWANs, switches, ILL, MPLS, VPN, SOC (may be in shared mode), NOC etc., under managed services (Separate implementation for SOC & NOC to avoid conflict of interest).	1. Kindly confirm bank will bring his own MPLS and ILL network or Service provider will provide the links.	Bidder has to provide everything as part of the solution
37	Infrastructure as a Service (IaaS) model	Point 1, Clause 4.3, Page 17	The model may include both Private Cloud as well as Sovereign cloud as the case may be.	1. Kindly confirm bank need a fully dedicated Private cloud setup or VPC setup or complete hosting on the cloud.	Kindly refer to Sr. No. 14 and 17 of the corrigendum
38	NOC, SOC and their requirements, Appendix- IV	1. Clause 4.4.2, Page 17 2. Page 26	: A Security Operation Center (SOC) is a centralized facility that provides 24/7 monitoring and management of an organization's security posture. The SOC's primary objective is to detect, analyze, and respond to security incidents and events. The typical requirements of a SOC and indicative tools are given in Appendix IV.	Kindly requesting to provide the detailed requirement for Security Information and Event Management (SIEM) Software.	Kindly refer to EoI

39	IT Infrastructure, Current Setup	Clause 3.4, Page 14	NABARD has a Datacentre and DR Site on colocation model. All internal NABARD applications are hosted at Datacentre and DR site and the same are accessed over MPLS and ILL. In the event of failure of Datacentre, DR Site is activated.	<p>1. Colocation Model:- In this regards, to serve your organization in a better way and also to provide the budgetary estimations: please provide the BoQ, Sizing, No. of Racks required, Power details.</p> <p>2. IaaS Model:- Please provide BoQ, VM details, Backup, Storage, Licenses required for OS, Antivirus, Database etc.</p> <p>3. Dedicated Hosting Model- It is understood that all the investment regarding IT infra will be done by NABARD and the same will be colocated to colocation provider. pl clarify.</p>	Kindly refer to Corrigendum
40	Dedicated Hosting Model	Clause 4.2, Page 17	Entire Infra to be hosted in Tier IV equivalent Data Centre. Scope to remain the same as Co-located model above.	<p>Tier-3 standard of Data Center is widely accepted with a SLA of 99.983% uptime. The number of Tier-IV Data Center in India is very Limited which may not give the fair competition to NABARD.</p> <p>We request, NABARD to please modify the clause in compliance with Tier-3 standards only.</p>	Kindly refer to Sr. No. 9 of the corrigendum
41	Network Operation Center (NOC) / Security Operation Center (SOC) and their requirements	Clause 4.4, Page 17	Requirement for NOC/SOC is common for all the models present as part of the EoI. Besides, respondent shall ensure that SOC rests with different vendors in order to avoid conflict of interest.	<p>We understands that NOC &amp; SOC are two different verticals. ITI Limited offers SOC services through ITI SOC to cater this requirement.</p> <p>We don't see any "Conflict of Interest" if ITI provides SOC services. Kindly Explain</p>	Kindly refer to clause 4.4 of the EoI

				It is understood that NABARD will invest for IT infrastructure and colocate to the Colocation DC, OR the same will be provisioned in IaaS cloud. Top of that NOC & SOC will be integrated. pL clarify.	Bidder may propose the best available solution as per the EoI
42	Eligibility Criteria	Point 3 in the table 5.1.1, Page 19	The respondent should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 & FY 2021-22.	We request to modify as such:- The respondent should have a minimum average annual turnover of at least Rs.1500 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 & FY 2021-22.	Not considered
43	Annexure-VII	Page 36, Clause 6.7	Respondent shall indicate the approximate cost of the proposed solution for the 5 years. Detailed breakup including year wise, product/component wise consisting of SOC, NOC, backups, storage, firewalls, switches, cost of licenses etc., service wise, maintenance wise etc. shall be provided by the respondent in the following indicative format:	To submit the required details, we need BoQ Sizing for Colocation, Hardware details, etc.  Also Scope of work to be finalized.	Kindly refer to the corrigendum
44	Appendix IV	Page 26	SOC Requirements- A set of indicative tools to be used in SOC may include, but not limited to:	SOC always deploys to the target end points. Please provide the details of endpoints where SOC services such as IDPS, SIEM etc to be deployed.	Kindly refer to EoI
45	Eligibility Criteria	Point 1 in table under Clause 5.1.1	Should be either a Government Organization/ PSU/ LLP/ PSE/ partnership firm or a limited Company under Indian Laws or /and an autonomous Institution approved by GOI/RBI promoted.	We are System Integrator. So can we jointly contract with other vendor for Data center and colocation services?	Kindly refer to clause 5.5.1 and 6.3 of EoI

46	Introduction about the project	Clause 3.3, Page 14	NABARD is proposing to explore the concept of establishment of new Data Centre, DR Site and near DR Site on Colocation/Dedicated Hosting/Iaas (Private / Sovereign Cloud) model (through private cloud or Sovereign cloud)	Please help define Sovereign Cloud	As per Industry Standards
47	Proposed Setup	Point A, Clause 3.4, Page 14	National Level Software set to be accessed by about 83000 PACs to run from proposed Infra – Software Independently developed and not part of the scope of this EoI	Earlier in the document, Infrastructure was planned for 63000 PACS, now in this point we are referring to 83000 PACS. Is 20000 PACS is already installed in other premise or will be included in this project. Please clarify	Kindly refer to Sr. No. 13 of the corrigendum
48	Proposed Setup	Point D, Clause 3.4, Page 14	Dedicated failover Firewall for DC, DR & Near DR	Can you help understand why NDR site requirement for this project and how relevant it will be? Can NABARD existing Datacenter can be considered for NDR Site to optimize the cost	NDR is required in order to cater to financial transactions. NABARD existing DC cannot be used as NDR Site
49	Project Scope	Clause 4, Point I, Page 16	Respondent should provide technical specifications, expected service levels and any other deliverables which can be used for ensuing RFP for the model which is finalized as part of the EOI to host the ERP solutions for PACS.	To share technical specification, we will require centralized ERP details like is it 3 tier application, what technology stack will it support, what database will be support, what would be sizing, is there any performance benchmark available	Kindly refer to the corrigendum
50	Colocation Model	Clause 4.1, Page 16		In Colocation model, if NABARD existing DC is hosted with some vendor and they offer same DC for hosting for this project. Will it be consider? Do PACS project need to be isolated from existing setup and need to be in separate datacenter?	Separate infrastructure either in same or different DC with all the details as mentioned in the EoI is required
51	Infrastructure as a Service (Iaas) model	Clause 4.3, Point i, Page 17	IAAS - The model may include both Private Cloud as well as Sovereign cloud as the case may be.	In case of Cloud, we will need reference architecture from software vendor to understand the flow of data	Kindly refer to the corrigendum

52	Process of Evaluation	Clause 5, Page 18	NABARD reserves the rights to issue an open RfP for all prospective respondents to participate	Is there a chance that RFP will be closed to qualified vendors only as per EOI	Kindly refer to clause 5 of EOI
53	Eligibility Criteria	Clause 5.1.1		Being CSP, they will participate through business partner whereas eligibility criteria will be applicable to CSP or business partner? Eligibility Criteria is focus on mainly Colocation and hosting service provider and does not cover cloud service provider Request you to please change the eligibility criteria where CSP can be eligible through business partner	Kindly refer to the corrigendum and EOI
54	Eligibility Criteria	Point 5 in the table of Clause 5.1.1, Page 19	The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant.	Please help with more information on DC, NDR and DR. Please share RPO and RTO requirement of software vendor. Do they need any specific replication to be covered like Application or storage based.	RTO and RPO shall be near zero
55	Appendix II	Point 1, Page 23	Compute, storage, networks, backups, security and other fundamental resources to be provided where NABARD and associated vendors are able to deploy and run the ERP software using control panel.	we will need more information on Centralized ERP technology stack like tier 3 application, OS, Version, DB and sizing to estimate compute, storage, network, back and security	Kindly refer to the corrigendum
56	Appendix II	Point 9, Page 23	Perform an Image backup of VM Image information or support the ability to take an existing running instance or a copy of an instance and export the instance into NABARD's required format.	Please provide information what image formats are in consideration ? Are there any hypervisor image that NABARD is planning to re-use and if yes, what target hypervisor we are talking about ?	Bidder may propose the best available solution as per the EOI
57	Appendix II	Point 12, Page 23	Respondent shall ensure that VMs receive OS patching, health checking, Systematic Attack Detection, and backup functions	Please provide details patching standards currently followed by NABARD Ideally the partner will follow the	Bidder may propose the best available solution as per the EOI

				guidelines of the bank's standard as per the applicable standards	
58	Eligibility Criteria	Point 6 in table under Clause 5.1.1, Page 19	ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force.	Request to Modify the clause as below: ISO 27001 (Mandatory) for the respondents <b>DC &amp; DR</b> and <del>NDR</del> offered / <del>proposed to Bank</del> . The certification should be in-force.	Not considered
59	Eligibility Criteria	Point 7 in table under Clause 5.1.1, Page 19	a) The respondent must be providing DC, DR and NDR co-location/dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date. b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.	Request to Modify the clause as below: a) The respondent must be providing DC, DR and NDR co-location/dedicated hosting/IaaS facilities/ <b>Cloud Services</b> to at least 10 customers from its data centers in India as on EoI date. <del>b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.</del>	Not considered
60	Eligibility Criteria	Point 8 in table under Clause 5.1.1, Page 19	The proposed site should be owned or at least should have residual lease for minimum 10 years by the respondent. Respondent may be part of a consortium but the respondent shall ensure that all the related parties are in the same line of activity and the financials of the main/prime respondent shall be considered for evaluation purpose.	Request to Modify the clause as below: The proposed site should be owned or at least should have residual lease for minimum <del>10</del> <b>2</b> years by the respondent. Respondent may be part of a consortium but the respondent shall ensure that all the related parties are in the same line of activity and the financials of the main/prime respondent shall be considered for evaluation purpose.	Not considered

61	Appendix II	IaaS Model, Page 23	In case of suspension / termination of VM, all the data within it shall be immediately deleted / destroyed and certify the VM and data destruction to the Nabard as per stipulations and shall ensure that the data is not forensically recovered.	Need clarification on how we are planning to take backup	Bidder may propose the best available solution as per the EoI
62	Appendix II	IaaS Model, Page 23	24x7 Monitoring of Nabard's infrastructure status and resource utilization such as RAM, CPU, Disk, IOPS and network etc.	please share more details on if any threshold org has decided for which alerts and notification has to be triggered to admin of particular domain	Bidder may propose the best available solution as per the EoI
63	Appendix I	Colocation Model, Page 22	Respondent has to ensure no infiltration in Bank setup including its systems, network etc.	Please elaborate more on the critical components which needs to have security configuration	Kindly refer to EoI
64	Eligibility Criteria	i) Point 2 in table under Clause 5.1.1, Page 18 ii) Point 2 in the table under Clause 6.3, Page 30	The respondent should have minimum three years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022.	We have undergone restructuring of our company business resulting in formation of two subsidiary companies to focus on specific line of business operational from Year 2020 (Feb). Hence the subsidiary bidding company will have to relay on its parent company and its sister company to comply with the Experience & financial Eligibility clauses of the RFP. Request you to modify the clause as: 2. The Bidder or Bidder's Parent company (in case bidder is 100% owned subsidiary of its Parent company) should have minimum three years of experience of providing DC/ DR / NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022.	Kindly refer to Sr. No. 3 and 4 of the corrigendum
65	Eligibility Criteria	i) Point 3 in table under Clause 5.1.1,	The respondent should have a minimum average annual turnover of	We have undergone restructuring of our company business resulting in	Kindly refer to Sr. No. 3 of the clause 5.1.1 and 6.3

		<p>Page 19</p> <p>ii) Point 3 in the table under Clause 6.3, Page 30</p>	<p>at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22.</p>	<p>formation of two subsidiary companies to focus on specific line of business operational from Year 2020 (Feb). Hence the subsidiary bidding company will have to relay on its parent company and its sister company to comply with the Experience &amp; financial Eligibility clauses of the RFP. Request you to modify the clause as: 3.The Bidder or Bidder's Parent company (in case bidder is 100% owned subsidiary of its Parent company) should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22.</p>	
66	Eligibility Criteria	<p>i) Point 4 in table under Clause 5.1.1, Page 19</p> <p>ii) Point 4 in the table under Clause 6.3, Page 30</p>	<p>The respondent should have positive net worth and operating profit in atleast two out of three Financial Years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22.</p>	<p>We have undergone restructuring of our company business resulting in formation of two subsidiary companies to focus on specific line of business operational from Year 2020 (Feb). Hence the subsidiary bidding company will have to relay on its parent company and its sister company to comply with the Experience &amp; financial Eligibility clauses of the RFP. Request you to modify the clause as: 4. The Bidder or Bidder's Parent company (in case bidder is 100% owned subsidiary of its Parent company) should have positive net worth and operating profit in atleast two out of three Financial Years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22.</p>	<p>Kindly refer to Sr. No. 4 of the clause 5.1.1 and 6.3</p>



67	Eligibility Criteria	<p>i) Point 7 in table under Clause 5.1.1, Page 19</p> <p>ii) Point 7 in the table under Clause 6.3, Page 31</p>	<p>7. a) The respondent must be providing DC, DR and NDR colocation/ dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date.</p> <p>b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.</p>	<p>We have undergone restructuring of our company business resulting in formation of two subsidiary companies to focus on specific line of business operational from Year 2020 (Feb). Hence the subsidiary bidding company will have to relay on its parent company and its sister company to comply with the Experience &amp; financial Eligibility clauses of the RFP. Request you to modify the clause as:</p> <p>7. a. <b>The Bidder or Bidder's Parent company (in case bidder is 100% owned subsidiary of its Parent company)</b> must be providing DC/ DR/ NDR colocation/ dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date.</p> <p>b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.</p>	Kindly refer to Sr. No. 1 and 2 of the corrigendum
----	----------------------	--	---	--	--

68	Eligibility Criteria	<p>i) Point 8 in table under Clause 5.1.1, Page 19</p> <p>ii) Point 8 in the table under Clause 6.3, Page 31</p>	<p>The proposed site should be owned or at least should have residual lease for minimum 10 years by the respondent. Respondent may be part of a consortium but the respondent shall ensure that all the related parties are in the same line of activity and the financials of the main/prime respondent shall be considered for evaluation purpose.</p>	<p>We have undergone restructuring of our company business resulting in formation of two subsidiary companies to focus on specific line of business operational from Year 2020 (Feb). Hence the subsidiary bidding company will have to relay on its parent company and its sister company to comply with the Experience &amp; financial Eligibility clauses of the RFP. Request you to modify the clause as:</p> <p>7. a. The proposed site should be owned or at least should have residual lease for minimum 10 years by the Bidder's or Bidder's Parent company's (in case bidder is 100% owned subsidiary of its Parent company) partner for Datacenter . Respondent may be part of a consortium or in partner with Datacenter service provider but the respondent shall ensure that all the related parties are in the same line of activity and the financials of the main/prime respondent shall be considered for evaluation purpose.</p>	<p>Kindly refer to Sr. No. 8 of the clause 5.1.1 and 6.3</p>
----	----------------------	--	--	--	--

69	Eligibility Criteria	i) Point 7 in table under Clause 5.1.1, Page 19 ii) Point 7 in the table under Clause 6.3, Page 31	7. a) The respondent must be providing DC, DR and NDR colocation/ dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date. b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site.	Kindly note that the Datacenter is owned by separate entity providing Datacenter services of pure Colocation/ dedicated Hosting, while Datacenter services i.e IAAS is provided by the Bidder. In such scenario, the Bidder will have to subcontract services for Colocation option while execute the IaaS option by itself. The options can be decided upon receipt of detail RFP document only. Kindly acknowledge the same.	Kindly refer to Sr. No. 1 and 2 of the corrigendum.
70	Annexure VII	Page 36, Clause 6.7	Respondent shall indicate the approximate cost of the proposed solution for the 5 years. Detailed breakup including year wise, product/component wise consisting of SOC, NOC, backups, storage, firewalls, switches, cost of licenses etc., service wise, maintenance wise etc. shall be provided by the respondent in the following indicative format:	This being EOI stage no details of the precise requirement has been provided to conclude the commercials as per the format given in The EOI. Kindly guide.	Kindly refer to the corrigendum
71	Checklist for Respondents	Clause 7	Presentation format should cover standardized solutions, Solution document, overall solution architecture along with diagrams wherever necessary, BoQ as per scope of work.	Kindly share the BOQ of the requirement which is missing in the EOI document.	Bidder shall share the indicative BoQ requirement as per the Scope of Work mentioned in the EoI

72	Dedicated Hosting Model	Clause 4.2 point 2, Page 16	Respondent shall provide control panel for managing NABARD's infrastructure. <b>Managed by NABARD:</b> - Data, Applications, Databases, Operating Systems <b>Managed by CSP:</b> Virtualization, Physical Servers, Storage, Network, Data Centre	As per standard Solution, Tata Communications will manage the Infra till OS level. It includes DC, Physical HW Infra, Virtualization platform, OS Management, Database, Backup, etc..  Please suggest if we can follow the same for here as well Or NABARD would like to allow CSP only the DC and HW part?	Bidder may provide the best available solution as per the EoI
73	Dedicated Hosting Model	Clause 4.2 point 6, Page 17	Virtualization provided by the respondent as part of solution shall be compatible with NABARD's present and future hosting requirements.	Which virtualized platform will be require to host the set-up?	Bidder may provide the best available solution as per the EoI
74	Infrastructure as a Service (IaaS) model	Clause 4.3 point i, Page 17	The model may include both Private Cloud as well as Sovereign cloud as the case may be.	Here, does the bidder has to provide dedicated private cloud? Or bidder can host the infrastructure on their shared cloud platform? Tata Communications does have IZO Private Cloud solution which is MeitY empanelled	Kindly refer to the EoI and corrigendum
75	Appendix II	Point I, Page 23	Compute, storage, networks, backups, security and other fundamental resources to be provided where NABARD and associated vendors are able to deploy and run the ERP software using control panel.	Is it ok for bidder to provide the complete Cloud hosting infra on shared environment (Compute, Storage, Backup)? Tata Communications does have IZO Private Cloud solution which is MeitY empanelled	Bidder may provide the best available solution as per the EoI
76	Appendix II	Point ii, Page 23	Service provider shall be responsible for managing and controlling the underlying virtualized infrastructure including storage, network, security, etc. and the deployed applications shall be managed and controlled by NABARD and its associated vendors.	Does customer have specific virtualization platform requirements? Tata Communications have IZO Private Cloud which built on VMware ESXi platform.	Bidder may provide the best available solution as per the EoI

77	Appendix II	Point vi, Page 23	The Service shall provide auto-scalable, redundant, and dynamic computing capabilities	Please specify which servers will require auto-scaling feature? TCL requests customer to provide required scalable sizing to map the Virtual machine for future readiness.	Kindly refer to the corrigendum
78	Appendix II	Point viii, Page 23	Respondent shall allow users to securely and remotely, load applications over the SSL VPN clients from the public internet.	Please provide details about required Internet BW, Client to Site and Site to Site VPN connection count.	Bidder may provide the best available solution as per the EoI
79	Appendix II	Point ix, Page 23	Perform an Image backup of VM Image information or support the ability to take an existing running instance or a copy of an instance and export the instance into NABARD's required format.	Tata Communications offers periodic backup solution. As per the customer's requirement, our team will configure scheduled backup.	Bidder may provide the best available solution as per the EoI
80	Appendix II	Point xiv, Page 23	NABARD shall retain ownership of all virtual machines, templates, clones, images and scripts/application created for department's applications.	The Virtual Machine will be built on Tata Communications's IZO private cloud platform. The Platform will be owned by TCL. So here, TCL can provide the ownership of complete VM data, Backup data, Template and anything related to scripts/applications.	Bidder may provide the best available solution as per the EoI
81			Technical requirement details about Virtual Machine (VM) Sizing and associated services.	There is no such information provided about VM count, VM sizing, OS requirement, Database license, Backup, Connectivity, etc.. Please provide complete requirement sizing details so it will help CSP to understand for designing right solution.	Kindly refer to the corrigendum

82			Details about migration scope and activity ownership.	Please confirm if this is for new Infra requirement Or the existing Infra will be migrated to proposed environment. In case of migration, who will be the owner to manage the migration? Does CSP has to provide migration tool, connectivity, and own the migration activities?	New. Facilitation for migration, if needed, shall be provided by the bidder.
83			Details about network connectivity for DC, DR, NDR and External links.	Please provide details about network connectivity requirement. - Type of connectivity for DC, DR and NDR - Bandwidth requirements - External link requirement details	Bidder may propose the best available solution as per the EoI
84			Details about RPO and RTO	What is the expected RPO and RTO?	RTO and RPO shall be near zero
85	Proposed Setup	Clause 3.4 Point i, Page 14	Dedicated SOC and NOC – SOC to be run by different vendors in order to avoid conflict of interest	What is the difference between dedicated SOC and NOC-SOC.	Kindly refer to point i of Clause 3.4
86	Proposed Setup	Clause 3.4 Point i, Page 14	Dedicated SOC and NOC – SOC to be run by different vendors in order to avoid conflict of interest	Annexure IV for which SOC? Dedicated SOC or NOC-SOC	Kindly refer to EoI
87	Appendix IV	Page 26	Intrusion Detection and Prevention Systems (IDPS): These tools are used to detect and prevent attacks against the network infrastructure.	IDPS will be part of Firewall. Hence request NABARD to remove it from scope of SOC	Kindly refer to EoI
88	Appendix IV	Page 26	Endpoint Security Tools: These tools are used to protect endpoints, such as laptops, desktops, and mobile devices, from security threats.	Are the endpoint security solutions in place and need to be integrated with the SOC? If yes, please share the list of technologies	Bidder shall provide the best available solution as per the EoI
89	Appendix IV	Page 26	Endpoint Security Tools: These tools are used to protect endpoints, such as laptops, desktops, and mobile devices, from security threats.	If No, Please let us know the count of endpoints (desktops/laptops/Mobile devices) which need to be covered under this scope. Also, please mention the technologies that need to be covered for these endpoints	Bidder shall provide the best available solution as per the EoI

90	Appendix IV			Is NABARD comfortable with a multitenant Cloud SOC or is there a need to deploy a dedicated SIEM solution	Bidder shall provide the best available solution as per the EoI
91	Appendix I	Page 21		For DC, DR and NDR is there any preferred locations for setup? As per notice document did not find any specified locations.	Kindly refer to Sr. No. 11 and 12 of the Corrigendum
92	Appendix I	Page 21		For DC, DR and NDR all infrastructures did not specify the total rack capacity and followed by electrical power, cooling and IBMS part	Kindly refer to the corrigendum
93				For dedicated rack and servers mentioned caging facilities but not specified the divisions	Kindly refer to the corrigendum
94	IT Infrastructure	Clause 3.4, Tentative model, Page 15		As shown in model diagram, is there any specified the Co-location data centres.	No
95	Eligibility Criteria	Clause 5.1.1		Request Clarification if Start-Ups can participate as per "Relaxation of Norms for Start-Up" as per Notification no. DPE/7(4)2017-Fin By Ministry of Heavy Industries & Public Enterprises- Govt Of India, Relaxing the prior experience and prior turnover criteria. After due diligence and should have business engagement (PO/WO) with at least having 2 Hyperscale DC in India.	Kindly refer to Sr. No. 16 of the corrigendum

96	Eligibility Criteria	Clause 5.1.1 point iii Page 19	The respondent should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020- 21 & FY 2021-22	Requesting customer to kindly amend the clause as per below, we are CMMI level V company with 5 Data center in India and very keen to associate with M/s NABARD. The respondent should have a minimum average annual turnover of at least Rs. <b>70 crore</b> during last three (3) financial years i.e., FY 2019-20, FY 2020- 21 & FY 2021-22	Not considered
97				Requesting customer to kindly clarify below : What is the current IT set up location for DC/DR/NDR and Model (Colocation/ Cloud)?	Not required as per our understanding. Description, if needed, will be shared with the finalised bidder.
98				Requesting customer to kindly clarify below : How many applications are hosted public network?	Not required as per our understanding. Description, if needed, will be shared with the finalised bidder.
99				Requesting customer to kindly clarify below : What is the current type of storage are hosted on existing setup?	Not required as per our understanding. Description, if needed, will be shared with the finalised bidder.
100				Requesting customer to kindly clarify below : What is the current version for Database & operating system?	Not required as per our understanding. Description, if needed, will be shared with the finalised bidder.
101				Requesting customer to kindly clarify below : SD WAN is set up for the solution or need to be provided, please specify.	Bidder is supposed to provide all the solutions as per the EoI
102				Requesting customer to kindly clarify below : What is the status of the current hosted hardware? Is there any Tech refreshment required? Please specify.	Not required as per our understanding. Description, if needed, will be shared by the finalised bidder.



103				Requesting customer to kindly clarify below : What will be bandwidth requirement for proposed RFP?	Bidder may propose the best available solution as per the EoI
104				Requesting customer to kindly clarify below : No of users – VPN users to specify	Bidder may propose the best available solution as per the EoI
105	Eligibility Criteria	Clause 5.1.1, Point ii, Page 18	<b>Criteria: Point 2</b>  The respondent should have minimum three years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022	Request to amend this criteria as mentioned below  <b>Criteria: Point 2</b>  The respondent should have minimum <b>two</b> years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on <b>31.03.2023</b>  <b>Supporting Document:</b>  Auditor certificate indicating that respondent is in DC, DR and NDR co-location services/dedicated hosting services/IaaS in India for two years as on <b>31.03.2023</b> .	Kindly refer to Sr. No. 3 and 4 of the corrigendum

106	Eligibility Criteria	Clause 5.1.1, Point iii, Page 19	<p><b>Criteria: Point 3</b></p> <p>The respondent should have a minimum average annual turnover of at least Rs.100 crore during last three (3) financial years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22</p>	<p>Request to amend this criteria as mentioned below</p> <p><b>Criteria: Point 3</b></p> <p>The respondent should have a minimum average annual turnover of at least <b>Rs.50 crore</b> during last three (3) financial years i.e., <b>FY 2020-21, FY 2021-22 &amp; FY 2022-23</b></p> <p><b>Supporting Document:</b></p> <p>a) Audited annual reports for FY2020-21, FY 2021-22 &amp; FY 2022-23 (if available) or Auditor certificate for FY 2022-23.</p> <p>The Auditor certificate should provide the details of net worth, operating profit and turnover for the <b>FY2020-21, FY 2021-22 &amp; FY 2022-23.</b></p>	Kindly refer to Sr. No. 3 of clause 5.1.1 and 6.3
-----	----------------------	----------------------------------	--	--	---

107	Eligibility Criteria	Clause 5.1.1, Point iv, Page 19	<p><b>Criteria: Point 4</b></p> <p>The respondent should have positive net worth and operating profit in atleast two out of three Financial Years i.e., FY 2019-20, FY 2020-21 &amp; FY 2021-22.</p>	<p>Request to amend this criteria as mentioned below</p> <p><b>Criteria: Point 4</b></p> <p>The respondent must <b>currently have positive net worth.</b></p> <p>The respondent must have operating profit in atleast two out of three Financial Years i.e., <b>FY 2020-21, FY 2021-22 &amp; FY 2022-23</b></p> <p><b>Supporting Document:</b></p> <p>a) Audited annual reports for FY2020-21, FY 2021-22 &amp; FY 2022-23 (if available) or Auditor certificate for FY 2022-23.</p> <p>The Auditor certificate should provide the details of net worth, operating profit and turnover for the FY2020-21, FY 2021-22 &amp; FY 2022-23.</p>	Kindly refer to Sr. No. 4 of clause 5.1.1 and 6.3
108	Details to be submitted by the respondent	Clause 2.11	The Respondent may submit multiple responses for different solutions as per the scope of the EoI. In this regard, respondent may have to give presentation on different solutions as proposed by them. However, at the RfP stage, NABARD will have the right to decide the appropriate model to adopt and the respondent will be allowed to respond only for the model selected by NABARD in the ensuing RfP.	Though the scope is explained in brief for multiple options, there is no BoQ or technical architecture shared for the entire solution deployment. Without these, it may be difficult to envisage the overall landscape and propose options.	BoQ to be designed by the bidder on the basis of proposed model

109	Introduction about the project	Clause 3.3, Page 14	NABARD is in the process of computerization of Primary Agriculture Credit Society (PACS) across the country. For this purpose, a separate ERP solution is being developed. The number of PACS to be computerized is in the approximate range of 63000. In order to host the proposed ERP solution and associated components, NABARD is proposing to explore the concept of establishment of new Data Centre, DR Site and near DR Site on Colocation/Dedicated Hosting/IaaS (Private / Sovereign Cloud) model (through private cloud or Sovereign cloud) on OLTP basis. It is envisaged that this infra shall be scalable to accommodate any other major projects in future.	Request to clarify 'OLTP' basis	As per industry standards
110	IT Infrastructure-Proposed Setup	Clause 3.4 point b, Page 14	b) Concurrent users may be anywhere in the range of 50000 – 2 lakh during business hours.	1. Is this the estimate for all 63000 PACS? 2. Please share projection for the entire duration of contract 3. Please share per session bandwidth requirement	Kindly refer to the corrigendum
111	IT Infrastructure-Proposed Setup	Clause 3.4 point f, Page 14	f) Networking for IFTAS cloud integration for RTGS, NEFT etc. for secure transactions at DC, DR & Near DR. (whenever required)	Please share the requirements in DC with respect to the given integrations	Kindly refer to EoI
112	IT Infrastructure-Proposed Setup	Clause 3.4 point g, Page 14	g) Backup Solution (including backup software, storage including D2D appliance, Tape drive, tapes etc. for offline backup) at DC, DR and Near DR.	Tape drives are fast becoming obsolete, request to limit backup solutions to disk based options	Bidder may propose the best solution as per the EoI

113	IT Infrastructure-Proposed Setup	Clause 3.4 point i, Page 14	i) Dedicated SOC and NOC – SOC to be run by different vendors in order to avoid conflict of interest	Please clarify if the scope of this EoI includes: 1. NOC 2. SOC 3. Both	Both
114	Dedicated Hosting Model	Clause 4.2 point ii, Page 16	The data center to conform to all the requirements of a tier IV data center	Respondent shall provide control panel for managing NABARD's infrastructure.	Bidder may propose the best solution as per the EoI
115	Appendix I	Page 21	STS power in some rack	Please share how many STS and of what capacity is expected	Kindly refer to the corrigendum
116	Appendix I	Page 22	Respondent shall provide dedicated caged rack for hosting NABARD's IT equipment including servers, storage, backups etc. The caged rack should be compatible enough to accommodate the future rack requirements as well.	Caging design and commercials can be provided once the dimension and number of racks are finalized. Please share the same as well as projection for future growth till the duration of the contract.	Kindly refer to the corrigendum
117	Appendix II	Page 23	Dedicated VPN setup for PACS connection to be provided.	Most modern firewalls and UTMs come with built-in VPN solutions using add-on licenses. Request to confirm if this would suffice the requirement.  Please let us know the number of site to site VPNs and client to site VPNs and session bandwidth for each of these expected.	Bidder may propose the best solution as per the EoI
118	Appendix II	Page 23	Respondent shall ensure that VMs receive OS patching, health checking, Systematic Attack Detection, and backup functions.	Please share the scope of 'Systematic Attack Detection'	As per industry standards
119	Appendix III	Page 25	performance analysis tools	Please share detailed scope of this requirement since Performance Analysis is a very broad area	Kindly refer to EoI
120	Appendix II	Page 23	Services will be made available online, on-demand and dynamically scalable up or down as per request for service from NABARD with two-	Please clarify if Two Factor Authentication is expected to be deployed by bidder or NABARD would deploy this solution?	For application, Two Factor Authentication will be deployed by NABARD whereas 2FA for cloud

			factor authentication via the SSL through a web browser		related services shall be provided by the bidder
121	Appendix II	Page 23	The Service shall provide auto-scalable, redundant, and dynamic computing capabilities.	Please share the projected growth and for Compute, Storage, Network, etc.	Kindly refer to the corrigendum
122	Appendix II	Page 23	Perform an Image backup of VM Image information or support the ability to take an existing running instance or a copy of an instance and export the instance into NABARD's required format.	Will backup tool be provided by NABARD team to restore backup in their format?	Bidder is supposed to provide all the solutions as per the EoI
123	Appendix II	Page 23	The respondent to give details of the elastic capacity of the cloud during the traffic ups and downs.	Kindly elaborate this requirement. Is the expectation limited to alerts of utilization or NABARD expects bidder to reserve compute capacity.	Monitoring and scaling up the requirements as per the need
124	Appendix III	Page 25	Backup and recovery systems: A NOC should have backup and recovery systems in place to ensure that data can be restored quickly in the event of a disaster.	Our understanding is that the NOC / SOC services should have a BCP in place so that services are not hampered. Please confirm.	Yes
125	Appendix IV	Page 26	Threat Intelligence Tools: These tools are used to collect and analyze threat intelligence data to identify and respond to threats in real-time.	Does NABARD will use own security tool or CSP is expected to propose.	Bidder is supposed to provide all the solutions as per the EoI

126	Appendix I	Page 21	The facility should have centralized Building Management Systems (BMS) with CCTV facility covering all vantage points with regard to infrastructure facilities/equipment such as fire alarm systems, access control, smoke detector, water leakage, precision ACs, UPS, rodent repellers, etc. and any other service stipulated by other customer of the respondent, to the extent they are in the interest of sound management of the DC, DR and NDR. The BMS should be managed by well trained and experienced personnel to ensure high availability of DC, DR and NDR	Please elaborate	Kindly refer to EoI
-----	------------	---------	--	------------------	---------------------

For any further clarifications, bidder may go through the EoI and the corrigendum issued herewith. Further, for any issues related with the submission of documents on the e-tendering portal (<https://nabard.eproc.in>), bidders may send their queries to [ujwala.shimpi@ciindia.com](mailto:ujwala.shimpi@ciindia.com) and [fairlin.jivin@ciindia.com](mailto:fairlin.jivin@ciindia.com) with cc to [dit@nabard.org](mailto:dit@nabard.org), [nikhil.raj@nabard.org](mailto:nikhil.raj@nabard.org) and [utkarsh.deshmukh@nabard.org](mailto:utkarsh.deshmukh@nabard.org).

## Department of Information Technology

### Corrigendum bid – EoI No. 507 dated 15 March 2023

#### Expression of Interest (EoI) for setting up of new Data Center, DR Site and Near DR Site on Colocation model/Dedicated Hosting/Infrastructure as a Service (IaaS) (Private/Sovereign) model- Corrigendum

S.No	Bid Document	Clause	Existing Details	Changes
1	Eligibility Criteria	Point 7 in table under clause 5.1.1, Page 19	a) The respondent must be providing DC, DR and NDR co-location/dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date. b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site	a) The respondent must be providing DC/DR/NDR services on co-location/dedicated hosting/IaaS facilities to at least 5 different customers from its data centers in India as on 31.03.2022 each having work order of worth Rs. 1 crore or above b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site or hosted on Cloud
2	Annexure-III: Response to the Eligibility Criteria	Point 7 in table under Clause 6.3 Annexure- III, Page 31	a) The respondent must be providing DC, DR and NDR co-location/dedicated hosting/IaaS facilities to at least 10 customers from its data centers in India as on EoI date. b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site	a) The respondent must be providing DC/DR/NDR services on co-location/dedicated hosting/IaaS facilities to at least 5 different customers from its data centers in India as on 31.03.2022 each having work order of worth Rs. 1 crore or above b) Of the above submitted credentials, atleast one (1) credential should be of a Bank in India who have co-located / hosted their Data Centre or Near Disaster Recovery (NDR) Site or Disaster Recovery site or hosted on Cloud



3	Eligibility Criteria	Point 2 in table under clause 5.1.1, Page 18	<p>The respondent should have minimum three years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022</p> <p><b>Documents to be submitted as a proof/declaration</b></p> <p>Statutory auditor certificate indicating that respondent is in DC, DR and NDR co-location services/dedicated hosting services/Iaas in India for three years as on 31.03.2022</p>	<p>a) The respondent should have minimum three years of experience of providing DC/DR/NDR services on co-location basis/dedicated hosting basis/IaaS in India for atleast 5 different entities as on 31.03.2022 each having a minimum work order worth of Rs. 1 crore or above</p> <p>b) In case of consortium, all the related parties shall have minimum three years of providing related experience to 5 different entities as on 31.03.2022 as above.</p> <p><b>Documents to be submitted as a proof/declaration</b></p> <p>1. Statutory auditor certificate indicating that respondent is in DC, DR and NDR co-location services/dedicated hosting services/Iaas in India for three years as on 31.03.2022</p> <p>2. In case of consortium, all the related party shall submit experience certificate for three years for 5 different entities as on 31.03.2022</p>
---	----------------------	--	--	--

4	Annexure-III: Response to the Eligibility Criteria	Point 2 in table under Clause 6.3 Annexure- III, Page 30	<p>The respondent should have minimum three years of experience of providing DC/ DR and NDR co-location services/dedicated hosting services/IaaS in India for atleast 5 different entities as on 31.03.2022</p> <p><b>Documents to be submitted as a proof/declaration</b></p> <p>Statutory auditor certificate indicating that respondent is in DC, DR and NDR co-location services/dedicated hosting services/IaaS in India for three years as on 31.03.2022</p>	<p>a) The respondent should have minimum three years of experience of providing DC/DR/NDR services on co-location basis/dedicated hosting basis/IaaS in India for atleast 5 different entities as on 31.03.2022 each having a minimum work order worth of Rs. 1 crore or above</p> <p>b) In case of consortium, all the related parties shall have minimum three years of providing related experience to 5 different entities as on 31.03.2022 as above.</p> <p><b>Documents to be submitted as a proof/declaration</b></p> <p>1. Statutory auditor certificate indicating that respondent is in DC, DR and NDR co-location services/dedicated hosting services/IaaS in India for three years as on 31.03.2022</p> <p>2. In case of consortium, all the related party shall submit experience certificate for three years for 5 different entities as on 31.03.2022</p>
5	Eligibility Criteria	Point 6 in table under clause 5.1.1, Page 19	<p>ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force.</p> <p><b>Documents to be submitted as a proof / declaration</b></p> <p>ISO Certification from Governing Body for the proposed DC, DR and NDR</p>	<p>ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force at the time of bid submission for RFP.</p> <p><b>Documents to be submitted as a proof / declaration</b></p> <p>ISO Certification from Governing Body for the proposed DC, DR and NDR, if available. Further, if not available, then bidder has to ensure that the same is available and in-force at the time of bid submission for RFP.</p>

6	Annexure-III: Response to the Eligibility Criteria	Point 6 in table under Clause 6.3 Annexure- III, Page 31	ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force. <b>Documents to be submitted as a proof / declaration</b> ISO Certification from Governing Body for the proposed DC, DR and NDR	ISO 27001 (Mandatory) for the respondents DC, DR and NDR offered / proposed to Bank. The certification should be in-force at the time of bid submission for RFP. <b>Documents to be submitted as a proof / declaration</b> ISO Certification from Governing Body for the proposed DC, DR and NDR, if available. Further, if not available, then bidder has to ensure that the same is available and in-force at the time of bid submission for RFP.
7	Appendix I	Point 2, Page 21	Facility should be owned by respondent or on lease with unexpired lease duration of at least 12 years as on date of the EOI. The site should be up and running and existing BFSI clients should be functional at proposed site.	Facility should be owned by respondent or on lease with unexpired lease duration of at least 10 years as on date of the EOI. The site should be up and running and existing banking clients should be functional at proposed site.
8	Colocation Model	Point 2, Clause 4.1, Page 16	The data centre to conform to all the requirements of a tier IV data centre	The data centre to conform to all the requirements of a tier III/IV data centre or equivalent
9	Dedicated Hosting Model	Point 5, Clause 4.2, Page 17	Entire Infra to be hosted in Tier IV equivalent Data Centre. Scope to remain the same as Co-located model above.	Entire Infra to be hosted in Tier III/IV or equivalent Data Centre. Scope to remain the same as Co-located model above.
10	Colocation Model	Point 1, Clause 4.1, Page 16	Under this model it is expected that NABARD will provide all the hardware and networking requirements which are to be hosted on a fully functional Tier IV equivalent data centre site for DC, DR and Near DR.	Under this model it is expected that NABARD will provide all the hardware and networking requirements which are to be hosted on a fully functional Tier III/IV or equivalent data centre site for DC, DR and Near DR.

11	Eligibility Criteria	Point 5 in table under clause 5.1.1, Page 19	<p>Criteria:</p> <p>The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant.</p> <p><b>Documents to be submitted as a proof/declaration :</b></p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier III/IV requirements.</p> <p>b) A valid certification copy from the authorized agency to be submitted.</p> <p>c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>	<p>Criteria:</p> <p>The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant or equivalent. DC and DR shall be in different seismic zones preferably in II and III.</p> <p><b>Documents to be submitted as a proof/declaration :</b></p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier III/IV requirements or equivalent.</p> <p>b) A valid certification copy from the authorized agency to be submitted.</p> <p>c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>
----	----------------------	--	--	--

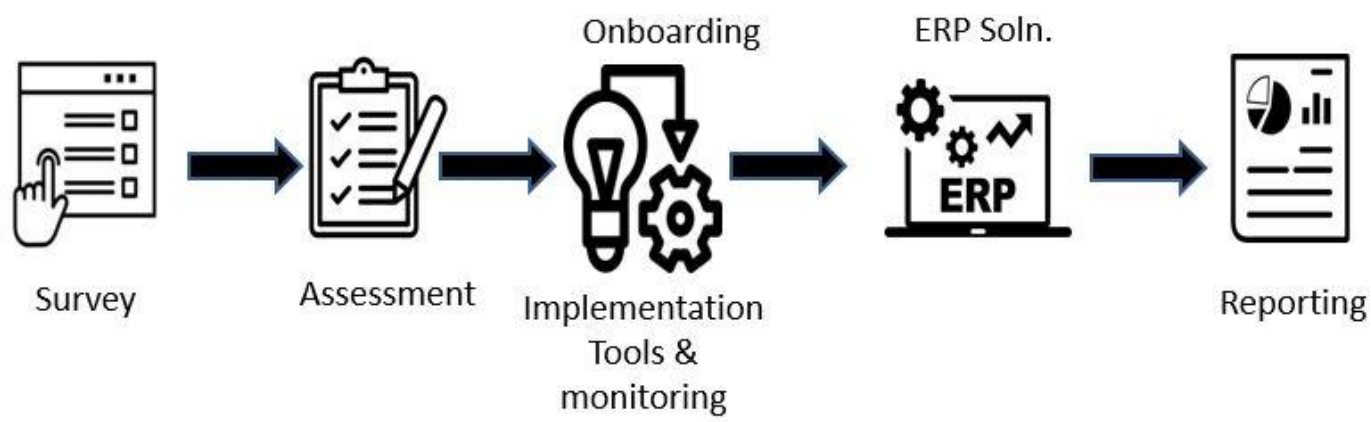
12	Annexure-III: Response to the Eligibility Criteria	Point 5 in table under Clause 6.3 Annexure- III, Page 30	<p>Criteria: The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant.</p> <p><b>Documents to be submitted as a proof/declaration :</b></p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier III/IV requirements.</p> <p>b) A valid certification copy from the authorized agency to be submitted.</p> <p>c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>	<p>Criteria: The proposed Premise for hosting Bank's NDR should be at the same city as DC. DC, DR and NDR should be tier III/ IV compliant or equivalent. DC and DR shall be in different seismic zones preferably in II and III.</p> <p><b>Documents to be submitted as a proof/declaration :</b></p> <p>a) Supporting document - publicly available information of the proposed site along with an undertaking on a vendor letterhead, clearly mentioning that the all the Premises are complying with tier III/IV requirements or equivalent.</p> <p>b) A valid certification copy from the authorized agency to be submitted.</p> <p>c) Undertaking / declaration on respondent letter head with the details of the proposed address duly attested, signed and stamped to be submitted.</p>
----	---	---	---	---

13	Introduction about the project	Clause 3.3, Page 14	NABARD is in the process of computerization of Primary Agriculture Credit Society (PACS) across the country. For this purpose, a separate ERP solution is being developed. The number of PACS to be computerized is in the approximate range of 63000. In order to host the proposed ERP solution and associated components, NABARD is proposing to explore the concept of establishment of new Data Centre, DR Site and near DR Site on Colocation/Dedicated Hosting/Iaas (Private / Sovereign Cloud) model (through private cloud or Sovereign cloud) on OLTP basis. It is envisaged that this infra shall be scalable to accommodate any other major projects in future.	NABARD is in the process of computerization of Primary Agriculture Credit Society (PACS) across the country. For this purpose, a separate ERP solution is being developed. The number of PACS to be computerized is in the approximate range of 83000. In order to host the proposed ERP solution and associated components, NABARD is proposing to explore the concept of establishment of new Data Centre, DR Site and Near DR (NDR) Site on Colocation/Dedicated Hosting/Iaas (Private / Sovereign/Hyperscaler Public Cloud) model on OLTP basis. It is envisaged that this infra shall be scalable to accommodate any other major projects in future.
14	Infrastructure as a Service (IaaS) model	Point I, Clause 4.3, Page 17	The model may include both Private Cloud as well as Sovereign Cloud as the case may be.	The model may include Private Cloud, Sovereign Cloud as well as Meity empanelled Hyperscaler Public Cloud as the case may be. However, the bidder shall ensure that the data along with the associated metadata stays within the country and comply with all the relevant regulations therein.
15	Eligibility Criteria	New clause	New clause	MSE/StartUp Exemption <b>Documents to be submitted as a proof/declaration :</b>  MSE/StartUp Certificate for relevant services to be submitted

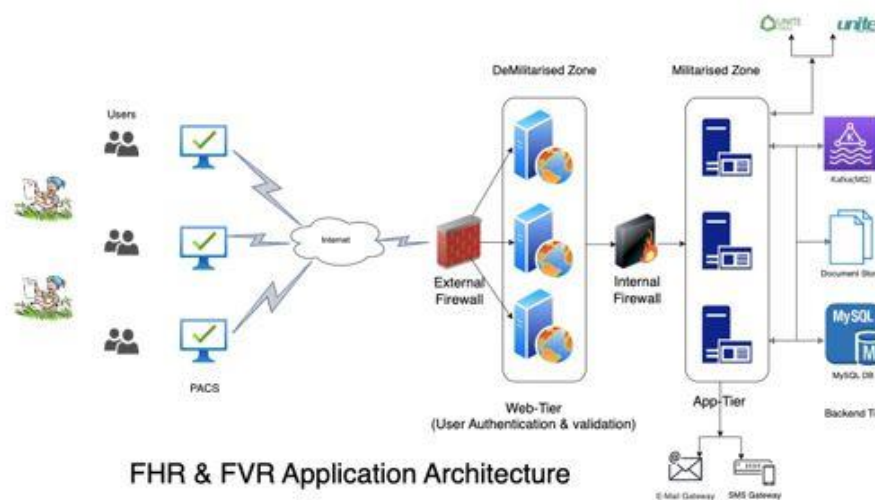
16	Annexure-III: Response to the Eligibility Criteria	New clause	New clause	MSE/StartUp Exemption <b>Documents to be submitted as a proof/declaration :</b>  MSE/StartUp Certificate for relevant services to be submitted
17	Page 1	Page 1	Expression of Interest (EoI) for Setting up of new Data Centre, DR site and Near DR Site on Colocation/Dedicated Hosting/Infrastructure as a Service (IaaS) (Private / Sovereign Cloud) model	Expression of Interest (EoI) for Setting up of new Data Centre, DR site and Near DR Site on Colocation/Dedicated Hosting/Infrastructure as a Service (IaaS) (Private / Sovereign/ Hyperscaler Public Cloud) model
18	Critical Information	Point 4 and 5 of table in Page 6	Last date and time for submission of responses 29 March 2023, 05:00pm  Date and Time for opening of responses 30 March 2023, 03:00pm	Last date and time for submission of responses 10 April 2023, 05:00pm  Date and Time for opening of responses 11 April 2023, 03:00pm

**Technical Details of the Application and associated components**  
**Indicative Reference Architecture for Data Flow and Deployment**

# Co-Ops India – Data Flow



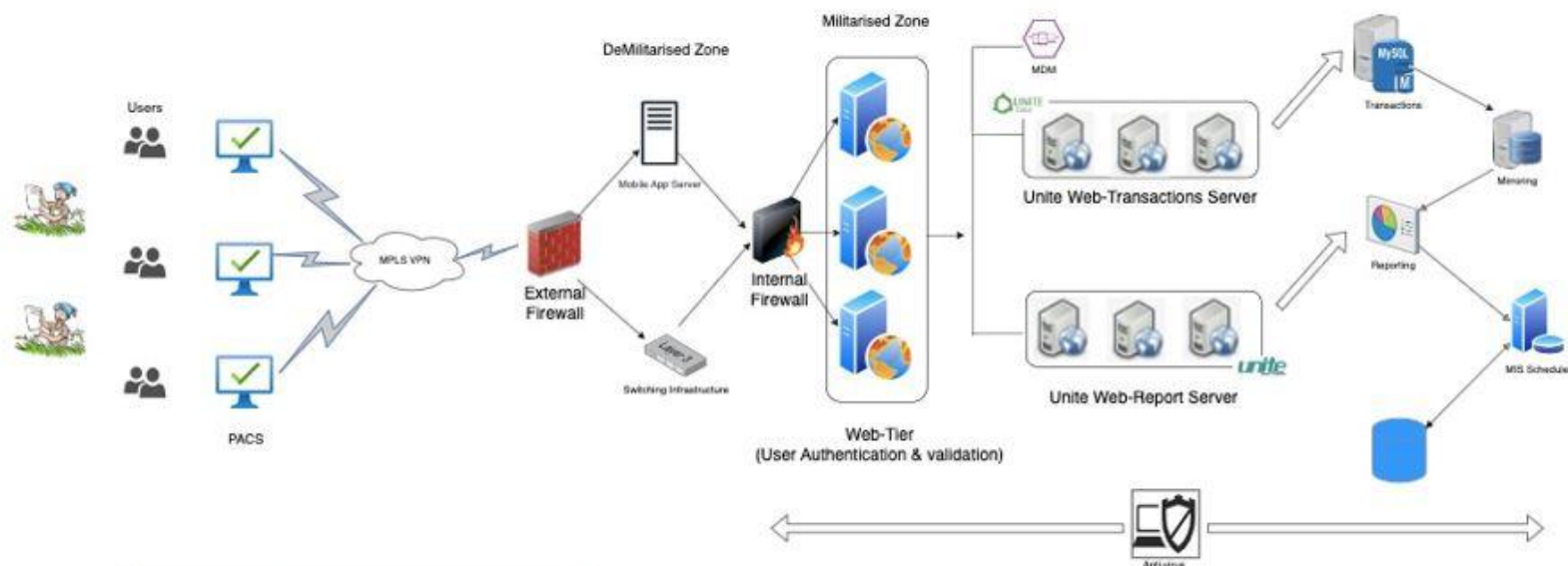




FHR & FVR Application Architecture

Survey and Assessment

## FHR & FVR Application Architecture

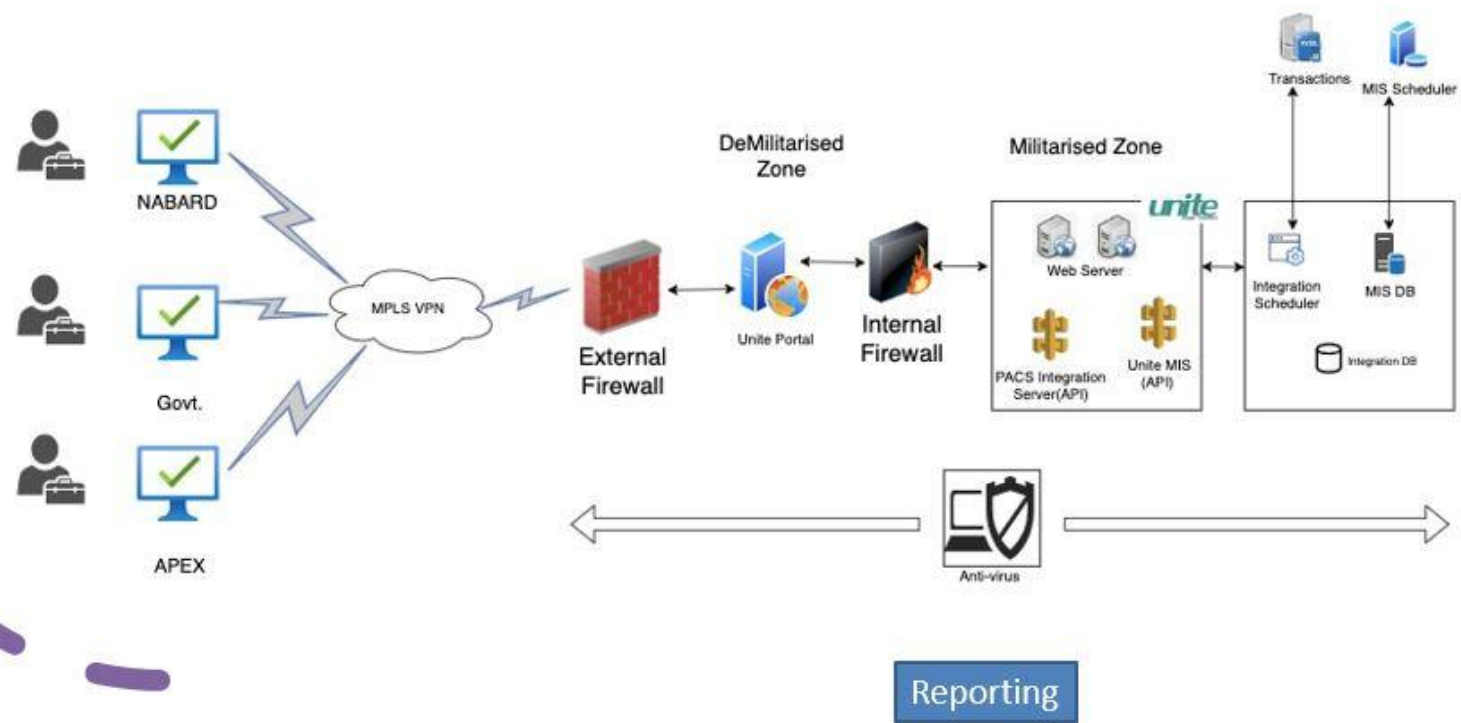


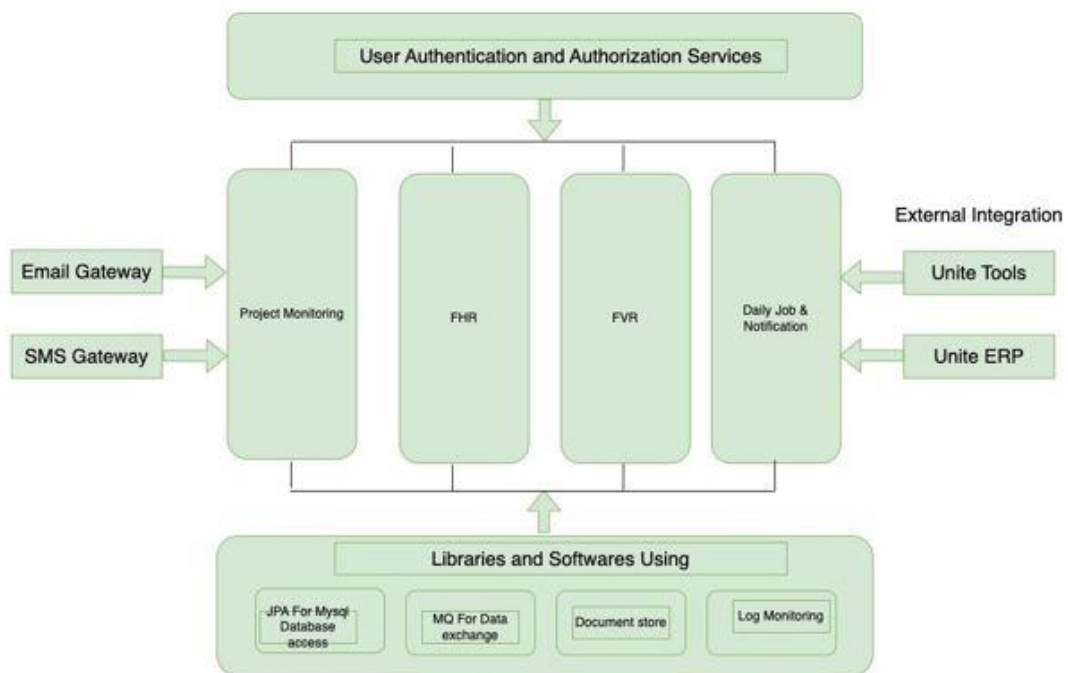
Onboarding and ERP Solution

## Unite ERP-Application Architecture (Access for PACS)



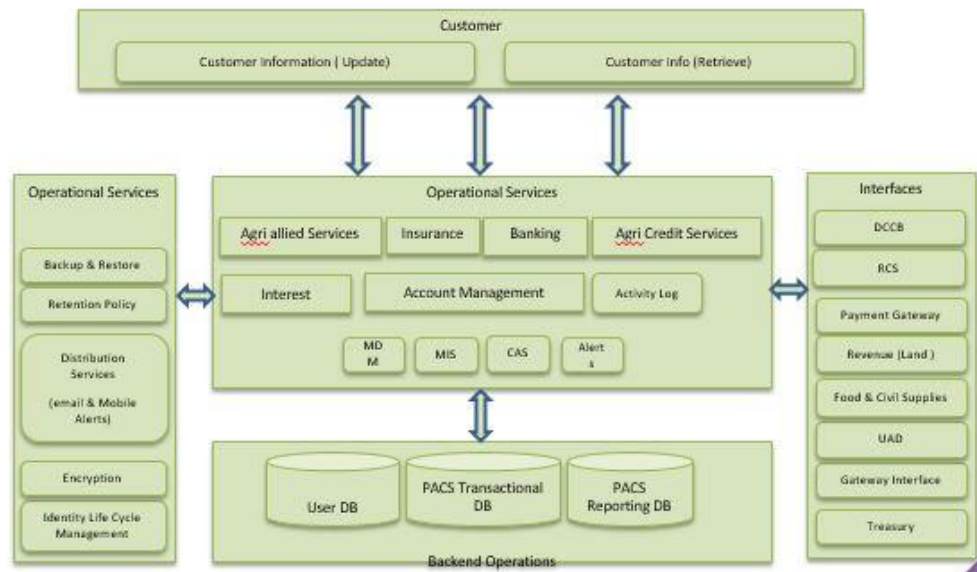
# Unite ERP-Application Architecture (Access for NABARD)





# FHR&FVR Schematic

# ERP Application Schematic



**Indicative Tech Stack of the ERP Application**

**FHR FVR**

S. No.	Name		
1	Middleware Server	FHR/FVR	<i>Additional Software:</i>
2	DB Server - MySQL		Ubuntu - 22.4 (Operating System)
3	OpenkM		Java 1.8
4	Kafka		Tomcat 8.5.31
			MySql Server - 8.0
			Mysql Workbench - 8.0
			Kafka - 2.13.-2.7.0 (Messaging Queue)
			OpenKM - 6.3.0 (Document Storage)

**Unite ERP**

S. No.	Name		
1	App Servever	UNITE ERP	Additional Software:
2	Webserver		Ubuntu - 22.4 (Operating System)
3	DB Server (MySQL)		Apache/2.4.52 (Ubuntu)
4	MIS DB Server		MySQL Server - 8.0
5	Report DB Server		Mysql Workbench - 8.0
			dotnet-runtime 7
			ASP.NET Core Runtime 7+

**Indicative Sizing of 54000 PACS for each individual site**

	vCPU	RAM(GB)	Storage(TB)
FHR/FVR	144	1152	24
Learning Portal	96	288	14
Unite ERP	2280	9752	213
Unite Portal	420	1920	60
Capture Tools	2028	8256	129
	4968	21368	440

\* The above indicated sizing may be taken as reference and further extrapolated by the respective bidders to the tune of 83000 PACS to be computerized and hosted. The above mentioned sizing is indicative in nature for approximate calculation purpose (for rack, power, STS etc.) in order to arrive at the costing and does not indicate the exact sizing.