प्रसार भारती / **Prasar Bharati**
प्रसार भारती सचिवालय / **Prasar Bharati Secretariat**
सूचना एवं प्रौद्योगिकी प्रभाग / IT Division
आकाशवाणी भवन, संसद मार्ग / **Akashvani Bhawan, Parliament Street**
नई दिल्ली-११०००१ / **New Delhi-110001**

No. 7(6)/2019/IT/PBS   **Date: 08.08.2022**

Sub: Industry Feedback and Budgetary quote are invited for Procurement of Cloud Services required by Prasar Bharati.

Sir/Madam,

Kindly find attached herewith the Technical Specification for hiring the various cloud services required by Prasar Bharati. The interested bidders/OEM/integrators empanelled by MEITY, for providing public cloud services, are requested to provide industry feedback and budgetary quote on these specifications through eMail on ddgit@prasarbharati.gov.in, latest by 23.08.2022

This issues with the approval of Competent Authority.

Encl: As Above

(R.P. Joshi)
DDG(IT)

To:

All Concerned

Copy to :-
DDG(Tech) for uploading on Prasar Bharati Website.

BID Document for hiring of public cloud service for Prasar Bharati

Tenders are invited in two bid format (Technical and Financial Bid) from the interested bidders who are MEITY empanelled public cloud service providers or their authorized partners/agencies for the various cloud services required by Prasar Bharati. The required cloud services are given in bill of material (BoM in Annexure-I. The technical specification for these line items are in Annexure-II. Format for submission of financial bid is at Annexure-III.

[I] Eligibility Criteria:

Sl.No.	Requirement	Support document to be submitted by bidder	Compliance Yes/No
1	Bidder must be a Company incorporated in India under the Company Act. And should have registered PAN and GST number.	1. A copy of certificate of incorporation 2. Copy of registration with GST. 3. Income TAX PAN Number.	
2.	The Bidder must be MEITY empanelled public cloud service providers or their authorized partners/agency.	A valid Empanelment certificate issued by MEITY, **OR** Self-certified copy of the CSP empanelment web page of the MEITY website. In addition Authorization from the respective CSP in case the Bidder is not a CSP.	
3	CSP should have at least two data centres in different seismic zones and should support 4 hour RTO (Recovery Time Objective) in case of failure.	A self-declaration from CSP along with location details of Data Centre.	
4.	Bidder should not be blacklisted by any of the Govt. organisation in last 3 years.	A self-declaration from Bidder	
5	The bidder is to comply all the specifications, terms and conditions of the tender document without any deviation, any conditional offer will be rejected without further communication.	A self-declaration letter stating that the bidder comply all the terms and conditions and meets required specifications of tender document**.**	
6	In case the bidder is not a CSP, an authorization certification from the CSP is required to be submitted by the bidder. The specific authorisation letters (Manufacturer Authorization Format((MAF)) from OEM shall	Authorisation certificate from CSP is required to be submitted.	

	clearly indicate that the bidder is competent to sell & provide services for all the items mentioned in the scope of supply given in this tender.		
7	An office of the Service Provider (CSP) must be located in the India.	DOCUMENTARY EVIDENCE TO BE SUBMITTED	
8	Bidder/OEM must provide Escalation Matrix of Telephone Numbers/email for Service Support.	DOCUMENTARY EVIDENCE TO BE SUBMITTED	
9	Malicious Code Certificate: The seller should upload following certificate in the bid:- (a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :- (i) Inhibit the desires and designed function of the equipment. (ii) Cause physical damage to the user or equipment during the exploitation. (iii) Tap information resident or transient in the equipment/network. (b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.	A self-declaration certificate from Bidder and CSP.	
10	The bidder should have at least 2 year's experience in providing cloud services of the total value above 1.5 Crores with one of the project having more than 1 Crore.	Copy of Purchase Order OR Contract OR Certificate from the Client	

[II] Terms and conditions:

1. The generic SLA shall be as per GeM website and MEITY guidelines, a copy of the same can be taken from GEM/MEITY website. Any specific condition or value of any parameter mentioned in this document will supersede those mentioned in the GeM/MEITY document.

2. Payment will be made on monthly basis. No advance payment will be made in any case. Payment will be made as per actual usages i.e. 'pay-per-use' model.

3. Prasar Bharati (PB) provides various services to its customers through various service portals. The requirement of computing resources varies during the working hours of the day which reduces during night. The peak hour of services are from 8 AM to 8 PM. The CSP should have adequate elasticity to provide additional computing and network resources as and when required on auto-scale environment (up and down both). The solution should have necessary provisions to enable and define the various parameters like triggers/events to achieve the said auto-scale environment without any human intervention based on the criteria/rules decided by Prasar Bharati.

4. The offer must have all the services/products as mentioned in the in Part A and Part B of the Bill of Material (BoM) of tender document.

5. The successful bidder is required to submit a Performance Bank Guarantee (PBG) of 3% of the total contract value or as mentioned on the GEM portal, whichever is less.

6. The bidder shall provide complete manageability of hired resources and services to Prasar Bharati in order to allocate, deploy, monitor, reporting, billing and ticketing etc.

7. The contract will be for three years with the provision to extend further for two years with one year at a time based on the performance. All terms and conditions of the contract shall remain same during the entire period of contract. There will be no upward revision in the rates during the contract period. In case of any downward market trends the benefit is to be passed on to Prasar Bharati.

8. Access to management portal is to be provided to Prasar Bharati for the complete management of the hired services.

9. In addition to the mandatory services mentioned in BoM (Part A and Part B of Annexure-I), Prasar Bharati may take optional services from the published services along with price on the portal of CSP based on discount percentage quoted by the bidder. CSP having no published prices on the date of submission of bid, the discount percentage is to be treated Zero for calculation of L-1.

[II] Technical Evaluation:

Technical Evaluation will be conducted as per below procedure:-

1. The eligibility criteria as mentioned in the tender will be evaluated. The bidder must ensure that it meets all the eligibility criteria and all the relevant documents are submitted.

2. The Bidder must comply with all the terms and conditions mentioned in the Bid document. Non-complied bids are liable to be rejected.

3. Bidder must fill the Native Name of the CSP services corresponding to each of the line item in Part A and Part B of BoM. For Part C the URL of the published price may be given in the BoM. Bidder is to sign a copy of this filled BoM (unpriced) and certify that all the line items have been offered and price has been quoted in Financial Bid failing which bid is liable to be rejected.

4. During technical evaluation, the bidder is required to demonstrate following features, failing which the bid is liable to be rejected:-

   1. Prasar Bharati intends to hire the consolidated amount of cores and RAM for VMs. Any number of VMs should be able to create as per Operating System (OS) license availability. There should not be any restriction on creation of number of VMs, if pool of resources is available. The same is to be demonstrated.

   2. Demonstration of complete Portal manageability.
      a. Display of the hired assets/resources and their management.
      b. Scalability of cloud infra resources as per the demand/trigger.
      c. Billing information Portal and supported features like bill alerts etc.
      d. Demonstration of firewall and its security features.
      e. All logs including access logs, utilization logs of hired assets/resources.
      f. Ticketing system for cloud Support Management.

   3. Demonstration of all the features of the assets/resources as per Bill of Material mentioned in the tender document.

[III] Financial Evaluation:

Bidder is to quote price for all the line items of Part A & Part B of BoM in the financial bid, in case of free service it should be clearly mentioned as zero. These rate will be applicable through out of contract period. The format for Financial Bid is given in Annexure-III.

In addition bidder is to provide percentage of discount that will be applicable for optional services which are published on the website of the CSP but not part of Part A & Part B of BoM, If required these optional services may be hired by PB in future. The estimated amount for hiring of these additional services is 10% of the amount of total estimated price for all the line items as per Part A of Bill of Material (BoM).

L1 will be decided based on total price calculated for all the line items in Part A of Bill of Material (BOM) and scaled cost of the Cloud Migration Service cost in Part B as per rates quoted by the bidder as well as the discount offered by the bidder for the optional services published on CSP portal.

L1 will be Total Monthly Price of all the line items as per Part A of BoM **plus** scaled (1/36) cost of cloud migration service (Part B) **plus** discounted price for the optional services equivalent to the 10% of monthly amount of Part A of BoM.

   A) Total Price for all Line Items of Part A of BOM = ∑estimated quantity * price quoted by bidder. (say **A**)

B) Let the discount offered by the bidder for published items but not part of Part A or Part B of BOM be **discount (say Discount in %)**.

C) Scaled cost i.e 1/36 of Cloud Migration service (say **M**).

Lowest bidder will be decided based on following formula:

L1 = A + M + {10 % of A} * { (100 – Discount in %) / 100}

[IV] Other Criteria and Terms and Conditions:

Any issue that has not been specifically mentioned such as SLA, Penalty etc. in this tender document will be as per GeM / MEITY Cloud Procurement guidelines and instruction applicable to MEITY empanelled Cloud CSPs.

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Bill of Material (BoM)

PART - A (Mandatory)

Sr No.	Sr No. of Technical specs	Item	Respective Native Line Item name of CSP (to be filled by bidder)	Estimated Quantity per month	Price Unit
		a	b	c	d
1	1	vCPU-Virtual Machine		388800 vCPU hour	1 vCPU per hour
2	2	RAM - Virtual Machine		1555200 GB hour	1 GB per Hour
3	3	Windows Server Licenses		100 vCPU License	1 vCPU per hour
4	4	Block Storage (3 IOPS)		30000 GB	1GB per Month
5	5	Block Storage (5 IOPS)		10000 GB	1GB per Month
6	6	File storage		15000 GB	1GB per Month
7	7	Object storage		50000 GB	1GB per Month
8	8	Object storage : access requests		10 sets	1 set of 1 million requests (GET/PUT etc.)
9	9	Archival storage		20000 GB	1GB per Month
10	10	Archival storage as service(access requests)		5 sets	1 set of million requests (GET/PUT etc.)
11	11	Bandwidth		20000 GB	1 GB data transfer for outgoing
12	12	Firewall(Physical)		1 number	per instance
13	13	Firewall(Virtual)		1 number	per instance
14	14	Network Load Balancer- instances		1 Instance	per instance
15	15	Network Load Balancer: Bandwidth capacity		2190 sets	1 set of 100 Mbps Per Hour
16	16	Application Load Balancer- Instance		1 Instances	per instance
17	17	Application Load Balancer- Bandwidth Capacity		2190 sets	1 set of 100 Mbps Per Hour

Bill of Material (BoM)

PART - A (Mandatory)

Sr No.	Sr No. of Technical specs	Item	Respective Native Line Item name of CSP (to be filled by bidder)	Estimated Quantity per month	Price Unit
18	18	Backup as service(Full)		40000 GB	1 GB
19	19	Backup as service(Increamental)		5000 GB	1 GB
20	20	Managed Database as service (Microsoft SQL)		17280 core hours	1 vCPU per hour
21	21	Web application firewall instance		2 Instance	per instance
22	22	Web application firewall -Access Capacity		10 sets	1 set of 1 Millions requests
23	23	VPN gateway(Site to Site)		2 number	per gateway
24	24	VPN gateway(Site to Client)		20 number	per number
25	25	Identity and access Management service Single sign on subscription		20 sets	per 100 users
26	26	Identity and access Management service Dual / Multifactor Authentication		2 sets	per 100 users
27	27	SMS Notification service		1 set	Per 1000 Notifications
28	28	Email Notification service		200 sets	Per 1000 Notifications
29	29	Alarm service		1 set	Per 1000 Notifications
30	30	Container Computer service - Instance		87600 Sec	1 Instance per second

Bill of Material (BoM)

PART - A (Mandatory)

Sr No.	Sr No. of Technical specs	Item	Respective Native Line Item name of CSP (to be filled by bidder)	Estimated Quantity per month	Price Unit
31	31	Container Computer service - Registry		100 GB	per GB
32	32	Log Analytics		10GB	1 GB per Hour
33	33	Virtual Network		5 subnet	Per subnet
34	34	Public IP		5 sets	Per 8 public IP
35	35	Content Delivery Network - Storage		100 GB	Per GB
36	36	Content Delivery Network -Data Transfer		10000 GB	per GB
37	37	API Gateway		50 sets	per million requests
38	38	DNS		100 sets	Per Millions queries

PART - B (Mandatory)

Sr No.	Sr No. of Technical specs	Item		Estimated Quantity per month	Price Unit
39	39	Cloud Migration service		15000 GB (Required one time only for entire contract period)	Per GB

PART -C (Optional)

Optional Items
(For Discounted Price)

Prasar Bharati may hire optional services i.e other than mentioned in PART-A & PART B above if required in future during the contract period. These optional services should be available on the CSP public website. These services will be taken on the discount offered by the bidder on the published rates (on the date of hiring of services) on the website of the CSP.

URL of published price of CSP :

Technical specification for each line Item of Bill of Material:

1. vCPU-Virtual Machine

Specification	Values
Price Metric	1 vCPU per hour
CPU	Beyond Year 2019 with 2.0 GHz and above
Chipset	Intel/AMD
Physical Core to vCPU Ratio	1:2
Features	1. Shall support automatic scaling of resources as per the demand and support for adequate elasticity and sufficient auto scale feature without human intervention.

2. RAM-Virtual Machine

Specification	Values
Price Metric	1 GB per hour
Features	Shall support automatic scaling of resources as per the demand and support for adequate elasticity and sufficient scalability without human intervention.

3. Windows Server License

Specification	Values
Price Metric	1 vCPU per hour
Operating System	Windows Server 2022 Operating System

4. Block Storage (3 IOPS)

Specification	Values
Storage Category	Block Storage
Price Metric	1 GB per Month
Storage Type	SSD
IOPS per GB	Above 3 IOPS
Features	1. Shall support encryption and decryption of data 2. Shall support increase of resources as per the policy defined by Prasar Bharati based on time, volume etc. of existing storage.

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5. Block Storage (5 IOPS)

Specification	Values
Storage Category	Block Storage
Price Metric	1 GB per Month
Storage Type	SSD
IOPS per GB	Above 5 IOPS
Features	3. Shall support encryption and decryption of data 4. Shall support increase of resources as per the policy defined by Prasar Bharati based on time, volume etc. of existing storage.

6. File Storage

Specification	Values
Storage Category	File Storage
Price Metric	1 GB per Month
Storage type	SSD
Features	1. Shall support encryption and decryption of data. 2. Shall support increase of resources as per the policy defined by Prasar Bharati based on time, volume etc. of existing storage.

7. Object storage:

Specification	Values
Storage Category	Object Storage
Price Metric	1 GB Per Month
Basic Features	PUT, HEAD,POST,COPY,LIST,DELETE and GET
Features	1.Creating as many as bucket with full user access control 2.GUI portal for management 3. safely and securely store or retrieve data directly from the internet 4. Object Storage shall supports private access from Cloud Infrastructure through *service gateway* so Object Storage may be access from private IP addresses in private subnets. 5. Shall support version management. 6. Shall support encryption and decryption of data.

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	7. Shall be capable to use frequent update.
	9. Shall support object life cycle management and should be visible to user GUI.
	10. Shall support increase of resources as per the policy defined by Prasar Bharati based on time, volume etc. of existing storage.

8. Object storage: Access Requests

Specification	Values
Storage Category	Object Storage
Price Metric	1 set of million requests (GET/PUT) for the object storage at sr. no -7

9. Archival storage :

Specification	Values
Storage Category	Archival Storage as a Service
Price Metric	1 GB Per Month
Features	1. Archival storage shall have data retention capability and built-in data protection capabilities for long term data persistence.
	2. Archival storage shall be compatible with third party APIs.
	3. Shall support encryption and decryption of data
	4. Shall support life cycle management
	5. . Shall support increase of resources as per the policy defined by Prasar Bharati based on time, volume etc. of existing storage..

10. Archival storage : Access Requests

Specification	Values
Storage Category	Archival Storage as a Service
Price Metric	1 set of million requests (GET/PUT) for item at sr.no.9.

11. Bandwidth

Specification	Values
Category	Internet Bandwidth

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Incoming Traffic (Ingress)	Unlimited without any charges
Price Metric(Outgoing traffic)	1 GB data transfer for outgoing
Features	1. Shall support automatic scaling of resources as per the demand and support for adequate elasticity and sufficient scalability without human intervention.

12. Firewall (Physical)

Specification	Values
Price metric	Number of unit
Features	1. Firewall service shall allow user to centrally configure and manage firewall rules using the console across the hired cloud infrastructure. 2. This service shall allow user to monitor the network usage, audit logs details (host wise). 3. Shall control the layer-3/layer-4. 4. Shall support scalable throughput as per demand. 5. Throughput of at least 1Gbps shall be supported.

13. Firewall (Virtual)

Specification	Values
Price metric	Number of unit
Features	1. Firewall service shall allow user to centrally configure and manage firewall rules using the console across the hired cloud infrastructure. 2. This service shall allow user to monitor the network usage, audit logs details (host wise). 3. Shall control the layer-3/layer-4. 4. Shall support scalable throughput as per demand. 5. Throughput of at least 1Gbps shall be supported.

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14. Network Load Balancer : Instance

Specification	Values
Price matric: Instances	1 Number
Features	1. Support for routing/serving of incoming requests to various resources based on network attributes. 2. Support for monitoring the health of service 3. Shall be able to handle the volatile traffic and support of containerized application. 4. Shall support on-demand scaling of load balancer based on demand. 5. Shall support automatic scaling of resources as per the demand and support for elasticity and sufficient scalability without human intervention.

15. Network Load Balancer : Capacity

Specification	Values
Price matric: Bandwidth	1 set of 100 Mbps Per Hour
Features	1. Support for routing/serving of incoming requests to various resources based on network attributes. 2. Support for monitoring the health of service 3. Shall be able to handle the volatile traffic and support of containerized application. 4. Shall support on-demand scaling of load balancer based on demand. 5. Shall support automatic scaling of resources as per the demand and support for elasticity and sufficient scalability without human intervention.

16. Application Load Balancer :Instance

Specification	Values
Price matric	Per instance
Features	1. Support for redirecting URL, custom HTTP response, containerized

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<table>
<tr><td></td><td>applications, monitoring the health of service.

2. Shall be able to provide access logs with advance features.

3. Shall support automatic increase of resources as per the demand and support for elasticity and sufficient scalability without human intervention.</td></tr>
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17. Application Load Balancer :Bandwidth capacity

Specification		Values
Price matric:	Bandwidth	1 set of 100 Mbps Per Hour
Features		Applicable to load balancer instance at sr.no.16

18. Backup as Service : Full Back up

Specification	Values
Price Metric	1 GB
Frequency of Backup	Weekly, Monthly
Features	1. Backup process shall be automatic and centrally manageable. 2. Successful/failure alerts 3. Backup Polices should be configurable 4. Backup restore time should be better than 500 GB within one hour. 5. Shall support automatic increase of resources as per the demand and support for elasticity and sufficient scalability without human intervention. 6. Rate quoted shall be exclusively for the management and licensing cost of backup. Charges for storage will be as per pricing of object storage.

19. Back up as Service : Incremental Back up:

Specification	Values
Price Metric	1 GB

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Frequency of Backup	Daily, weekly
Features	Same as Backup as Service – Full Back up.

20. Managed Database as a Service (Microsoft SQL)

Specification	Values
Database Service Name	Microsoft SQL 2019 or latest
Edition	Standard Edition
License Subscription	1 vCPU per hour
Features	1. Rate shall include Licensing cost and the Database management part only. 2. Rate shall be exclusive of windows operating system, vCpu, RAM and storage. The central pool of resources will be used for creating VM as per Managed service SQL license. 3. Shall support all basic Managed DB including performance tuning, patching/minor upgrades without downtime, automated backups, restore and failover, high availability and durability and quick support. 4. Shall support both scaling vertical and Horizontal on demand without any data loss.

21. Web Application Firewall - Instance

Specification	Values
Price Metric	1 instance
Features	1. Shall have provision for centrally define and manage rules, DNS configuration, SSL/TSL certificate management (SSL certificate will be provided by Prasar Bharati), Reverse proxy setting etc. 2. Shall support application specific rule based on Open Web Application Security Project (OWASP). 3. WAF shall have comprehensive logging by capturing each inspected web request's geo-location data, HTTP URL, and HTTP header data for use in security automation, analytics, or auditing purposes. 4. WAF shall protects web applications from attacks by filtering traffic based

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| | on created rules |
| | 5. Shall provide protection against DDOS attack. |

22. Web Application Firewall – Access Capacity

Specification	Values
Price Metric	1 Million Requests
Features	Same as Web application firewall – instance.

23. VPN Gateway : Site to site

Specification	Values
Price Metric	Per gateway
Features	Shall provide BGP dynamic routing, static routing, Policy-based routing, site to site IPsec connection

24. VPN Gateway :Client to site

Specification	Values
Price Metric	Per client license
Features	Shall provide BGP dynamic routing, static routing, Policy-based routing, site to site IPsec connection, SSL.

25. Identity and Access Management : Single sign-on subscription

Specification	Values
Type of Services	Single Sign-on
Price Metric	Per 100 user

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26. Identity and Access Management Dual / Multifactor Authentication

Specification	Values
Price Metric	Per 100 user
Features	Multifactor/Dual authentication shall have provision for authentication app, registered device, Time based Onetime password, OTP etc. **Remark: Dual factor authentication should available to access cloud based services.**

27. SMS Notification service

Specification	Values
Type of Service	SMS Notifications Service
Price Metric	Per 1000 notifications
Features	1. Automatic SMS notification in case of critical fault to be handled by CSP.

28. Email Notification Service:

Specification	Values
Type of Service	Email Notifications Service
Price Metric	Per 1000 notifications

29. Alarm Service

Specification	Values
Type of Service	Alarm Service
Price Metric	Per 1000 Alerts

30. Container Compute Service - Instance:

Specification	Values
Price Metric	per instances per sec
vCPU	1
Chipset	Intel/AMD
RAM(in GB)	4

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Features	Container as a service shall include Orchestration to handle the container's lifecycle, including provisioning, deployment, scaling (up and down), networking, load balancing etc.

31. Container Compute Service - Registry:

Specification	Values
Price Metric	1 GB
Features	1. Shall support automatic build, push and Vulnerability scanning of container image. 2. Shall facilitate access privilege for users. 3. To be taken along with container Compute service - Instance

32. Log Analytics

Specification	Values
Price Metric (Storage Unit per Hour)	1 GB Per Hour
Features	1. Log analytics shall have provision for UI dashboard, API support.

33. Virtual Network

Specification	Values
Network Type	Public/Private
Price Metric	Per Subnet
Subnet	Yes
Features	Shall have provision to screen traffic, creating subnet, configure route table

34. Public IP

Specification	Values
Price Metric	Per 8 public IPs

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35. Content Delivery Network – Storage

Specification	Values
Price Metric :	Per GB
Features	The CDN facility shall have provision for custom caching, HTTP/3 and QUIC protocol support, Optimize cache TTLs, API support.

36. Content Delivery Network – Data Transfer

Specification	Values
Price Metric : Outbound Data Transfer	Per GB
Features	Same as CDN storage.

37. API Gateway

Specification	Values
Price Metric	Per million requests
Features	1. Shall support complete set of services to manage the lifecycle of APIs with customizable developer portal 2. Shall support Open API support, Server less APIs Rate, Limiting policy, API Access Control, API Protection, scalable in real-time

38. DNS service

Specification	Values
Price Metric	Per Million queries
Features	1. Shall comply with both IPV4 and IPV6 with low latency with scalable capability to tackle high load. 2. Shall support various routing policies like Latency Based Routing, Geo DNS, Geo-proximity and Weighted Round Robin etc.

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<u>ANNEXURE-II</u>

39. Cloud Migration service:

Specification	Values
Price Metric	Per GB
Features	Shall carryout data transfer from existing CSP in NCR to cloud service provider using data transfer appliance which shall be provided by the bidder.

Financial BID

PART - A (Mandatory)

Sr No.	Sr No. of Technical specs	Item	Respective Native Line Item name of CSP (to be filled by bidder)	Estimated Quantity per month	Price Unit	Rate/unit in INR	Tax in INR	Price with tax in INR	Amount per month in INR
		a	b	c	d	e	f	g	h = c x g
1	1	vCPU-Virtual Machine		388800 vCPU hour	1 vCPU per hour				
2	2	RAM - Virtual Machine		1555200 GB hour	1 GB per Hour				
3	3	Windows Server Licenses		100 vCPU License	1 vCPU per hour				
4	4	Block Storage (3 IOPS)		30000 GB	1GB per Month				
5	5	Block Storage (5 IOPS)		10000 GB	1GB per Month				
6	6	File storage		15000 GB	1GB per Month				
7	7	Object storage		50000 GB	1GB per Month				
8	8	Object storage : access requests		10 sets	1 set of 1 million requests (GET/PUT etc.)				
9	9	Archival storage		20000 GB	1GB per Month				
10	10	Archival storage as service(access requests)		5 sets	1 set of million requests (GET/PUT etc.)				
11	11	Bandwidth		20000 GB	1 GB data transfer for outgoing				
12	12	Firewall(Physical)		1 number	per instance				
13	13	Firewall(Virtual)		1 number	per instance				
14	14	Network Load Balancer- instances		1 Instance	per instance				
15	15	Network Load Balancer: Bandwidth capacity		2190 sets	1 set of 100 Mbps Per Hour				
16	16	Application Load Balancer- Instance		1 Instances	per instance				
17	17	Application Load Balancer- Bandwidth Capacity		2190 sets	1 set of 100 Mbps Per Hour				
18	18	Backup as service(Full)		40000 GB	1 GB				
19	19	Backup as service(Increamental)		5000 GB	1 GB				

			Financial BID						
PART - A (Mandatory)									
Sr No.	**Sr No. of Technical specs**	**Item**	**Respective Native Line Item name of CSP (to be filled by bidder)**	**Estimated Quantity per month**	**Price Unit**	**Rate/unit in INR**	**Tax in INR**	**Price with tax in INR**	**Amount per month in INR**
		a	b	c	d	e	f	g	h = c x g
20	20	Managed Database as service (Microsoft SQL)		17280 core hours	1 vCPU per hour				
21	21	Web application firewall instance		2 Instance	per instance				
22	22	Web application firewall -Access Capacity		10 sets	1 set of 1 Millions requests				
23	23	VPN gateway(Site to Site)		2 number	per gateway				
24	24	VPN gateway(Site to Client)		20 number	per number				
25	25	Identity and access Management service - Single sign on subscription		20 sets	per 100 users				
26	26	Identity and access Management service Dual / Multifactor Authentication		2 sets	per 100 users				
27	27	SMS Notification service		1 set	Per 1000 Notifications				
28	28	Email Notification service		200 sets	Per 1000 Notifications				
29	29	Alarm service		1 set	Per 1000 Notifications				
30	30	Container Computer service - Instance		87600 Sec	1 Instance per second				
31	31	Container Computer service - Registry		100 GB	per GB				
32	32	Log Analytics		10GB	1 GB per Hour				
33	33	Virtual Network		5 subnet	Per subnet				
34	34	Public IP		5 sets	Per 8 public IP				
35	35	Content Delivery Network - Storage		100 GB	Per GB				

Financial BID									
PART - A (Mandatory)									
Sr No.	Sr No. of Technical specs	Item	Respective Native Line Item name of CSP (to be filled by bidder)	Estimated Quantity per month	Price Unit	Rate/unit in INR	Tax in INR	Price with tax in INR	Amount per month in INR
		a	b	c	d	e	f	g	h = c x g
36	36	Content Delivery Network -Data Transfer		10000 GB	per GB				
37	37	API Gateway		50 sets	per million requests				
38	38	DNS		100 sets	Per Millions queries				
						Total Amount per Month (PART-A) (in INR)	=		
PART - B (Mandatory)									
39	39	Cloud Migration service		15000 GB (Required one time only for entire contract period)	Per GB				
						Total Amount (PART-B) (in INR)	=		

PART - C(Optional)

**Optional Items
(For Discounted Price)**

Prasar Bharati may hire optional services i.e other than mentioned in PART-A & PART-B above if required in future during the contract period. These optional services along with price should be available on the CSP's public website. These services will be hired based on the discount offered by the bidder on the published rates (on the date of hiring of services) on the website of the CSP.

Discount Offered	=	in % on the published rate at CSP website

This discount will be fixed throughout the contract period and will be applicable for all the services including the future services made available by the CSP.

Lowest bidder (L1) will be based on the following formula:

L1 = PART-A + { 0.1 * PART A * (100 - Discount) / 100) } + { 1 /36 of Cloud Migration Service cost i.e Item 39 }