Request for Proposal
for
Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara.
Government of Gujarat

Volume-I
(Commercial Terms and Bid Process)

Gujarat Informatics Ltd

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Sector - 10 A, Gandhinagar – 382010 Gujarat.

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Abbreviations

- **GoG**: Government of Gujarat

- **DST**: Department of Science & Technology

- **GIL**: Gujarat Informatics Limited

- **GSWAN**: Gujarat State Wide Area Network

- **GSDC:** Gujarat State Data Centre

- **GSCAN**: Gujarat Sachivalaya Campus Area Network

- **OEM:** Original Equipment Manufacturer

- **O&M:** Operations & Maintenance

- **EMS:** Enterprise Management Suite

- **NMS:** Network Monitoring System

- **EMD:** Earnest Money Deposit

- **PBG:** Performance Bank Guarantee

- **SLA:** Service Level Agreement

- **FAT:** Final Acceptance Test

- **TPA:** Third Party Agency

- **SoW:** Scope of Work

- **IPS:** Intrusion Prevention System

- **IMS:** Integrated Infrastructure Management System

- **CCTV:** Closed Circuit Tele Vision

- **QP:** Quarterly Payment

- **TENDERER**: DST/GIL/ Government of Gujarat

Section I – Invitation for Bids

The invitation to bid is for "Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara". The bidders are advised to study the bid document carefully. Submission of bids shall be deemed to have been done after careful study and examination of the bid document with full understanding of its implications. This section provides general information about the Issuer (i.e. Gujarat Informatics Limited), important dates and addresses and the overall eligibility criteria for the bidders.

1.1 Issuer

Gujarat Informatics Limited (herein after referred to as "GIL") a company owned by Department of Science & Technology, Govt. of Gujarat (herein after referred to as "GIL") invites proposals for Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara. The scope of work and other requirement of this project are specified in this RFP document.

1.2 About The RFP Document

The Request for Proposal (RFP) document consists of two volumes viz.

1.2.1. RFP Volume I – Commercial Terms & Bid Process

(a)   Section I – Invitation for Bids
(b)   Section II – Eligibility Criteria
(c)   Section III – Instructions to Bidders
(d)   Section IV – Terms & Conditions of the Contract
(e)   Section V – Payment Terms
(f)   Section VI – Format for Response to Tender – Pre Qualification Bid
(g)   Section VII – Format for Response to Tender – Technical Bid
(h)   Section VIII - Format for Response to Tender – Financial Bid
(i)   Annexure 1 – RFP document acknowledgement form
(j)   Annexure 2- Performa of Bank Guarantee towards Performance Security
(k)   Annexure 3: Format of Earnest Money Deposit in the form of Bank Guarantee
(l)   Annexure 4: Undertaking On letterhead of Bidder
(m)   Annexure 5: Undertaking On letterhead of OEM

1.2.2. RFP Volume II – Scope of work and SLAs

(n)   Section I – Introduction
(o)   Section II – Scope of Work
(p)   Section III – Technical Specification
(q)   Section IV – Service Level Agreement (SLAs), Penalties & Payment Terms

1.3 Instruction to the bidders for online bid submission

1.4.1. Tender documents are available only in electronic format which Bidders can download free of cost from the website www.gil.gujarat.gov.in and https://gem.gov.in/.

1.4.2. The bids have been invited through e-tendering route i.e. the Pre-qualification, **technical and financial bids shall be submitted online on the website https://gem.gov.in/.**

1.4.3. **Bi**dders who wish to participate in this bid will have to register on https://gem.gov.in/.

1.4 **Amendment in RFP Document**

At any time before the deadline for submission of bids, GIL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by amendment. All the amendments made in the document would be published in the website **www.gil.gujarat.gov.in**. All such amendments shall be binding to all the bidders. **The bidders are also advised to visit the aforementioned website on regular basis for checking necessary updates.**

1.5 **Address for submission of Bid Security and Correspondence**

All queries and/or correspondence regarding clarification in the bid should be addressed to:

DGM (Tech.), Gujarat Informatics Limited, Block No. 2, 2**nd** Floor, C & D Wing, Karmayogi Bhavan, Sector - 10 A, Gandhinagar 382010, Phone: (079)-23258161

E-mail: ddict-gil@gujarat.gov.in; mgrhninfra-gil@gujarat.gov.in

Section II – Eligibility Criteria

The bidder must possess the requisite experience, strength and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view the complexity and volume of the work involved, following criteria are prescribed as the eligibility criteria for the bidder interested in undertaking the project. The bidder must also possess technical know-how and financial wherewithal that would be required to successfully provide required services sought by the State for the entire period of the contract. The Bids must be complete in all respect and should cover entire scope of work as stipulated in the bid document. This invitation to bid is open to all bidders who qualify the eligibility criteria as given below:

S/N	Eligibility Criteria	Attachments
1	Bidder should be a company registered under Indian Companies Act, 1956 and should have been operating for the last five years as on bid submission date.	Certificates of incorporation AND Self-Declaration Certificates
2	Bidder should be an established IT System Integrator and should have been engaged in setting-up of Datacenter/ on premises DR site IT Infrastructure, Server, Storage, Network and Security Solutions for Data Center/ on premises DR site of State/Central Government/PSU/BFSI clients in India in last 5 years as on bid submission date.	Work Orders / Client Certificates confirming year and area of activity should be enclosed.
3	Bidder must have average annual turnover of at least **Rs. 500 crores** for any three of last **four** audited financial years as on bid submission date. AND Average Annual Turnover of at least **Rs. 100 Crore** solely generated from SITC of IT Component for Datacentre/ on premises DR or on premises Cloud system implementation during each of the above three financial years as on bid submission date.	CA certified and audited Balance Sheet and Profit & Loss statement for any three of last **four** audited financial years (2018-19, 2019- 20, 2020-21, 2021-22). CA certificate mentioning turnover from the said business.
4	The bidder should have experience in Supply, Installation, Testing and Commissioning (SITC) of Data Centre/ on premises Disaster Recovery IT Infrastructure i.e. Server, Storage, Virtualization, Data Centre Network and Security. Bidder Should have executed on premises Data Center/ on premises Disaster Recovery related work order of minimum one work order value of 30 Cr or two order of value 15 Cr in the last three financial years as on bid submission. All work orders / contracts should be in the name of the bidder	Relevant Work order copy / client satisfactory letter regarding successful implementation Data Center/Disaster Recovery IT infrastructure in the name of the bidder is to be submitted. The PO/Workorder/contracts / letter should be in the name of the bidder and clearly mention the scope of work.
5	The bidder/OEM should have experience in implementing at least two (2) Disaster Recovery Data Centres with Active-Active or Active-Passive DR Site of similar size mentioned in this RFP for all IT components of the data centre during the last Five (5) years in India • Bidder's in house data centres shall not be considered. • Bidders who have built their own Internet Data Centre (IDC) for commercial use will be considered.	Relevant Work order copy / client satisfactory letter regarding successful implementation Disaster Recovery IT infrastructure in the name of the bidder is to be submitted. The PO/Workorder/contracts / letter

S/N	Eligibility Criteria	Attachments
		should be in the name of the bidder and clearly mention the scope of work.
6	OEM of Proposed solution (Hardware & Virtualization stack) should have existence in India for the last Five years as on bid submission date.	OEM Undertaking confirming the existence along with copies of work completion certificate or work order/purchase order.
7	On premise Cloud solution must have been implemented at Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the last five years as on Bid submission date.	Relevant Work order copy / client satisfactory letter regarding successful implementation on-premise cloud solution in the name of the bidder is to be submitted. The PO/Workorder/contracts / letter should be in the name of the bidder and clearly mention the scope of work.
8	The bidder must possess following certification 1) ISO 9001:2015 or Latest 2) ISO 27001:2013 / ISO 20000:2018 valid at the time of bidding	Provide valid certificate copies
9	Bidder and OEM should not be blacklisted by any Ministry of Government of India or by Government of any State in India or any of the Government PSUs at the time of bidding.	Self-Declaration/ Certificate / affidavit mentioning that the Bidder is not blacklisted as per the clause.
10	The bidder must have positive net worth and should be Profit making in any three of last **four** audited financial years as on 31st March, 2022	Audited and Certified Balance Sheet and Profit/Loss Account of last 4 Financial Years should be enclosed. CA certificate mentioning net profit of the bidder should be enclosed.
11	The bidder should be authorized by the OEMs of the proposed equipment/devices to bid for this tender	MAF as per annexure XX for Authorized partner. Self-declaration if the bidder is an OEM.

1. All details and the supportive documents for the above should be uploaded in the GeM bid.
2. Bidder's experience, bidder's turn over criteria, EMD and PBG will not be considered of GeM bid. However bidder must match eligibility criteria, experience, bidder's turn over criteria, EMD and PBG as mentioned above (in this document) and will be considered for evaluation.
3. All bidders who wish to participate in this bid must submit EMD as per bid requirement.

Technical Evaluation Matrix (Max Marks -100)

Sr. No.	Criteria	Documents Required	Maximum Points

1	Average annual turnover of Bidder for three of last **four** audited financial years (2018-19, 2019- 20, 2020-21, 2021-22). as on submission date. >500 to <=800 Crores = 5 Marks >800 and <=1000Crores = 10 Marks Above 1000 Crores = 15 Marks	CA certified and audited Balance Sheet and Profit & Loss statement for any three of last **four** audited financial years (2018-19, 2019- 20, 2020-21, 2021-22).	15
2	The bidder has commissioned and installed IT Infrastructure of On Premises Datacenter/ on premises Disaster Recovery IT Infrastructure, On Premises Cloud Solution Up to 2 Projects = 5 Marks 3 to 5 Projects = 10 Marks above 5 Projects = 15 Marks	Relevant Work order copy / client satisfactory letter regarding successful implementation Data Center/Disaster Recovery IT infrastructure in the name of the bidder is to be submitted. The PO/Workorder/contracts / letter should be in the name of the bidder and clearly mention the scope of work.	15
3	On premise Cloud solution must have been implemented at Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the last five years as on Bid submission date. 2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks	Relevant Work order copy / client satisfactory letter regarding successful implementation on-premise cloud solution in the name of the bidder is to be submitted. The PO/Workorder/contracts / letter should be in the name of the bidder and clearly mention the scope of work.	15
4	The bidder having valid Certifications at the time of bidding • ISO 9001:2015 or Latest = 5 Marks • ISO 27001:2013 = 5 Marks • ISO 20000:2018 = 5 Marks Each Certificate carries 5 marks	Copies of Certificate	15
5	Bidders presentation Understanding of scope Solution Architecture Implementation Methodology		40

Passing mark should be 70%

Section III - Instruction to Bidders

3.1   Bidding Documents

3.1.1   Bidder can download the bid document and further amendment if any freely available on https://gil.gujarat.gov.in and https://gem.gov.in/ and upload their response/proposal on https://gem.gov.in/ on or before due date of the tender.

3.1.2   Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents thoroughly. Failure to furnish all information required as per RFP or submission of a Bid not substantially responsive to the RFP in every respect may result in the rejection of the Bid.

3.1.3   Under no circumstances physical bid will be accepted.

3.2   Clarification on Bidding Documents

3.2.1   A prospective Bidder requiring any clarification of the bidding documents may seek clarifications by submitting queries on email Id: ddict-gil@gujarat.gov.in; mgrhninfra-gil@gujarat.gov.in prior to the date of Pre Bid Meeting.

3.2.2   Tenderer will discuss the queries received from the interested bidders in the Pre Bid Meeting and respond the clarifications by uploading on the website https://gil.gujarat.gov.in.

3.2.3   No further or new clarification what so ever shall be entertained after the Pre Bid Meeting.

3.2.4   The interested bidder should send the queries as per the following format:

Bidder's Request For Clarification		
Name of Organization submitting Request	Name & position of person submitting request:	Address of organization including phone, fax, email points of contact
S.No.	Bidding Document Reference (Clause /page)	Content of RFP requiring clarification	Points of Clarification required
1			
2			
3			
4			

3.3   Amendments to RFP

3.3.1   At any time prior to the deadline for submission of bids, TENDERER, for any reason, whether on its own initiative or in response to the clarifications requested by prospective bidders, may modify the bidding documents by amendment and publish corrigendum on the websites https://gil.gujarat.gov.in and https://gem.gov.in/.

3.3.2   All prospective bidders are requested to check above mentioned websites, any amendments/corrigendum/modification will be notified on these websites and such modification will be binding on them.

3.3.3   In order to allow prospective bidders a reasonable time to take the amendment into Account in preparing their bids, TENDERER, at its discretion, may extend the deadline for the submission of bids.

3.4   Language of Bid

3.4.1   The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and TENDERER shall be in English.

3.4.2   In case, supporting documents and printed literature furnished by the bidder is in some other language, accurate translation of the relevant pages in English would be required. For the purpose of interpretation of the bid, the translation in English shall govern.

3.5   Documents Comprising the Bid

3.5.1   The Bid prepared by the Bidder shall comprise of the following documents:

   (a)   **Bid Security/EMD and Bid Processing Fee:** The Bidder shall furnish, as part of the Bid, a Bid security for the amount of **Rs. 2,20,00,000/- (Rs. Two crore Twenty lac) EMD** in the form of Demand Draft OR in the form of an unconditional Bank Guarantee (which should be valid for **9 months from the last date of bid submission**) of any Nationalized Bank including the public sector bank or Private Sector Banks or Commercial Banks or Co-Operative Banks and Rural Banks (operating in India having branch at Ahmedabad/ Gandhinagar) as per the **G.R. no. EMD/10/2021/7729/DMO dated 12.04.2021** issued by Finance Department or further instruction issued by Finance department time to time; in the name of "Gujarat Informatics Ltd." payable at Gandhinagar (as per prescribed format and must be submitted along with the covering letter.

   (b)   **Technical Bid**: The Technical Bid besides the other requirements of the RFP, shall comprise:

   (i)   Volume I, Section VII– Format 1: Pre-Qualification Bid Letter
   (ii)   Volume I, Section VII – Format 2: General Information about the Bidder
   (iii)   Volume I, Section VII – Format 3: Format for MAF / OEM Authorization
   (iv)   Volume I, Section VII – Format 4: Declaration Regarding Blacklisting
   (v)   Volume I, Section VII – Format 5: Annual Sales Turnover Statement
   (vi)   Volume I, Section VII – Format 6: Completion of Projects of Prescribed Nature and Size
   (vii)   Volume I, Section VII – Format 7: Compliance Statement

(c) **Financial Bid:** The Financial Bid, besides the other requirements of the RFP, shall comprise of the following:

(i) Volume I, Section VIII – Format 1: Financial Bid Letter

(ii) Volume I, Section VIII –Format-2: Price Bid

3.5.2 The Pre-qualification Bid, Technical Bid and Financial Bid must be submitted online through the e-tendering website of https://gem.gov.in/ online portal.

3.6 Bid Forms

3.6.1 Wherever a specific form is prescribed in the Bid document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information. Failing to upload the information in the prescribed format, the bid is liable for rejection.

3.6.2 For all other cases, the Bidder shall design a form to hold the required information.

3.6.3 TENDERER shall not be bound by any printed conditions or provisions in the Bidder's Bid Forms.

3.7 Fraudulent and Corrupt Practice

3.7.1 Fraudulent practice means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the TENDERER of the benefits of free and open competition.

3.7.2   "Corrupt Practice" means the offering, giving, receiving or soliciting of anything of value, pressurizing to influence the action of a public official in the process of Contract execution.

3.7.3   TENDERER will reject a proposal for award and may forfeit the EMD and/or Performance Bank Guarantee if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for, or in executing, contract(s).

3.8   Local / Site Conditions

3.8.1   It will be incumbent upon each Bidder to fully acquaint itself with the local conditions and other relevant factors of GSDC Gandhinagar, NIC Bhuvneshwar, Orissa & Near DR Vadodara which would have any effect on the performance of the contract and / or the cost. The Bidders are advised to visit the GSDC Gandhinagar, NIC Bhuvneshwar, Orissa & Near DR Vadodara locations (at their own cost) and due-diligence should be conducted before the pre-bid meeting/ bid-submission.

3.8.2   The Bidder is expected to make a site visit to obtain for itself all information that may be necessary for preparing the bid and entering into contract.

3.8.3   Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for providing the services before entering into contract will in no way relieve the Successful Bidder from performing any work in accordance with the RFP documents.

3.8.4   It will be imperative for each Bidder to fully inform themselves of all legal conditions and factors which may have any effect on the execution of the contract as described in the RFP Documents. TENDERER shall not entertain any request for clarification from the Bidder regarding such conditions.

3.8.5   It is the responsibility of the Bidder that such factors have properly been investigated and considered while submitting the bid proposals and that no claim whatsoever including those for financial adjustment to the contract awarded under the RFP Documents will be entertained by TENDERER and that neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by TENDERER on account of failure of the Bidder to appraise themselves of local laws and site conditions.

3.9   Lack of Information to Bidder

The Bidder shall be deemed to have carefully examined all RFP documents to its entire satisfaction. Any lack of information shall not in any way relieve the Bidder of its responsibility to fulfil its obligation under the Contract.

3.10   Contract Obligations

If after the award of the contract the Bidder does not sign the contract or fails to furnish the

Performance Bank Guarantee (PBG) within fifteen working days from the date of award and if the operations are not started within 60 working days after submission of Kickoff date, TENDERER reserves the right to cancel the contract and apply all remedies available under the terms and conditions of this contract.

3.11 Bid Price

3.11.1 The Price/Financial bid should indicate the prices in the format/price schedule only.

3.11.2 Offered prices should be exclusive of GST inclusive of levies such as Excise, Insurance, FOR destination (anywhere in the Gujarat state).

3.11.3 Discount if offered, should not be mentioned separately. It should be included in offered price.

3.11.4 Prices shall be written in both words and figures. In the event of difference, the price in words shall be valid and binding.

3.11.5 For Warranty and AMC support, unit rate should be quoted against each line item listed in the respective Annexures attached in this bid. Quantities can be increased or decreased by TENDERER and bidder has to supply deviated quantities at the rates prescribed and approved by TENDERER in the tender document.

3.11.6 If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its bid will be rejected.

3.11.7 Any discrepancy relating to prices quoted in the offer across different sections of the bid, only prices given in the prescribed format given at Price Schedule of this RFP shall prevail.

3.11.8 The quoted prices shall be valid for 365 days from the date of opening of financial bid.

3.11.9 RA has been enabled in the GEM Bid.

3.11.10   The Bidder has to submit detailed breakup of financial price bid of Schedule 1 as per the attached Schedule 2 in the Price bid section in separate physical sealed cover and should be submitted at the time of bid submission. As GEM is not allowing breakup of so many items, detailed breakup is to be submitted in physical sealed cover. Physical sealed cover would be opened in front of eligible participants at the time of financial bid opening. Rates submitted on GEM portal of all the aggregated cost under the Schedule 1 of the price schedule will only be considered for L1 Evaluation. The physical price bid submitted to GIL for price breakup will be used during contract period for any addition / deletion of the item under the scope. The same will be required to be submitted after RA. The price breakup should not be uploaded on GeM

3.12 Bid Currency

Prices shall be quoted in Indian rupees only.

3.13   Period of Validity of Bids

3.13.1 Bids shall remain valid for 180 days from the date of Financial Bid opening. A Bid valid for a shorter period shall be rejected as non-responsive.

3.13.2 In exceptional circumstances, TENDERER may solicit Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid security shall also be suitably extended. A Bidder's request to modify the Bid will not be permitted.

3.14   Bid Due Date

3.14.1 Bid must be submitted on the e-tendering website https://gem.gov.in/ not later than the date/time specified in the RFP.

3.14.2 The TENDERER may, at its discretion, extend the bid due date, in which case all rights and obligations of the TENDERER and the bidders, previously subject to the bid due date, shall thereafter be subject to the new bid due date as extended.

3.15   Late Bid

Bidders would not be able to upload or submit the bid after the bid due date/time.

3.16   Modification and Withdrawal of Bid

3.16.1 The Bidder may modify or withdraw its Bid before the due date of bid submission on e-tendering website https://gem.gov.in/.

3.16.2 No Bid may be modified subsequent to the deadline for submission of bids.

3.16.3 No Bid may be withdrawn after due date for submission of bids. Withdrawal of a Bid after Bid submission due date may result in the forfeiture of bidder's Bid security.

3.17   Opening of Bids by TENDERER

3.17.1 Bids will be opened in the presence of Bidder's representatives, who choose to attend. The Bidder's representatives who are present shall sign a register evidencing their attendance.

3.17.2 The Bidder's names, Bid modifications or withdrawals, discounts and the presence or absence of relevant Bid security and such other details as the TENDERER at its discretion, may consider appropriate, will be announced at the opening.

3.17.3 Immediately after the closing time, the TENDERER shall open the Pre-qualification Bids and list them for further evaluation.

3.18   Contacting TENDERER

3.18.1 Bidder shall not approach TENDERER officers outside of office hours and/ or outside TENDERER office premises, from the time of the Bid opening to the time the Contract is awarded.

3.18.2 Any effort by a bidder to influence TENDERER officers in the decisions on Bid evaluation, bid comparison or contract award may result in rejection of the Bidder's offer. If the Bidder wishes to bring additional information to the notice of the TENDERER, it should do so in writing.

3.19   Rejection Criteria

3.19.1 Besides other conditions and terms highlighted in the RFP document, bids may be rejected under the following circumstances:

a) **Pre-qualification Rejection Criteria**

   (i)   Bids submitted without or with improper Bid Security (EMD) and Bid Processing fee.

   (ii)   Bids which do not conform to unconditional validity of the bid as prescribed in the bid.

   (iii)   If the information provided by the Bidder is found to be incorrect / misleading at any stage / time during the Tendering Process.

   (iv)   Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions.

   (v)   Bids without proper documents/evidences as asked for in the pre-qualification bid as mentioned in the RFP Document.

b) **Technical Rejection Criteria**

   (i)   Technical Bid containing financial details.

   (ii)   Revelation of Prices in any form or by any reason before opening the Financial Bid.

   (iii)   Failure to furnish all information required by the RFP Document or submission of a bid not substantially responsive to the Bid Document in every respect.

   (iv)   Bidders not quoting for the complete scope of Work as indicated in the Bid documents, addendum (if any) and any subsequent information given to the Bidder.

   (v)   Bidders not complying with the Technical and General Terms and conditions as stated in the RFP Documents.

   (vi)   Bidders not conforming to unconditional acceptance of full responsibility of providing services in accordance with the Scope of work and Service Level Agreements of this RFP.

   (vii)   If the bid does not confirm to the timelines indicated in the RFP Document.

c) **Financial Rejection Criteria**

   (i)   Incomplete Price Bid

   (ii)   Price Bids that do not conform to the Bid's price bid format.

3.2   Rejection of Bids

TENDERER reserves the right to reject any Bid, and to annul the bidding process and reject all

bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders or any obligation to inform the affected Bidders of the grounds for such decision.

3.3   Evaluation Methodology

3.3.1   TENDERER will form a Committee which will evaluate the proposals submitted by the bidders for a detailed scrutiny. During evaluation of proposals, TENDERER, may, at its discretion, ask the bidders for clarification of their Proposals.

3.3.2   The Pre-qualification Bids will be evaluated first to ascertain the eligibility of the Bidders.

3.3.3   The technical bids of the bidders who comply with the eligibility criteria in the Pre-qualification Bids will be opened. The technical evaluation would be based on the technical presentation and proposal of Bidder meeting the Specifications mentioned in the RFP document and other compliance to the terms and conditions. In case of conditional bid or major deviations from the RFP requirements, TENDERER may seek the clarification in writing from the bidder, if required. If bidder fails to submit the required clarifications in due time, the technical evaluation will be done based on the information submitted in the technical bid.

3.3.4   The Financial Bids of Technically qualified bidders only would be opened and evaluated to determine the L1 bidder. **The Criteria for selection will be the lowest cost to the TENDERER i.e. Sum total of all the line items without taxes for the qualified bid.** TENDERER/GIL may negotiate the prices with L1 Bidder, under each item/head offered by Bidder.

3.3.5   Bidder is allowed to quote only one make & model for each line item. Further, bidders are not allowed to change the quoted make & model during the contract period

3.4   Award of Contract

3.4.1   Award Criteria: The Criteria for selection will be the lowest cost to TENDERER amongst the technically qualified bids.

3.4.2   TENDERER's right to vary requirements at time of award: TENDERER reserves the right at the time of award to increase or decrease quantity for the requirements originally specified in the document without any change in Bid rate or other terms and conditions.

3.4.3   In case, if lowest bidder does not accept the award of contract or found to be involved in corrupt and/or fraudulent practices, the next lowest bidder will be awarded the contract, if he agrees to match the price quoted by L1/Lowest bidder.

3.5   Notification of Award and Signing of Contract

3.5.1   Prior to expiration of the period of Bid validity, TENDERER will notify the successful Bidders and issue LoI.

3.5.2   The successful bidder has to submit the Performance Bank Guarantee (PBG) within fifteen (15) working days of receipt of award. The PBG should be 10% of total contract value and valid up to 180 days beyond the expiry of the contract.

3.6   Contract Obligations and Amendment to Contract

3.6.1   Once a contract is confirmed and signed, the terms and conditions contained therein shall take precedence over the Bidder's bid and all previous correspondence.

3.6.2   Amendments to the Contract may be made by mutual agreement by both the Parties.

3.6.3   No variation in or modification in the terms of the contract shall be made except by written amendment signed by both the parties. All alterations and changes in the contract will take into account prevailing rules, regulations and laws applicable in the State of Gujarat.

3.7   Use of Contract Documents and Information

3.7.1   The bidder shall not without prior written consent from TENDERER disclose the Contract or any provision thereof or any specification, plans, drawings, pattern, samples or information furnished by or on behalf of GoG in connection therewith to any person other than the person employed by the Vendor in the performance of the Agreement. Disclosure to any such employee shall be made in confidence and shall extend only as far as may be necessary for such performance.

3.7.2   The bidder shall not without prior written consent of TENDERER make use of any document or information made available for the project except for purposes of performing the Contract.

3.7.3   All project related documents issued by TENDERER other than the Contract itself shall remain the property of TENDERER and Originals and all copies shall be returned to TENDERER on completion of the bidder's performance under the Contract, if so required by the TENDERER.

3.8   Confidentiality of the Document

3.8.1   This Bid Document as submitted by the bidder would be treated as confidential and TENDERER shall ensure that anything contained in this Bid Document shall not be disclosed in any manner, whatsoever to any party/unrelated person to the Bid process.

Section IV - General Conditions of the Contract

4.1   Application
These general conditions shall apply to the extent that they are not superseded by provisions in other parts of the contract. For interpretation of any clause in the RFP or Contract Agreement, the interpretation of the TENDERER shall be final and binding on the agency.

4.2   Standard
The selected agency shall give the services and carry out their obligations under the Contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The selected agency shall always act in respect of any matter relating to this contract as faithful advisor to TENDERER. The selected agency shall abide by all the provisions/Acts/Rules etc. of Information Technology prevalent in the country as on the date of the requirements and design submissions. The equipments and services supplied under this contract shall conform to the standards mentioned in the requirement specifications.

4.3   Patent Rights
The selected agency shall indemnify TENDERER against all third party claims of infringement of patent, trademark or industrial design rights arising from the use of the equipments and services or any part thereof.

4.4   Incidental Services
The Selected agency may be required to provide any or all of the following services:

4.4.1   Furnish detailed manuals for each appropriate unit of the supplied equipment and services.

4.4.2   Perform or supervise or maintain and/ or repair the supplied equipment and services, for a period of time agreed by TENDERER and the selected agency, provided this service shall not relieve the Selected agency of any warranty obligations under this contract.

4.5   Delivery and Documents
The selected agency shall submit all the deliverables on due date as per the delivery schedule agreed between parties. No party shall, without the other party's prior written consent, disclose contract, drawings, specifications, plan or other documents to any person other than an entity employed by the affected party for the performance of the contract. In case of the termination of the contact, all the documents prepared by the selected agency under this contract shall become the exclusive property of TENDERER. The Selected agency may retain a copy of such documents, but shall not use anywhere, without taking permission, in writing, from TENDERER. TENDERER reserves right to grant or deny such permission. Delivery of the equipments and services and associated documents shall be made by the selected agency in accordance with the terms specified by TENDERER in RFP.

4.6   Change Orders
4.6.1   TENDERER may at any time, by a written order given to the Selected agency make changes within the general scope of the contract in any one or more of the following:

(a)   Configuration or specifications of the equipment.

4.6.2 TENDERER may at any time, by a written order given to the Selected agency make changes within the general scope of the contract in any one or more of the following during the contract period:

(a)   The service to be provided by the Selected agency.

(b)   Change in bandwidth at GSDC

4.7   Assignment

The Selected agency shall not assign, in whole or in part, his obligations to perform under the contract, to any other party or persons, except with TENDERER's prior written consent. The permission, if any, of TENDERER has to be taken before award of the contract.

4.8   Sub Contract

The Selected agency would provide the services on its own and no back-to-back sub-contracting shall be allowed. However if sub-contracting for specialized work is required, the Selected agency will take prior permission from TENDERER.

4.9   Inappropriate use of Network

The Selected agency shall not use the network facilities/ equipment installed for any other purpose/ use than that of the functions assigned by the TENDERER.

4.10   Termination for Default

DST/ GoG may, without prejudice to any other remedy for breach of contract can terminate the contract, in whole or in part after giving 30 days prior written notice of default sent to the Selected agency:

4.10.1 If the Selected agency fails to deliver any or all of the equipments and services within the time periods specified in the contract, or any extension thereof granted by DST/ GIL OR

4.10.2 If the Selected agency fails to perform any obligations under the contract

4.11   Termination for Insolvency

4.11.1 TENDERER may at any time terminate the contract by giving 30 days prior written notice to the Selected agency, without compensation to the Selected agency, if the Selected agency becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to TENDERER.

4.11.2 In the event of termination as per clause above (4.11 & 4.12), TENDERER reserves the right to take suitable action against successful bidder against their default including revoking the PBG and risk purchase clause etc.

4.12   Force Majeure

4.12.1 The Selected agency shall not be liable for forfeiture of his performance security, liquidated damages or termination for default, if and to the extent that, his delay in performance or other failure to perform his obligations under the contract is the result of an event of Force Majeure.

4.12.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Selected agency and not involving the Selected agency and not involving the Selected agency's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of DST/ GoG either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

4.12.3 If a Force Majeure situation arises, the selected agency shall promptly notify DST/ GoG in writing of such conditions and the cause thereof. Unless otherwise directed by DST/ GoG, the selected agency shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

4.12.4 **Force Majeure Events:** The Force Majeure circumstances and events shall include the following events to the extent that such events or their consequences (it being understood that if a causing event is within the reasonable control of the affected party, the direct consequences shall also be deemed to be within such party's reasonable control) satisfy the definition as stated above.

4.12.5 Without limitation to the generality of the foregoing, Force Majeure Event shall include following events and circumstances and their effects to the extent that they, or their effects, satisfy the above requirements:

(a) **Natural events** ("Natural Events") to the extent they satisfy the foregoing requirements including:

   (i)   Any material effect on the natural elements, including lightning, fire, earthquake, cyclone, flood, storm, tornado, or typhoon;

   (ii)   Explosion or chemical contamination (other than resulting from an act of war);

   (iii) Epidemic such as plague, covid-19 etc.;

   (iv) Any event or circumstance of a nature analogous to any of the foregoing.

(b) **Political Events** which occur inside or Outside the State of Gujarat or involve directly the State Government and the Central Government ("Direct Political Event"), including:

   (i)   Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil commotion, act of terrorism or sabotage;

   (ii)   Strikes, work to rules, go-slows which are either widespread, nation- wide,

or state-wide or are of political nature;

    (iii) Any event or circumstance of a nature analogous to any of the foregoing

4.12.6 **Force Majeure Exclusions**

(a) Force Majeure shall not include the following event(s) and/or circumstances, except to the extent that they are consequences of an event of Force Majeure:

    (i) Unavailability, late delivery

    (ii) Delay in the performance of any contractor, sub-contractors or their agents;

4.12.7 **Procedure for Calling Force Majeure:** The Affected Party shall notify to the other Party in writing of the occurrence of the Force Majeure as soon as reasonably practicable, and in any event within five days after the affected Party came to know or ought reasonably to have known, of its occurrence and that the Force Majeure would be likely to have a material impact on the performance of its obligations under the contract.

4.12.8 **Payments in case of Force Majeure:** During the period of their inability of services as a result of an event of Force Majeure, the Selected agency shall be entitled to continue to be paid under the terms of this contract, as well as to be reimbursed for costs additional costs reasonably and necessarily incurred by them during such period purposes for the purpose of the services and in reactivating the service after the end of such period.

4.13 **Resolution of Disputes**

4.13.1 If any dispute arises between parties, then there would be two ways for resolution of the dispute under the Contract.

(a) **Amicable Settlement:** Performance of the contract is governed by the terms the conditions of the contract, however at times dispute may arise about any interpretation of any term or condition of contract including the Schedule of Requirement, the clauses of payments etc. In such a situation disputes arising between parties are out of contract, either party of the contract may send a written notice of dispute to the other party. The party receiving the notice of dispute will consider the notice and respond to it in writing within 30 days after receipt. If that party fails to respond within 30 days, or the dispute cannot be amicably settled within 60 days following the response of that party, then 'Arbitration' clause shall become applicable. Amicable settlement clause shall be only applicable in case of dispute is arising out of contract. The said clause shall not be applicable in the case of cyber-crimes and any other type of security breach carried out by either bidder organization itself or its employees.

(b) **Arbitration:** In the case dispute arising between the parties in the contract, which has not been settled amicably, any party can refer the dispute for Arbitration under (Indian) Arbitration and Conciliation Act, 1996. Such disputes shall be referred to Arbitral Tribunal as prescribed by Ministry of Law, Government of India. The Indian Arbitration and Conciliation Act, 1996 and any

statutory modification or reenactment thereof, shall apply to these arbitration proceedings.

4.13.2 Arbitration proceedings will be held in India at Gandhinagar and the language of the arbitration proceeding and that of all documents and communications between the parties shall be in English.

4.13.3 The decision of the majority of arbitrators shall be final and binding upon both the parties.

4.13.4 All arbitration awards shall be in writing and shall state the reasons for the award.

4.13.5 The expenses of the arbitration as determined by the arbitrators shall be shared equally between the two parties. However, the expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself.

4.13.6 Arbitration clause shall be only applicable in case of dispute is arising out of contract. The said clause shall not be applicable in the case of cyber-crimes and any other type of confidentiality/security breach carried out by either bidder organization itself or its employees.

4.13.7 Both the parties agree the jurisdiction of Adjudicating Authority, Gujarat state and Cyber Appellate Tribunal, New Delhi under Information Technology Act, 2000 (including any amendments therein) in case of any contraventions, security and confidentiality breaches.

4.14 Governing Language

The contract shall be written in English. All correspondence and other documents pertaining to the contract, which are exchanged by the parties, shall be written in the same language.

4.15 Applicable Law

Applicable Law means the laws and any other instruments having the force of law in India as they may be issued and in force from time to time. The contracts shall be interpreted in accordance with the laws of the Union of India and that of the State of Gujarat.

4.16 Notices

Any notice by one party to the other pursuant to the contract shall be sent in writing by registered post only to the addresses as defined under this contract. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

4.17 Back up support

Selected agency shall furnish details of the back-up engineering and network support that will be available to TENDERER. If the maintenance of the equipment, after expiry of the contract period, is taken over either by TENDERER or any other person/ agency to be nominated by TENDERER, the Selected agency shall be responsible for provisioning of spare parts and back-up maintenance support required by TENDERER or that agency, and shall continue to make available the spare parts.

4.18 Statutory Deductions and Payment

4.18.1 Payments shall be subject to any deductions (such as TDS, penalty as per SLAs, etc.) of

any amount, for which the Selected agency is liable under the agreement against this RFP.

4.18.2 The payments to the Selected agency will be made quarterly at the end of each quarter on

Acceptance of the invoice by the TENDERER or its designated agency. The invoice would be processed for release of payment within 45 days after due verification of the invoice and other supporting documents by TENDERER or its designated agency. However, in case the processing of the invoice gets delayed beyond 45 days from the date of acceptance of invoice, the Selected agency would be paid an ad-hoc amount of 50% of invoice value and the remaining amount would be released after getting clarifications, due verification and imposition of penalty, if any.

4.19   Taxes and Duties

The Selected agency shall fully familiarize itself about the applicable Domestic taxes (such as GST, Income Tax, duties, fees, levies, etc.) on amount payable by TENDERER under the contract. The Selected agency shall pay such domestic tax, duties, fees and other impositions (wherever applicable) levied under the applicable law. The billing should be done in Gujarat only.

4.20   Insurance

The equipments covered under this contract (as per Annexures enclosed with this RFP) shall be fully insured by the selected agency against loss or damage incidental to manufacture or acquisition, transportation, storage, delivery and installation. The selected agency will have to procure insurance for all the assets under GSDC on behalf of TENDERER within six months form the date of kick-off meeting. TENDERER shall provide authorization to the selected agency to procure insurance.

4.21   Manuals, Data and Information

Complete information relating to installation, maintenance, service, support, and troubleshooting of equipments and services should be supplied by the selected agency.

4.22   Inspection and Testing (in case of replacement/new procurement, suggested by bidder as part of O&M solution)

4.23.1 The bidder will have to offer the inspection after delivering and installing the equipments at the GSDC/MDC/DR locations specified in the RFP.

4.23.2 Any deviation found in the specification of the delivered equipments after inspection from the tender specifications will lead to the cancellation of the order, forfeiture of PBG and prohibition in the participation in the future purchases of Government of Gujarat.

4.23.2 The TENDERER's right to inspect, test and, where necessary, reject the Goods after the Goods arrival at Customer Sites shall in no way be limited or waived by reason of the

Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

4.23.3 DST/GIL may appoint Third Party Agency, who would monitor the project during implementation, commissioning and operation. The Third Party Agency will also conduct the Partial and Final Acceptance Test as per the technical requirement of the Agreement .Third Party Agency will verify the services provided by the Bidder under the Agreement. The successful bidder will co-operate with such Third Party Agency.

4.23.4 In case, if bidder wish to have support from any external agency, it's very necessary to inform GIL/GoG in written prior to allow them to work on GIL/GoG infrastructure. The information should contain all respective information about the company from whom support has been extended, the person/group of people and the segment in which services has been taken. On completion of the task, another report should be submitted mentioning action taken by this person/group of people from external agency, with duration. The bidder is sole responsible for the action taken by such agency on their behalf. No Data/ Information should be sent out of the premise without obtaining prior written confirmation from the GIL/GoG.

4.23.5 DST/GIL has an online portal for its entire Helpdesk Management system (i.e. https://gsdchelpdesk.gujarat.gov.in) user complaints will be raised by the users on this portal only. Successful bidder will be provided with separate login of the portal wherein he has to do following activities:

4.24 Limitation of Liability

Selected agency's cumulative liability for its obligations under the contract shall not exceed the contract value and the selected agency shall not be liable for incidental, consequential, or indirect damages including loss of profit or saving.

4.25 Confidentiality

4.25.1 Selected agency understands and agrees that all materials and information marked and identified by TENDERER as 'Confidential' are valuable assets of TENDERER and are to be considered TENDERER's proprietary information and property. Selected agency will treat all confidential materials and information provided by TENDERER with the highest degree of care necessary to ensure that unauthorized disclosure does not occur. Selected agency will not use or disclose any materials or information provided by TENDERER without TENDERER's prior written approval.

4.25.2 Selected agency shall not be liable for disclosure or use of any materials or information provided by TENDERER or developed by Selected agency which is:

(a)   possessed by Selected agency prior to receipt from TENDERER, other than through prior disclosure by TENDERER, as documented by Selected agency's written records;

(b)   published or available to the general public otherwise than through a breach of Confidentiality; or

(c)   Obtained by Selected agency from a third party with a valid right to make such disclosure, provided that said third party is not under a confidentiality obligation to TENDERER; or

(d)   Developed independently by the selected agency.

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4.25.3 In the event that selected agency is required by judicial or administrative process to disclose any information or materials required to be held confidential hereunder, Selected agency shall promptly notify TENDERER and allow TENDERER a reasonable time to oppose such process before making disclosure.

4.25.4 Selected agency understands and agrees that any use or dissemination of information in violation of this Confidentiality Clause will cause DST , GoG irreparable harm, may leave TENDERER with no adequate remedy at law and TENDERER is entitled to seek to injunctive relief.

4.25.5 TENDERER does not wish to receive the Confidential Information of Selected agency, and selected agency agrees that it will first provide or disclose information which is not confidential. Only to the extent that TENDERER requests Confidential Information from Selected agency, then selected agency will furnish or disclose Confidential Information.

4.25.6 Nothing herein shall be construed as granting to either party any right or license under any copyrights, inventions, or patents now or hereafter owned or controlled by the other party. The requirements of use and confidentiality set forth herein shall survive the expiration, termination or cancellation of this RFP. Confidential Information disclosed under this contract shall be subject to confidentiality obligations for a period of two years following the initial date of disclosure. Nothing contained in this contract shall limit the selected agency from providing similar services to any third parties or reusing the skills, know-how, and experience gained by the employees in providing the services contemplated under this contract.

4.26   Use of Contract document and Information

4.26.1 The selected agency shall not, without TENDERER's prior written consent, disclose the contract or any provision thereof, or any specification, design, drawing, pattern, sample or information furnished by or on behalf of TENDERER in connection therewith, to any person other than a person employed by the Selected agency in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

4.26.2 The Selected agency shall not without TENDERER's prior written consent, make use of any Document or information forming a part of this RFP except for purpose of performing the contract. Any document forming a part of this RFP, other than the contract itself, shall remain the property of TENDERER

4.27   Severability

If any term, clause or provision of the agreement shall be judged to be invalid for any reason whatsoever such invalidity shall not affect the validity or operation of any other term, clause or provision of the agreement and such invalid term clause or provision shall be deemed to have been deleted from the agreement and if the invalid portion is such that the remainder cannot be sustained without it, both parties shall enter into discussions to find a suitable replacement to the clause that shall be legally valid.

4.28   Contract Period

The contract shall remain valid for a period of five years from the date of FAT and end with the date of completion of five years of service. However, TENDERER reserves a right to terminate the contract by sending a notice to the bidder in the events of non-performance, security violations and non-compliance.

4.29   Performance Bank Guarantee of the Contract

4.29.1 The Performance Bank Guarantee (PBG) has to be submitted within fifteen (15) working days of receipt of award. The PBG should be 10% of total contract value and valid up to 180 days beyond the expiry of contract.

4.29.2 The PBG shall be denominated in Indian Rupees and shall be in the form of a Bank Guarantee Bond from of all Nationalized Bank including the public sector bank or Private Sector Banks authorized by RBI or Commercial Bank or Regional Rural Banks of Gujarat or Co-Operative Bank of Gujarat (operating in India having branch at Ahmedabad/ Gandhinagar) as per the G.R. No. EMD/10/2021/7729/DMO dated 12.04.2021 issued by Finance Department and further GR issued by FD time to time. (in the Performa given in this document)

4.29.3 The Performance Guarantee shall be discharged by GoG and returned to the Service Provider within 30 days from the date of expiry of the Performance Bank Guarantee.

4.30   Successful bidder (Selected agency's) Obligations

The Selected agency would be required to maintain and manage (including integration of new equipment/replaced equipment as a part of this bid) the GSDC facilities. It will be the selected agency's responsibility to ensure compliance to the requirements of the GSDC and continued operations of the GSDC in accordance with and in strict adherence to the terms of the RFP and the Contract.

4.30.1 In addition to the aforementioned, the Selected agency shall:

(a) Perform the Services specified by TENDERER and make available the necessary equipment / facilities / services as may be necessary and 'Scope of work' requirements as specified in the bid and changes thereof.

(b) The Selected agency shall ensure that its team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. The Selected agency shall ensure that the Services are performed in accordance with the terms hereof and to the satisfaction of TENDERER. Nothing in this Contract relieves the Selected agency from its liabilities or obligations under this Contract to provide the Services in accordance with TENDERER directions and requirements as stated in the Contract and the Bid to the extent accepted by TENDERER and the Selected agency shall be liable for any non-performance, non- compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its team.

(c) The Selected agency's representatives shall have all the powers requisite for the performance of services under this contract. The Selected agency's representatives

shall liaise with TENDERER's representatives for the proper coordination and timely completion of the works and on any other matters pertaining to the works. The Selected agency will extend full co-operation to TENDERER's representatives in the manner required by them for supervision / inspection / observation of the GSDC facilities, equipment / material, procedures, performance, reports and records pertaining to the works. Selected agency shall also have complete charge of the selected agency's personnel engaged in the performance of the works and to ensure internal discipline, compliance of rules, regulations and safety practices. Selected agency shall also co-ordinate and co-operate with the other Service Providers / Vendors of TENDERER working at the site/offsite for activities related to planning, execution of scope of work and providing services under this contract.

4.30.2 Reporting Progress:

(a) The Selected agency shall monitor progress of all the activities specified in the contract and submit monthly progress report about various aspects of the work to TENDERER as per Scope of Work. TENDERER on mutual agreement between both parties may change the periodicity of such reports. Extracts of the progress report to be termed, as "Executive Summary" shall be submitted in 3 copies, along with 3 copies of monthly progress report. The same is required to be submitted in soft copy as well. Formats for such reporting shall be discussed at the Kick-off meeting.

(b) The GSDC facilities / services and / or Labour to be provided by the selected agency under the Contract and the manner and speed of execution and maintenance of the work are to be conducted in a manner to the satisfaction of TENDERER in accordance with the Contract. The rate of progress of the work compliance to the requirements of the GSDC or their facilities or any part of them at any time fall behind the stipulated time for completion or is found to be too slow to ensure completion of the works or insufficient for satisfactory operations of the GSDC, TENDERER shall so notify the Selected agency in writing.

(c) The Selected agency shall reply to the written notice giving details of the measures they propose to take to expedite the progress so as to complete the works by the prescribed time. The Selected agency shall not be entitled to any additional payment for taking such steps. If at any time it should appear to TENDERER that the actual progress of work does not conform to the approved plan the Selected agency shall produce at the request of TENDERER a revised plan showing the modification to the approved plan necessary to ensure completion of the works within the time for completion or steps initiated to ensure compliance/improvement to the stipulated requirements.

4.30.3 Knowledge of Site Conditions:

(a) The Selected agency's undertaking of this Contract shall be deemed to mean that the selected agency possesses the knowledge of requirements as stipulated in the RFP.

(b) The Selected agency shall be deemed to have understood the requirements and have satisfied itself with the data contained in the RFP Document, the quantities and nature of the works and materials necessary for the completion of the works, etc. and

in-general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting its obligations and responsibilities therewith under the Contract and its ability to perform it.

(c) Selected agency shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price for the works. The consideration provided in the Contract for the Selected agency undertaking the works shall cover all the Selected agency's obligation and all matters and things necessary for proper execution and maintenance of the works in accordance with the Contract and for complying with any instructions which TENDERER may issue in accordance with the connection therewith and of any proper and reasonable measures which the Selected agency takes in the absence of specific instructions from TENDERER.

4.31   Selected agency's Team

4.31.1 The Selected agency shall supply to TENDERER an organization chart showing the proposed organization / manpower not less than the proposal made in the proposed technical solution of the RFP, to be established by the selected agency for execution of the work / facilities including the identities and Curriculum-Vitae of the key personnel to be deployed during Kick-off meeting. The Selected agency shall promptly inform TENDERER in writing of any revision or alteration in such organization chart.

4.31.2 The selected agency shall be responsible for the deployment, transportation, accommodation and other requirements of all its employees required for the execution of the work and for all costs / charges in connection thereof.

4.31.3 The Selected agency shall provide and deploy manpower on the Site for carrying out the work, only those manpower resources who are skilled and experienced in their respective trades and who are competent to execute or manage / supervise the work in a proper and timely manner as per the RFP.

4.31.4 TENDERER may at any time object to and require the Selected agency to remove forthwith from the site an employee of the Selected agency or any persons deployed by Selected agency or it's sub-contracted agency, if in the opinion of TENDERER, the person in question has misconducted himself or his deployment is otherwise considered undesirable by TENDERER, the Selected agency shall forthwith remove and shall not again deploy the person in question of the work site without the written consent of TENDERER.

4.31.5TENDERER may at any time request the Selected agency to remove from the work / Site the selected agency's supervisor or any other authorized representative including any employee of the selected agency or its sub-contracting agency or any person(s) deployed by selected agency or its sub-contracting agency for professional incompetence or negligence or for being deployed for work for which he is not suited. The selected agency shall consider the request and may accede to or disregard it. TENDERER having made a request as aforesaid in the case of any person which the Selected agency has disregarded, may in the case of the same person at any time but on a different occasion and for a different instance of one of the reasons referred to above in this Clause object to and require the Selected agency to remove that person from deployment on the work which the Selected agency shall then forthwith do and shall not again deploy any

person so objected to on the work or on the sort of work in question (as the case may be) without the written consent of TENDERER.

4.31.6 TENDERER shall state to the Selected agency in writing its reasons for any request or requirement pursuant to this clause.

4.31.7 The selected agency shall maintain backup personnel for each domain which should be screened through DST / GIL and shall promptly provide replacement of every person removed pursuant to this section with an equally competent substitute from the pool of backup personnel. The resume should be screened in advance and same resources should be made available as replacement.

4.31.8 In case of change in its team composition owing to attrition the selected agency shall ensure a reasonable amount of time-overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.

4.31.9 The entire scope of the work depends on the technical skill and experience in management of the same level or kind of infrastructure.

4.31.10 It is mandatory for successful bidder to deploy qualified professional to install, commission and maintain the equipments, as defined under scope of work.

4.31.11 The successful bidder has to submit regular schedule of man power availability and get it approved by GIL/DST/GoG.

4.31.12 The successful bidder has to deploy necessary problem escalation process and system to take care users at priority.

4.31.13 The successful bidder is free to deploy or to develop applications to facilitate the operation. GIL/DST/GoG will welcome the deployment such application in respect to improve Quality of Services.

4.31.14 For extending better services to the government, the successful bidder will be allowed to deploy and use own tested and proven solution, with prior permission form the GIL/DST/GoG.

4.31.15 The successful bidder needs to manage and maintain various records related to the services extended to the Government.

4.31.16 The Government network is being operated and maintained by various agencies. In such circumstances the successful bidder may need to coordinate and approach various agencies, if required.

4.31.17 The successful bidder needs to maintain the required security of network, database, e-mails WiFi, Proxy but not limited to above, related to the government operations.

4.31.18 The successful bidder is responsible to maintain documentation on the progress of the work and will have to update the same on regular basis. Bidder will have to submit the progress reports regularly, as per the guideline issued by GIL /DST/ GoG.

4.31.19 The understanding of the comprehensive maintenance under warranty period is as follows.

4.31.20 In case of failure, the successful bidder needs to replace or repair the faulty part/component/device to restore the services at the earliest.

4.31.21 The cost of the repairing or replacement of faulty part/component/device has to be entirely born by the successful bidder.

4.31.22 All expenses related to part/component/device, including hiring of specialized technical expertise, in case required, has to be borne by the successful bidder as part of comprehensive maintenance.

4.31.23 The successful bidder also needs to make alternate arrangement in case of major failure happens in the network, due to which services may be affecting for longer period.

4.31.24 After repairing or replacement of the part/component/device, the successful bidder needs to put the same into operation.

4.31.25 The escalation of the rate during the rate contract is not permitted.

4.31.26 The Selected agency will be responsible to carry out on job training mentioned below but not limited to, on quarterly basis and submit the content of training, attendance and output / result of the training. Technical skill development, Soft skill development, Quality & Safety training.

4.32 Statutory Requirements

4.32.1 During the tenure of this Contract nothing shall be done by the selected agency in contravention of any law, act and / or rules / regulations, there under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep TENDERER indemnified in this regard.

4.32.2 The selected agency and their personnel/representative shall not alter / change / replace any hardware component proprietary to TENDERER and / or under warranty or AMC of third party without prior consent of TENDERER.

4.32.3 The selected agency and their personnel/representative shall not without consent of TENDERER install any hardware or software not purchased / owned by TENDERER.

4.33 Contract Administration

4.33.1 Either party may appoint any individual / organization as their authorized representative through a written notice to the other party. Each representative shall have the authority to:

   (i)   Exercise all of the powers and functions of his / her Party under this Contract other than the power to amend this Contract and ensure the proper administration and performance of the terms hereof and

   (ii)   Bind his or her Party in relation to any matter arising out of or in connection with this Contract.

4.33.2 The selected agency along with the members of sub-contracted agency / third party shall be bound by all undertakings and representations made by the authorized representative of the Selected agency and any covenants stipulated hereunder with respect to this Contract for and on their behalf.

4.33.3 For the purpose of execution or performance of the obligations under this Contract TENDERER's Representative would act as an interface with the nominated representative of the selected agency. Selected agency shall comply with any instructions that are given by TENDERER's Representative during the course of this Contract in relation to the performance of its obligations under the terms of this Contract and the RFP.

4.33.4 A Committee comprising of representatives from TENDERER and the selected agency shall meet on a mutually agreed time or weekly basis to discuss any issues / bottlenecks being encountered. The Selected agency shall draw the minutes of these meetings and circulate to TENDERER.

4.34 Right of Monitoring, Inspection and Periodic Audit

4.34.1 TENDERER reserves the right to inspect and monitor / assess the progress / performance

/ maintenance of the GSDC facilities at any time during the course of the Contract, after providing due notice to the Selected agency. TENDERER may demand and upon such demand being made TENDERER shall be provided with any document, data, material or any other information which it may require to assess the progress of the project/ delivery of services.

4.34.2 TENDERER shall also have the right to conduct, either itself or through another third party as it may deem fit, an audit to monitor the performance of the Selected agency of its obligations / functions in accordance with the standards committed to or required by TENDERER and the Selected agency undertakes to cooperate with and provide to TENDERER / any other third party appointed by TENDERER, all documents and other details as may be required by them for this purpose. Any deviations or contravention identified as a result of such audit/assessment would need to be rectified by the selected agency failing which TENDERER may without prejudice to any other rights that it may have issued a notice of default.

4.35   Information Security

4.35.1 The Selected agency shall not carry and / or transmit any material, information, layouts, diagrams, storage media or any other goods / material in physical or electronic form, which are proprietary to or owned by TENDERER , without prior written permission from TENDERER.

4.35.2 The Selected agency shall adhere to the Information Security policy developed by TENDERER.

4.35.3 Selected agency acknowledges that TENDERER business data and other TENDERER proprietary information or materials, whether developed by TENDERER or being used by TENDERER pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to TENDERER and Selected agency   agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by Selected agency to protect its own proprietary information. Selected agency recognizes that the goodwill of TENDERER depends, among other things, upon selected agency keeping such proprietary information confidential and that unauthorized disclosure of the same by Selected agency could damage TENDERER and that by reason of Implementation Agency's duties hereunder. Selected agency may come into possession of such proprietary information even though Selected agency does not take any direct part in or furnish the services performed for the creation of said proprietary information and shall limit access thereto to employees with a need to such access to perform the services required by this agreement. Selected agency shall use such information only for the purpose of performing the said services.

4.35.4 Selected agency shall, upon termination of this agreement for any reason or upon demand by TENDERER, whichever is earlier return any and all information provided to Selected agency by TENDERER including any copies or reproductions, both hard copy and electronic.

4.36   **Relationship between the Parties**

4.36.1 Nothing in this Contract constitutes any fiduciary relationship between TENDERER and Selected agency's Team or any relationship of employer employee, principal and agent, or partnership, between TENDERER and Selected agency.

4.36.2 No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of this Contract.

4.36.3 TENDERER has no obligations to the Selected agency's Team except as agreed under the terms of this Contract.

4.37   **Special Terms and Conditions**

4.37.1 Second hand Equipment: Any proposed equipments shall be new and no second hand equipment shall be accepted. Occurrence of such an event, will amount to mischief and fraudulence and the Bidder shall be liable for penal action.

4.37.2 Acceptance Test: A Testing Committee shall be constituted comprising of officers duly authorized by TENDERER and/or any third party agency appointed by it. The acceptance tests shall be carried at each site by the committee.

4.38   **Final Acceptance Test (FAT)**

4.38.1 The Equipment shall be deemed to be commissioned, subject to successful FAT. Availability of all the defined services shall be verified. The Selected agency shall be required to demonstrate all the features/facilities/functionalities as mentioned in the RFP for each site.

4.38.2 The discovery of the GSDC equipment on EMS/NMS tool would be part of FAT.

4.38.3 All documentation as defined should be completed before the final acceptance test.

4.38.4 On successful completion of the final acceptance and TENDERER are satisfied with the working of the system, the acceptance certificate signed by TENDERER will be issued to the selected agency.

4.38.5 The date on which final acceptance certificate is issued shall be deemed to be date of successful commission of the equipment. Any delay by the selected agency in commissioning of equipments shall render the selected agency liable to the imposition of appropriate liquidated damages.

4.39   **Delay in Implementation**

4.39.1 If the Selected agency fails to comply with the time schedule, the selected agency shall be liable to pay penalty as mentioned in Volume II of RFP/Bid.

4.39.2 The delay due to force majeure situation shall be excluded from the calculation of delay.

4.40   **SLA Monitoring**

4.40.1 TENDERER may engage third party audit agency or designate any agency/team for SLA management and monitoring. This third party audit agency shall monitor the SLA parameters and generate reports on regular basis. TENDERER reserves the right to periodically change the measurement points and methodologies used.

4.40.2 The Selected agency shall establish an Enterprise/Network Management System for monitoring and measurement of the SLA parameters prescribed for GSDC.

4.41   Exit Management

4.41.1 **Purpose**

(a)   This clause sets out the provisions which will apply upon completion of the contract period or upon termination of the agreement for any reasons. The Parties shall ensure that their respective associated entities, in case of TENDERER, any third party appointed by TENDERER and in case of the selected agency, the sub- contractors, carry out their respective obligations set out in this Exit Management Clause.

(b)   The exit management period starts 3 months before the expiry of contract or in case of termination of contract, the date on which the notice of termination is sent to the selected agency.

(c)   The exit management period ends on the date agreed upon by TENDERER or one year after the beginning of the exit management period, whichever is earlier.

(d)   The Parties shall ensure that their respective associated entities, authorized representative of or its nominated agencies and the vendor carry out their respective obligations set out in this Exit Management Clause.

(e)   Before the expiry of the exit management period, the Selected agency shall deliver to TENDERER or its nominated agencies all new or up-dated materials from the categories set out in point 4.5 above, and shall not retain any copies thereof, except that the Selected agency shall be permitted to retain one copy of such materials for archival purposes only.

(f)   After completion of contract period (5 years), the contract may be extended next one year subject to the service of the selected agency and TENDERER's discretion.

4.41.2 **Cooperation and Provision of Information**

(a)   During the exit management period:

(i)   The selected agency will allow TENDERER or any third party appointed by TENDERER, access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable TENDERER or any third party appointed by TENDERER to assess the existing services being delivered;

(ii)   Promptly on reasonable request by TENDERER or any third party appointed by TENDERER, the selected agency shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with the "Contract", the Project Plan, SLA and Scope of Work, relating to any material aspect of the services. TENDERER or any third party appointed by TENDERER shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The Selected agency shall permit TENDERER or any third party appointed by TENDERER to have reasonable access to its employees and facilities as reasonably required by TENDERER or any third party appointed by TENDERER to understand the methods of delivery of the services employed by the Selected agency and to assist appropriate knowledge transfer.

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    (iii) Before the end of exit management period, the Selected agency will ensure a successful trial run of Cloud, E-mail, proxy, Network administration, Facility management including helpdesk management etc. by TENDERER or by any third party appointed by TENDERER.

(b) Confidential Information, Security and Data

    (i) The selected agency will promptly, on the commencement of the exit management period, supply to TENDERER or any third party appointed by TENDERER the following:

        a. Information relating to the current services rendered and performance data relating to the performance of sub-contractors/ bandwidth providers in relation to the services.

        b. Documentation related to Intellectual Property Rights.

        c. All confidential information related to TENDERER.

        d. Documentation relating to sub-contractors.

        e. All current and updated TENDERER data as is reasonably required by TENDERER or any third party appointed by TENDERER for purposes of transitioning the services to TENDERER or any third party appointed by TENDERER, in a format prescribed by TENDERER or any third party appointed by TENDERER.

        f. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable TENDERER or any third party appointed by TENDERER, to carry out due diligence in order to transition the provision of the Services to TENDERER or any third party appointed by TENDERER, (as the case may be).

    (ii) Before the expiry of the exit management period, the Selected agency shall deliver to TENDERER or any third party appointed by TENDERER all new or up-dated materials from the categories set out above and shall not retain any copies thereof.

    (iii) Before the expiry of the exit management period, unless otherwise provided under the "Contract", TENDERER or any third party appointed by TENDERER shall deliver to the selected agency all forms of "Selected agency's" confidential information which is in the possession or control of TENDERER or any third party appointed by TENDERER.

(c) Right of Access to Premises

    (i) At any time during the exit management period, where Assets are located at the Selected agency's premises, the selected agency will be obliged to give reasonable rights of access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to) TENDERER or any third party appointed by TENDERER in order to take stock of the Assets.

    (ii) The selected agency shall also give TENDERER or any third party appointed by TENDERER, right of reasonable access to its premises and shall procure TENDERER or any third party appointed by TENDERER, rights of access to relevant

third party premises during the exit management period and for such period of time following termination or expiry of the "Contract" as is reasonably necessary to migrate the services to TENDERER or any third party appointed by TENDERER.

(d) General Obligations of the Selected agency

   (i)   The selected agency shall provide all such information as may reasonably be necessary to bring into effect seamless handover as practicable in the circumstances to TENDERER or any third party appointed by TENDERER and which the selected agency has in its possession or control at any time during the exit management period.

   (ii) For the purposes of this Clause, anything in the possession or control of any selected agency, associated entity, or sub-contractor is deemed to be in the possession or control of the selected agency.

   (iii) The selected agency shall commit adequate resources to comply with its obligations under this Exit Management Clause.

4.41.3 **Exit Management Plan**

The selected agency shall provide TENDERER or any third party appointed by TENDERER with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the "Contract" as a whole and in relation to the Project Plan, SLA and Scope of Work.

(a) A detailed program of the transfer process that could be used in conjunction with TENDERER or any third party appointed by TENDERER including details of the means to be used to ensure continuing provision of the services throughout the transfer process and of the management structure to be used during the transfer.

(b) Plans for the communication with such of the Selected agency's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on TENDERER's operations as a result of undertaking the transfer.

(c) Identification of specific security tasks necessary at termination.

(d) Plans for provision of contingent support to TENDERER or any third party appointed by TENDERER for a reasonable period after transfer for the purposes of seamlessly replacing the Services.

4.41.4 The selected agency shall re-draft the Exit Management Plan annually to ensure that it is kept relevant and up to date.

4.41.5 Each Exit Management Plan shall be presented by the selected agency to and approved by TENDERER or any third party appointed by TENDERER.

4.41.6 In case of expiry or termination of contract, each Party shall comply with the Exit Management Plan.

4.41.7 During the exit management period, the selected agency shall use its best efforts to deliver the services.

4.41.8 Payments during the Exit Management period shall be made in accordance with the Terms of Payment Clause.

4.41.9 This Exit Management plan shall be furnished in writing to TENDERER or any third

party appointed by TENDERER within 90 days from the Effective Date of "Contract".

4.42   Representations and warranties

4.42.1 Representations and Warranties by the selected agency

(a) It is a company/ organization under any statute of India duly organized and validly existing under the laws of India and has all requisite legal power and authority and corporate authorizations to execute the Agreement and carry out the terms, conditions and provisions hereof;

(b) It has in full force and effect all requisite clearances, approvals and permits necessary to enter into the Agreement and perform its obligations hereof;

(c) It will have the legally valid and enforceable title to all Equipment as may be necessary for proper functioning and it will be free from all encumbrances, liens, charges, any security interest and adverse claims of any description;

(d) The Agreement and the transactions and obligations hereof do not contravene its constitutional documents or any law, regulation or government directive and will not contravene any provisions of, or constitute a default under, any other Agreement or instrument to which it is a party or by which it or its property may be bound or any of its obligations or undertakings by which it or any of its assets are bound or cause a limitation on its powers or cause it to exceed its authorized powers;

(e) Necessary approvals/ clearances concerned authorities, for establishing the proposed project are to be obtained by the successful bidder.

(f) Necessary approvals/ clearances from concerned authorities, as required, for fire protection, government duties / taxes / Octroi, are to be obtained by the successful bidder.

(g) Necessary approvals/ clearances, from concerned authorities (like City Nagar, Nigam, Public Works Department (PWD), Department of Irrigation, State Electricity Board etc. for "Right of way"), as required, are to be obtained by the successful bidder for laying their own cables to meet system requirements, However, tenderer will reimburse the actual expenses incurred by bidder for getting the RoW permission (except for reinstatement expenses) upon submission of original receipts.

(h) There is no pending or threatened actions, suits or proceedings affecting the Selected agency or its affiliates or any of their respective assets before a court, governmental agency, commission or arbitrator or administrative tribunal which affects the Selected agency's ability to perform its obligations under the Agreement; and neither Selected agency nor any of its affiliates have immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution or otherwise);

(i) The Selected agency confirms that all representations and warranties of the selected agency set forth in the Agreement are true, complete and correct in all respects;

(j) No information given by the selected agency in relation to the Agreement, project documents or any document comprising security contains any material mis-statement of fact or omits to state as fact which would be materially adverse to the

enforcement of the rights and remedies of TENDERER or which would be necessary to make any statement, representation or warranty contained herein or therein true and correct;

(k) All equipment including material to be installed by the selected agency in the GSDC shall be new. All equipment shall conform to the codes, standards and regulations applicable to networking facilities and benefit from the usual manufacturer's guarantees.

4.42.2 Representations and Warranties by TENDERER

(a) It has full legal right; power and authority to execute the GSDC project and to enter into and perform its obligations under the Agreement and there are no proceedings pending.

(b) The Agreement has been duly authorized, executed and delivered by TENDERER and constitutes valid, legal and binding obligation of TENDERER.

(c) The execution and delivery of the Agreement with the selected agency does not violate any statutory judgment, order, decree, regulation, right, obligation or rule of any court, government authority or arbitrator of competent jurisdiction applicable in relation to TENDERER, its assets or its administration.

4.43   Each Day during the Agreement

The Parties agree that these representations and warranties are taken to be made on each Day during the term of the Agreement.

4.44   Indemnity

Successful Bidder will defend and/or settle any claims against TENDERER that allege that Bidder branded product or service as supplied under this contract infringes the intellectual property rights of a third party. Successful Bidder will rely on Customer's prompt notification of the claim and cooperation with our defense. Bidder may modify the product or service so as to be non-infringing and materially equivalent, or TENDERER may procure a license. If these options are not available, TENDERER will refund to Customer the amount paid for the affected product in the first year or the depreciated value thereafter or, for support services, the balance of any pre-paid amount or, for professional services, the amount paid. Bidder is not responsible for claims resulting from any unauthorized use of the products or services. This section shall also apply to deliverables identified as such in the relevant Support Material except that Bidder is not responsible for claims resulting from deliverables content or design provided by Customer.

4.45   Risk Purchase

TENDERER on identifying any material breach of contract by Bidder, shall give Bidder a cure period of 90 days to correct the breach. If Bidder fails to cure the breach in the said time duration and accept its inability to correct, TENDERER may terminate the part of the contract that is breached and employ a third party to do the work on behalf of TENDERER. Bidder shall not be liable for any compensation for the work executed this way. Bidder shall execute the balance part of work as agreed under the contract.

Section V – Payment Terms

5.1   Payment Schedule

S/N	Activity	Payment (%)
Table 1: Schedule-I		
1	Delivery of all components (Hardware, Software, Licenses, etc.) at Primary Data Centre, Gandhinagar, Near DR site, Vadodara and NIC, Bhubaneshwar	70% of the sum total of schedule I of financial bid
2	Successful installation, Testing, Integration, Commissioning	10% of the sum total of schedule I of financial bid
3	Successful completion of training & Final Acceptance test of entire solution	20% of the sum total of schedule I of financial bid
Table 2:		
1	5 Years AMC/warranty and Back to Back OEM support for the entire Infrastructure (hardware & Software)	Will be divided and paid in 20 equated Quarters. Five years will start from the date of successfully completion of FAT.

Section VI– Formats to Response to the RFP: Pre-qualification Bid

6.1 Format 1: Pre-Qualification Bid Letter

To,
DGM (Technical)
Gujarat Informatics Limited
8th Floor, Block -1, Udyog Bhavan, Sector - 11,
Gandhinagar 382010, Gujarat, India

Sir/Madam,

Sub: Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara

Reference: RFP No: <Bid REFERENCE NUMBER> Dated <DD/MM/YYYY>

We, the undersigned Bidder, having read and examined in detail the entire Bid documents do hereby propose to provide the services as specified in the above referred Bid document number along with the following:

1.   **Earnest Money Deposit (EMD):** We have enclosed an EMD in the form of a Demand Draft/ Bank Guarantee no. _____ dated xx/xx/xxxx for   Rs. **2,20,000,00/- (Rupees Two Crore Twenty lac only)** drawn on _____. This EMD is liable to be forfeited in accordance with the provisions of this RFP.

2.   **Contract Performance Bank Guarantee:** We hereby declare that in case the contract is awarded to us, we shall submit the contract performance bank guarantee in the form prescribed in Volume I, Annexure 2 - Proforma and as per Section IV - General Conditions of Contract.

3.   We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

4.   We understand that our bid is binding on us and that you are not bound to accept a bid you receive.

5.   I / we hereby Undertake that I/we have carefully gone through the Terms & Conditions contained in the RFP Document [No] regarding selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara. I declare that all the terms and conditions and provisions of this RFP Document including SoW and SLAs are acceptable to my company. I further certify that I am the Director/Company Secretary and am therefore, competent in my Company to make this declaration.

Thanking you,

Yours faithfully,

(Signature of the Bidder)
Printed Name Designation
Seal Date:
Business Address:

6.2 Format 2: General Information about the Bidder

	Details of the Bidder		
1.	Name of the Bidder & Address of the Bidder		
2.	Status of the Company (Public Ltd/ Pvt. Ltd)		
3.	Details of Incorporation of the Company	Date:	
		Ref. #	
4.	Details of Commencement of Business	Date:	
		Ref. #	
5.	Company Identification Number (CIN)		
6.	Registered Office of the Company :		
7.	Composition of the Board of Directors of the Company. Please furnish Name, Designation and their DIN.		
8.	Name of Company Secretary of the Company and his/her Membership No.		
9.	Name and address of the Statutory Auditors of Company for the Financial years		
10.	Valid GST registration No. & Date		
11.	Permanent Account Number (PAN)		
12.	Name & Designation of the contact person to whom all references shall be made regarding this tender		
13.	Telephone No. (with STD Code)		
14.	E-Mail of the contact person:		
15.	Fax No. (with STD Code)		
16.	Website		

	Financial Details (as per audited Balance Sheets) (in Cr)				
	Year	Year1	Year2	Year3	Year4
17.	Net Worth				
	Total Turnover				
	PAT				

6.3 Format 3: Format for MAF / OEM Authorization.

<u>Format of MAF/OEM Authorization</u>

No. _____ dated _____

To

_____

_____

_____

Ref: Tender No. _____

Subject: _____

Dear Sir,

We, _____ who are established and reputed manufacturers of _____ having factories at _____ _____(address of factory) do hereby authorize M/s. _____(Name & Address of agent) to submit a bid, and sign the contract with you against above mentioned tender No:

We authorized the _____ (name of the bidder) for the following modules/products:

Sr. No.	Product Name	Make & Model

We hereby confirm that the offered Product in the referenced RFP will be provided unconditionally with a back to back warranty, maintenance, support services and parts availability etc. for proposed product etc. available for the period of five years from FAT through M/s_____ (SI/Bidder).

Certified the hardware / software mentioned in Annexure A, for which our company, "Name of OEM" is the OEM, has been quoted for support in the bid of M/s. (Partner name)

Subject to existence of valid pre-purchased support contract with "Name of OEM" we undertake to provide the following:

1.   TAC Support for operation, maintenance and upgrade of the quoted product on 24 x 7 basis up to Contract End Date.
2.   RMA replacement when required identified and approved by "Name of OEM" Technical Team (with an equivalent or upgrade model)
3.   Full support towards migration to IPV6 for the GSWAN network by studying, planning, designing and recommending the migration path and methodology.

We also certify that the Bidder and "Name of OEM" have agreed to execute agreement in the above respect subject to the Bidder being selected for the Project and Bidder loading support order on "Name of OEM", a copy of same shall be shared with you, with in 1 month of ordering of support by Bidder.

We hereby confirm After completion of 5 years warranty/CAMC period, if required, DST/GIL may extend the warranty/AMC support for further period of 2 years (6th year and 7th year) for Hardware and Software.

Yours faithfully,

(Name)
(Name of manufacturers)

6.4 Format 4: Declaration Regarding Blacklisting

To,

DGM (Technical)
Gujarat Informatics Limited
Block No. 2, 2nd Floor, C & D Wing, Karmayogi Bhavan,
Sector 10A, Gandhinagar,   Gujarat 382010

Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the RFP Document [No _____] regarding selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara. I hereby declare that my company has not been blacklisted by any Ministry of Government of India or by Government of any State in India or by Government of Gujarat or any of the Government PSUs. I further certify that I am the Director/Company Secretary and am therefore, competent in my Company to make this declaration.

Yours faithfully,

(Signature of the Bidder) Printed Name
Designation
Seal DIN/Membership No.
Date: Business Address:

6.5 Format 5: Annual Sales Turnover Statement
(On Applicant's Statutory Auditor's letterhead)

Date:

This is to certify that we M/s_____are the statutory Auditors of
M/s_____and that the below mentioned calculations are true as per the
Audited Financial Statements of M/s_____for the below mentioned years.
(any three out of 4 FY)

Sr.	Turnover	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
1	Annual Turnover as per Profit and Loss Account					
2	Net worth as per Audited Balance Sheet					
3	Turnover generated solely from SITC of IT Component for Data centre or on premises Disaster Recovery site or on premises Cloud system implementation					
4	Net Profit as per Profit & Loss Account					

Yours faithfully,

(Signature of the Auditor) Printed Name
Designation
Seal DIN/Membership No. Date:
Business Address:

Note: Please upload the Copy of the audited Annual Accounts of the company for the last three

years including Balance sheet, Profit & Loss A/c, Directors' Report and Statuary Auditor's Report.

6.6 Format 6: Completion of Projects of Prescribed Nature and Size
(Please fill one separate form for each project according to pre-qualification criteria.)

S. No.	Criteria	Project
1	Implementer Company	
2	Customer's Name	
3	Scope of the Project	Please provide scope of the project, highlight Key Result Areas expected and achieved
4	Value of Project	
5	Did the project involve implementation and/or maintenance of Data Centre	Yes/No
6	Datacenter / on premises DR or on premises Cloud system implementation	
7	Completion certificate	Yes/No
9	Customer Contact Person's detail	
A	Name	
B	Designation	
C	Email	
D	Phone	
E	Fax	
F	Mailing address	

Note: 1.   The Copies of work order and the client certificates for satisfactory completion of the project and showing the order value and cost.

2.   Completion certificate of prescribed nature and size as mentioned to be uploaded.

6.7 Format 7: Compliance Statement

Sr. No	RFP Clause No.	RFP Clause	Complied / Not Complied	Comments
1				
2				
Note: The Clause by Clause Technical Compliance should be submitted by OEM on their Letterhead duly signed by Power of Attorney.				

Section VII – Format for Response to RFP: Technical Bid

7.1 Format 1: Technical Bid Letter

To,

DGM (Technical)
Gujarat Informatics Limited
Block No. 2, 2nd Floor, C & D Wing, Karmayogi Bhavan,
Sector 10A, Gandhinagar,   Gujarat 382010

Sir/Madam,

Sub: Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara

Reference: RFP No: <Bid REFERENCE NUMBER> Dated <DD/MM/YYYY>

We, the undersigned Bidder, having read and examined in detail the entire Bid documents do hereby propose to provide the services as specified in the above referred Bid document number along with the following:

1. We declare that all the services shall be performed strictly in accordance with the bid documents. Further we agree that additional conditions or assumptions, if any, found in the RFP documents shall not be given effect to.

2. We agree to abide by this bid for a period of 180 days from the date of financial bid opening or for any further period for which bid validity is extended and it shall remain binding upon us and Bid may be accepted at any time before the expiration of that period.

3. We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

4. We understand that our bid is binding on us and that you are not bound to accept a bid you receive.

Thankingyou,

Yours faithfully,

(Signature of the Bidder)
Printed Name Designation
Seal Date:
Business Address:

7.2   Format 3: Proposed Solution

1.   The Bidder is required to describe the proposed Technical Solution in this section. Following should be captured in the explanation:

- Clear articulation and description of the design and technical solution and various components (including diagrams and calculations wherever applicable)

- Extent of compliance to technical requirements specified in the scope of work

- Technical Design and clear articulation of benefits to Govt. of various components of the solution vis-à-vis other options available.

- Strength of the Bidder to provide services including examples or case-studies of similar solutions deployed for other clients.

2.   The Bidder should provide detailed design and sizing calculation for the following listing all assumptions that have been considered:

1.   Implementation & Support

   a.   DC DR Hardware and Software
   b.   Dc-Near Dr-Far DR setup
   c.   DC – DR Failover and fallback to DC
   d.   Backup & Restoration, Operating and Recovery Procedures
   e.   Warranty & CAMC Support Help Desk Services and Escalation Plan

2.   Approach & Methodology for implementation and adherence to SLAs.

3.   Bidder has to describe about their plan of dealing with all existing solution at SDC.

4.   Bidder shall provide a detailed project plan with timelines, handing over process, resource allocation, milestones etc.

Section VIII– Formats to Response to the RFP: Financial Bid

8.1 Format 1: Financial Bid Letter

To,

DGM (Technical)
Gujarat Informatics Limited
Block No. 2, 2nd Floor, C & D Wing, Karmayogi Bhavan,
Sector 10A, Gandhinagar,   Gujarat 382010

Sir/Madam,

Subject: Selection of Agency for Supply, Installation, testing, commissioning and provide premium

support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre,

Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and

Proposed Near DR site, Vadodara

Reference: RFP No: <Bid REFERENCE NUMBER> Dated <DD/MM/YYYY>

We, the undersigned Bidder, having read and examined in detail all the Bid documents in respect of

selection of Agency for Supply, Installation, testing, commissioning and provide premium support

(24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed

Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara do

hereby propose to provide services as specified in the Tender documents number **<Bid**

REFERENCE NUMBER> Dated <DD/MM/YYYY>

1. PRICE AND VALIDITY
    * All the prices mentioned in our Bid are in accordance with the terms as specified in the Bid
       documents. All the prices and other terms and conditions of this Bid are valid for a period of
       180 calendar days from the date of opening of the financial Bids.
    * We hereby confirm that our Bid prices are inclusive all taxes.
    * We have studied the clause relating to Indian Income Tax and hereby declare that if any Income
       Tax, surcharge on Income Tax, Professional and any other corporate Tax is altered under the
       law, we shall pay the same.

2.   UNIT RATES
        We have indicated in the relevant schedules enclosed the unit rates for the purpose of on
        account of payment as well as for price adjustment in case of any increase to / decrease

from the scope of work under the contract.

3.   DEVIATIONS

We declare that all the services shall be performed strictly in accordance with the Bid documents Further we agree that additional conditions, if any, found in the bid documents, shall not be given effect to.

4.   TENDER PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in RFP document.

5.   QUALIFYING DATA

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

6.   BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in the Schedule of Requirements and RFP documents. These prices are indicated in Formats (Section 8.2) of this Section attached with our bid as part of the RFP.

7.   CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed in Volume I, Annexure 3-Performa and as per Section IV - General Conditions of Contract.

8.   We hereby declare that our Bid is made in good faith, without collusion or fraud and the Information contained in the Tender is true and correct to the best of our knowledge and belief.

9.   We understand that our Bid is binding on us and that you are not bound to accept a bid you receive.

10.   We confirm that no Technical deviations are attached here with this financial offer.

Thanking you,

Yours faithfully,

(Signature of the Bidder)

Printed Name Designation

Seal Date:

Business Address:

8.2 Format 2: Price/Financial Bid

8.2.1   Schedule 1

Sr. No.	Description	Unit	Total Price including GST
1	SITC, CAMC & Warranty Support for Hardware and Software for Gujarat State Datacentre, Near DR Site Vadodara and DR Site NIC Bhuvneshwar, Orissa as per Specification and Scope of Work Mentioned.	1	

Note: to be uploaded on GeM.

8.2.2   Schedule 2:- Breakup of the Price / Financial bid

	Component	Total Rate Inc. GST
Sr. #	Device Description	
1	SITC of WAN Router Qty. 6	
2	CAMC and Warranty Support for 5 Year Of WAN Router Qty. 6	
3	SITC of Internet Router for Qty. 4	
4	CAMC and Warranty Support 5 Year Of Internet Router Qty. 4	
5	SITC of FW External (for Internet) Qty. 4	
6	CAMC and Warranty Support for 5 Year Of FW External (for Internet) Qty. 4	
7	SITC of IPS External (for Internet) Qty. 4	
8	CAMC and Warranty Support for 5 Year Of IPS External (for Internet) Qty. 4	
9	SITC of Layer 3 Switches (FC-10G-48) Qty. 4	
10	CAMC and Warranty Support for 5 Year Of Layer 3 Switches (FC-10G-48) Qty. 4	
11	SITC of SDN Controller Qty. 2	
12	CAMC and Warranty Support for 5 Year Of SDN Controller Qty. 2	
13	SITC of Core Spine Switch Qty. 2	
14	CAMC and Warranty Support for 5 Year Of Core Spine Switch Qty. 2	
15	SITC of Leaf – Border Switch Qty. 2	
16	CAMC and Warranty Support for 5 Year Of Leaf – Border Switch Qty. 2	
17	SITC of Leaf switch (FC-10G-48) Qty. 4	
18	CAMC and Warranty Support for 5 Year Of Leaf switch (FC-10G-48) Qty. 4	
19	SITC of Management switch Qty. 6	
20	CAMC and Warranty Support for 5 Year Of Management switch Qty. 6	
21	SITC of WAF or SLB Qty. 2	
22	CAMC and Warranty Support for 5 Year Of WAF or SLB Qty. 2	
23	SITC of Compute and Cloud 3000 Cores (60 TB) Qty. 1	
24	CAMC and Warranty Support for 5 Year Of Compute and Cloud 3000 Cores (60 TB) Qty. 1	
25	SITC of Compute and Cloud 2000 Cores (40 TB) Qty. 1	
26	CAMC and Warranty Support for 5 Year Of Compute and Cloud 2000 Cores (40 TB) Qty. 1	
27	SITC of SAN Storage 600 TB expansion Qty. 1	
28	CAMC and Warranty Support for 5 Year Of SAN Storage 600 TB expansion Qty. 1	
29	SITC of SAN Storage As per Capacity mentioned Qty. 2	
30	CAMC and Warranty Support for 5 Year Of SAN Storage As per Capacity mentioned Qty. 2	
31	SITC of Unified Storage As per Capacity mentioned Qty. 1	
32	CAMC and Warranty Support for 5 Year Of Unified Storage As per Capacity mentioned Qty. 1	
33	SITC of SAN Switch Qty. 4	
34	CAMC and Warranty Support for 5 Year Of SAN Switch Qty. 4	
35	SITC of FCIP Router Qty. 6	
36	CAMC and Warranty Support for 5 Year Of FCIP Router Qty. 6	

Note:

1. The Bidder has to submit detailed breakup of financial price bid of Schedule 1 as per the attached Schedule 2 in the Price bid section in separate sealed cover and should be submitted at the time of bid submission. As GEM is not allowing breakup of so many items, detailed breakup is to be submitted in physical sealed cover. Physical sealed cover would be opened in front of

eligible participants at the time of financial bid opening. Rates submitted on GEM portal of all the aggregated cost under the Schedule 1 of the price schedule will only be considered for L1 Evaluation. The physical price bid submitted to GIL for price breakup will be used during contract period for any addition / deletion of the item under the scope. The same will be required to be submitted after RA. The price breakup should not be uploaded on GeM.

2. L1 will be the lowest sum total of rates with taxes.
3. Bidder is required to submit Total cost of the quantity mentioned in the line item. The unit rate of each line item will be derived by dividing the price submitted by bidder with the quantity mentioned in the line item.
4. The yearly CAMC & OEM support cost should not be less than 7% of the CAPEX cost as per. In case of any bidder is quoting less than 7%, the bid is liable to be rejected.
5. Sum Total of AMC & Warranty would be paid in 20 equated Quarters from the date of successfully completion of FAT.
6. RA has been enabled in the GEM Bid.

Annexure 1: RFP Document Acknowledgement Form

Dated:

To,

DGM (Technical)

Gujarat Informatics Limited
Block No. 2, 2nd Floor, C & D Wing, Karmayogi Bhavan,
Sector 10A, Gandhinagar,   Gujarat 382010

Dear Sir,

We hereby acknowledge receipt of a complete set of RFP Documents consisting of   Annexure (along with their Appendices) enclosed to the "Invitation for Bid" pertaining to   providing   of _____ services against RFP no._____.

We have noted that the closing date for receipt of the RFP by GIL is_____ at <   > hrs. and opening at < > hrs. on the same day.

We guarantee that the contents of the above said RFP Documents will be kept confidential within our organization and text of the said documents shall remain the property of GIL and that the said documents are to be used only for the purpose intended by GIL.

Our address for further correspondence on this tender will be as under:

Telex no: …………………………………………….

Fax no: ……………………........................ Telephone no: …………………..

Personal attention of:………………….......................... (if required)

      Yours faithfully,

(Bidder) Note: this form should be returned along with offer duly signed.

Annexure 2: PERFORMANCE BANK GUARANTEE FORMAT
(To be stamped in accordance with Stamp Act)

Ref: Bank Guarantee No.

Date:

To
DGM (Tech)
Gujarat Informatics Limited,
Block -2, 2nd Floor, Karmyogi Bhavan,
Sector – 10A, Gandhinagar.
(Gujarat)

Dear Sir,

1. WHEREAS............................ (Name of Bidder) hereinafter called "the Bidder" has undertaken, in pursuance of Agreement dated, ... (hereinafter referred to as "the Agreement for **Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara** AND WHEREAS it has been stipulated in the said Agreement that the Bidder shall furnish a Bank Guarantee ("the Guarantee") from a scheduled bank for the sum specified therein as security for implementing PROJECT.

2. WHEREAS we _____ ("the Bank", which expression shall be deemed to include it successors and permitted assigns) have agreed to give the Government of Gujarat ("GoG") the Guarantee:
   THEREFORE the Bank hereby agrees and affirms as follows:
   The Bank hereby irrevocably and unconditionally guarantees the payment of all sums due and payable by the Bidder to GoG under the terms of their Agreement dated _____. Provided, however, that the maximum liability of the Bank towards GoG under this Guarantee shall not, under any circumstances, exceed _____ in aggregate.

3. In pursuance of this Guarantee, the Bank shall, immediately upon the receipt of a written notice from GoG in that behalf and without delay/demur or set off, pay to GoG any and all sums demanded by GoG under the said demand notice, subject to the maximum limits specified in Clause 1 above. A notice from GoG to the Bank shall be sent by Registered Post (Acknowledgement Due) at the following address:

   _____

   _____

   _____
   Attention Mr. _____.

4. This Guarantee shall come into effect immediately upon execution and shall remain in force for a period of months from the date of its execution. The Bank shall extend the Guarantee for a further period which may mutually decide by the bidder and GoG. The liability of the Bank under the terms of this Guarantee shall not, in any manner whatsoever, be modified, discharged, or otherwise affected by:
   - Any change or amendment to the terms and conditions of the Contract or the execution of any further Agreements.
   - Any breach or non-compliance by the Bidder with any of the terms and conditions of any Agreements/credit arrangement, present or future, between Bidder and the Bank.

5. The BANK also agrees that GoG at its option shall be entitled to enforce this Guarantee against the Bank as

a Principal Debtor, in the first instance without proceeding against the BIDDER and not withstanding any security or other guarantee that GoG may have in relation to the Bidder's liabilities.

6.   The BANK shall not be released of its obligations under these presents by reason of any act of omission or commission on the part of GoG or any other indulgence shown by GoG or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the BANK.

7.   This Guarantee shall be governed by the laws of India and the courts of Ahmedabad shall have jurisdiction in the adjudication of any dispute which may arise hereunder.

Dated this the ………………. Day of ……………………..

Witness

(Signature)   (Signature)

(Name)   (Name)

Bank Rubber Stamp

(Name)

(Official Address)
Designation with Bank Stamp

Plus Attorney as per Power of
Attorney No.
Dated:

Approved Bank: All Nationalized Bank including the public sector bank or Private Sector Banks or Commercial Banks or Co-Operative and Rural Banks (operating in India having branch at Ahmedabad/ Gandhinagar) as per the G.R. no. EMD/10/2021/7729/DMO dated 12.04.2021 issued by Finance Department or further instruction issued by Finance department time to time.

Annexure 3: Format of Earnest Money Deposit in the form of Bank Guarantee

Ref: Bank Guarantee No.

                                                                                Date:

To,

DGM (Technical)

Gujarat Informatics Limited
Block No. 2, 2nd Floor, C & D Wing, Karmayogi Bhavan,
Sector 10A, Gandhinagar,   Gujarat 382010

Whereas -- (here in after called "the Bidder") has submitted its bid dated ---------------- in response to the RFP No. <<<<>>>> for <<<<>>>> by these presents that WE -- ------------------- -- having our registered office at - ----------- ----------------------- --------------------------- (hereinafter called "the Bank") are bound unto the _____, Gujarat Informatics Limited in the sum of ---------- ------------ for which payment well and truly to be made to Gujarat Informatics Limited , the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this -------------day of ---------------------- ----2021.

THE CONDITIONS of this obligation are:

1. The E.M.D. may be forfeited:
a. if a Bidder withdraws its bid during the period of bid validity
b. Does not accept the correction of errors made in the tender document;
c. In case of a successful Bidder, if the Bidder fails:
    (i) To sign the Contract as mentioned above within the time limit stipulated by purchaser or
    (ii) To furnish performance bank guarantee as mentioned above or

    (iii) If the bidder is found to be involved in fraudulent practices.
    (iv) If the bidder fails to submit the copy of purchase order & acceptance thereof.

We undertake to pay to the GIL/Purchaser up to the above amount upon receipt of its first written demand, without GIL/ Purchaser having to substantiate its demand, provided that in its demand GIL/ Purchaser will specify that the amount claimed by it is due to it owing to the occurrence of any of the abovementioned conditions, specifying the occurred condition or conditions.

This guarantee will remain valid up to the validity of Bids 9 Months. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the OWNER/PURCHASER and further agrees that the guarantee herein contained shall continue to be enforceable till the OWNER/PURCHASER discharges this guarantee

The Bank shall not be released of its obligations under these presents by any exercise

by the OWNER/PURCHAER of its liability with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of the OWNER/PURCHASER or any other indulgence shown by the OWNER/PURCHASER or by any other matter or things.

The Bank also agree that the OWNER/PUCHASER at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against the SELLER and not withstanding any security or other guarantee that the OWNER/PURCHASER may have in relation to the SELLER's liabilities.

Dated at _____ on this _____ day of _____2021.

_____

Signed and delivered by
_____

 For & on Behalf of

Name of the Bank & Branch &
Its official Address

Approved Bank: Any Nationalized Bank operating in India having branch at Ahmedabad/ Gandhinagar

Annexure 4: Undertaking On letterhead of Bidder
<u>Sub : Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 published by Ministry of Finance, Dept. of Expenditure, Public Procurement division</u>

Ref: Bid Number: _____

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that we as a bidder and quoted product from following OEMs are not from such a country or, if from such a country, these quoted products OEM has been registered with competent authority. I hereby certify that these quoted product & its OEM fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number_____.

No.	Item Category	Quoted Make & Model

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority, otherwise GIL/End user Dept. reserves the right to take legal action on us.

(Signature)
Authorized Signatory of **<u>M/s <<Name of Company>></u>**

Annexure 5: Undertaking On letterhead of OEM

Sub : Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 published by Ministry of Finance, Dept. of Expenditure, Public Procurement division

Ref: Bid Number: _____

Dear Sir,

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that our quoted product and our company are not from such a country, or if from such a country, our quoted product and our company have been registered with competent authority. I hereby certify that these quoted product and our company fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number_____.

No.	Item Category	Quoted Make & Model

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority; otherwise GIL/End user Dept. reserves the right to take legal action on us.

(Signature)
Authorized Signatory of **M/s <<Name of Company>>**

Request for Proposal for
Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara.

Volume-II
(Scope of Work and SLAs)

Gujarat Informatics Ltd
Block No. 2, 2nd Floor,
C & D Wing, Karmayogi Bhavan
Sector - 10 A, Gandhinagar – 382010 Gujarat.

Ph No. 23259237, 23259240
Fax: 23238925.
www:gil.gujarat.gov.in

Abbreviations

- **GoG**: Government of Gujarat

- **DST**: Department of Science & Technology

- **GIL**: Gujarat Informatics Limited

- **GSWAN**: Gujarat State Wide Area Network

- **GSDC:** Gujarat State Data Centre

- GSCAN: Gujarat Sachivalaya Campus Area Network

- **OEM:** Original Equipment Manufacturer

- **O&M:** Operations & Maintenance

- **EMS:** Enterprise Management Suite

- **NMS:** Network Monitoring System

- **EMD:** Earnest Money Deposit

- **PBG:** Performance Bank Guarantee

- **SLA:** Service Level Agreement

- **FAT:** Final Acceptance Test

- **TPA:** Third Party Agency

- **SoW:** Scope of Work

- **IPS:** Intrusion Prevention System

- **IMS:** Integrated Infrastructure Management System

- **CCTV:** Closed Circuit Tele Vision

- **QP:** Quarterly Payment

- TENDERER: DST/GIL/ Government of Gujarat

Section I: Introduction

1.1. Gujarat State Data Centre (GSDC)

Government of Gujarat has set up Gujarat State Data Center (GSDC) in Gandhinagar, the State capital. GSDC includes 2600 sq.ft of server & storage area, 600 sq.ft of connectivity zone and 1300 sq.ft of control room & utility area. GSDC has been connected to all the Government offices through GSWAN infrastructure and is operationalized since 2008.

GSDC is a central repository for storing & hosting all digital data, applications and services of Government of Gujarat. GSDC provides a shared platform of Compute, Storage, Network & Security, Infrastructure component. Also providing the Cloud Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS), e-mail services to Govt. of Gujarat employee, Remote management and service integration with other core infrastructure like GSWAN, GFGNL etc. The existing GSDC having is 100+ Racks and GoG has planned the new State Data Center of approximately 300 racks, which is under process.

1.1.1.   GSDC Overview:

2600 Sq. ft	5	Co-location/hosting of approx. 440+ Servers from various State Government Departments
	6	Hosting of approx. 720+ Government websites and Applications
	7	Storage capacity of approx. 3 PB+ to store State Government and Citizen's critical information/data
	8	SAN , Backup solution, Proxy
	9	Two sets of UPSs of 240 KVA capacity each to provide battery backup
Connectivity Zone (Network Room): 600 Sq. ft	5	Firewall
	6	Intrusion Prevention System (IPS)
	7	Web Application Firewall (WAF)
	8	DMZ (Demilitarized zones)
	9	Server Load Balancer (SLB)
	10	Routers and Layer 2/3 switches for network
Control Room and Utility Area: 1300 Sq. ft	6	UPSs and Battery banks
	7	Panel Switches
	8	Precision Air conditioners (PAC)
	9	FM 200 Gas cylinders to protect against fire situation
	10	Building Management System
	11	24 x 7 x 365 CCTV/Surveillance monitoring system
	12	Water Leakage Detection System
	13	Rodent repellent system
	14	Access Control System
	15	Fire Alarm System/Smoke Detection System
Network Operation Center (NOC) Area: 2500 Sq. ft	•	24x7 Monitoring and Management facility for GSDC
	•	Operations and Management Team seating arrangement for approx. 50+ personnel
Expansion Area : 1400 Sq.ft	10	21 Rack capacity , currently 16 Racks have been installed for Cloud infra, GFGNL-DWDM, infra, NAS, eNagar and IFP projects
	11	Separate Non-IT infra like Access Control, CCTV, WLD, Rodent repellent system Fire suppression, Fire Alarm, Electrical system, PAC and UPS of 2 x 200KVA with battery backup.

Section II: Scope of Work

Gujarat Informatics Limited on behalf of Department of Science and technology, Government of Gujarat issued this RFP for selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacentre, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara.
DST/GIL/GSDC envisages Disaster Recovery site and refresh of existing Data Center: Primary Data Center is located at GSDC, Gandhinagar and the proposed Far DR site is NIC, Bhubaneshwar & Proposed Near DR Site, Vadodara

The scope of work under this RFP is Supply, Installation, Configuration, Testing, Commissioning and Support (24x7x 365) including successful completion of Final Acceptance Test (FAT), followed by handover to the existing Data Center Operator of GSDC appointed by the DST, GoG of various equipment for Gujarat State Data centre (GSDC) and Proposed Far Disaster Recovery (DR) site NIC Bhubaneshwar & Proposed Near DR Site, Vadodara

1.1.System Integration Component:

    1.1.1.Bidder is required to supply, install, configure, test and commission the required Hardware and software compute (inclusive of all active & passive components and sub components, accessories) as per the technical and functional specification mentioned in the RFP document.

    1.1.2.The licenses supplied by the selected bidder should be in the name of Department of Science and Technology, Government of Gujarat valid perpetual for life and handover to GSDC.

    1.1.3.As Basic infrastructure i.e. Power, Cooling, Connectivity and Racks (server & network) are ready at the NIC Bhubaneswar. Bidder is required to provide Racks with iPDU & other components at Near DR site, Vadodara and at primary site GSDC Gandhinagar .

    1.1.4.Required Power point within each rack will provided by NIC/DST/GIL. However, bidder will have to ensure that the hardware supplied/delivered is compatible with the IPDU's supplied in the rack or bidder needs to provide required connector, if any.

    1.1.5.Currently ISP (NKN) connectivity of capacity 10 Gbps with high availability is already available between the primary site and DR site. The proposed solution should seamlessly integrate with, the existing GSDC Infrastructure. 2x10G FC up-links from Internet (NKN) will provided to the bidder for integration of GSDC and Proposed DR Site. For Near DR site , all data should be replicated with near zero data loss, bidder is required to propose requisite bandwidth and accordingly DST/GoG will provide the bandwidth.

    1.1.6.The bidder should provision the required hardware and software components which mentioned in the RFP to be implemented under this RFP Scope.

    1.1.7.The Bidder has to ensure that if any additional component(s) required for overall solution to comply with the implementation to achieve desired objectives and SLA levels, then in such case it should be the responsibility of the bidder to provide the same as a part of the entire solution.

    1.1.8.The architecture needs to be scalable to meet future demand.

    1.1.9.The bidder shall be responsible of configuring Data Replication between GSDC and Near & Far DR Site as per the guidelines/policy of TENDERER. The RPO between Primary and Far DR site will be max 15 minutes and between Primary DC and Near DR, it should be near zero data loss.

    1.1.10.Bidder has to submit the HLD, LLD, detailed project plan etc. for DC and DR both. It is preferable that respective OEM should support for configuration, Implementation and commissioning for particular device.

     1.   Bidder should provide the overall program management and should undertake OEM support for their respective technologies from various OEMs so as to ensure seamless implementation as per the design goals.

     2.   The OEM resources should be engaged to collect the Customer requirement to achieve business outcomes and based upon that provide the specific solution designing (OEM High Level & Low Level Design) with Implementation & configuration implementation support to the bidder for deployment. OEM should also provide a test plan that should be executed by the bidder before go-live to ensure that OEM supplied technology & products work as per the design objectives.

3.   OEM to design and implement the complete security policy and workflow as per industry best practice in consultation with Customer to meet their business requirements.

4.   The bidder shall obtain sign-offs from OEM on the system design & deployment architecture before go-live of the envisaged system and submit before FAT.

1.1.11. The selected bidder is required to submit the certification from the OEM of the proposed solution confirming successful implementation, testing, commissioning and satisfactory deployment of the proposed solution based on the industry best practices as a part of FAT.

1.1.12. Bidder (SI) should provide the overall program management, OEM has to support SI such that the proposed solution which will be based on heterogeneous technologies from various OEM, to work together seamlessly as per the design goals. The seamless integration with all devices would be done by SI.

1.1.13. Bidder (SI) has to design and implement the complete security policy, migration (if any required) and workflow as per industry best practice in consultation with OEM and GSDC to meet Business requirements.

1.1.14. Supply, installation, configuration & maintenance of the DR fabric (SDN ready from day one) along with the software, hardware in Spine-Leaf architecture and seamless migration and integration with existing Network Architecture of GSDC. The existing network architecture will be shared to the successful bidder.

1.1.15. Interconnection between spine and leaf switches through Direct Attach Cables (DAC) or through fiber cables or any other passive components is in the scope of the bidder without any additional cost to the Tender.

1.1.16. The DR Fabric including but not limited to Spine & Leaf switches, SFP/SFP+/QSFP/QSFP28, Data Center Network Management Software, other components / software etc. should be from same OEM.

1.1.17. The migration & integration activity should be carried out in coordination with GSDC Team and DCO Team with no / minimal possible downtime during holidays / night hours provided by the GSDC according to the requirement.

1.1.18. If GSDC decides to and fro shift device from existing GSDC to Near/Far DR or vice-versa, or if there is any change in location of DR sites, of in case of any exigencies, the bidder has to shift the equipment without any additional cost to the tenderer.

1.1.19. The DR process should be documented by the successful bidder as part of the disaster recovery plan.

1.1.20. The support including spares, patch updates, for the quoted products shall be available for the entire period of the Project without any additional cost.

1.1.21. Successful bidder is required to handover the Operation and maintenance of the entire infrastructure to the existing Data centre operator of the GSDC on completion of FAT.

1.1.22. FAT shall be considered completed successfully upon completion of: -

1.1.22.1. All the required activities like supply, installation, testing, commissioning of the proposed solution as per the RFP/Contract agreement

1.1.22.2.   Successful 1 DR Drill of selected application by the Tenderer on the proposed DR sites.

1.1.22.2.1. The exact process of the DR drills should be formulated in consultation with the Tenderer team in a way that all elements of the system are rigorously tested, while the risk of any failure during the drill is minimized.

1.1.22.2.2. The date, time, duration, and scope of each drill shall be decided mutually between Tenderer and the successful bidder. Extreme care must be taken while planning and executing DR drills to ensure that there is no avoidable service interruption, data loss, or system damage at DC.

1.1.22.2.3. Drills to be conducted for applications selected by Tenderer which could simulate the failure of all systems.

1.1.22.2.4. DR Drill will be considered successful only if the desired services are started at the DR Site, successfully running the services for the pre-decided time period and restore the services back to the Primary site.

1.1.23. The successful bidder is responsible for complete knowledge transfer, Operating Manuals and

SOPs, needs to provide a comprehensive, on-site training on deployed devices and tools (including cloud solution) to at least 10 member team nominated by DST/GIL/GSDC

1.1.24. The bidder needs to provide a comprehensive, on-site training on deployed solution to the team nominated by DST/GIL, GoG.

1.1.25. **Warranty Support:** As part of the warranty services bidder shall provide:

1.1.25.1. Bidder shall provide a comprehensive on-site free warranty for 5 years from the date of FAT for proposed solution.

1.1.25.2. Warranty and Support of all devices & tools will be considered only after successful FAT date. FAT of DC and DR will be conducted separately.

1.1.25.3. Bidder shall also obtain the five year OEM premium support (ATS/AMC) on all licensed software, OSS, any other third party tool, hardware and other equipment for providing OEM support during the warranty period.

1.1.25.4. Wherever specific clause is not defined, by default support of all devices and tools should be premium one i.e. 4/6 hrs replacement and according to SLA

1.1.25.5. Bidder shall provide the comprehensive manufacturer's warranty and support in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by the bid. Bidder must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this bid against any manufacturing defects during the warranty period.

1.1.25.6. Bidder shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels in the bid.

1.1.25.7. Bidder is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the bid. During the warranty period bidder, shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost in case the procured hardware or software is not adequate to meet the service levels.

1.1.25.8. Mean Time between Failures (MTBF): If during contract period, any equipment has a hardware failure on four or more occasions in a period of less than three months, it shall be replaced by equivalent or higher-level new equipment by the bidder at no cost. For any delay in making available the replacement and repaired equipment's for inspection, delivery of equipment's or for commissioning of the systems or for acceptance tests / checks on per site basis, DST/GIL reserves the right to charge a penalty.

1.1.25.9. During the warranty period bidder, shall maintain the systems and repair / replace at the installed site, at no charge, all defective components that are brought to the bidder notice.

1.1.25.10. The bidder shall as far as possible repair/ replace the equipment at site.

1.1.25.11. Warranty should not become void, if DST/GIL buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the bidder. However, the warranty will not apply to such supplemental hardware items installed.

1.1.25.12. The bidder shall carry out Preventive Maintenance (PM), including cleaning of interior and exterior, of all hardware and testing, if any, and should maintain proper records at each site for such PM. Failure to carry out such PM will be a breach of warranty and the warranty period will be extended by the period of delay in PM.

1.1.25.13. Bidder shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions.

1.1.25.14. Bidder shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.

1.1.25.15. Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).

1.1.25.16. To provide warranty support effectively, OEM should have spare depo in India and will be ask to deliver spare as per SLA requirement.

1.1.25.17. "After completion of 5 years warranty/CAMC period, if required, DST/GIL may extend the warranty/AMC support for further period of 2 years (6th year and 7th year) on the derived

rates of average cost of 5 years warranty/CAMC cost quoted for Hardware and Software. Bidder is required to provide the undertaking for the same mentioning that they will provide 6th year and 7th year warranty/ CAMC support".

1.2.Key Deliverables:

The bidder needs to provide following deliverables in accordance with the Implementation Timelines.

S/N	Deliverables	Activity
1.	Kick-off meeting	Project Plan
2.	Delivery of Components	• Software License documents • Hardware warranty certificate
3.	Installation & Commissioning	• Solution architecture documents • Logical and physical design • Completion of UAT and closure of observations • Integration Testing Report • Test cases & SOPs for the DR
4.	FAT	Successful 1 DR Drill for selected Application by Tenderer on the proposed DR Site NIC Bhubaneshwar and MDC, Vadodara(Near DR)
5.	Training	• Material • Plan • Completion

1.3.Bill Of Material

The tenderer is intend to procure following system included but not limited to required Hardware, Software, License, Accessories and any other device / software to full fill the functional requirement mentioned under this RFP.

Sr. #	Component	DC	Far DR	Near DR	Total
	Device Description	Qty.	Qty.	Qty.	Qty.
1	WAN Routers	2	2	2	6
2	Internet Router	2	2	0	4
3	FW External (for Internet)	2	2	0	4
4	IPS External (for Internet)	2	2	0	4
5	Layer 3 Switches (FC-10G-48)	4	0	0	4
6	SDN Controller	0	2	0	2
7	Core-Spine Switch	0	2	0	2
8	Leaf - Border	0	2	0	2
9	Leaf switch (FC-10G-48)	0	4	0	4
10	Management switch	2	2	2	6
11	WAF/SLB	0	2	0	2
12	Compute & Cloud	3000 Cores (60 TB)	2000 Cores (40 TB)	0	2
13	SAN Storage	600 TB expansion	1.6 PB	1.6 PB	2+1expansion

14	Unified Storage	NR	NR	1.5 PB	1
15	SAN Switch	2	2	0	4
16	FCIP Router	2	2	2	6

Section III: Technical Specification

The bidder should provide state of the art system to fulfil over all functional requirement for primary Data Centre, proposed Near Disaster recovery site & Proposed Far Disaster recovery site. Devices such as Network Switch, Router, Load Balancer, storage, compute and Firewall should be proposed in high availability design and failure of any single device should not impact network or solution availability. The bidder should provide overall program management and OEM Implementation support wherever required as solution from multiple OEM required to be integrated with each other and seamlessly work together as per the requirement.

Tenderer envisages to procure Hardware and Software infrastructure for Primary Data Center ,proposed Near Disaster recovery site & Proposed Far Disaster recovery site. The solution should be planned to have an agile infrastructure that delivers best performance to the applications with simplified operations and management. The proposed setup should cater to the needs to envisaged applications in current scope and planned future applications. An open architecture should be planned to ensure multi environment workloads: - bare metal, virtual (multi OEM hypervisor) and containerized applications in future to provide flexibility in delivering services.
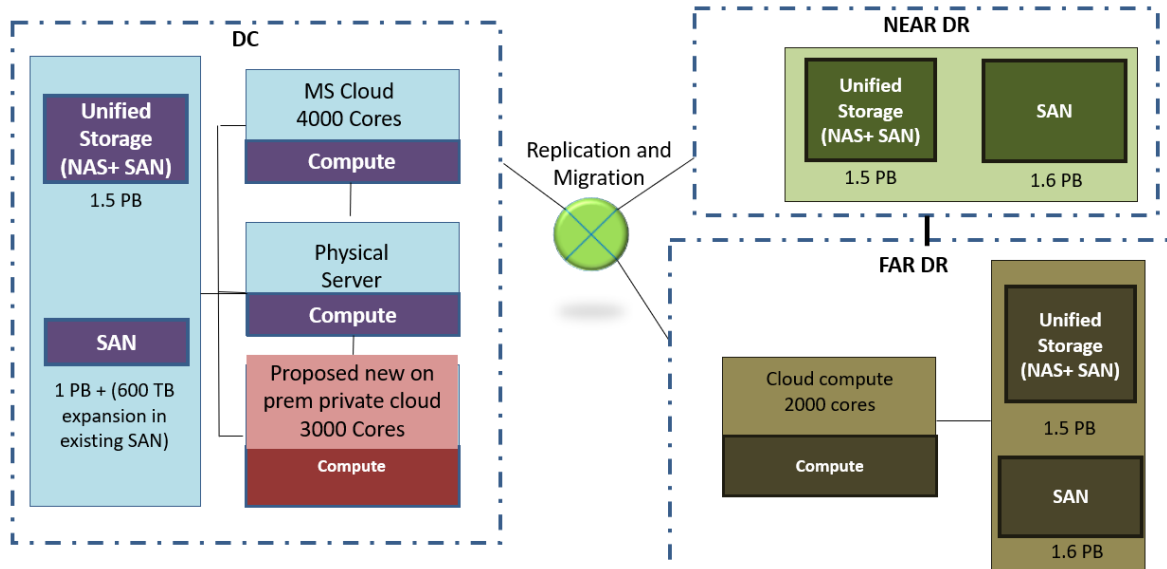
The second site planned part of business continuity during operation failure due to technical reasons or natural calamities is the Disaster recovery site. The Disaster recovery site will be setup at 25% of compute & with all related components like network, security, storage etc. The Near DR storage & far Disaster recovery site Compute, Storage, Network & Security architecture should be seamlessly integrated with the Primary Data Center to ensure consistency in policies, replications and design.

The architecture across On-premises Data Center and Near & Far Disaster recovery provider needs to be compatible to ensure consistency in network & security policies and design. The solution should be able to provide a single view & manageability of the infrastructure resources available across multiple sites for central visibility and governance.

The proposed solution should automate the DR operations as much as possible, replication of heterogeneous environments, monitoring of DR health status and report any deviation from defined thresholds. The proposed solution should use standardize replication and management approach across critical systems environment. The proposed solution should automate procedures and should require minimum dependency on human interventions at the time of DR to avoid human errors / skill sets dependency or misconfigurations.

The Bidder shall ensure that the products quoted should not be declared "End of Production" for next 5 years and "End of support" for the next 7 years by the OEM from the date of bid submission. However, if OEM declares any equipment/solution/software/or part as end of support for any reasons, then in that case OEM has to replace that equipment with better or equivalent products without any cost to DST/GoG. OEM to provide compliance on their letter head for the specification of Hardware and Software Infrastructure.

Current Storage and backup devices:
Hitachi Vantara
Storage - Hitachi VSP E 590H
Backup & Replication Software – Hitachi Data Protection Suite (Commvault)-DC

Hitachi Vantara VSP 5600 1 PB NvME-DC

NetAPP FAS 8200 1.5 PB - DC
NetAPP FAS 8300 1.5 PB NL-SAS -Far DR

1.1. WAN & Internet Router

Sr. #	Specifications
1	Chassis based Router in nature which should support Software Defined Network (SDN). Device should support termination of internet link or WAN (Intranet) links 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with router 4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**From Day1 Router Should Have:** 1. Port - **10 x 10 G** with fully populated SFP+ 2. Uplink Ports - 4 **x 40 G populate** optics with SFPS 3. Aggregated throughput - **200 Gbps** 4. RAM - **8 GB DRAM** 5. Storage - **8 GB** 6. Console Port - **RJ45, usb/microusb for management**
3	**The Router should support :** 1. Concurrent IPsec tunnel - **4000** 2. VRF sessions - **4000** 3. Access Control List (ACL)- **4000** **4. IPv6 routes: 4 Million**
4	**Other Functionality:** 1. Should have hot swappable power supplies, Fans, processor/controller card for 1+1 redundancy 2. All the LAN/WAN ports should be in compliance with 802.3 standards 3. Should support advanced encryption algorithms like AES-256 and AES-GCM 4. Should support IPv6 and IPv4 routing protocols like, BGP, OSPF and Static routing. 5. Should support Static NAT, Dynamic NAT, NAT/PAT 6. Should support TCP/IP, VPN, IPV4 & IPV6, SNMP, Resource Reservation Protocol (RSVP), etc 7. Should support Role-based administrative access, SSHv2, RADIUS/TACACS+ , Authorization, and Accounting (AAA) 8. Should support Netflow/cFlow/J-Flow/equivalent feature.

	9. The Router should be supplied with all applicable feature and interface perpetual-licenses from day one. 10. The router should support Netconf, YANG, and other modern system management protocols. The device should support YANG - A Data Modelling Language for the Network Configuration 11. In case the primary route processor fails on the router, there should be ZERO packet loss on the whole router for the traffic

1.2. Next Generation Firewall (Internet + DMZ)

Sr. #	Specifications
1	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.
2	Solution: 1. Appliance should be purpose build enterprise grade, scalable, Open architecture 2. Should deployed in high availability mode active-active Clustering and active-standby (hot stand-by redundancy), have fault tolerance and shall provide stateful failover 3. The Appliance should be come with all required Licenses of Firewall, Threat Prevention security, Global protection etc. with Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC 4. It should provide network segmentation features with powerful capabilities that facilitate deploying security for various internal, external and DMZ (Demilitarized Zone) sub-groups on the network, to prevent unauthorized access 5. Should have redundant hot swappable power supply, fan tray etc. 6. The required performance and Throughput must be complied by Single Appliance. However, the solution should be proposed / working in High Availability (HA) 7. The next generation firewall gateway must be capable of supporting these next generation security applications on a unified platform - Stateful Inspection Firewall, Next Gen Firewall, HTTPS inspection, Application Control, Security Policy Management, Monitoring and Logging, Virtual Systems. These security controls must be supplied by and managed by the vendor.
3	Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic **throughput should be min.** 30 Gbps measured after enabling all function like Firewall, Malware protection and Application Control, file blocking and logging enabled NGFW - **Minimum 50 Gbps.** **Firewall throughput: 120 Gbps** **Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 100 Virtual System for future use.** OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled

4	The appliance should be populated with all modules, transceivers & license need to be provisioned from day one. HA, Sync & Management port must be provided separately Support consideration for the Platform should be 24x7 for 5 Years **4 x 1G SFP** **8 x 10 G SFP+** **4 x 40G QSFP+** **4 x 100 G QSFP28** **1 x 1G** ports for out of band **management**.
5	Appliance should support atleast **32 Million concurrent session**s.
6	Appliance should support atleast **5,50,000 new connections per second.**
7	**Features :** 1. Solution must allow to create security policies based on L7 parameters such as Application, Users, File Type etc in addition to IP & Port numbers. 2. The appliance should allow user identification by integrating with AD, LDAP etc solutions. 3. The appliance should support comprehensive threat prevention security features including Antivirus, Anti Spam, Anti Bot etc from day one. 4. The appliance should prevent threats using ML capabilities on files like PowerShell scripts, etc files in real-time. 5. The appliance should support attack recognition for IPv6 traffic, the same way it does for IPv4 6. The appliance should have functionality of Geo Protection to Block the traffic country wise per policy 7. The appliance should support ingesting 3rd party IOCs such as IP Addresses, Domain Names & URLs from different sources including any existing security solution & Open source threat intel 8. The appliance should have ability to detect credential theft attempts on SDC employees 9. The NGFW Antivirus & anti Malware must able to analyse & prevent malicious file, virus, malware, ransomware etc traversing on following protocols: HTTP, HTTPS, SMTP, SMTPS, IMAP, IMAPS, FTP, and SMB. 10. Should protect the user from the malicious content upload or download by any application
7a	VPN : 1. Should support VPN - 500 users to connect remotely with the Organisation from day 1 and scalable to 2000 users. 2. Tunnels: IPsec, SSL 3. MFA should be supported 4. Should be able to support both IPSec and SSL VPN functionalities on the same platform. 5. Authentication algorithms: MD5, SHA-1, SHA-128, SHA-256 or higher 6. The proposed solution should be able to collect information from the endpoint such as Patch updates and AV update status for compliance verification and should be able to provide access based on the compliance state.
8	**Other Features:** 1. The appliance should support VLAN tagging (IEEE 802.1q), SNMP v 2.0 and v 3.0 2. Appliance should be capable configuring Policies using SSH, HTTPS and Command Line (CLI) as a last resort in case of Emergency. 3. Appliance should capable to inspect and applies policy to TLS/SSL-encrypted traffic, both inbound and outbound, including for traffic that uses TLS 1.2 or higher and HTTP/2. 4. Appliance should capable to automatically block known vulnerabilities, malware, vulnerability exploits, spyware, command and control (C&C), and custom signatures. 5. Appliance should having Open API for integrations with third-party products 6. Should support URL and DNS threat intelligence feeds to protect against threats. 7. Appliance should be integrate with third party security analytics systems that dynamically push IoCs to the firewall through STIX/TAXII

9	**Management :** 1. The solution should having single management console deployed in HA through which Centralized configuration, logging, monitoring, and reporting are perform The centralised management and reporting server can be in physical/virtual form factor from the same OEM, if OEM is management software in virtual form factor, server/appliance should be supplied by bidder 2. The solution must provide Customizable Executive Dashboard to provide quick insight to Applications / Users / Content / Files / Threat / Top Country / Top Rule Usage etc. The same should be downloadable. 3. The report must highlight applications running on non-traditional ports and by-passing L3/L4 security rules 4. NGFW must provide report including source IP / User / Destination IP / Hostname / byte transfer / rule allowing non-standard traffic in a GUI and must be exportable in PDF/an excel format. 5. The NGFW must support the ability to create custom reports directly from the WebGUI of the NGFW 6. Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to NGFW irrespective load & CPU utilization 7. Bidder must provide all license to achieve the overall requirement of Management solution
10	Traffic handled - **TCP,UDP,HTTP/TCP,TCP/UDP**
11	Appliance should having min **2 x 32 core CPU** , Minimum to 128 GB of RAM, **450 GB SSD for internal storage & 1 TB of RAID1 storage** for logging-related activities. Bidder may provide external Storage for this activities.
12	Appliance should have support for traffic based and user based access control.
13	Network Address Translation (NAT) shall be configurable as 1:1, 1: many, many: 1, many: many, flexible NAT (overlapping IPs). Reverse NAT shall be supported.
14	Dynamic Host Configuration Protocol (DHCP) over Virtual Private Network (VPN) shall be supported for dynamic allocation of IP addresses
15	The solution should support the following File/Media Types for Malware identification: PDF, ZIP, 7Z, RAR, CAB, PKZIP, EXE, DLL, SYS, SCR, CPL, OCX, Java, Flash, MS office files.
16	The solution should provide detection, analysis and repair/block capability against malware-based attacks
17	Appliance should provide inline signature less attack prevention for file based attacks while identifying and immediately stopping them.
18	Appliance should capable to make policy recommendations on behavioural analysis to detect internet of things (IoT) devices
19	Enables visibility, security policies, reporting, and forensics based on users and groups—not just IP addresses.
20	Appliance should capable to enable or disable decryption flexibly based on URL category and source and destination zone, address, user, user group, device, and port, for privacy and regulatory compliance purposes
21	Solution should have both firewall and its management console in HA with provision for auto-failover
22	OEM must be EAL4/ ICSA/ FIPS4.0/NDPP/Common Criteria certified

1.3. IPS / IDS

Sr. #	Specifications
1	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.
2	Solution: 1. Appliance should be purpose build enterprise grade, scalable & open architecture. 2. Should deployed in high availability mode active-active Clustering and active-standby (hot stand-by

	redundancy), have fault tolerance and shall provide stateful failover 3. The Appliance should be come with all required Licenses of Next generation IPS, Threat Prevention security, Global protection etc. with Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC 4. It should provide network segmentation features with powerful capabilities that facilitate deploying security for various internal, external and DMZ (Demilitarized Zone) sub-groups on the network, to prevent unauthorized access 5. Should have redundant hot swappable power supply, fan tray etc. 6. The required performance and Throughput must be complied by Single Appliance. However, the solution should be proposed / working in High Availability (HA)
3	Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 50 Gbps. OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled
4	The appliance should be populated with all modules, transceivers & license need to be provisioned from day one. HA, Sync & Management port must be provided separately Support consideration for the Platform should be 24x7 for 5 Years 4 x 1 G SFP 8 x 10 G SFP+ 4 x 40G QSFP+ 4 x 100 G QSFP28 1 x 1G ports for out of band management.
5	Appliance should support atleast 32 Million concurrent sessions.
6	Appliance should support atleast 5,50,000 new connections per second.
7	Features : 1. Solution must allow to create security policies based on L7 parameters such as Application, Users, File Type etc in addition to IP & Port numbers. 2. The appliance should allow user identification by integrating with AD, LDAP etc solutions. 3. The appliance should support comprehensive threat prevention security features including IPS, Antivirus, Anti Spam, Anti Bot, DoS/DDOS etc from day one. 4. The appliance should prevent threats using ML capabilities on files like PowerShell scripts, etc files in real-time. 5. The appliance should support attack recognition for IPv6 traffic, the same way it does for IPv4 6. The appliance should support ingesting 3rd party IOCs such as IP Addresses, Domain Names & URLs from different sources including any existing security solution & Open source threat intel 7. The appliance should have ability to detect credential theft attempts on SDC employees 8. The solution must able to analyse & prevent malicious file, virus, malware, ransomware etc traversing on following protocols: HTTP, HTTPS, SMTP, SMTPS, IMAP, IMAPS, FTP, and SMB. 9. Should protect the user from the malicious content upload or download by any application
8	Other Features: 1. The appliance should support VLAN tagging (IEEE 802.1q), SNMP v 2.0 and v 3.0 2. Appliance should be capable configuring Policies using SSH, HTTPS and Command Line (CLI) as a last resort in case of Emergency. 3. Appliance should capable to inspect and applies policy to TLS/SSL-encrypted traffic, both inbound and outbound, including for traffic that uses TLS 1.2 or higher and HTTP/2. 4. Appliance should capable to automatically block known vulnerabilities, malware, vulnerability exploits, spyware, command and control (C&C), and custom intrusion prevention system (IPS) signatures. 5. Appliance should having Open API for integrations with third-party products

	6. Appliance should be integrate with other security devices and analytics systems that dynamically push IoCs to the firewall 7. Should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports 8. Should support URL and DNS threat intelligence feeds to protect against threats 9. Solution must be capable of defending against IPS-evasion attacks by automatically using the most appropriate defragmentation and stream reassembly routines for all traffic based on the characteristics of each destination host. 10. Solution must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioural anomaly detection techniques. Identify and explain each type of detection mechanism supported 11. The detection engine should support capability of detecting and preventing a wide variety of threats (e.g., network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, etc.) 12. Solution shall have capability to analyze and block TCP/UDP protocol to identify attacks. At minimum, the following protocols are supported for real-time inspection, blocking and control : HTTP, HTTPS, SMTP, POP3, IMAP, NetBIOS-SSN and FTP & shall have required subscription like Threat Intelligence for proper functioning 13. IPS must be able to detect and block network and application layer attacks, protecting at least the following services: email services, DNS, FTP 14. Solution must protect from DNS Cache Poisoning, and prevents users from accessing blocked domain addresses. 15. IPS must include the ability to detect and block P2P & evasive applications
9	Management : 1. The solution should having single management console deployed in HA through which Centralized configuration, logging, monitoring, and reporting are perform The centralised management and reporting server can be in physical/virtual form factor from the same OEM, if OEM is management software in virtual form factor, server/appliance should be supplied by bidder 2. The solution must provide Customizable Executive Dashboard to provide quick insight to Applications / Users / Content / Files / Threat / Top Country / Top Rule Usage etc. The same should be downloadable. 3. The report must highlight applications running on non-traditional ports and by-passing L3/L4 security rules 4. NGFW must provide report including source IP / User / Destination IP / Hostname / byte transfer / rule allowing non-standard traffic in a GUI and must be exportable in PDF/an excel format. 5. The NGFW must support the ability to create custom reports directly from the WebGUI of the NGFW 6. Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to NGFW irrespective load & CPU utilization..
10	Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.
11	Appliance Should support more than 10,000 (excluding custom signatures) IPS signatures or more. Should support capability to configure correlation rule where multiple rules/event can be combined together for better efficacy
12	Traffic handled - TCP,UDP,HTTP/TCP,TCP/UDP
13	Appliance should having min 2 x 32 core CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage & 1 TB of RAID1 storage for logging-related activities. Bidder may provide external Storage for this activities.
14	Appliance should have support for traffic based and user based access control.
16	The solution should support the following File/Media Types for Malware identification: PDF, ZIP, 7Z, RAR, CAB, PKZIP, EXE, DLL, SYS, SCR, CPL, OCX, Java, Flash, MS office files.

17	The solution should provide detection, analysis and repair/block capability against malware-based attacks
18	Appliance should provide inline signature less attack prevention for file based attacks while identifying and immediately stopping them.
19	Appliance should capable to make policy recommendations on behavioural analysis to detect internet of things (IoT) devices
20	Enables visibility, security policies, reporting, and forensics based on users and groups—not just IP addresses.
21	Appliance should capable to enable or disable decryption flexibly based on URL category and source and destination zone, address, user, user group, device, and port, for privacy and regulatory compliance purposes
22	Solution should have both firewall and its management console in HA with provision for auto-failover
23	OEM must be EAL4/ ICSA/ FIPS4.0/NDPP/Common Criteria certified
24	IPS must support deployment in In-line bypass mode

1.4. SDN Controller

Sr. #	Specifications
1	Proposed fabric must be the Clos network topology architecture defined using Core, Server switches with VXLAN (RFC7348) overlay with Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**Fabric - Solution Functionality:** 1. Solution should allow workload mobility anywhere in the SDC, across the Data Center sites 2. Leaf switches to Spine connectivity should use 100 G uplink port 3. Switch and optics should be from the same OEM 4. All switches should have non-blocking ports 5. Should be integrate with different Hypervisors and Kubernetes, Redhat, Openshift and manage virtualise networking from SDN Controller. 6. Should auto discover all the Spine and Leaf switches and auto provision them based on the policy using SDN Controller. 7. All relevant licenses for all features and scale should be quoted along with required hardware. 8. Should support advance telemetry in terms device views, metrics views, snapshot, diff view 9. The proposed architecture should provide a single pane for provisioning, monitoring, and management to deploy stretched policies across multiple Data centers. 10. Solution should provide L2 & L3 extension across sites 11. Should provide inventory of all connected IP devices. 12. Should be able to integrate with all physical, virtual network devices
3	**SDN Controller or Centralised Appliance:** 1. Should be on-premise and must have all related licenses to support the entire fabric infrastructure 2. Should support multi tenancy and role base access control to tenant for management. 3. Should support micro-segmentation rules and policies for workloads connected to DC fabric for east-west traffic. 4. Should support declarative model based network automation or IBN (Intent based Networking) 5. Solution should support OpenConfig/NetConf, YANG based model or equivalent open architecture. 6. Should not participate in Data plane and control plane path of the fabric. 7. Must run in N + 1 redundancy to provide availability as well as function during the split brain scenario 8. In case of SDN Controllers fails, the fabric must function without any performance degradation and with the current configuration.

	9. Should provide dynamic device inventory of the Fabric, current network topology (like Real time Bandwidth Utilization; Traffic Throughput; Error Rates, Traffic & Tend Analytics, abnormal detection etc,) also validate the cabling connectivity and generate alarms in case of wrong or faulty connectivity. 10. Should support ZTP(Zero Touch Provisioning). 11. Should support Open API integration. 12. Should support Network roll-back. 13. Centralized Management/SDN controller should be from the same switch OEM and must have all licenses to support the entire fabric infrastructure.
4	**Other Functionality :** 1. SDN Controller must have ability to automate VXLAN control plane and provide topology information of the fabric. 2. Solution should support Micro Segmentation for the Virtualize and Non - Virtualize environment 3. Solution should have historical configuration analysis between any two time series to identify any issue along with user who made that change. 4. SDN Controller must communicate to south bound devices using open standard protocol or using Device APIs.
5	Monitoring - On Premise Systems 1. Ability to monitor device network availability - ping, Perform device/node discovery / network discovery 2. Ability to monitor/collect network device core metrics - CPU /Memory / Disk / Network. Ability to monitor OS services and processes 3. Solution should provide network device specific monitoring capabilities - CISCO, Juniper, HP ,ARISTA etc.

1.5. Core-Spine Switch

Sr. #	Specifications
1	Non-Chassis based Switch in nature which can be used as Spine in (Spine-Leaf architecture) and support Software Defined Network (SDN) 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with switch 4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**From the day one Switch should have :** 1. Ports - **32 x 40/100 G** non-blocking interfaces populated with multimode 100 G Transceivers 2. Total aggregated system **throughput minimum 6.4Tbps**(Full Duplex:- Bi-Directional) 3. Throughput - Minimum **2bbps**(billion packets /sec.) 4. Latency - **< 1 microseconds** 5. Form factor - Max. **2 U** 6. Minimum 32 MB of System/Packet Buffer 7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP) 8. Air Flow – Front-to-back or Back-to-Front. To be decided at the time of ordering.
3	The core Switch should have Redundant Power Supply Units (PSUs), Hot-swappable and support in-line hot insertion and removal of different parts like power supplies/ fan tray etc. and should not require switch reboot & should not disrupt the functionality of the system. Power cords provided as per site requirement

4	The core switch should have hardware level redundancy (1+1). Issues with any of the switch should not impact the functioning of the switch.
5	Switch should support 1. Switching 2. IP Routing 3. IP Forwarding 4. Policy based Routing 5. ACL and Global Control Plane Policing 6. IPv6 Host and Routing 7. Non-blocking Layer 2 switching and Layer 3 routing 8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2 9. Support VRF 10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP 11. Should protect against ARP and DHCP spoofing 12. Should support layer 2 extension over VXLAN across all Data Center to enable VM mobility & availability 13. Should support VXLAN and EVPN symmetric IRB
6	Switch should have functionality: Other 1. Switch and optics should be from the same OEM 2. Should support 40/100 GBE long range (LR) and short range (SR) QSFP28 3. Should support port ACL with L2, L3 and L4 parameters 4. Should support IPv4 and IPv6 dual stack operations simultaneously 5. The solution Should support seamless software upgrade without impacting traffic flow 6. Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using 7. Should support control plane Protection from unnecessary or DoS traffic by control plane protection policy 8. Should support to trust the QoS marking/priority settings of the end points as per the defined policy 9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer 10. Switch should support to prevent edge devices in the network from becoming Spanning Tree Protocol root nodes
7	Management: 1. Switch should provide different privilege (Role based) for login in to the system for monitoring and management 2. Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail 3. Switch should provide remote login for administration using Telnet, SSHV2, SSHv3 4. Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption 5. Switch should support Configuration roll-back
8	Switch platform should support Following 1. IPv4 host routes – Min. 1,00,000 2. MAC addresses – Min. 2,00,000 3. Ipv6 Host Routes – Min. 1,00,000 4. VLAN –4000+
9	Should support telemetry: 1. Flow path trace (ingress to egress switch)

	2. Per Flow Hop by Hop packet drop with reason of drop 3. Per Flow latency (per switch and end to end) 4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 5, Switch environmental like (CPU/memory/FAN/Power Supply) 6, Interface statistics like CRC error
10	Switch should be capable of segregate zones using virtual control plane on the hardware. Each zone created should be logically assigned with its control plane and data plane on single hardware so that there should not be any interference of traffic of one zone into others
11	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.

1.6. Leaf – Border

Sr. #	Specifications
1	Fixed Switch in nature which can be used as Leaf in (Spine-Leaf architecture) and support Software Defined Network (SDN) 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with switch 4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**From the day one Switch should have :** 1. Ports - **32 x 40/100 G** non-blocking interfaces populated **30 x 40 G** multimode fiber transceivers and **2 x 100G** for uplink device connect with multimode 100 G transceivers 2. Total aggregated system **throughput minimum 6.4 Tbps** (Full Duplex:- Bi-Directional) 3. Throughput - Minimum **2 bbps** (billion packets /sec.) 4. Latency - **<1 micro second** 5. Form factor - Max. **2 U** 6. Minimum **32 MB** of System/packet Buffer 7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 1 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP) 8. Air Flow – Front-to-back or Back-to-Front. To be decided at the time of ordering.
3	The core Switch should have Redundant Power Supply Units (PSUs), Hot-swappable and support in-line hot insertion and removal of different parts like power supplies/ fan tray etc. and should not require switch reboot & should not disrupt the functionality of the system. Power cords provided as per site requirement
4	The core switch should have hardware level redundancy (1+1) in terms of data plane and control plane. Issues with any of the plane should not impact the functioning of the switch.

5	**Switch should support** 1. Switching 2. IP Routing 3. IP Forwarding 4. Policy based Routing 5. ACL and Global Control Plane Policing 6. IPv6 Host and Routing 7. Non-blocking Layer 2 switching and Layer 3 routing 8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2 9. Support **VRF** 10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3 11. Should protect against ARP and DHCP spoofing 12. Should support layer 2 extension over VXLAN across all Data Center to enable VM mobility &availability 13**.** Switch should support VXLAN and EVPN symmetric IRB
6	**Switch should have functionality : Other** 1. Switch and optics should be from the same OEM 2. Should support 40/100 GBE long range (LR) and short range (SR) QSFP28 3. Should support port ACL with L2, L3 and L4 parameters 4. Should support IPv4 and IPv6 dual stack operations simultaneously 5. The solution Should support seamless software upgrade without impacting traffic flow 6. Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using 7. Should support control plane Protection from unnecessary or DoS traffic by control plane protection policy 8. Should support to trust the QoS marking/priority settings of the end points as per the defined policy 9. Should support multi OEM hypervisor hypervisor (vCenter, Kubernetes, Redhat, Openshift) environment and should be able to sense movement of VM and configure network automatically, using orchestration layer
7	**Management :** 1. Switch should provide different privilege (Role based) for login in to the system for monitoring and management 2. Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail 3. Switch should provide remote login for administration using Telnet , SSHV2, SSHv3 4. Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption 5. Switch should support Configuration roll-back
8	Switch platform should support Following 1. IPv4 host routes – **Min. 1,00,000** 2. MAC addresses – **Min. 2,00,000** 3. Ipv6 Host Routes – **Min. 1,00,000** 4. VLAN –**4000+**
9	**Should support telemetry :** 1. Flow path trace (ingress to egress switch) 2. Per Flow Hop by Hop packet drop with reason of drop 3. Per Flow latency (per switch and end to end) 4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 5. Switch environmental like (CPU/memory/FAN/Power Supply) 6. Interface statistics like CRC error

| 10 | Switch should be capable of segregate zones using virtual control plane on the hardware. Each zone created should be logically assigned with its control plane and data plane on single hardware so that there should not be any interference of traffic of one zone into others |
| 11 | The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant. |

1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48)

Sr. #	Specifications
1	Fixed Switch in nature which can be used as Leaf in (Spin-Leaf architecture) and support Software Defined Network (SDN) 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with switch 4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**From the day one Switch should have :** 1. Ports - **48 x 1/10/25 G** non-blocking interfaces populated **48 x 10 G** multimode fiber transceivers for downlink connectivity and **6 x 100 G** for uplink to spin with multimode 100 G transceivers 2. Total aggregated system **throughput minimum 2.4 Tbps** (Full Duplex:- Bi-Directional) 3. Throughput - Minimum **1 bbps** (billion packets /sec.) 4. Latency - **<1 micro second** 5. Form factor - Max. **2 U** 6. Minimum **32 MB** of System Buffer 7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 1 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP) 8. Air Flow – Front-to-back or Back-to-Front. To be decided at the time of ordering.
3	The core Switch should have Redundant Power Supply Units (PSUs), Hot-swappable and support in-line hot insertion and removal of different parts like modules/ power supplies/ fan tray etc. and should not require switch reboot & should not disrupt the functionality of the system. Power cords provided as per site requirement
4	The core switch should have hardware level redundancy (1+1). Issues with any of the plane should not impact the functioning of the switch.
5	**Switch should support** 1. Switching 2. IP Routing 3. IP Forwarding 4. Policy based Routing 5. ACL and Global Control Plane Policing 6. IPv6 Host and Routing 7. Non-blocking Layer 2 switching and Layer 3 routing 8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2 9. Support **VRF** 10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3 11. Should protect against ARP and DHCP spoofing 12. Should support layer 2 extension over VXLAN across all Data Center to enable VM mobility & availability 13. Should support VXLAN and EVPN 14. Switch should support VXLAN and EVPN symmetric IRB.

6	**Switch should have functionality : Other** 1. Switch and optics should be from the same OEM 2. Should support 40/100 GBE long range (LR) and short range (SR) QSFP28 3. Should support port ACL with L2, L3 and L4 parameters 4. Should support IPv4 and IPv6 dual stack operations simultaneously 5. The solution Should support seamless software upgrade without impacting traffic flow 6. Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using 7. Should support control plane Protection from unnecessary or DoS traffic by control plane protection policy 8. Should support to trust the QoS marking/priority settings of the end points as per the defined policy 9. Should support multi OEM hypervisor (vCenter, Kubernetes, Redhat, Openshift)environment and should be able to sense movement of VM and configure network automatically, using orchestration layer
7	**Management :** 1. Switch should provide different privilege (Role based) for login in to the system for monitoring and management 2. Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail 3. Switch should provide remote login for administration using Telnet, SSHV2, SSHv3 4. Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption 5. Switch should support Configuration roll-back
8	Switch platform should support Following 1. IPv4 host routes – **Min. 1,00,000** 2. MAC addresses – **Min. 2,00,000** 3. Ipv6 Host Routes – **Min. 1,00,000** 4. VLAN –**4000+**
9	**Should support telemetry :** 1. Flow path trace (ingress to egress switch) 2. Per Flow Hop by Hop packet drop with reason of drop 3. Per Flow latency (per switch and end to end) 4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 5. Switch environmentals like (CPU/memory/FAN/Power Supply) 6. Interface statistics like CRC error
10	Switch should be capable of segregate zones using virtual control plane on the hardware. Each zone created should be logically assigned with its control plane and data plane on single hardware so that there should not be any interference of traffic of one zone into others
11	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.

1.8. Management switch

Sr. #	Specifications
1	Fixed Switch in nature which can be used as Leaf in (Spin-Leaf architecture) and support Software Defined Network (SDN) 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with switch

	4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC
2	**From the day one Switch should have :** 1. Ports - **48 x 100 M/ 1 / 10 G Base-T Port for host connectivity** and **2 x 100 G** for uplink to spin with multimode transceivers 2. Total aggregated system **throughput minimum 2.4 Tbps** (Full Duplex:- Bi-Directional) 3. Throughput - Minimum **1 bbps** (billion packets /sec.) 4. Latency - **<1 micro second** 5. Form factor - Max. **2 U** 6. Minimum **32 MB** of System Buffer 7. Min. - RAM - 28 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 1 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP) 8. Air Flow – Front-to-back or Back-to-Front. To be decided at the time of ordering.
3	The core Switch should have Redundant Power Supply Units (PSUs), Hot-swappable and support in-line hot insertion and removal of different parts like modules/ power supplies/ fan tray etc. and should not require switch reboot & should not disrupt the functionality of the system. Power cords provided as per site requirement
4	The core switch should have hardware level redundancy (1+1). Issues with any of the plane should not impact the functioning of the switch.
5	**Switch should support** 1. Switching 2. IP Routing 3. IP Forwarding 4. Policy based Routing 5. ACL and Global Control Plane Policing 6. IPv6 Host and Routing 7. Non-blocking Layer 2 switching and Layer 3 routing 8 Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2 9. Should Support **VRF** 10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3 11. Should protect against ARP and DHCP spoofing
6	**Switch should have functionality : Other** 1. Switch and optics should be from the same OEM 3. Should support port ACL with L2, L3 and L4 parameters 4. Should support IPv4 and IPv6 dual stack operations simultaneously 5. Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using 6. Should support control plane Protection from unnecessary or DoS traffic by control plane protection policy 7. Should support to trust the QoS marking/priority settings of the end points as per the defined policy 8. Should support multi OEM hypervisor (vCenter, Kubernetes, Redhat, Openshift) environment and should be able to sense movement of VM and configure network automatically, using orchestration layer
7	**Management :** 1. Switch should provide different privilege (Role based) for login in to the system for monitoring and management 2. Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail 3. Switch should provide remote login for administration using Telnet , SSHV2, SSHv3 4. Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption 5. Switch should support Configuration roll-back

8	Switch platform should support Following 1. IPv4 host routes – **Min. 1,00,000** 2. MAC addresses – **Min. 2,00,000** 3. Ipv6 Host Routes – **Min. 1,00,000** 4. VLAN –**4000+**
9	**Should support telemetry :** 1. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 2. Switch environmental like (CPU/memory/FAN/Power Supply) 3. Interface statistics like CRC error
10	Switch should be capable of segregate zones using virtual control plane on the hardware. Each zone created should be logically assigned with its control plane and data plane on single hardware so that there should not be any interference of traffic of one zone into others
11	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.

1.9. WAF with SLB

Sr. #	Specifications
1	The proposed WAF solution should be appliance with SLB and support Software Defined Network (SDN) 1. HA and Active-Active mode 2. IPv6 readiness from day one. 3. Relevant licenses for all the below features and scale should be quoted along with switch 4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC 5. The OEM should have 3 references for WAF in Government in last 5 Years, PO/Installation copy should be submitted.
2	**From the day one WAF should have:** 1. Ports 10G x 16 and 1G X 8 without use of any Split out/ Breakout cable 2. Solution should support the following deployment modes : Inline, non-inline. 3. Should have dual power supply 4. Should support overall throughput of 40 Gbps and further scalable to 70 Gbps after applying all policies and signatures 5. Should have a dedicated hardware for SSL Acceleration 6. Should support be in HA and the feature to force the active device to standby and back to active state; or force a device to offline mode 7. Should support N+1 High Availability Clustering for future scalability with the ability to add heterogeneous devices from the same OEM into the cluster 8. OEM should provide regular updates to geo-location database from their public downloads website 9. Layer 4 connections per second: 1.2 Million 10. Layer 7 requests per second: 2.5 Million 11. Layer 4 concurrent connections: 80 Million 12. RSA CPS (2K Keys): 30,000 and scable to 50, 000 without changing the hardware (license upgrade only) 13. ECC CPS(EC-P256): 20,000 and scalable to 25,000 with TLS 1.3 Support without changing the hardware (license upgrade only) 14. Memory: 128 GB and scalable upto 256 GB 15. The appliance should have dedicated 2 x 10/100/1000 Copper Ethernet Out-of-band Management Port.

3	**WAF should have functionality:** 1. WAF should be able to detect an anomaly when either too many sessions are opened from an IP address or when the number of sessions exceeds a set threshold. 2. The solution should be able to identify/detect, web scraping and should be able to block any web scraping attempts on applications/websites. 3. The solution should be capable of inspecting, analysing Application Layer traffic as well as blocking malicious intrusions at the application layer 4. The solution should provide capability to configure application wise policies to monitor specific web application elements such as application session logic, form fields etc 5. The solution should provide both web application firewall logs and syslog based logs events 6. Capable of both positive and negative security models. The positive model ("white list") defines acceptable, permitted behaviour, input, data ranges, etc., and denies everything else. The negative model ("black list") defines what is NOT allowed; messages matching those signatures are blocked and traffic not matching the signatures (not "black listed") is permitted. 7. Should have capability to automatically analyze attacks like Brute Force and avail CAPTCHA on the fly to users to identify bot / scripted attacks 8. Should have Proactive BOT defence and must have BOT signatures 9. Should have HTTP based DDOS detection
4	**WAF should have functionality: Other** 1. Platform should be a full proxy architecture and must perform reverse proxy for inside applications 2. There should not be any License limitations on the Solution 3. There should not be any adverse performance impact on the Application or Database, due to the overhead of the Web Application Firewall 4. Solution should support Virtual Patching at OS Level, and Application level, to provide security against unpatched or zero-day vulnerabilities. 5. The Solution should provide stateful firewall feature and protection against DoS and DDoS Attacks. 6. Solution should provide Automated Application Vulnerability Assessment test features, for assessing the vulnerabilities and mis-configurations of Application servers, and their OS platforms. OS, Applications are to be tested for known exploits and misconfigurations. The solution should also support Custom scripts for vulnerability tests. 7. The solution should support integration with SIEM Tool (Esp. RSA Security Analytics) for real time log analysis and co-relation. 8. The solution should have signatures of all known Application and Database level attacks, threats, and vulnerabilities and provide protection against the same 10. Inspect web services messages, if web services are exposed to the public Internet. 11. Should offer protection for Interactive web applications (for ex: applications using JSON with AJAX…etc) 12. The proposed appliance should have Virtualization feature with its own Hypervisor, NOT any third Party or Open Source or Network Function Virtualization that virtualizes the Device resources—including CPU, memory, network, operating system, configuration and acceleration resources and should provide Complete fault isolation between virtual load balancer instances – failure of one of the instances does NOT affect other instances. Even restart and shutdown of one virtual load balancer should not effect to neighbour instance. 13. The proposed device should have 5 Virtual Instances from Day 1 and scalable upto 18 Virtual Instances.
5	

	Management: 1. Solution should provide Application activity monitoring in real-time and generate real-time alerts on any suspicious or malicious activity (if detected). 2. The solution should provide central policy management for multiple web application firewalls from a single web interface 3. Should provide HTTPS interface management for administering the device 4. Should provide SSH interface management for administering the device 5. Should provide troubleshooting and traffic analysis tool like tcp dump 6. Should support role based admin access with roles like no access, Guest, Operator, Application editor, Resource Administrator and Administrator 7. Should provide historical graphical reporting for the last 30 days on appliance itself 8. Support for customized logging to log any parameter from L3 to L7, like Geo-location, IP addresses, client browser, client OS, etc..
6	The Solution should provide protection against the following (but not limited to), type of attacks : Unvalidated input Injection flaws SQL injection OS injection Parameter tampering Cookie poisoning Hidden field manipulation Cross site scripting flaws Buffer overflows Broken access control Broken authentication and session management Improper Error Handling XML bombs/DOS Forceful Browsing Sensitive information leakage Session hijacking Denial of service Request Smuggling Cookie manipulation

1.10. FCIP Router

Sr. #	Specifications
1	The FC-IP Router should be supplied with minimum of 12 x 32 Gbps FC ports at line rate with no over subscription. Should support non-blocking architecture
2	All FC ports for device connectivity should be 12 x 32 Gbps auto-sensing Fibre Channel ports along with 4 x 1/10G, Ethernet IP storage services
3	The FCIP replication ports must be capable of 1 Gbps as well as 10 GbE capable
4	The FCIP switch should be able to compress the data on WAN link
5	The FCIP switch should be able to encrypt data on WAN link
6	The Extension switch should be equipped with redundant hot swap power supply and Fan and allow hot swap ability without resetting the switch, or affecting the operations of the switch
7	The license offered should include features such as IVR, multiple tunnels/ trunking and Port channeling

8	The switch must be able to load balance traffic through an aggregated link with Source ID and Destination ID. The support for load balancing utilizing the Exchange ID must also be supported.
9	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic
10	The offered SAN extension switch should be able to do data compression for FCIP traffic.
11	All license and required accessories, cables, modules etc should be provide from Day 1
12	Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC

1.11. SAN Switch

Sr. #	Specifications
1	1. SAN switch should be of director class. Should have non-blocking architecture with 32 Gbps line rate. The director class switches should be configured with minimum of 240*32Gbps active ports in a single Fabric. Each SAN switch shall be offered with 48 ports in Non-blocking architecture in a single domain concurrently active at 32 Gbit/sec full duplex with local switching. Switch should also support 64/32/16/16/8Gbps. The director class switch should support 64G speed by just putting the 64G blades in the future 2. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC 3. Switch should support multiprotocol architecture such as FC, FICON, FCR and FCIP. 4. Switch should support Virtual Fabrics feature that enables partitioning of a physical SAN into logical fabrics and isolation by application, business group, customer or traffic type. 5. At least dual switches shall be provided in no single point of failure configuration. 6. The switch should auto negotiate with 64/32/16/10/8/ Gbps FC speed with required SFP modules 7. The switch should support ISL trunking 8. VSAN/Virtual Fabric should be supported 9. Should support Inter VSAN Routing (IVR)/ Virtual fabric routing functionality 10. The director class switches should be supplied with all the required licenses, modules, SFPs and cables and accessories 11. Switch must support local switching on port card to provide point to point line rate throughput. 12. Cascading of two SAN switches should be possible with dedicated ports without using the ports available for host connectivity and the licenses should be provided for the same 13. The switch should provide local switching feature with port to port latency of less than 800ns. 14. The SAN Switch should be capable of supporting HW Compression for FC-IP functionality and IPSec encryption without any additional Licenses 15. Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic. 16. It should be possible to isolate the high bandwidth data flow traffic to specific ISLs by using simple zoning. 17. Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device. 18. Support for web based management and should also support CLI. 19. The switch shall support advanced zoning and RBAC to simplify administration and significantly increase control over data access. 20. Offered SAN switch shall support to configure the switches with alerts based on threshold values for temperature, fan status, Power supply status, port status.

	21. The proposed SAN Switches should have feature to Monitoring a Switch with Predefined Policies to constantly monitor itself for potential faults and automatically alert on problems before they become costly failures as well as early fault detection and isolation
	22. Airflow: Flexible Airflow. Cool air intake should be from front side and hot air release should be from back
	23. There should not be single point of failure for the switch. The SAN switch should provide Enterprise-class availability features such as Dual redundant control processors, WWN cards, redundant hot swappable power and cooling subsystems. Power supply and fan assembly should have different FRU.
	24. The switch should be rack mountable.
	25. Non-disruptive Microcode/ firmware Upgrades and hot code activation
	26. Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN Port)
	27. Offered SAN switch shall be energy efficient
	28. The proposed switch should support offline diagnostic including optical and electrical loop back, latency, link traffic, distance.
	29. The proposed SAN switch should support forward error correction and buffer credit recovery.
	30. Setting of the port speed to 16Gbps or 32Gbps should not impact or disable the other ports in the same port blade or port group
	31. It should support heterogeneous server technologies and its host bus adapters.
	32. Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided
	33. Bidder shall carry out integration of devices with existing SAN Switches

1.12. Private Cloud

Sr. #	Specifications
1	At GSDC and Far DR site we want to create Private Cloud : Bidder should supply chassis (enclosure), servers, connected SAN switch and LAN switch, with all populated ports with SFPs, all ports licenses (wherever applicable), cables and all related accessories to implement the DR Cloud 1. IPv6 readiness from day one. 2. Relevant licenses for all the below features and scale should be quoted along with switch 3. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC 4. Solution should be capable of on-demand deployment of compute, network and storage infrastructures automatically through an approval based system 5. Solution should be capable of decoupling applications and application infrastructure configurations 6. Solution should be able to back-up and restore to a saved backup (OS level), if required 7. Solution must offer ability to Copy, convert, or migrate an image (P2V, V2V). 8. Solution should provide the monitoring capabilities for storage, processor, network, memory and applications running within the Virtual environment so as to ensure that the most important Virtual Machines get adequate resources even in the times of congestion 9. Solution should allow role based access for auditing, monitoring, metering etc. 10. Solution should support VLAN isolation. 11. Solution should be capable of orchestrating compute and storage resource placements based on flexible policies to maximize hardware utilization 12. Solution should be able to abstract compute, network, and storage resources for the application and user self-service regardless of underlying server, network and storage in GSDC.

13. Solution must support standards-based REST/SOAP/WSDL interfaces.
14. Solution should support virtualizing Workloads like Database, Web Services, Application, Containers etc.
15. Solution should support dynamic memory/core allocation, movement of VM, which includes movement from one physical server to another and continuous availability of applications running in virtual machines in the event of physical host failure
16. Solution should have the ability enforce policies, track and report non-conformance.
17. Solution should provide patch management capabilities such that it should be able to update patches on its own Virtualization Layer.
18. The Virtualized Infrastructure should be able to consume Storage across various protocols
19. Solution should have customizable, intuitive Web portal for its users allowing user to create various service requests and its status.
20. Solution should be able to offer choice of various Service offering with an option to select Storage, memory and network requirement and quickly compute the overall infrastructure Quota for the tenant.
21. Solution should provide the capability to offer for customized service if the requirement is not available in the defined service catalogue
22. Solution should have the provision to approve the logged service request by nominated members of DST/GIL/DCO Team.
23. Solution should automate as well as manual provisioning of resources on approval from appropriate authority.
24. Solution should allow/configure various workflow/hierarchy in the web portal.
25. Solution should provide real-time resource availability status.
26. Solution should able to generate various MIS reports like resource utilization report, client wise resource utilization report, availability reports of system components etc.
27. Solution should be able to provide logs with date and time stamp along with the user details pertaining to configuration level changes.
28. Solution should support all OS level clustering (e.g. Windows, RedHat, Ubuntu, CentOS etc)
29. Solution should be scalable & adaptive cloud computing platform which accommodates the vendor specific and open source tools & utilities. It should also increase the feasibility of integrations to ease the operational overhead, improve the execution quality & provides better visibility & accounting.
30. Solution should support Full Automation solution validation (Infrastructure as code – Tool & Orchestration Set)
31. Solution should be able to integrate with various vendor specific & open source tools & utilities (API Integrations).
32. Solution should support deployment of legacy as well new applications architecture & infrastructure services (VMs and containers).
33. Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation.
34. Solution should be able to provide post-check reports with accounting for the deployment of private cloud components using automation.
35. Solution should support running the automation suite (Infrastructure as code) to migrate existing Infrastructure (VM & Containers) on the new private cloud platform (DC & DR).
36. Solution should support running automation suite to enable end users to create & deploy VMs / Containers, also provide periodic and on-demand authorization & utilization reports
37. Solution should enable end users define the trigger condition to scale in & out of the existing VMs / Containers infrastructure within limit of resource pool allocated to user
38. Solution should be able to automate replication of resources at DR site & DR invoking
39. Solution should be able to provide accounting and auditing of all the changes, resource utilization and reports on demand and periodically.
40. Solution should provide Observability Stack - Automated log collections, Infrastructure monitoring (Active & passive) & alerting on the UI / Dashboard.

	41. Solution should provide Observability Stack to provide the on demand and periodic reports for security events, traffic & cloud resource utilization trend to reduce the meantime to resolve the issue & support the capacity & risk management.
2	**Servers**

	From the day one Server should have :
	1. Architecture - **X86**
	2. CPU –2.6GHz or above (Processor should be latest series/generation for the server model being quoted)
	3. Server Form Factor: Blade
	4. Physical Cores / server - **Min. 2x32 Cores**
	5. RAM **- DDDR4 - Min. 1 TB**
	6. HDD – **min. 2 x 1 TB NVMe**
	7. HBA card - speed should be **min. 2x32Gbps FC**
	8. NIC – **Min. 4 x 10/25 Ethernet Gig**
	9. All component should be hot pluggable and with redundant module (in HA mode), like back power, colling etc
	10. Cumulative Usable Capacity
	    • at GSDC - 3000 physical cores and min 60 TB of RAM with ECC
	    • at Far DR - 2000 physical cores and min 40 TB of RAM with ECC
	
	Note : HBA and NIC card can be provided on server or with converged switch or with solution

3	Enclosure – Chassis
	From the day one Server should have : 1.　　　Should accommodate both half-width and full-width blade form factors 2.　　　The enclosure's all component should be hot pluggable and with redundant module (in HA mode), like back switch, power, cooling etc 3.　　　Connectivity - should be 40/100 Gbps port with all populated SFPs 4.　　　Should provide different privilege (Role based) for login in to the system for monitoring and management
4	**SAN Switch**
	From the day one Server should have : 1. No. of Ports - Min. 48 ports or ports 2. All ports should be populated with min. 32 Gbps SFP 3. All ports licenses should be given from day one 4. With all accessories, power cable, data cable etc
5	**Cloud Functionality - Virtualization**
1	Proposed Hypervisor should support the hypervisors listed as a leader in last published Gartner's Magic Quadrant for Virtualization Infrastructure. Consider VM as Virtual Machine and Container.
2	**The solution :** 1.　　　Should provide a purpose-built hypervisor that installs directly on the 64 bit bare metal x86 server. 2.　　　Should provide support for heterogeneous guest Operating systems such as Windows Server and Linux (Red Hat, SUSE, Ubuntu and CentOS) 3.　　　Should provide the ability to create new virtual machines from scratch or based on templates (created from fully configured virtual machines) 4.　　　Capabilities of Hot Add resources(CPU, RAM) to VM on the fly when needed, without disruption or downtime in working for both OS - windows and Linux based VMs 5.　　　Should provide a virtual switch which can span across a virtual data center and multiple hosts, should be able to connect to it

	6. Architecture should support multi-vendor hardware 7. Should provide Provisioning, Monitoring, Automation and Orchestration via both portal and API 8. Should provide support for Software Defined Networking and auto provisioning of networks and storage. 9. Should support QoS, Resource pooling, On Demand Self Service, Capacity and resource optimization 10. The solution should have Service Catalogue for the cloud services and same can be customized. The solution should have pre-defined catalogues of templates. 11. Should support for cloud native VM 12. The solution should provide forecasting spend associated with currently deployed cloud resources and services. 13. The solution should have Life Cycle Management Work flows: Provisioning, Decommissioning, Horizontal/Vertical Scale, Upgrade etc. 14. The solution should have ability for work flows to include business approvals 15. The solution should have capabilities around Configuration and Change Management work flows
3	**Virtualization management software :** 1. Should support user role and permission assignment (RBAC) and shall maintain a record of significant configuration changes and the administrator who initiated them. 2. Should have Virtual Machine and hypervisor host performance monitoring. 3. Should provide a centralized interface from which virtual machine across data centre can be configured, move, monitored and administered 4. Should be available VM and host's performance monitoring and utilization reports. It shall co-exist and integrate with leading systems management vendors. 5. Single view of all virtual machines, allow Monitoring of system availability and performance and automated notifications with alerts. Monitor, analyse virtual machines, server utilization availability with detailed performance graphs and greater visibility into object relationships. 6. Should support for cluster services between Virtual Machines. 7. Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR
4	**Hypervisor layer :** 1. Should provide High Availability & automated distributed resource scheduling for VM and storage placement & load balancing. 2. Should support features like snapshots & cloning of individual virtual machines 3. Non-disruptive Scale-Up & Scale-Out to grow capacity and/or performance whenever required. 4. Should provide ease of use wizard for multi-point in time snapshot scheduling and instant batch cloning of Virtual machines 5. Hypervisor must support IPv4, IPv6 and dual stack configuration.
5	**Other :** 1. The solution should be able to manage Multi tenancy 2. All functionality should be from Web based Self Service Portal (SSP) 3. Dashboards should be available for Admin as well as for Tenant 4. Should have a feature to define Quota, which establishes the usage limitation of resources for each user depending on user roles & user type. 5. The bidder shall provide perpetual licenses for all software components proposed in the solution. The bidder shall propose Support & Subscription services from the OEM with unlimited number of support requests, remote support, access to product updates/upgrades and premium 24x7 supports. 6. The platform shall have capability to run both stateful and stateless applications.

	7.　　The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities. 8.　　The container platform shall support deployment and orchestration of multiple containers formats (docker,cri-o etc) for preventing any technology lock in. 9.　　The platform shall have inbuilt management and monitoring capabilities. It should be offered with suitable container registry capability. 10.　　The platform shall have inbuilt automated application container build capability – from source code to a runnable container image. 11.　　The platform shall provide auto scaling capability for automatically running appropriate number of container instances as per load requirements. 12.　　The solution should be deployed in max 3 racks at primary GSDC and DR site

1.13. Minimum Specification for All Flash NvME Storage:

Sr. #	Specifications
1.	Bidder to provide separate storage of usable capacity of 1.6 PB along with necessary rack, other related accessories, software & license required and installation of storage at GSDC.
2.	Solution should symmetric active-active multi-controller scale-up and scale-out architecture. The proposed solution should be with No Single Point of Failure (NSPOF). All the components should be redundant and hot swappable including power supply, fans, batteries, backplane etc. Should support non-disruptive replacement of failed/damaged hardware components & Firmware without any controller reboot (except OEM release note suggestions).
3.	The solution should be based on end-to-end NVMe architecture, which is NVMe over Fabric for front-end connectivity and also be configured with latest dual ported native NVMe Flash drives, for 100 micro second latency. It should support SCM (Storage Class memory)
4.	Usable Capacity – 1.6 PB (without considering de-dup, compression) and scalable upto usable 2 PB.
5.	The solution should be provided with minimum of 4 controllers. Expandable upto at least 8 controller. The controller should function such that the entire load of the solution is spread across all the controllers. However, in case of failure of any controller(s), the remaining working controller(s) should be able to cater to entire load of the solution and should not lead to decrease in Read and write performance.
6.	Each storage Controller should be supplied with min 512 GB Cache and solution's total cache should be minimum 4 TB and expandable up to 6 TB of Cache, which should be available to all LUNs /Devices across all controller as a single unit Cache should be dynamically used for Read and Write operations. Mirrored cache, Vault to disk, to prevent data in the event of power failure.
7.	Storage array cache shall be globally shared and mirrored across controllers that are in different controller pairs, and not just across controllers within the same pair at all times (during normal operations & during any controller failures)
8.	Disk Drives - Dual ported NvME SSD drive.
9.	Each drive Capacity - Max 15.36 TB
10.	Raid Level - 5/6 or equivalent Group of Raid may limited to 10
11.	Min. Hot spare drive - 10 disk or as per best practices 1 drive per 30 capacity drive.
12.	Speed of Dual Ported Disk Drive - - PCI Gen3 NVMe or higher
13.	IOPs per second - Minimum Aggregate front-end IOPS of proposed array (8K I/O Block size, Read/Write ratio of 70:30) > 6,00,000 Random r/w
14.	Front end port - FC port - 64 x 32 Gbps speed, iSCSI port - 16 x 10 gbs speed and should also support 8 number of 10 Gb ports capable of remote replication to DR site

15.	Type of backend port - PCI Gen3 NVMe or higher
16.	Remote Replication Ethernet ports - 08 ports 10/25 G
17.	No. of snapshot per volume - Min 200 , performance for solution should not be impacted during snapshot process.
18.	Number of Volume / LUN Supported for Remote Replications - 6000
19.	Solution should support 3 Site replication and for zero data loss required licenses should be supply
20.	Solution should having De-Duplication functionality min 2.5 x, Inline, hardware assisted data reduction so that there is no performance impact. It should be possible to enable or disable data reduction functionality on volumes for specific applications or group of volumes as and when required.
21.	Solution should having RESTful API for integration with third party tool & management
22.	Solution should support all existing versions of all Operating System. Defective HDD will not be given back to OEM/SI.
23.	Solution should provide a Web based interface of Management software with Dashboard with minimum features of: 1. A single command console for entire storage system. 2. The Solution should allow role-based access for auditing, monitoring and other general operations and administration capabilities through GUI/CLI 3. System status i.e. CPU, Memory, Disks, Network resources, Display total, allocated and utilized capacity, performance, throughput, storage utilization, Hardware details like disk, controllers, overall status of compaction of data, System Audit Log, 4. Should generate Alert, Notification 5. Reports – Scheduled or Manual 6. Historical logs of storage performance utilization for at least one quarter
24.	Proposed storage should be designed to store and retrieve data without any possibility of silent data corruption, it should comply to T10-DIF (Data Integrity Field) standards or equivalent data protection standard. Data movement within the array from Front-End module to Cache to backend to Flash/NVMe drives be protected with T10-DIF or equivalent data protection standard.
25.	The proposed solution should also support creation of secure snapshots/volume to protect against intentional or accidental deletion. It should be possible to define a retention period for such snapshots during creation. It should be possible to automatically delete such snapshots, but only on expiry of the retention period.
26.	Application aware snapshot (normal) - Oracle, SAP etc
27.	Data Migration from Existing Storage to new Storage
28.	After FAT, Bidder has to handover storage solution to existing Data Center Operator for O&M
29.	Storage should be provided with all virtualization licenses
30.	Solution should have 3 site DC-DR-Near DR replication and all required licenses for same needed to be provided by bidder

1.14. Unified Storage (NAS+SAN)

#	Parameter	Specification
1.	Capacity	• Total Usable capacity of Unified Storage should be 1.5 PB Usable from Day one & upgraded upto 4 PB. • The Unified Storage capacity mentioned is the Usable capacity in RAID 6 or equivalent configuration from day one. • "Disk: Min. 8TB NL-SAS/SAS/ drives; (existing NetApp FAS 8200 having 8 TB NL-SAS)

		• Proposed system should have min. 12 Gbps drives"
2.	High Availability	• Storage solution should comprise of Active-Active Load Balancing Storage Controllers • The storage should have no single point of failure on components like controllers, disks, cache memory, I/O Ports, Power supply, Fan, etc. • Proposed system should have error detection and correction mechanism to protect against disk or controller failure.
3.	Controller Cache	• Each storage Controller/Node should be supplied with min 128 GB usable Cache from day one. • The storage array must have write cache protection mechanism either by de-staging write data to disk or providing write cache data protection with battery backup
4.	Compatibility	• Should be able to store all types of data (Data, Voice, Images, Video, etc.) • Should be Rack Mountable & Rack of 42 U with iPDU is part of storage solution • It should support remote management • Should support NL-SAS/SATA, SAS, SSD drives within same storage system • Storage should be OS neutral for the applications hosted i.e. any application hosted with any OS.
5.	Management software	• Licenses for the storage management software should include disc capacity/count of the complete solution • Management software should be supplied with storage system array. • The unified storage must have single Microcode operating system for storage services of SAN & NAS.

6.	Management Console	• A single command console for entire storage system.
		• The Solution should allow role-based access for auditing, monitoring and other general operations and administration capabilities through GUI/CLI
		• Minimum features of Management software should be:
		  ▪ System status i.e. CPU, Memory, Disks, Network resources
		  ▪ Display total, allocated and utilized capacity
		  ▪ Role based user access management, disk quota management, user groups
		  ▪ Firmware upgrade
		  ▪ Hardware details like drives, controller etc.
		  ▪ Overall status of compaction/compression of data
		  ▪ System audit Logs
		  ▪ Should generate alert/notification
		  ▪ Reports – Scheduled or Manual
		  ▪ Historical logs of storage performance utilization for at least one quarter
		• Should display Reports like capacity utilization, RAID, and Alarms, event and notifications as defined under the MIS report section of this RFP.

7.	Monitoring	• It should have the functionality to monitor performance, throughput, storage utilization, alerts through Management software/console. • Auto alerts on failure of physical components like CPU, Disk, Memory etc. • Should support real-time monitoring of software version, hardware status and system capacity usage.
8.	Ports	• **Frontend ports:** 8 X 10 Gb SFP+ ports, 8 X 16 Gbps FC Ports Across Controllers
9.	Security	• Should provide encryption, either at controller or at Disk level from Day one. Note: This feature should be available and it will be enabled as and when required without any additional cost to the DST/GIL.
10.	Protocols	• FC, NFS, CIFS/SMB, SNMP, NTP, IPv4, Ipv6
11.	Others	• Proposed system should be supplied with all the required power cables, patch cords, accessories etc. • Solution should have 3 site DC-DR-Near DR replication and all required licenses for same needed to be provided by bidder

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1.15. Expansion of existing SAN storage at primary site GSDC:

Existing SAN storage needs to be expanded by usable 600 TB with NVMe drives

Note:

a) As Basic infrastructure i.e. Power, Cooling, Connectivity and Server & Network racks are ready at the NIC Bhubaneswar.
b) Required Power point within each rack will provided by NIC/DST/GIL. However, bidder will have to ensure that the hardware supplied/delivered is compatible with the IPDU's supplied in the rack or bidder needs to provide required connector, if any.

As Basic infrastructure i.e. Power, Cooling, Connectivity and Racks (server & network) are ready at the NIC Bhubaneswar.

Required Power point within each rack will provided by NIC/DST/GIL. However, bidder will have to ensure that the hardware supplied/delivered is compatible with the IPDU's supplied in the rack or bidder needs to provide required connector, if any.

Section IV: Service Level Agreement (SLA), Penalties & Payment Terms

1.1. Implementation Timeline & Penalties:

S/N	Measurement	Target	Penalty for Delay
1	Kick-off meeting	2 weeks from issuance of LoI/ Award of Contract	Rs 50,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may terminate the contract and Forfeit the PBG.
2	Delivery of Components (Hardware, Software, License, etc.)	T1 = T + 8 weeks	A penalty of 0.5% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T + 10 weeks DST/GIL may terminate the contract and Forfeit the PBG
3	Installation and Commissioning	T2 = T1 + 8 weeks	A penalty of 0.5% of contract value of Delayed part per week or part thereof. Delay beyond T1 + 10 weeks DST/GIL may terminate the contract and Forfeit the PBG
4	Final Acceptance Test (FAT)	T3 = T2 + 4 weeks	A penalty of 0.5% of contract value of delayed part per week or part thereof. Delay beyond T2 + 6 weeks DST/GIL may terminate the contract and Forfeit the PBG
5	Training	T4 = T3 + 2 weeks	A penalty of 0.5% of contract value per week or part thereof. Delay beyond T3 + 3 weeks DST/GIL may terminate the contract and Forfeit the PBG

T = Date of Kick-off meeting

Note: The maximum penalty cap for the above is at 10% of the contract value (Price bid).

1.2. Service Level Agreement & Penalties

1.2.1. DC & DR Infrastructure Related SLA & Penalties

S/n	Measurement	Target	Penalty
1	Uptime of Primary DC & Proposed DR Equipment / software supplied under this RFP	99.74%	a) 99.74% or Better= NIL b) 99.50% to 99.73%=0.25% of QP c) 99.00 to 99.49% = 0.50% of QP d) 98.50 to 98.99% = 1.00% of QP e) less than 98.50% may lead to termination of contract

1.2.2.Other Service Levels & Penalties

S/N	SLA	Target	Penalties
1	Incident Resolution	**Priority Level 1** Incident - Within 1 hr **Priority Level 2** Incident - Within 6 hr **Priority Level 3** Incident - Within 12 hr	• Level 1 Incident 0.25% of QP for every 2-hr delay in resolution; • Level 2 Incident 0.25% of QP for every 3 Hr delay in resolution; Level 3 Incident 0.25% of QP for every 6 hrs delay in resolution
2	Security Breach	Detection of security Breach - within 30 mins	3% Of QP for every 30-min delay in detection and additional 1% for every 1 hr delay in the mitigation of security breach

		Mitigation of Security Breach - within 1 hr from the time of Breach	

Note:

Root Cause should be identified for all incidents, if root cause is not identified then additional penalties will be levied.

The security breach will include but not limited to successful penetration of any Virus, Trojan, malwares, zero-day attacks, intrusion, Denial of Service Attacks, …etc., up to the Server level. In case of any compromise of data due to the Security Breach then double penalty will be levied (this will not be counted within the maximum penalty cap limit).

1.3. Payments Schedule

S/N	Activity	Payment (%)
Table 1: Schedule-I		
1	Delivery of all components (Hardware, Software, Licenses, etc.) at Primary Data Centre, Gandhinagar Near DR site, Vadodara and NIC, Bhubaneshwar	70% of the sum total of schedule I of financial bid
2	Successful installation, Testing, Integration, Commissioning	10% of the sum total of schedule I of financial bid
3	Successful completion of training & Final Acceptance test of entire solution	20% of the sum total of schedule I of financial bid
Table 2:		
1	5 Years AMC/warranty and Back to Back OEM support for the entire Infrastructure (hardware & Software)	Will be divided and paid in 20 equated Quarters. Five years will start from the date of successfully completion of FAT.