

**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)**



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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. Bidders 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, 2nd 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 7 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 seven 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 Seven (7) years in India <ul style="list-style-type: none"> • 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 seven 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.

- All details and the supportive documents for the above should be uploaded in the GeM bid.
- 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.
- 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
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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 for Central / State Gov, PSU, BFSI in India during the last seven years as on Bid submission date. Up to 2 On Premises Datacenter/ on premises Disaster Recovery IT Infrastructure = 5 Marks 3 to 5 On Premises Datacenter/ on premises Disaster Recovery IT Infrastructure = 10 Marks above 5 On Premises Datacenter/ on premises Disaster Recovery IT Infrastructure = 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 seven 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 <ul style="list-style-type: none"> • 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 Bhubneshwar, 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 Bhubneshwar, 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 **inclusive** 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 **180** 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 **within 3 Days in separate Sealed Cover mentioning Tender Number, Subject and Clearly Mentioning "Price-bid"**. 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. **Bidder has to upload scanned copy / proof of the EMD along with bid and has to ensure delivery of hardcopy to the Buyer within 3 days of Bid End date / Bid Opening date. Bidder to Submit EMD and Price Breakup**

in Separate Seald Covers mentioning “EMD” and “Price-Bid”.

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 from 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.

- 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.
- 4.31.5 TENDERER 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.

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

6.3 Format 3: Format for MAF / OEM Authorization.**Format of MAF/OEM Authorization**

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. TENDERPRICING

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

5. QUALIFYINGDATA

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. BIDPRICE

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:

- 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:

Telexno:.....

Fax no: Telephone no:

Personalattentionof:..... (ifrequired)

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

**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: _____

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 **M/s <<Name of Company>>**

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](http://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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 24x7 Monitoring and Management facility for GSDC • Operations and Management Team seating arrangement for approx. 50+ personnel
Expansion Area : 1400 Sq.ft	<ol style="list-style-type: none"> 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, or 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	<ul style="list-style-type: none"> • Software License documents • Hardware warranty certificate
3.	Installation & Commissioning	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

Component		DC	Far DR	Near DR	Total
Sr. #	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

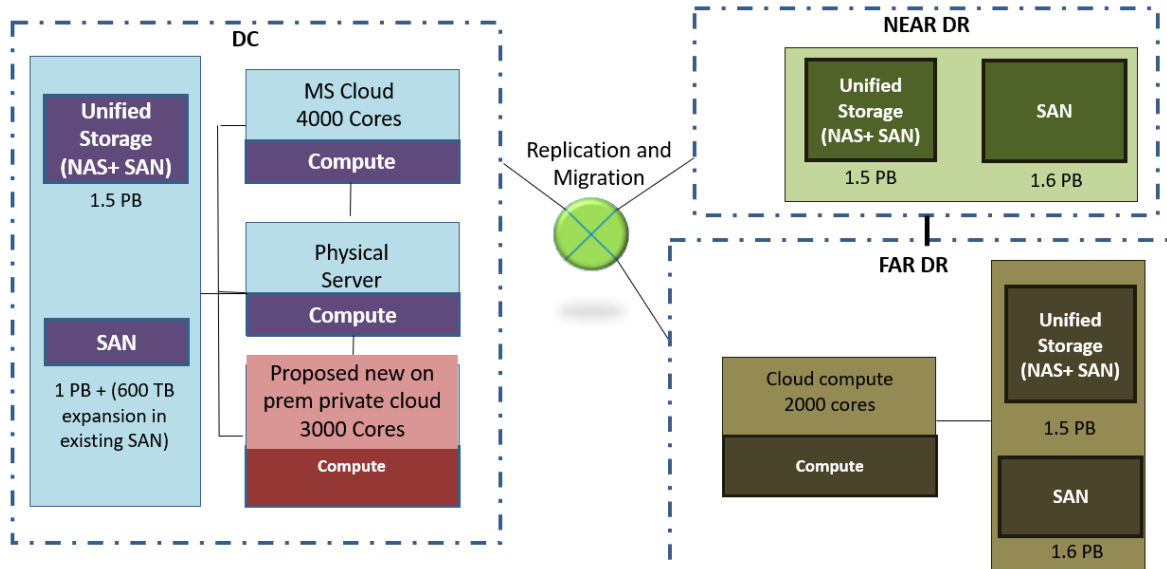
Request for Proposal Vol-II Scope of Work**Department of Science & Technology**

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	<p>Chassis based Router in nature which should support Software Defined Network (SDN). Device should support termination of internet link or WAN (Intranet) links</p> <ol style="list-style-type: none"> 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	<p>From Day1 Router Should Have:</p> <ol style="list-style-type: none"> 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	<p>The Router should support :</p> <ol style="list-style-type: none"> 1. Concurrent IPsec tunnel - 4000 2. VRF sessions - 4000 3. Access Control List (ACL)- 4000 4. IPv6 routes: 4 Million
4	<p>Other Functionality:</p> <ol style="list-style-type: none"> 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

	<p>7. Should support Role-based administrative access, SSHv2, RADIUS/TACACS+ , Authorization, and Accounting (AAA)</p> <p>8. Should support Netflow/cFlow/J-Flow/equivalent feature.</p> <p>9. The Router should be supplied with all applicable feature and interface perpetual-licenses from day one.</p> <p>10. The router should support Netconf, YANG/Python API, and other modern system management protocols. The device should support YANG/Python API - A Data Modelling Language for the Network Configuration</p> <p>11. In case the primary route processor fails on the router, there should be ZERO packet loss on the whole router for the traffic</p>
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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	<p>Solution:</p> <ol style="list-style-type: none"> 1. Appliance should be purpose build enterprise grade, scalable and should be able to upgrade firmware and/or software including that of management, onsite without any cost to bidder and without upgrading any hardware 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	<p>Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic throughput should be min. 30 Gbps Threat Protection throughput (measured after enabling all function like Firewall, Malware protection and Application Control, logging enabled,etc)</p> <p>NGFW - Minimum 50 Gbps. Firewall throughput: 120 Gbps</p> <p>Virtual System/Virtual Instance: The Firewall must support minimum 10 Virtual System/Virtual Instance from Day1</p> <p>OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled</p>

4	<p>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</p> <p>6 x 10 G SFP+</p> <p>4 x 40G QSFP+</p> <p>4 x 100 G QSFP28</p> <p>1 x 1G ports for out of band/dedicated management port.</p>
5	Appliance should support atleast 32 Million concurrent sessions .
6	Appliance should support atleast 4,00,000 new connections per second .
7	<p>Features :</p> <ol style="list-style-type: none"> 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	<p>VPN :</p> <ol style="list-style-type: none"> 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	<p>Other Features:</p> <ol style="list-style-type: none"> 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	<p>Management :</p> <ol style="list-style-type: none"> 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 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. The report must highlight applications running on non-traditional ports and by-passing L3/L4 security rules 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. The NGFW must support the ability to create custom reports directly from the WebGUI of the NGFW Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to NGFW irrespective load & CPU utilization 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/64 multicore CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage & 1 TB of RAID1/5/6 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 File/Media Types for Malware identification
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	<p>Solution:</p> <ol style="list-style-type: none"> Appliance should be purpose build enterprise grade, scalable and should be able to upgrade firmware and/or software including that of management, onsite without any cost to bidder and

	<p>without upgrading any hardware</p> <p>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 or equivalent architecture</p> <p>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</p> <p>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</p> <p>5. Should have redundant hot swappable power supply, fan tray etc.</p> <p>6. The required performance and Throughput must be complied by Single Appliance. However, the solution should be proposed / working in High Availability (HA)</p>
3	<p>Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 50 Gbps.</p> <p>Virtual System/Virtual Instance: The IPS/IDS must support minimum 10 Virtual System/Virtual Instance from Day1.</p> <p>OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled</p>
4	<p>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</p> <p>6 x 10 G SFP+</p> <p>4 x 40G QSFP+</p> <p>4 x 100 G QSFP28</p> <p>1 x 1G ports for out of band/dedicated management port.</p>
5	Appliance should support atleast 32 Million concurrent sessions.
6	Appliance should support atleast 4,00,000 new connections per second.
7	<p>Features :</p> <ol style="list-style-type: none"> 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	<p>Other Features:</p> <ol style="list-style-type: none"> 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)

	<p>signatures.</p> <p>5. Appliance should having Open API for integrations with third-party products</p> <p>6. Appliance should be integrate with other security devices and analytics systems that dynamically push IoCs using Open API/STIX/TAXII standards</p> <p>7. Should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports</p> <p>8. Should support URL and DNS threat intelligence feeds to protect against threats</p> <p>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.</p> <p>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</p> <p>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.)</p> <p>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</p> <p>13. IPS must be able to detect and block network and application layer attacks, protecting at least the following services: email services, DNS, FTP</p> <p>14. Solution must protect from DNS Cache Poisoning, and prevents users from accessing blocked domain addresses.</p> <p>15. IPS must include the ability to detect and block P2P & evasive applications</p>
9	<p>Management :</p> <p>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</p> <p>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.</p> <p>3. The report must highlight applications running on non-traditional ports and by-passing L3/L4 security rules</p> <p>4. IPS/IDS 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.</p> <p>5. The IPS/IDS must support the ability to create custom reports directly from the WebGUI</p> <p>6. Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to IPS/IDS irrespective load & CPU utilization.</p>
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/64 multicore CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage & 1 TB of RAID1/5/6 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 File/Media Types for Malware identification
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 IPS/IDS 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	<p>Fabric - Solution Functionality:</p> <ol style="list-style-type: none"> Solution should allow workload mobility anywhere in the SDC, not across the Data Center sites Leaf switches to Spine connectivity should use 100 G uplink port Switch and optics should be from the same OEM All switches should have non-blocking ports Should be integrate using REST API or equivalent mechanism with different Hypervisors and Kubernetes, Redhat, Openshift and manage virtualise networking from SDN Controller. Should auto discover all the Spine and Leaf switches and auto provision them based on the policy using SDN Controller. All relevant licenses for all features and scale should be quoted along with required hardware. Should support advance telemetry in terms device views, metrics views, snapshot, diff view or equivalent The proposed architecture should provide a single pane for provisioning, monitoring, and management to deploy stretched policies across multiple Data centers. Solution should provide L2 & L3 extension across sites Should provide inventory of all connected IP devices. Should be able to integrate with all physical, virtual network devices
3	<p>SDN Controller or Centralised Appliance:</p> <ol style="list-style-type: none"> Should be on-premise and must have all related licenses to support the entire fabric infrastructure Should support multi tenancy and role base access control to tenant for management. Should support micro-segmentation rules and policies for workloads connected to DC fabric for east-west traffic. Should support declarative model based network automation or IBN (Intent based Networking) or equivalent mechanism Solution should support OpenConfig/NetConf, YANG based model or equivalent open architecture. Should not participate in Data plane and control plane path of the fabric. Must run in N + 1 redundancy to provide availability as well as function during the split brain

	<p>scenario</p> <p>8. In case of SDN Controllers fails, the fabric must function without any performance degradation and with the current configuration.</p> <p>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.</p> <p>10. Should support ZTP(Zero Touch Provisioning).</p> <p>11. Should support Open API integration.</p> <p>12. Should support Network roll-back.</p> <p>13. Centralized Management/SDN controller should be from the same switch OEM and must have all licenses to support the entire fabric infrastructure.</p>
4	<p>Other Functionality :</p> <p>1. SDN Controller must have ability to automate VXLAN control plane and provide topology information of the fabric.</p> <p>2. Solution should support Micro Segmentation for the Virtualize and Non - Virtualize environment</p> <p>3. Solution should have historical configuration analysis between any two time series to identify any issue along with user who made that change.</p> <p>4. SDN Controller must communicate to south bound devices using open standard protocol or using Device APIs.</p>
5	<p>Monitoring - On Premise Systems</p> <p>1. Ability to monitor device network availability - ping, Perform device/node discovery / network discovery</p> <p>2. Ability to monitor/collect network device core metrics - CPU /Memory / Disk / Network. Ability to monitor OS services and processes</p> <p>3. Solution should provide network device specific monitoring capabilities - CISCO, Juniper, HP ,ARISTA etc.</p>

1.5. Core-Spine Switch

Sr. #	Specifications
1	<p>Non-Chassis based Switch in nature which can be used as Spine in (Spine-Leaf architecture) and support Software Defined Network (SDN)</p> <p>1. HA and Active-Active mode</p> <p>2. IPv6 readiness from day one.</p> <p>3. Relevant licenses for all the below features and scale should be quoted along with switch</p> <p>4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC</p>
2	<p>From the day one Switch should have :</p> <p>1. Ports - 32 x 40/100 G non-blocking interfaces populated with multimode 100 G Transceivers</p> <p>2. Total aggregated system throughput minimum 6.4Tbps(Full Duplex:- Bi-Directional)</p> <p>3. Throughput - Minimum 2bbps(billion packets /sec.)</p> <p>4. Latency - < 3 microseconds</p> <p>5. Form factor - Max. 2 U</p> <p>6. Minimum 32 MB of System/Packet Buffer</p> <p>7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/Console Port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP or 1x1000BASE-T)</p> <p>8. Air Flow – Front-to-back or Back-to-Front. To be decided at the time of ordering.</p>
3	<p>The core Switch should have Redundant Power Supply Units (PSUs), Hot-swappable and support in-</p>

	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 <ol style="list-style-type: none"> 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 v2 (SSHv2) or Telnet, SNMPv1/2/3, 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 <ol style="list-style-type: none"> 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 ; or same should be achieved with equivalent technology 10. Switch should support to prevent edge devices in the network from becoming Spanning Tree Protocol root nodes
7	Management: <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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) or equivalent 2. Per Flow Hop by Hop packet drop with reason of drop or equivalent 3. Per Flow latency (per switch and end to end) or equivalent Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW by any mechanism 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; or same can be achieved using VRF
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 - < 3 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/Console Port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP or 1x1000BASE-T) 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	<p>Switch should support</p> <ol style="list-style-type: none"> 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 v2 (SSHv2) or Telnet, SNMPv1/2/3, 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. Switch should support VXLAN and EVPN symmetric IRB
6	<p>Switch should have functionality : Other</p> <ol style="list-style-type: none"> 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 ; or same should be achieved with equivalent technology
7	<p>Management :</p> <ol style="list-style-type: none"> 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	<p>Switch platform should support Following</p> <ol style="list-style-type: none"> 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	<p>Should support telemetry :</p> <ol style="list-style-type: none"> 1. Flow path trace (ingress to egress switch) or equivalent 2. Per Flow Hop by Hop packet drop with reason of drop or equivalent 3. Per Flow latency (per switch and end to end) or equivalent 4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW by any mechanism 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 ; or same can be achieved using VRF
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 - < 3 microseconds 5. Form factor - Max. 2 U 6. Minimum 32 MB of System Buffer 7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/Console Port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP or 1x1000BASE-T) 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	<p>Switch should support</p> <ol style="list-style-type: none"> 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 v2 (SSHv2) or Telnet, SNMPv1/2/3, 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 14. Switch should support VXLAN and EVPN symmetric IRB.
6	<p>Switch should have functionality : Other</p> <ol style="list-style-type: none"> 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 ; or same should be achieved with equivalent technology
7	<p>Management :</p> <ol style="list-style-type: none"> 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	<p>Switch platform should support Following</p> <ol style="list-style-type: none"> 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	

	<p>Should support telemetry :</p> <ol style="list-style-type: none"> 1. Flow path trace (ingress to egress switch) or equivalent 2. Per Flow Hop by Hop packet drop with reason of drop or equivalent 3. Per Flow latency (per switch and end to end) or equivalent 4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW by any mechanism 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; or same can be achieved using VRF
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	<p>Fixed Switch in nature which can be used as Leaf in (Spin-Leaf architecture) and support Software Defined Network (SDN)</p> <ol style="list-style-type: none"> 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	<p>From the day one Switch should have :</p> <ol style="list-style-type: none"> 1. Ports - 48 x 1 / 10 G Base-T Port for host connectivity and 2 x 100 G for uplink to spine with multimode transceivers 2. Total aggregated system throughput minimum 1.36 Tbps (Full Duplex:- Bi-Directional) 3. Throughput - Minimum 1 bbps (billion packets /sec.) 4. Latency - < 3 microseconds 5. Form factor - Max. 2 U 6. Minimum 32 MB of System Buffer 7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/Console Port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP or 1x1000BASE-T) 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	<p>Switch should support</p> <ol style="list-style-type: none"> 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 v2 (SSHv2) or Telnet, SNMPv1/2/3, NTP 11. Should protect against ARP and DHCP spoofing
6	<p>Switch should have functionality : Other</p> <ol style="list-style-type: none"> 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 environment and should be able to sense movement of VM and configure network automatically, using orchestration layer ; or same should be achieved with equivalent technology
7	<p>Management :</p> <ol style="list-style-type: none"> 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	<p>Switch platform should support Following</p> <ol style="list-style-type: none"> 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	<p>Should support telemetry :</p> <ol style="list-style-type: none"> 1. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW by any mechanism 2. Switch environmental like (CPU/memory/FAN/Power Supply) 3. Interface statistics like CRC error
10	<p>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 ; or same can be achieved using VRF</p>
11	<p>The OEM should be in the Leader's quadrant of the Data-Center and Cloud Networking in the latest Gartner Magic Quadrant.</p>

1.9. WAF with SLB

Sr. #	Specifications
1	<p>The proposed WAF solution should be appliance with SLB and support Software Defined Network (SDN)</p> <ol style="list-style-type: none"> 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	<p>From the day one WAF should have:</p> <ol style="list-style-type: none"> 1. Ports 10G x 8 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	<p>WAF should have functionality:</p> <ol style="list-style-type: none"> 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	<p>WAF should have functionality: Other</p> <ol style="list-style-type: none"> 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	<p>Management:</p> <ol style="list-style-type: none"> 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	<p>The Solution should provide protection against the following (but not limited to), type of attacks :</p> <ul style="list-style-type: none"> 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
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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 or equivalent technology, 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	<ol style="list-style-type: none"> 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 Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC Switch should support multiprotocol architecture such as FC, FICON, FCR and FCIP. 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/ISL/port channel of two SAN switches should be possible and the licenses should be provided for the same. The switch should provide local switching feature with port to port latency of less than 800ns.~~
13. The SAN Switch should be capable of supporting HW Compression for FC-IP functionality and IPsec encryption without any additional Licenses
14. 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.
15. It should be possible to isolate the high bandwidth data flow traffic to specific ISLs by using simple zoning.
16. 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.
17. Support for web based management and should also support CLI.
18. The switch shall support advanced zoning and RBAC to simplify administration and significantly increase control over data access.
19. Offered SAN switch shall support to configure the switches with alerts based on threshold values for temperature, fan status, Power supply status, port status.
20. 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
21. Airflow: Flexible Airflow. Cool air intake should be from front side and hot air release should be from back
22. 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.
23. The switch should be rack mountable.
24. Non-disruptive Microcode/ firmware Upgrades and hot code activation
25. 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)
26. Offered SAN switch shall be energy efficient
27. The proposed switch should support offline diagnostic including optical and electrical loop back, latency, link traffic, distance.
28. The proposed SAN switch should support forward error correction and buffer credit recovery.
29. 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
30. It should support heterogeneous server technologies and its host bus adapters.
31. Switch should be provided with ICL/ISL/Port Channel or equivalent technology compatibility and required license for the same to be provided
32. Bidder shall carry out integration of devices with existing SAN Switches

1.12. Private Cloud

Sr. #	Specifications
1	<p>At GSDC and Far DR site we want to create Private Cloud :</p> <p>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</p> <ol style="list-style-type: none"> 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 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. Hypervisor should support all guest OS level clustering (e.g. Windows, RedHat, Ubuntu, CentOS etc)

	<p>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.</p> <p>30. Solution should support Full Automation solution validation (Infrastructure as code – Tool & Orchestration Set)</p> <p>31. Solution should be able to integrate with various vendor specific & open source tools & utilities (API Integrations).</p> <p>32. Solution should support deployment of legacy as well new applications architecture & infrastructure services (VMs and containers).</p> <p>33. Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation.</p> <p>34. Solution should be able to provide post-check reports with accounting for the deployment of private cloud components using automation.</p> <p>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).</p> <p>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</p> <p>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</p> <p>38. Solution should be able to automate replication of resources at DR site & DR invoking</p> <p>39. Solution should be able to provide accounting and auditing of all the changes, resource utilization and reports on demand and periodically.</p> <p>40. Solution should provide Observability Stack - Infrastructure monitoring (Active & passive) & alerting on the UI / Dashboard.</p> <p>41. Solution should provide Observability Stack to provide the on demand and periodic reports for cloud resource utilization trend to reduce the meantime to resolve the issue & support the capacity & risk management.</p> <p>42. Solution should provide agentless/without any performance overhead mechanism to provide full stack visibility and automation for storage, network and virtualized infrastructure from a single platform</p>
2	<p>Servers</p>
	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 - DDR4 - 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 <ul style="list-style-type: none"> • 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 <p>Note : HBA and NIC card can be provided on server or with converged switch or with solution</p>
3	<p>Enclosure – Chassis</p>

	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> Should accommodate both half-width and full-width blade form factors The enclosure's all component should be hot pluggable and with redundant module (in HA mode), like back switch, power, cooling etc Connectivity - should be 40/100 Gbps port with all populated SFPs Should provide different privilege (Role based) for login in to the system for monitoring and management
4	SAN Switch
	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> No. of Ports - Min. 48 ports or ports All ports should be populated with min. 32 Gbps SFP All ports licenses should be given from day one 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	<p>The solution :</p> <ol style="list-style-type: none"> Should provide a purpose-built hypervisor that installs directly on the 64 bit bare metal x86 server. Should provide support for heterogeneous guest Operating systems such as Windows Server and Linux (Red Hat, SUSE, Ubuntu and CentOS) Should provide the ability to create new virtual machines from scratch or based on templates (created from fully configured virtual machines) Solution should be able to dynamically 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 Should provide a virtual switch which can span across a virtual data center and multiple hosts, should be able to connect to it Architecture should support multi-vendor hardware Should provide Provisioning, Monitoring, Automation and Orchestration via both portal and API Should provide support for Software Defined Networking and auto provisioning of networks and storage. Should support QoS, Resource pooling, On Demand Self Service, Capacity and resource optimization The solution should have Service Catalogue for the cloud services and same can be customized. The solution should have pre-defined catalogues of templates. Should support for cloud native VM The solution should provide forecasting spend associated with currently deployed cloud resources and services. The solution should have Life Cycle Management Work flows: Provisioning, Decommissioning, Horizontal/Vertical Scale, Upgrade etc. The solution should have ability for work flows to include business approvals The solution should have capabilities around Configuration and Change Management work flows

3	<p>Virtualization management software :</p> <ol style="list-style-type: none"> Should support user role and permission assignment (RBAC) and shall maintain a record of significant configuration changes and the administrator who initiated them. Should have Virtual Machine and hypervisor host performance monitoring. Should provide a centralized interface from which virtual machine across data centre can be configured, move, monitored and administered Should be available VM and host's performance monitoring and utilization reports. It shall co-exist and integrate with leading systems management vendors. 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. Should support for cluster services between Virtual Machines. Should support Virtual Machine migration between two or more servers in a cluster as well as between DC and DR
4	<p>Hypervisor layer :</p> <ol style="list-style-type: none"> Should provide High Availability & automated distributed resource scheduling for VM and storage placement & load balancing. Should support features like snapshots & cloning of individual virtual machines Non-disruptive Scale-Up and/or Scale-Out to grow capacity and/or performance whenever required. Should provide ease of use wizard for multi-point in time snapshot scheduling and instant batch cloning of Virtual machines Hypervisor must support IPv4, IPv6 and dual stack configuration.
5	<p>Other :</p> <ol style="list-style-type: none"> The solution should be able to manage Multi tenancy All functionality should be from Web based Self Service Portal (SSP) Dashboards should be available for Admin as well as for Tenant Should have a feature to define Quota, which establishes the usage limitation of resources for each user depending on user roles & user type. The bidder shall provide perpetual licenses or subscriptions 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. The platform shall have capability to run both stateful and stateless applications. The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities. The container platform shall support deployment and orchestration of multiple containers formats (docker,cri-o etc) for preventing any technology lock in. The platform shall have inbuilt management and monitoring capabilities. It should be offered with suitable container registry capability. The platform shall have inbuilt automated application container build capability – from source code to a runnable container image. The platform shall provide auto scaling capability for automatically running appropriate number of container instances as per load requirements. 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.	<p>Solution should provide a Web based interface of Management software with Dashboard with minimum features of:</p> <ol style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

		<ul style="list-style-type: none"> Storage should be OS neutral for the applications hosted i.e. any application hosted with any OS.
5.	Management software	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Frontend ports: 8 X 10 Gb SFP+ ports, 8 X 16 Gbps FC Ports Across Controllers
9.	Security	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> FC, NFS, CIFS/SMB, SNMP, NTP, IPv4, Ipv6
11.	Others	<ul style="list-style-type: none"> 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

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:

- As Basic infrastructure i.e. Power, Cooling, Connectivity and Server & Network racks 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.

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 Lol/ 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 + 12 weeks	A penalty of 0.5% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T + 14 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	<ul style="list-style-type: none"> 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	
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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, Bhubaneswar	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.

Answers to Prebid Queries

Combined Bidder's Request For Clarification for Selection of Agency for Supply, Installation, testing, commissioning and provide premium support (24x7x365 days) of Hardware & Software for Gujarat State Datacenter, Gandhinagar and Proposed Far Disaster Recovery site at NIC Bhuvneshwar, Orissa and Proposed Near DR site, Vadodara. (Bid Number: GEM/2022/B/2515263 Dated: 08-09-2022)				
S.No.	Bidding Document Reference (Clause /page)	Content of RFP requiring clarification	Points of Clarification required	DST / GSDC / GIL Remarks
1	Section III: Technical Specification. Page no:83	Ports 10G x 16 and 1G X 8 without use of any Split out/ Breakout cable	Any WAF or SLB deployment requires only one or two interfaces, it will be deployed in reverse Proxy Mode. RFP has asked total 24 interfaces; these many interfaces are not at all required for any WAF or SLB deployment. Also, considering required SSL TPS of 50,000 RSA and 25000 ECC which are not at all in line with 24 interfaces, number of interfaces are too high. This clause is in the favor of one OEM hence we sincerely request you to modify the clause to "Ports 8G x 16 and 1G X 8 without use of any Split out/ Breakout cable".	Please See Revised Condition
2	Section III: Technical Specification. Page no:83	New point	WAF should have high capacity storage to save all Security and Audit logs. Since logs are very important from Forensics and troubleshooting point of view. We request you to add this point "Device should have minimum of 4 TB SSD Hard disk drive to store historical logs".	Not Accepted
3	Section III: Technical Specification. Page no:84	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 neighbor instance.	Mostly all ADC vendors support virtualization which virtualizes the Device resources—including CPU, memory, network, and acceleration resources so that each virtual instances will have dedicated HW resources to get guaranteed performance. Each instance will have separate OS and configuration with Complete fault isolation between virtual load balancer instances. This is true virtualization techniques followed by all ADC vendors. Hence, we request you modify this point to "The proposed appliance should have Virtualization feature with its own Hypervisor, NOT any third Party or Open Source 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 affect to neighbor's instance."	No Change, As per RFP
4	Section III: Technical Specification. Page no:83	New point	WAF with SLB should support GSLB functionality to conduct DR drills hence we request you to include this feature "Solution should support GSLB with Full DNS functionality to support all types of DNS records like A,MX, AAAA, CNAME, PTR, SOA etc."	Not Accepted

5		Section II – Eligibility Criteria Page - 5 Point: 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.	Kindly amend the clause as below: The bidder/OEM should have experience in implementing at least One (1) 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 OR The bidder/OEM should have experience in implementing atleast 2 projects having Data centre and Disaster Recovery 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.	No Change, As per RFP
6		Section II – Eligibility Criteria Page - 5 Point: 5	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 should be in the name of the bidder and clearly mention the scope of work.	Kindly amend the clause as below: Relevant Work order copy / Go-Live Certificate / client satisfactory letter regarding successful implementation of the project 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.	No Change, As per RFP
7		Section II – Eligibility Criteria Page - 6 Point: 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.	Kindly amend the clause as below: On premise Cloud solution must have been implemented at One Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the last five years as on Bid submission date. (OR) 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	No Change, As per RFP
8		Section II – Eligibility Criteria Page - 5 Point: 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.	Kindly amend the clause as below: 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 / IT / ICT during each of the above three financial years as on bid submission date.	No Change, As per RFP

9	Technical Evaluation Matrix Page - 5 Point: 2 & 3	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.	Kindly amend the clause as below: Relevant Work order copy / client satisfactory letter regarding successful implementation Data Center/Disaster Recovery IT infrastructure / Go-Live Certificate 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.	No Change, As per RFP
10	Technical Evaluation Matrix Page - 5 Point: 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	Kindly amend the clause as below: On premise The Bidder should have experience in 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	No Change, As per RFP
11	Annexure 3: Format of Earnest Money Deposit in the form of Bank Guarantee Page - 57	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.	Kindly amend the clause as below: Whereas ----- ----- (here in after called "the Bidder") has submitted its bid dated ----- ----- or RFP Date _____ 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.	No Change, As per RFP
12	6.5 Format 5: Annual Sales Turnover Statement Page - 44	Turnover generated solely from SITC of IT Component for Data centre or on premises Disaster Recovery site or on premises Cloud system implementation	Kindly amend the clause as below: Turnover generated solely from SITC of IT Component for Data centre or on premises Disaster Recovery site or on premises Cloud system implementation / IT / ICT	No Change, As per RFP
13	Page no. 21 Caluse No. 4.18 Statutory Deductions and Payment Point number 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.	Kindly amend the clause to: Payments shall be subject to any deductions (such as TDS, penalty as per SLAs, etc.) of any applicable amount as defined by GOI for TDS and SLA Ceiling penalty% specified in the RFP, for which the Selected agency is liable under the agreement against this RFP.	No Change, As per RFP

14		Page no. 24 Caluse No. 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.	We understand termination shall be as per Tender Termination Clause No. 4.10. Accordingly, kindly amend the clause to: 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 as per Termination Clause.	No Change, As per RFP
15		Page no. 25 Caluse No. 4.29 Performance Bank Guarantee of the Contract	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.	As per the recent Notification No. F.9/4/2020-PPD from the Ministry of Finance, in all the govt. Projects PBG has been recommended to 3% of contract value. Hence we request you to kindly accept PBG as 3% of Contract value in form Bank Guarantee . Also, kindly allow to submit two PBGs i.e separate PBG for CAPEX and OPEX portion.	No Change, As per RFP
16		Page no. 33 Section IV 1.1 Table 1.1	<p>Implementation Timelines and Penalties</p> <p>1. Kick-off meeting 2 weeks from issuance of Lol/ Award of Contract Rs 50,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may terminate the contract and Forfeit the PBG.</p> <p>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</p> <p>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</p> <p>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</p> <p>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</p> <p>Note: The maximum penalty cap for the above is at 10% of the contract value (Price bid).</p>	<p>Due to Global crisis & shortage of semiconductors, it would not be feasible to deliver & Implement the items within stipulated timelines. Kindly amend the clause to:</p> <p>1. Kick off meeting 2 weeks from issuance of Lol/ Award of Contract 10,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may Forfeit the PBG.</p> <p>2. Delivery of Non-IT Components, Civil Works and Electrical Works T1 = T + 24 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T + 18 weeks DST/GIL may Forfeit the PBG.</p> <p>3. Delivery of IT Components (Hardware, Software, License etc.) T2 = T + 24 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T + 26 weeks DST/GIL may Forfeit the PBG</p> <p>4. Installaton and Commissioning of Non - IT components T3 = T1 + 8 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T1 + 10 weeks DST/GIL may Forfeit the PBG</p> <p>5. Installaton and Commissioning of IT components T4 = T2 + 8 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T2 + 10 weeks DST/GIL may Forfeit the PBG..</p>	Please See Revised Condition

				<p>5. FAT T5 = T4 + 4 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T4 + 6 weeks DST/GIL may Forfeit the PBG.</p> <p>6. Training T5 = T4 + 2 weeks A penalty of 0.1% of Component Value of Delayed/non-delivered part per week or part thereof. Delay beyond T4 + 4 weeks DST/GIL may Forfeit the PBG.</p> <p>Note: The maximum penalty cap for the above is at 10% of the CAPEX value beyond which DST/GIL can forfeit the PBG.</p>	
17	Page no. 37 Section V Payment Terms	<p>Payment Terms</p> <p>1. Delivery of all components (Hardware, Software, Licenses, etc.) at Primary Data Centre, Gandhinagar, Near DR site, Vadodara and NIC, Bhubaneswar: 70% of the sum total of schedule I of financial bid</p> <p>2. Successful installation, Testing, Integration, Commissioning: 10% of the sum total of schedule I of financial bid</p> <p>3. Successful completion of training & Final Acceptance test of entire solution 20% of the sum total of schedule I of financial bid</p>	<p>We need to pay to OEMs against their dispatch of equipment and hence in order to make the cash flow financially viable for this project, we request to amend the clause to:</p> <p>1. Conduction of Site Survey and Submission of Design Document: 10% of the sum total of schedule I of financial bid</p> <p>2. Delivery of all components (Hardware, Software, Licenses, etc.) at Primary Data Centre, Gandhinagar, Near DR site, Vadodara and NIC, Bhubaneswar on pro-rata basis: 70% of the sum total of schedule I of financial bid</p> <p>3. Successful installation, Testing, Integration, Commissioning of the delivered components: 10% of the sum total of schedule I of financial bid</p> <p>4. Successful completion of training & Final Acceptance test of entire solution: 10% of the sum total of schedule I of financial bid</p>	No Change, As per RFP	
18	Clause 3.11, page 12	Reverse Auction (RA) has been enabled in the GEM Bid.	We understand the bid is L1 and selection of bidder is based on the price bid uploaded in the GEM portal. Hence Reverse auction is not applicable. Kindly confirm.	Reverse Auction (RA) has been enabled in the GEM Bid.	
19	Clause 3.11.8 page 12	The quoted prices shall be valid for 365 days from the date of opening of financial bid.	Considering the prevailing pandemic situation, keeping price validity for 365 days is not possible, as OEMs are not offering more than 180 days. Hence request to consider price validity of 180 days from the date of submission of bids.	Please See Revised Condition	
20	Clause 3.11.2 page 12	Offered prices should be exclusive of GST	Clause 8.2 Format 2: Price/Financial Bid indicates price inclusive of GST, but clause 3.11.2 indicates offered price exclusive of GST. Kindly clarify	Please See Revised Condition.	

21		Clause 3.11.2 page 12	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.	We request to provide 3 business days for submission of price bid in physical sealed cover.	Please See Revised Condition.
22		Clause 3.11.2 page 12	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.	We understand in addition to price bid, EMD, POA also needs to be submitted in physical sealed cover. Kindly confirm. And also we request to provide 3 business days for submission of EMD, POA in physical sealed cover.	Please See Revised Condition.
23		Clause 3.11.2 page 12	Annexure 4: Undertaking On letterhead of Bidder 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	We request to modify the clause as below: 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 terminate the contract and invoke PBG.	No Change, As per RFP
24		Section IV clause 1.1, page no 33	Implementation penalties : The maximum penalty cap for the above is at 10% of the contract value (Price bid)	We request to modify the clause as below: The maximum penalty cap for the above is at 10% of the capex value (Price bid)	No Change, As per RFP
25		clause 1.2, page no 33	Service Level Agreement & Penalties	We understand SLA penalties shall be capped at 10% of the respective QGR. Kindly confirm.	No Change, As per RFP
26		clause 3.5 page no 9	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)	We request to modify the clause as below: EMD in the form of Demand Draft OR in the form of an unconditional Bank Guarantee (which should be valid for 6 months from the last date of bid submission)	No Change, As per RFP
27		RFP Vol-II (Scope of Work & SLAs), 1.3.Bill Of Material/ Pg# 66	1.3.Bill Of Material	Key BoM items are missing which is mandatory to provide end to end solution to address the scope of this RFP Items missing in the BoM :- 1. Virtualization 2. Private Cloud with Cloud Management and Orchestration layer 3. Containerization 3. OS , DB licenses required for DC expansion, Near DR and Far DR Sites 4. DRM tool for DR Sites 5. NMS and Helpdesk Mandatory details required :- a. Provide no. of VM's for virtualization , Private cloud and Cloud Management and Orchestration with UoM, b. provide no. of nodes or Cores to be containerized for Modern App platform , c. OS , DB licenses with UoM, d. provide device count and no. of users for NMS & Helpdesk and e. provide no. of apps and DB's for DRM tool.	No Change, As per RFP

28	RFP Vol-I (Commercial terms & Bid Process) 4.30 Successful bidder (Selected agency's) Obligations/Pg # 25	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.	Please provide RACI matrix to share the details of GIL, Bidder, OEM, Existing DCO, User Departments which will support for factoring the solution scope, ownerships and responsibilities.	No Change, As per RFP
29	RFP Vol-II (Scope of Work & SLAs) ,1.1.System Integration Component	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.	Kindly modify the clause as below :- "1.1.17.The migration & integration activity should be carried out in coordination with GSDC Team and DCO Team with minimal possible downtime by the GSDC according to the requirement." Please share the details of applications,databases (OS version, DB version, type , count, no. of instances, license qty, middleware, other software dependencies, cluster environments, etc) along with their dependencies.	Details will be shared with successful bidder
30	RFP Vol-II (Scope of Work & SLAs) ,1.1.System Integration Component	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.	Please remove this clause due to the ambiguity in location of DC/DR site or in case of any exigencies and cost will vary based on site location, OEM's warranty agreements and transit insurance of assets leads to additional charges to bidder, etc.	No Change, As per RFP
31	RFP Vol-II (Scope of Work & SLAs) ,1.1.System Integration Component	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.	Please modify the RPO to 1 hour for Far-DR and provide the expected RTO value as 4 hours for Far DR Site replication. And modify the RPO to 30 min for Near-DR and expected RTO as 2 hours. Also, please provide the data capacity to be replicated among the storage arrays and daily & YoY data growth expected.	No Change, As per RFP
32	RFP Vol-II (Scope of Work & SLAs) , Section III: Technical Specification	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.	Please modify the clause as the DR site will be setup with 25% compute and 100% network resources, security hardware resources and 100 % storage capacity for data replication.	No Change, As per RFP
33	RFP Vol-II (Scope of Work & SLAs) ,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	Kindly share the serial number of the Storage which needs 600 TB expansion. In case the OEM does not support for expansion of existing storage array due to EOS, please propose new storage with 1.6 PB capacity and migrate the data from existing to new array.	Storage is not EOS;
34	RFP Vol-II (Scope of Work & SLAs) , 1.3.Bill Of	14. Unified Storage	Please confirm if the NetAPP FAS 8300 1.5 PB is not required for DC and Far DR Site , so only required for Near DR Site.	Understanding is correct

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		Material/ Pg# 66			
35		RFP Vol-II (Scope of Work & SLAs), Section III: Technical Specification	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	This clause requires DRM tool to be added to 1.3 Bill of Materials	No Change, As per RFP
36		RFP Vol-II (Scope of Work & SLAs), Section III: Technical Specification	The solution should be able to provide a single view & manageability of the infrastructure resources available across multiple sites for central visibility and governance.	This clause require " Cloud Management and Orchestration " to be added to 1.3 Bill of Materials	No Change, As per RFP
37		RFP Vol-II (Scope of Work & SLAs), 1.3.Bill Of Material/ Pg# 66	1.3.Bill Of Material	Please include cyber components like Antivirus, HIPS, EDR solution for DR sites along with quantity. And few more security related components like SIEM tool, Content Filtering and URL Blocking,Proxy and vulnerability protection systems are to be included in case required to the BoM along with technical specifications for security monitoring, Web, App, OS and DB infra security requirements.	No Change, As per RFP
38		RFP Vol-II (Scope of Work & SLAs), 1.3.Bill Of Material/ Pg# 66	3.FW External (for Internet)	In Bill of material, the proposed BoM has 2 firewall for DC, 2 firewall for Far DR, no firewall for near DR. As per our understanding the scope of the current RFP is limited to setting up of Disaster Recovery sites, so please remove the firewall quantity for DC and add 1 quantity for each DR site Or else please clarify the purpose of DC qty.	No Change, As per RFP
39		RFP Vol-II (Scope of Work & SLAs), 1.3.Bill Of Material/ Pg# 66	4.IPS External (for Internet)	In Bill of material, the proposed BoM has 2 IPS for DC, 2 IPS for Far DR, no IPS for near DR. As per our understanding, the scope of the current RFP is limited to setting up of Disaster Recovery sites, so please remove IPS quantity for DC and add 1 quantity for each DR site Or else please clarify the purpose of DC qty.	No Change, As per RFP
40		RFP Vol-II (Scope of Work & SLAs), 1.3.Bill Of Material/ Pg# 66	11.WAF/SLB	In Bill of material, we find the proposed, 2 WAF for Far DR, no WAF for near DR. Since it is a DR site there is no need for HA mode, instead we can propose 1 quantity for each DR site Or else please clarify the purpose of DC qty.	No Change, As per RFP
41		RFP Vol-II (Scope of Work & SLAs), Section II: Scope of Work	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	Request to modify the clause as: "The scope of work under this RFP is Supply, Installation, Configuration, Testing, Commissioning and OEM Premium Support/Warranty (24x7x 365) for 5 years 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"	Already part of scope

42		RFP Vol-II (Scope of Work & SLAs) ,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	Please provide the functional and technical specifications in the RFP document. Recommended technical specifications of " NMS and Helpdesk " are attached for your reference, so please add it among the technical specs.	No Change, As per RFP
43		1.1.System Integration Component (Page: 63)	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. Bidder understanding is that the power, cooling & connectivity required for complete DC, Far DR & Near DR will be in the scope of customer. Kindly confirm. 2. If rack & IPDU for GSDC (Gandhinagar), Far DR (NIC, Bhubaneswar) & Near DR (Vadodara) will be in the scope of bidder, kindly include the quantity of the same in the BoM line item w.r.t each site. 3. Please provide the Rack & IPDU technical specifications 4. Please confirm the passive cabling for proposed racks will be in bidder's scope. If so, please include in BoM items.	No Change, As per RFP
44		1.1.System Integration Component (Page: 63)	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. Bidders understanding is that, the complete power distribution from raw power panel till rack IPDU will be in scope of customer for GSDC, Far & Near DR. Please confirm. 2. Kindly provide the details of IPDU / PDU specification required which will standardise the power socket type for entire DC & DR sites.	No Change, As per RFP
45		1.1.System Integration Component (Page: 64)	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.	Kindly include the DAC , passive components like cables,etc as part of the BoM and provide the technical specifications.	No Change, As per RFP
46		General	General	Kindly provide the electrical SLD for GSDC, Far DR & Near DR locations.	will be shred with succesfull bidder
47		1.2. Next Generation Firewall (Internet + DMZ)/ Page 9 Vol-2	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	To comply and validate we require existing Firewall details like Make and Model or details of existing security solution that needs to be supported by proposed Firewall	currently leading security solution in market
48		1.3. IPS / IDS / Page 11 Vol-2	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	To comply and validate we require existing IPS details like Make and Model or details of existing security solution that needs to be supported by proposed IPS	currently leading security solution in market
49		1.4 SDN Controller/ Page 75	a. Solution should allow workload mobility anywhere in the SDC, across the Data Center sites	Proposed Solution SDN has to enable , for which we require existing SDN Controller, Spine and Leaf make and model, so that we can able to arrive the solution based on existing network infrastructure	Solution should allow workload mobility anywhere in the SDC, not across the Data Center sites; no integration required

					with existing SDN controller
50		CPU	2.6GHz or above (Processor should be latest series/generation for the server model being quoted)	2.45GHz or above (Processor should be latest series/generation for the server model being quoted) The Processors should have feature to enable Memory Encryption for Bare-Bone or in virtualized infrastructure	No Change, As per RFP
51			Server Form Factor : Blade	Blade / Rack Form Factor	No Change, As per RFP
52		Primary Concern and Suggestion	The RFP floated is for Compute, Network and Storage at DC, DR, NDR sites.	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Compute, Storage and Network vendors as stated in the RFP, Cisco, Hitachi Vantara and Netapp. (B) We would request GIL to segerigate the RFP into 3 Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP
53		Page no. 89, Pt 2.7 and 2.8 and 3.3	HBA card - speed should be min. 2x32Gbps FC NIC – Min. 4 x 10/25 Ethernet Gig Connectivity - should be 40/100 Gbps port with all populated SFPs	Please clarify if HBA card on Blade server asked would be used as dedicated Ethernet and FC network to utilize FC and 25GbE ports to segregate traffic, as this will impact the fabric design for chassis based compute solution. Also can 40Gbps ports be split into 10Gbps ports? OR 40/100GbE ports used as is for uplinking in Blade chassis solution scenarios.	will be combined for FC and ethernet
54		Page 80, Pt 3.1	Should accommodate both half-width and full-width blade form factors	Please clarify if this means 2 socket and 4 socket should be supported in the same chassis	Understanding is correct
55		Page 93, Pt 1.14.9	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.	Controller based encryption is enabled/disabled at the time of installation and cannot be modified later.	No Change, As per RFP
56		Page 92, 1.14. Unified Storage (NAS+SAN)	Unified Storage (NAS+SAN)	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Netapp. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP

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57		Page 94, 1.15. Expansion of existing SAN storage at primary site GSDC	Expansion of existing SAN storage at primary site GSDC	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Hitachi. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP
58		Page 91, 1.13. Minimum Specification for All Flash NvME Storage	Minimum Specification for All Flash Storage	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Hitachi. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP
59	WAN & Internet Router	2,2,69 2,3,69 2,4,69 2,5,69	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	2. Uplink Ports - 4 x 40 G populate optics with SFPS & support for 100G ports 3. Aggregated throughput - 1Tbps Minimum 4. RAM - 64 GB DRAM 5. Storage / SSD - 32 GB	No Change, As per RFP
60	WAN & Internet Router	3,2,69 3,4,69	2. VRF sessions - 4000 4. IPv6 routes: 4 Million	2. VRF sessions - 8000 4. IPv6 routes: 4M, 4M IPv4, 128K Multicast routes,	No Change, As per RFP
61	WAN & Internet Router		Additions	1. The router should have the capability of logical system / SDR for separating internet and core mpls funtionalty. 2. Router should support EVPN-VXLAN for DCI capability.	No Change, As per RFP
62		Primary Concern and Suggestion	The RFP floated is for Compute, Network and Storage at DC, DR, NDR sites.	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Compute, Storage and Network vendors as stated in the RFP, Cisco, Hitachi Vantara and Netapp. (B) We would request GIL to segerigate the RFP into 3 Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP

63		Page no. 89, Pt 2.7 and 2.8 and 3.3	HBA card - speed should be min. 2x32Gbps FC NIC – Min. 4 x 10/25 Ethernet Gig Connectivity - should be 40/100 Gbps port with all populated SFPs	Please clarify if HBA card on Blade server asked would be used as dedicated Ethernet and FC network to utilize FC and 25GbE ports to segregate traffic, as this will impact the fabric design for chassis based compute solution. Also can 40Gbps ports be split into 10Gbps ports? OR 40/100GbE ports used as is for uplinking in Blade chassis solution scenarios.	will be combined for FC and ethernet
64		Page 80, Pt 3.1	Should accommodate both half-width and full-width blade form factors	Please clarify if this means 2 socket and 4 socket should be supported in the same chassis	Understanding is correct
65		Page 93, Pt 1.14.9	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.	Controller based encryption is enabled/disabled at the time of installation and cannot be modified later.	No Change, As per RFP
66		Page 92, 1.14. Unified Storage (NAS+SAN)	Unified Storage (NAS+SAN)	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Netapp. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP
67		Page 94, 1.15. Expansion of existing SAN storage at primary site GSDC	Expansion of existing SAN storage at primary site GSDC	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Hitachi. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP
68		Page 91, 1.13. Minimum Specification for All Flash NvME Storage	Minimum Specification for All Flash NvME Storage	(A) We would like to bring to GILs notice that the current RFP is DOMINATED by existing Storage vendors as stated in the RFP, Hitachi. (B) We would request GIL to segerigate the RFP into Different RFP so that fair competition and other leading OEMs like Dell can participate fairly and compete. In the current scenario the RFP would be CONTROLLED by existing OEMs only and hence limiting partification of competitive OEMs and leading to price control , which would not be good for GIL commercially.	No Change, As per RFP

69	FCIP Router	Page no 51, Pt no 8.2.1	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	Since there is DC-Near DR is mentioned, what is the distance (exact cable length) in terms of preferred path and non-preferred path between DC and Near DR? Is there any MUX at the both end? What is the MUX interface SFP speed and range (LR/SR) and what is the link speed between DC and NDR. Accordingly SFPs will be supplied on the switches	link speed between DC and NDR will be 1Gbps
70	FCIP Router	Page no 23, Pt no 1.10 (FCIP Router) Sr no 7	The license offered should include features such as IVR, multiple tunnels/ trunking and Port channeling	IVR(InterVSANRouting) is a technology which is vendor specific. It connects the physically partitioned virtual routers through cables. Is it required here to partition the physical router? If not then this lic and feature is not needed.	IVR or equivalent functionality
71	FCIP Router	Page no 24, Pt no 1.10 (FCIP Router) Sr no 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	When it is mentioned virtual environment, does that mean you are going to partition the physical router to virtual router and create Virtual environment. If not then the point is ok to go.	As per RFP. Not virtual environment of switch
72	SAN Switch	Page no 25, under Pt no 1.11 (SAN Switch) Sr no 32	Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided	ICL (Inter Chassis Link) lic is a port based lic with special QSFP to connect 2 chassis in a single Fabric to make 1 single logical chassis. Since there is just 1 switch per Fabric is this licenses needed?	License to be provided if required
73	SDN Controller	2, 5, 75	5. Should be integrate with different Hypervisors and Kubernetes, Redhat, Openshift and manage virtualise networking from SDN Controller.	5. Should be integrate with different Hypervisors and Kubernetes /Redhat /Openshift / NSX / VMWARE vCenter and provides visibility for virtualise networking from SDN Controller.	Please See Revised Condition.
74	SDN Controller	2,8, 75	8. Should support advance telemetry in terms device views, metrics views, snapshot, diff view	8. Should support advance telemetry in terms device views, metrics views, diff view for the configuration.	Please See Revised Condition.
75	SDN Controller	3,2,75	2. Should support multi tenancy and role base access control to tenant for management.	2. Should support multi tenancy and role base access control to tenant for management on blueprint level.	No Change, As per RFP
76	SDN Controller	3,3,75	3. Should support micro-segmentation rules and policies for workloads connected to DC fabric for east- west traffic.	3. Should support micro-segmentation rules using conglets and policies for workloads connected to DC fabric for east-west traffic.	No Change, As per RFP
77	SDN Controller	4,3,75	3. Solution should have historical configuration analysis between any two time series to identify any issue along with user who made that change.	3. Solution should have historical time series database for analysis.	No Change, As per RFP
78	Core-Spine Switch	2,7, 76	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)	7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 01 (1 x 1000BASE-T or 1 x 1-Gbps SFP)	Please See Revised Condition.
79		4,NA, 76	The core switch should have hardware level redundancy (1+1). Issues with any of the switch should not impact the functioning of the switch.	The core switch should have hardware level redundancy (1+1). Issues with any of the redundant hardware in the switch should not impact the functioning of the switch.	No Change, As per RFP. Issue in any of the redundant switch should not affect functioning of other switch

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80	Core-Spine Switch	6,5 77	5. The solution Should support seamless software upgrade without impacting traffic flow	The solution should support software upgrade with minimum traffic impact.	No Change, As per RFP
81	Core-Spine Switch	6,9 77	9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer	9. solution should provide L2 stretch for VM moment.	Please See Revised Condition.
82	Core-Spine Switch	9,1, 77	1. Flow path trace (ingress to egress switch)	1. Flow path trace (ingress to egress switch) / Flow based Telemetry	Please See Revised Condition.
83	Core-Spine Switch	9,2, 78	2. Per Flow Hop by Hop packet drop with reason of drop	2. Per Flow Hop by Hop packet drop with reason of drop / flow based telemetry	Please See Revised Condition.
84	Core-Spine Switch	9,3, 78	3. Per Flow latency (per switch and end to end)	3. Per Flow latency (per switch and end to end) / latency analysis using RPM.	Please See Revised Condition.
85	Core-Spine Switch	9,4, 78	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW, or device should support RPC calls for collecting utilization information.	Please See Revised Condition.
86	Core-Spine Switch	10, NA , 78	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	Switch should be capable of segregate zones using VRF. Each VRF created should be logically assigned with its control plane.	Please See Revised Condition.
87	Leaf – Border	2,7, 78	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)	7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 01 (1 x 1000BASE-T or 1 x 1-Gbps SFP)	Please See Revised Condition.
88	Leaf – Border	4,NA, 78	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.	The core switch should have hardware level redundancy (1+1). Issues with any of the redundant hardware in the switch should not impact the functioning of the switch.	No Change, As per RFP. Issue in any of the redundant switch should not affect functioning of other switch
89	Leaf – Border	6,5 79	5. The solution Should support seamless software upgrade without impacting traffic flow	The solution should support software upgrade with minimum traffic impact.	No Change, As per RFP
90	Leaf – Border	6,9 79	9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer	9. solution should provide L2 stretch for VM moment.	Please See Revised Condition.
91	Leaf – Border	9,1, 79	1. Flow path trace (ingress to egress switch)	1. Flow path trace (ingress to egress switch) / Flow based Telemetry	Please See Revised Condition.

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92	Leaf – Border	9,2, 79	2. Per Flow Hop by Hop packet drop with reason of drop	2. Per Flow Hop by Hop packet drop with reason of drop / flow based telemetry	Please See Revised Condition.
93	Leaf – Border	9,3, 79	3. Per Flow latency (per switch and end to end)	3. Per Flow latency (per switch and end to end) / latency analysis using RPM.	Please See Revised Condition.
94	Leaf – Border	9,4, 79	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW, or device should support RPC calls for collecting utilization information.	Please See Revised Condition.
95	Leaf – Border	10, NA , 80	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	Switch should be capable of segregate zones using VRF. Each VRF created should be logically assigned with its control plane.	Please See Revised Condition.
96	Leaf switch	2,7, 80	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)	7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 01 (1 x 1000BASE-T or 1 x 1-Gbps SFP)	Please See Revised Condition.
97	Leaf switch	4,NA, 80	The core switch should have hardware level redundancy (1+1). Issues with any of the plane should not impact the functioning of the switch.	The core switch should have hardware level redundancy (1+1). Issues with any of the redundant hardware in the switch should not impact the functioning of the switch.	No Change, As per RFP. Issue in any of the redundant switch should not affect functioning of other switch
98	Leaf switch	6,5 81	5. The solution Should support seamless software upgrade without impacting traffic flow	The solution should support software upgrade with minimum traffic impact.	No Change, As per RFP
99	Leaf switch	6,9 81	9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer	9. solution should provide L2 stretch for VM moment.	Please See Revised Condition.
100	Leaf switch	9,1, 81	1. Flow path trace (ingress to egress switch)	1. Flow path trace (ingress to egress switch) / Flow based Telemetry	Please See Revised Condition.
101	Leaf switch	9,2, 81	2. Per Flow Hop by Hop packet drop with reason of drop	2. Per Flow Hop by Hop packet drop with reason of drop / flow based telemetry	Please See Revised Condition.
102	Leaf switch	9,3, 81	3. Per Flow latency (per switch and end to end)	3. Per Flow latency (per switch and end to end) / latency analysis using RPM.	Please See Revised Condition.
103	Leaf switch	9,4, 81	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW, or device should support RPC calls for collecting utilization information.	Please See Revised Condition.

104	Leaf switch	10, NA , 81	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	Switch should be capable of segregate zones using VRF. Each VRF created should be logically assigned with its control plane.	Please See Revised Condition.
105	Management switch	2,1,82	1. Ports - 48 x 100 M/ 1 / 10 G Base-T Port for host connectivity and 2 x 100 G for uplink to spin	1. Ports - 48 x 1 / 10 G Base-T Port for host connectivity and 2 x 100 G for uplink to spin	Please See Revised Condition.
106	Management switch	2,7,82	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)	7. Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01, USB port - 01, Management ports: 01 (1 x 1000BASE-T or 1 x 1-Gbps SFP)	Please See Revised Condition.
107	Management switch	4,NA, 82	The core switch should have hardware level redundancy (1+1). Issues with any of the plane should not impact the functioning of the switch.	The core switch should have hardware level redundancy (1+1). Issues with any of the redundant hardware in the switch should not impact the functioning of the switch.	No Change, As per RFP. Issue in any of the redundant switch should not affect functioning of other switch
108	Management switch	6,8 82	9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer	9. solution should provide L2 stretch for VM moment.	Please See Revised Condition.
109	Management switch	9,4, 83	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW	4. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW, or device should support RPC calls for collecting utilization information.	Please See Revised Condition.
110	Management switch	10, NA , 83	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	Switch should be capable of segregate zones using VRF. Each VRF created should be logically assigned with its control plane.	Please See Revised Condition.
111		Section II: Scope of Work, Page 25/26	5. Solution should be capable of decoupling applications and application infrastructure configurations	Need idetails on applications to be decoupled. Please advise the use case or the outcome needed from this specification	Details will be shared to successful bidder. E.g. Decoupling will be used for microservices
112		Section II: Scope of Work, Page 25/26	7. Solution must offer ability to Copy, convert, or migrate an image (P2V, V2V).	What are the current images to be migrated/converted?	Currently we have physical and hyper-V images
113		Section II: Scope of Work, Page 25/26	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	Please advise the use case or the outcome needed from this specification	Provision for Tenant based resource

			overall infrastructure Quota for the tenant.		quota should be available
114		Section II: Scope of Work, Page 25/26	28. Solution should support all OS level clustering (e.g. Windows, RedHat, Ubuntu, CentOS etc)	Please advise the use case or the outcome needed from this specification	No Change, As per RFP
115		Section II: Scope of Work, Page 25/26	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.	Please advise the names of vendor specific and open source tools and utilities to be integrated	Proposed solution should be able to integrate with other open source tools, if required, to achieve accounting and visibility functionalities which are not provided by the proposed cloud out of the box
116		Section II: Scope of Work, Page 25/26	31. Solution should be able to integrate with various vendor specific & open source tools & utilities (API Integrations).	Please advise the names of vendor specific and open source tools and utilities to be integrated. Can the vendor provide API details for integration?	Should be able to integrate with open source tools if required to achieve the functionality not provided by the proposed cloud out of the box
117		Section II: Scope of Work, Page 25/26	34. Solution should be able to provide post-check reports with accounting for the deployment of private cloud components using automation.	Please advise the content needed in the post-check reports	Resource Provisioning details, accounting and chargeback related details, usage reports etc
118		Section II: Scope of Work, Page 25/26	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).	Please share the details of the existing infrastructure to be migrated to Private Cloud	Details will be shared to successful bidder
119		Page 88, Point 34	Solution should be able to provide post-check reports with accounting for the deployment of private cloud components using automation.	Please elaborate what is expected in this point.	Resource Provisioning details, accounting and

					chargeback related details, usage reports etc
120		Page 88, Point 38	Solution should be able to automate replication of resources at DR site & DR invoking	Please clarify, if the DR is initiated, How many VM's are required to be failover from DC to DR?	Details will be shared to successful bidder
121		Page 63, Point 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.	We request you to also consider Subscription licenses for the solution. As there are multiple solutions involved, some product licenses can be offered in Subscription model only.	No Change, As per RFP. See corrigendum for Cloud related licenses
122		Additional Queries	How many applications are container-Ready applications in the current environment.		Details will be shared to successful bidder
123			Please share how many applications are to be moved from Monolithic apps/db to micro-Services based architecture.		Details will be shared to successful bidder
124			What is the existing no. of applications COTS and In-House?		Details will be shared to successful bidder
125			Do have in-house developer team and what is the size of the team?		Details will be shared to successful bidder
126			What is the technology stack for the In-house apps example, JAVA, python, .Net , Database – Oracle/SQL or NoSQL Postgres/Mysql, Cache like Redis		Details will be shared to successful bidder
127			Any application which has been identified for Microservice/Cloud-Native Architecture modernisation or If you have already begun the journey on this path, pls share the details		Details will be shared to successful bidder
128			Do you have K8s (Kubernetes, Container Orchestration) in-house experience ? Where are you in the journey of Container/k8s?		Details will be shared to successful bidder
129			How many applications are you looking to containerize and should be considered as part of the proposal?		Details will be shared to successful bidder
130	Page No. 37 - Of	Section V – Payment Terms Table 2	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.	Need to change as 5 years warranty/CAMC terms (5 years Back To Back OEM Support) as 5 years Warranty and payment of the	No Change, As per RFP

	Volume I		Five years will start from the date of successfully completion of FAT.	same should be Yearly Advance Or upfront in 1st year only after FAT.	
131	Pg. No. 33 Scope Of Work Volume II. Whole document page no. 95	1.1. Implementation Timeline & Penalties:	T1 = T + 8 weeks. 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	Request to Change the Delivery weeks from 8 weeks to 6 months as there is delivery constraint from the OEM end. Also request to consider exemption from the Penalty, if there is genuine delay from OEM End.	No Change, As per RFP
132	12 of Volume 1	3.11 Bid Price	3.11.8 The quoted prices shall be valid for 365 days from the date of opening of financial bid.	Request to change Price validity from 365 days to 180 days as we get price validity from OEM as per bid validity only.	No Change, As per RFP
133	Pg. No. 33 Scope Of Work Volume II. Whole document page no. 95	Section IV: Service Level Agreement (SLA), Penalties & Payment Terms	Implementation Timeline & Penalties: Note: The maximum penalty cap for the above is at 10% of the contract value (Price bid).	The Maximum Penalty cap for the Implementation Timeline & Penalties should be 5 %	No Change, As per RFP
134		Page 85, Clause 1.10 and point No 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	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
135		Page 85, Clause 1.10 and point No 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	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
136		Page 85, Clause 1.10 and point No 3	The FCIP replication ports must be capable of 1 Gbps as well as 10 GbE capable	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
137		Page 85, Clause 1.10 and point No 4	The FCIP switch should be able to compress the data on WAN link	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
138		Page 85, Clause 1.10 and point No 5	The FCIP switch should be able to encrypt data on WAN link	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility	No Change, As per RFP

				required in the rfp and commercial aspects.	
139		Page 85, Clause 1.10 and point No 10	The offered SAN extension switch should be able to do data compression for FCIP traffic.	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
140		Page No 86, Clause under 1.11 SAN Switch	<ol style="list-style-type: none"> 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. 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP
141		Page No 86, Clause under 1.11 SAN Switch	<ol style="list-style-type: none"> 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 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP

			<p>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.</p> <p>16. It should be possible to isolate the high bandwidth data flow traffic to specific ISLs by using simple zoning.</p> <p>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.</p> <p>18. Support for web based management and should also support CLI.</p> <p>19. The switch shall support advanced zoning and RBAC to simplify administration and significantly increase control over data access.</p> <p>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.</p>		
142		Page No 87, Clause under 1.11 SAN Switch	<p>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</p> <p>22. Airflow: Flexible Airflow. Cool air intake should be from front side and hot air release should be from back</p> <p>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.</p> <p>24. The switch should be rack mountable.</p> <p>25. Non-disruptive Microcode/ firmware Upgrades and hot code activation</p> <p>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)</p> <p>27. Offered SAN switch shall be energy efficient</p> <p>28. The proposed switch should support offline diagnostic including optical and electrical loop back, latency, link traffic, distance.</p> <p>29. The proposed SAN switch should support forward error correction and buffer credit recovery.</p> <p>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</p>	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP

			<p>31. It should support heterogeneous server technologies and its host bus adapters.</p> <p>32. Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided</p> <p>33. Bidder shall carry out integration of devices with existing SAN Switches</p>		
143		Page 93, Clause .14 Point No 2	<ul style="list-style-type: none"> · 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. 	Allow Physical/Virtual Controller.	No Change, As per RFP
144		Page 93, Clause .14 Point No 3	<ul style="list-style-type: none"> · 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 	Storage array cache/HCI cache	No Change, As per RFP
145		Page 93, Clause .14 Point No 8	<ul style="list-style-type: none"> · Frontend ports: 8 X 10 Gb SFP+ ports, 8 X 16 Gbps FC Ports Across Controllers 	Exclude FC ports as HCI does not require FC protocol.	No Change, As per RFP
146		Page 93, Clause .14 Point No 9	<ul style="list-style-type: none"> · 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. 	Should provide encryption, either at controller or at Disk level or cluster level with HCI from Day one.	No Change, As per RFP

Request for Proposal Vol-II Scope of Work

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147		Page 93, Clause .14 Point No 10	· FC, NFS, CIFS/SMB, SNMP, NTP, IPv4, Ipv6	Exclude FC protocol as HCI does not require FC protocol.	No Change, As per RFP
148		Page 91, Clause 1.13 Point no 2	<p>Solution should symmetric active-active multi-controller scale-up and scale-out architecture.</p> <p>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.</p> <p>Should support non-disruptive replacement of failed/damaged hardware components & Firmware without any controller reboot (except OEM release note suggestions).</p>	<p>"Requesting Customer to Allow HCI / SAN Storage for this RFP, considering the flexibility, resiliency an performance you are looking for the next 5 year.</p> <p>Also the HCI support the multihypervisor solution hence will support the existing Hyper-V and other Hypervisor as well.</p> <p>HCI should be allowed, providing that the IOPS, Latency and performance able to meet with Unified scalable storage requirement (NAS and Block Storage)</p> <p>Please add the points below point as 31st Point</p> <p>""31. In case Bidder/OEM would to proposed the HCI based solution at DC, the sizing need to be consider 1.6 PB without dedup / Compression, accordinly with NVMe Drive ,each node must be with min. 25Gbps * 6 port ""</p>	No Change, As per RFP
149		Page 91, Clause 1.13 Point no 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)	<p>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)</p> <p>Request customer to change the specification to "The solution should be based on end-to-end NVMe architecture.</p>	No Change, As per RFP
150		Page 91, Clause 1.13 Point no 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.	Allow Physical/Virtual Controller.	No Change, As per RFP
151		Page 91, Clause 1.13 Point no 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.	Allow Physical/Virtual Controller.	No Change, As per RFP
152		Page 91, Clause 1.13 Point no 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)	Storage array cache/HCI cache	No Change, As per RFP
153		Page 91, Clause 1.13 Point no 10	Raid Level - 5/6 or equivalent Group of Raid may limited to 10	Or Equivalent RAIN Architecture.	No Change, As per RFP

Request for Proposal Vol-II Scope of Work

Department of Science & Technology

154		Page 91, Clause 1.13 Point no 11	Min. Hot spare drive - 10 disk or as per best practices 1 drive per 30 capacity drive.	OR Equivalent HCI Resiliency.	No Change, As per RFP
155		Page 91, Clause 1.13 Point no 12	Speed of Dual Ported Disk Drive - - PCI Gen3 NVMe or higher	Please allow NVMe disks which can achieve the necessary performance asked like IOPS, latency, etc..	No Change, As per RFP
156		Page 91, Clause 1.13 Point no 13	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	In case of HCI there is no FC ports required hence allow to quote for equivalent solution.	No Change, As per RFP
157		Page 91, Clause 1.13 Point no 15	Type of backend port - PCI Gen3 NVMe or higher	Please allow NVMe disks which can achieve the necessary performance asked like IOPS, latency, etc..	No Change, As per RFP
158		Page 91, Clause 1.13 Point no 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.	Kindly clarify K10-DIF standards or equivalent.	No Change, As per RFP
159		Page 88, Clause 1.12 Main Point as 1 and sub point No 15, 33, 36 and 38	<p>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</p> <p>33. Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation.</p> <p>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</p> <p>38. Solution should be able to automate replication of resources at DR site & DR invoking</p>	<p>Pt. No 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"</p> <p>Query : continuous Availability / Live migration from the DC to DR is required between existing DC (hyper-V) to New DR Environment right ?</p> <p>Pt. No. 33 "Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation."</p> <p>Query : Licenses for the container required on Day-1 ?</p> <p>Pt. No. 36 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 Query : Licenses for the container required on Day-1 ?</p> <p>Pt. No. 38. Solution should be able to automate replication of resources at DR site & DR invoking. Query : Licenses DR orchestration (VM Power on Sequence, allow scripting to change the IP and setting within the VM etc. need to provided on Day-1) ?</p>	No Change, As per RFP

160		Page No 89, Clause 1.12, Main point 2	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 - DDR4 - 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 <ul style="list-style-type: none"> · 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 <p>Note : HBA and NIC card can be provided on server or with converged switch or with solution</p>	<p>pt. No. 3 "3. Server Form Factor: Blade"</p> <p>Requesting to please allow and consider "3. Server Form Factor: Blade/Rack"</p>	No Change, As per RFP
161		Page No 89, Clause 1.12, Main point 3	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 	Requesting customer to please allow and consider "3. Server Form Factor: Blade/ Chassis / Rack"	No Change, As per RFP
162		Page No 89, Clause 1.12, Main point 4	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to add the Below Point in the last "13. In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP

163		Page No 89, Clause 1.12, Main point 5	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.	<p>Query:</p> <p>Gartner last document on the Hypervisor is "Market Guide for Virtualization of x86 Server Infrastructure" which is released in the year 2017, December.</p> <p>As per gartner, Hypervisor is now considered as a Comodity, and hence all the hyperviosr must be allowed, provided that it is enterprise ready with HA, DRS, vmotion, Live Migration, Memrory and CPU Over commitment features.</p> <p>Please add the features instead of the Old Gartner report. or consider the latest gartner report released in the year 2017 which also includes the continer and VM. "Market Guide for Virtualization of x86 Server Infrastructure"</p>	This clause stands removed
164		Page No 90, Clause 1.12, Main Point 5.2	11. Should support for cloud native VM	<p>11. Should support for cloud native VM</p> <p>Query: License required for the same on day-1?</p>	required licenses to be provided from Day1
165		Page No 90, Clause 1.12, Main Point 5.3	Virtualization management software : 7. Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR	<p>7. Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR</p> <p>Query: Live Migration between DC and DR required on Day-1 ?? Will this is evaluated as a POC ?</p>	Virtualizati on managem ent software : 7. Should support Virtual Machine migration between two or more servers in a cluster as well as between DC and DR
166		Page No 91, Clause 1.12, Main Point 5.5	<p>7. The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities.</p> <p>8. The container platform shall support deployment and orchestration of multiple containers formats (docker, cri-o etc) for preventing any technology lock in.</p>	<p>7. The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities.</p> <p>8. The container platform shall support deployment and orchestration of multiple containers formats (docker, cri-o etc) for preventing any technology lock in.</p> <p>Query : License required for the container same on Day-1?</p>	required licenses to be provided from Day1
167	Same As Nutanix	Page 85, Clause 1.10 and point No 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	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
168		Page 85, Clause 1.10 and point No 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	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP

169		Page 85, Clause 1.10 and point No 3	The FCIP replication ports must be capable of 1 Gbps as well as 10 GbE capable	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
170		Page 85, Clause 1.10 and point No 4	The FCIP switch should be able to compress the data on WAN link	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
171		Page 85, Clause 1.10 and point No 5	The FCIP switch should be able to encrypt data on WAN link	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
172		Page 85, Clause 1.10 and point No 10	The offered SAN extension switch should be able to do data compression for FCIP traffic.	Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.	No Change, As per RFP
173		Page No 86, Clause under 1.11 SAN Switch	<ol style="list-style-type: none"> 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 Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC Switch should support multiprotocol architecture such as FC, FICON, FCR and FCIP. 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. At least dual switches shall be provided in no single point of failure configuration. The switch should auto negotiate with 64/32/16/10/8/ Gbps FC speed with required SFP modules The switch should support ISL trunking VSAN/Virtual Fabric should be supported Should support Inter VSAN Routing (IVR)/ Virtual fabric routing functionality The director class switches should be supplied with all the required licenses, modules, SFPs and cables and accessories Switch must support local switching on port card to provide point to point line rate throughput. Cascading of two SAN switches should be possible with dedicated ports without 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP
174		Page No 86, Clause under 1.11 SAN Switch	<ol style="list-style-type: none"> 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 Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC Switch should support multiprotocol architecture such as FC, FICON, FCR and FCIP. 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. At least dual switches shall be provided in no single point of failure configuration. The switch should auto negotiate with 64/32/16/10/8/ Gbps FC speed with required SFP modules The switch should support ISL trunking VSAN/Virtual Fabric should be supported Should support Inter VSAN Routing (IVR)/ Virtual fabric routing functionality The director class switches should be supplied with all the required licenses, modules, SFPs and cables and accessories Switch must support local switching on port card to provide point to point line rate throughput. Cascading of two SAN switches should be possible with dedicated ports without 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP

			<p>using the ports available for host connectivity and the licenses should be provided for the same</p> <p>13. The switch should provide local switching feature with port to port latency of less than 800ns.</p> <p>14. The SAN Switch should be capable of supporting HW Compression for FC-IP functionality and IPsec encryption without any additional Licenses</p> <p>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.</p> <p>16. It should be possible to isolate the high bandwidth data flow traffic to specific ISLs by using simple zoning.</p> <p>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.</p> <p>18. Support for web based management and should also support CLI.</p> <p>19. The switch shall support advanced zoning and RBAC to simplify administration and significantly increase control over data access.</p> <p>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.</p>		
175	Page No 87, Clause under 1.11 SAN Switch	<p>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</p> <p>22. Airflow: Flexible Airflow. Cool air intake should be from front side and hot air release should be from back</p> <p>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.</p> <p>24. The switch should be rack mountable.</p> <p>25. Non-disruptive Microcode/ firmware Upgrades and hot code activation</p> <p>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)</p> <p>27. Offered SAN switch shall be energy efficient</p>	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to consider the recommended specifications "In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP	

			<p>28. The proposed switch should support offline diagnostic including optical and electrical loop back, latency, link traffic, distance.</p> <p>29. The proposed SAN switch should support forward error correction and buffer credit recovery.</p> <p>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</p> <p>31. It should support heterogeneous server technologies and its host bus adapters.</p> <p>32. Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided</p> <p>33. Bidder shall carry out integration of devices with existing SAN Switches</p>		
176		Page 93, Clause .14 Point No 2	<ul style="list-style-type: none"> · 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. 	Allow Physical/Virtual Controller.	No Change, As per RFP
177		Page 93, Clause .14 Point No 3	<ul style="list-style-type: none"> · 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 	Storage array cache/HCI cache	No Change, As per RFP
178		Page 93, Clause .14 Point No 8	<ul style="list-style-type: none"> · Frontend ports: 8 X 10 Gb SFP+ ports, 8 X 16 Gbps FC Ports Across Controllers 	Exclude FC ports as HCI does not require FC protocol.	No Change, As per RFP
179		Page 93, Clause .14 Point No 9	<ul style="list-style-type: none"> · 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. 	Should provide encryption, either at controller or at Disk level or cluster level with HCI from Day one.	No Change, As per RFP
180		Page 93, Clause .14 Point No 10	<ul style="list-style-type: none"> · FC, NFS, CIFS/SMB, SNMP, NTP, IPv4, Ipv6 	Exclude FC protocol as HCI does not require FC protocol.	No Change, As per RFP

181	Page 91, Clause 1.13 Point no 2	<p>Solution should symmetric active-active multi-controller scale-up and scale-out architecture.</p> <p>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.</p> <p>Should support non-disruptive replacement of failed/damaged hardware components & Firmware without any controller reboot (except OEM release note suggestions).</p>	<p>"Requesting Customer to Allow HCI / SAN Storage for this RFP, considering the flexibility, resiliency and performance you are looking for the next 5 year.</p> <p>Also the HCI support the multihypervisor solution hence will support the existing Hyper-V and other Hypervisor as well.</p> <p>HCI should be allowed, providing that the IOPS, Latency and performance able to meet with Unified scalable storage requirement (NAS and Block Storage)</p> <p>Please add the points below point as 31st Point</p> <p>""31. In case Bidder/OEM would to proposed the HCI based solution at DC, the sizing need to be consider 1.6 PB without dedup / Compression, accordingly with NVMe Drive ,each node must be with min. 25Gbps * 6 port ""</p>	No Change, As per RFP
182	Page 91, Clause 1.13 Point no 3	<p>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)</p>	<p>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)</p> <p>Request customer to change the specification to "The solution should be based on end-to-end NVMe architecture.</p>	No Change, As per RFP
183	Page 91, Clause 1.13 Point no 5	<p>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.</p>	<p>Allow Physical/Virtual Controller.</p>	No Change, As per RFP
184	Page 91, Clause 1.13 Point no 6	<p>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.</p>	<p>Allow Physical/Virtual Controller.</p>	No Change, As per RFP
185	Page 91, Clause 1.13 Point no 7	<p>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)</p>	<p>Storage array cache/HCI cache</p>	No Change, As per RFP
186	Page 91, Clause 1.13 Point no 10	<p>Raid Level - 5/6 or equivalent Group of Raid may limited to 10</p>	<p>Or Equivalent RAIN Architecture.</p>	No Change, As per RFP

187		Page 91, Clause 1.13 Point no 11	Min. Hot spare drive - 10 disk or as per best practices 1 drive per 30 capacity drive.	OR Equivalent HCI Resiliency.	No Change, As per RFP
188		Page 91, Clause 1.13 Point no 12	Speed of Dual Ported Disk Drive - - PCI Gen3 NVMe or higher	Please allow NVMe disks which can achieve the necessary performance asked like IOPS, latency, etc..	No Change, As per RFP
189		Page 91, Clause 1.13 Point no 13	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	In case of HCI there is no FC ports required hence allow to quote for equivalent solution.	No Change, As per RFP
190		Page 91, Clause 1.13 Point no 15	Type of backend port - PCI Gen3 NVMe or higher	Please allow NVMe disks which can achieve the necessary performance asked like IOPS, latency, etc..	No Change, As per RFP
191		Page 91, Clause 1.13 Point no 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.	Kindly clarify K10-DIF standards or equivalent.	No Change, As per RFP
192		Page 88, Clause 1.12 Main Point as 1 and sub point No 15, 33, 36 and 38	<p>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</p> <p>33. Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation.</p> <p>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</p> <p>38. Solution should be able to automate replication of resources at DR site & DR invoking</p>	<p>Pt. No 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"</p> <p>Query : continuous Availability / Live migration from the DC to DR is required between existing DC (hyper-V) to New DR Environment right ?</p> <p>Pt. No. 33 "Solution should support all the requirements or requests to deploy new Infra (VM & Container) using automation."</p> <p>Query : Licenses for the container required on Day-1 ?</p> <p>Pt. No. 36</p> <p>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</p> <p>Query : Licenses for the container required on Day-1 ?</p> <p>Pt. No. 38. Solution should be able to automate replication of resources at DR site & DR invoking.</p> <p>Query : Licenses DR orchestration (VM Power on Sequesnce, allow scripting to change the IP and setting within the VM etc. need to provided on Day-1) ?</p>	No Change, As per RFP

193		Page No 89, Clause 1.12, Main point 2	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 - DDR4 - 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 <ul style="list-style-type: none"> · 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 <p>Note : HBA and NIC card can be provided on server or with converged switch or with solution</p>	<p>pt. No. 3 "3. Server Form Factor: Blade"</p> <p>Requesting to please allow and consider "3. Server Form Factor: Blade/Rack"</p>	No Change, As per RFP
194		Page No 89, Clause 1.12, Main point 3	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 	Requesting customer to please allow and consider "3. Server Form Factor: Blade/ Chassis / Rack"	No Change, As per RFP
195		Page No 89, Clause 1.12, Main point 4	<p>From the day one Server should have :</p> <ol style="list-style-type: none"> 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 	<p>Requesting G-SDC to allow SAN/ HCI based (both the solution) which can be applicable looking at the future growth, flexibility required in the rfp and commercial aspects.</p> <p>Request to add the Below Point in the last "13. In case if HCI is proposed the bidder/OEM need to propose the 25Gbps TOR Switch for Node to Switch connectivity and applicable no. of switches need to be considered by Bidder/OEM, Switches must be enterprise class L3 switches which must support QOS at the network TOR level"</p>	No Change, As per RFP

196	Page No 89, Clause 1.12, Main point 5	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.	<p>Query:</p> <p>Gartner last document on the Hypervisor is "Market Guide for Virtualization of x86 Server Infrastructure" which is released in the year 2017, December.</p> <p>As per gartner, Hypervisor is now considered as a Comodity, and hence all the hyperviosr must be allowed, provided that it is enterprise ready with HA, DRS, vmotion, Live Migration, Memrory and CPU Over commitment features.</p> <p>Please add the features instead of the Old Gartner report. or consider the latest gartner report released in the year 2017 which also includes the continer and VM. "Market Guide for Virtualization of x86 Server Infrastructure"</p>	This clause stands removed
197	Page No 90, Clause 1.12, Main Point 5.2	11. Should support for cloud native VM	<p>11. Should support for cloud native VM</p> <p>Query: License required for the same on day-1?</p>	required licenses to be provided from Day1
198	Page No 90, Clause 1.12, Main Point 5.3	Virtualization management software : 7. Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR	<p>7. Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR</p> <p>Query: Live Migration between DC and DR required on Day-1 ?? Will this is evaluated as a POC ?</p>	Virtualizati on managem ent software : 7. Should support Virtual Machine migration between two or more servers in a cluster as well as between DC and DR
199	Page No 91, Clause 1.12, Main Point 5.5	<p>7. The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities.</p> <p>8. The container platform shall support deployment and orchestration of multiple containers formats (docker,cri-o etc) for preventing any technology lock in.</p>	<p>7. The platform shall provide container runtime, container orchestration, container management and container monitoring capabilities.</p> <p>8. The container platform shall support deployment and orchestration of multiple containers formats (docker,cri-o etc) for preventing any technology lock in.</p> <p>Query : License required for the container same on Day-1?</p>	required licenses to be provided from Day1

200		RFP Volume I: 1.3. IPS / IDS, Page no. 72, point no. 1	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	<p>Mentioned clause is completely favoring NGFW vendors and restricting participation of dedicated NIPS OEM's in this segment also functional specifications of NIPS component is influenced from functional specifications as per clause (1.2. Next Generation Firewall (Internet + DMZ) in term of performance parameters, port density and functional scope which is giving undue advantage to NGFW vendors.</p> <p>Also as per MoUD, NCIIPC, DSCI, NIST and Cert-In guidelines which recommend to adhere defence in depth layered security approach by incorporating different dedicated security layers from different OEM to avoid any single point of failure. Hence it's a humble suggestion to restrict the participation of NGFW vendors in IPS component to allow participation of dedicated NIPS providers which will bring required value addition and security effectiveness in the data center environment.</p> <p>Also IPS is a dedicated technology require dedicated hardware resources to mitigate sophisticated cyber threats by providing comprehensive threat protection against known, Unknown and undisclosed threats/Vulnerabilities. NGFW vendors hosting multiple security layers having partial functionalities using common signatures and common hardware platform which can work as a single point of failure and not recommended considering Data Center security architecture. Hence Its a humble suggestion to amend this clause to allow maximum participation of dedicated NIPS technology OEM's having global acceptance.</p> <p>Clause should read as : The OEM should be in the Leader's quadrant as per latest Gartner Magic Quadrant report of NIPS solution</p>	Clause stands removed
201		RFP Volume I: 1.3. IPS / IDS, Page no. 72, point no. 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	<p>Every OEM is having its own technology to achieve contingency as there are different models including stateful and flow based architecture hence restricting vendors on a particular architecture will going to restrict participation of wider OEM's in this segment. Hence its a humble suggestion to dilute this clause as below:</p> <p>Clause should read as : Should deployed in high availability mode active-active Clustering and active-standby (hot stand-by redundancy), have fault tolerance and shall provide stateful/Flow based failover architecture.</p>	Please See Revised Condition.

202			The required performance and Throughput must be complied by Single Appliance. However, the solution should be proposed / working in High Availability (HA)	As per placement of IPS appliance considering best practices it should be placed behind Firewall as primary function of IPS appliance is to do payload analysis (DPI) after filtered traffic coming from Firewall post ACL inspection and it should be lower than define inspection throughput on Firewall as it is meant to inspect whitelist traffic passing from Firewall only. Also though you have asked for 50 Gbps Firewall throughput (1.2. Next Generation Firewall (Internet + DMZ) but effective throughput after enabling all modules is defined 30 Gbps only and that is what NGFW vendors generally do their effective inspection is way lower after enabling all modules but in case of dedicated IPS providers they do define performance considering all types of traffic with lower packet size.	No Change, As per RFP
203		RFP Volume I: 1.3. IPS / IDS, Page no. 72, point no. 2	Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 50 Gbps.	<p>Also define concurrent sessions 32 Million is way lower considering 50 Gbps of inspection throughput that show NGFW traffic handling capacity which in case of dedicated IPS providers can go up >100 Million.</p> <p>Hence its a humble request to dilute this clause as it is oversized and parameters are difine to take commercial advantage also it will restric participation of dedicated IPS providers.</p> <p>Clause should read as : Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 30 Gbps. from day one and scalable up to 40 Gbps using same appliance delivering atleast 80 Million concurrent sessions scalable up to 100 Million to cater future traffic load.</p>	No Change, As per RFP
204		RFP Volume I: 1.3. IPS / IDS, Page no. 72, point no. 2	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	<p>Every OEM is using different strategy to achieve HA and Sync between two appliances as some are leveraging dedicated port/cables to achieve contingency and some are network based also port density required here is exorbitantly high and this will restrict participation of wider IPS vendors and this will not encourage helathy competition. Hence</p> <p>Clause should read as : The appliance should be populated with all modules, transceivers & license need to be provisioned from day one. Should achieve HA and Management port must be provided separately Support consideration for the Platform should be 24x7 for 5 Years also should have capability to populate below define port density options having bypass functionality.</p>	Please See Revised Condition.

				4 x 1 G SFP/8 x 10 G SFP+ /4 x 40G QSFP+ /4 x 100 G QSFP28	
205		RFP Volume I: 1.3. IPS / IDS, Page no. 73, point no. 2	Solution must allow to create security policies based on L7 parameters such as Application, Users, File Type etc in addition to IP & Port numbers.	This clause is restricting in nature to please dilute this clause to allow our participation. Clause should read as : Solution must allow to create security policies based on L7 parameters such as Application/Users/File Type/ IP & Port numbers.	No Change, As per RFP
206		RFP Volume I: 1.3. IPS / IDS, Page no. 73, point no. 2	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.	This clause is restricting in nature to please dilute this clause to allow our participation. Clause should read as : 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.	No Change, As per RFP
207		RFP Volume I: 1.3. IPS / IDS, Page no. 73, point no. 2	Should protect the user from the malicious content upload or download by any application	This clause is restricting in nature to please dilute this clause to allow our participation. Clause should read as : Should protect the user from the malicious content upload or download by any application based on reputation filters	No Change, As per RFP
208		RFP Volume I: 1.3. IPS / IDS, Page no. 73, point no. 2	Appliance should be integrate with other security devices and analytics systems that dynamically push IoCs to the firewall	This clause is giving advantage to NGFW vendors hence request you to dilute as below. Clause should read as : Appliance should be integrate with other security devices and analytics systems that dynamically push IoCs supporting Open API/STIX/TAXII standards	Please See Revised Condition.
209		RFP Volume I: 1.3. IPS / IDS, Page no. 73, point no. 2	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	This clause is restricting in nature to please dilute this clause to allow our participation. Clause should read as : 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	No Change, As per RFP
210		RFP Volume I: 1.3. IPS / IDS, Page no. 74, point no. 2	The solution should having single management console deployed in HA through which Centralized configuration, logging, monitoring, and reporting are perform	This clause is restricting in nature to please dilute this clause to allow our participation. Clause should read as : The solution should having single management console through which Centralized configuration, logging, monitoring, and reporting are perform	No Change, As per RFP

211	RFP Volume I: 1.3. IPS / IDS, Page no. 74, point no. 2	<p>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.</p> <p>The NGFW must support the ability to create custom reports directly from the WebGUI of the NGFW</p> <p>Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to NGFW irrespective load & CPU utilization..</p> <p>The report must highlight applications running on non-traditional ports and bypassing L3/L4 security rules</p>	<p>This clause is restricting in nature and completely favoring NGFW vandors hence it's a humble request you to delete this clause to allow our participation.</p>	Please See Revised Condition.
212	RFP Volume I: 1.3. IPS / IDS, Page no. 74, point no. 2	<p>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.</p>	<p>You have already define performance parameters for IPS sizing hence defining compute of this configuration is clearly favoring particular NGFW OEM. Hence request you to please delete this clause.</p>	Please See Revised Condition.
213	RFP Volume I: 1.3. IPS / IDS, Page no. 74, point no. 2	<p>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.</p>	<p>This clause is restricting in nature to please dilute this clause to allow our participation.</p> <p>Clause Should Read as : Proposed solution should have capability to detect and mitigate any malicious network based traffic pertaining to exploit and vulnerabilities, DoS attacks transversing bi-directionally by leveraging signature based and signature less techniques i.e. machine learning</p>	Please See Revised Condition.
214	RFP Volume I: 1.3. IPS / IDS, Page no. 75, point no. 2	<p>Appliance should provide inline signature less attack prevention for file based attacks while identifying and immediately stopping them.</p>	<p>This clause is restricting in nature to please dilute this clause to allow our participation.</p>	Please See Revised Condition.
215	RFP Volume I: 1.3. IPS / IDS, Page no. 75, point no. 2	<p>Appliance should capable to make policy recommendations on behavioural analysis to detect internet of things (IoT) devices</p>	<p>Clause Should Read as : Appliance should capable to make policy recommendations on behavioural analysis to detect internet of things (IoT)/OT devices by supporting protocols.</p>	No Change, As per RFP
216	RFP Volume I: 1.3. IPS / IDS, Page no. 75, point no. 2	<p>Enables visibility, security policies, reporting, and forensics based on users and groups—not just IP addresses.</p> <p>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</p> <p>Solution should have both firewall and its management console in HA with provision for auto-failover</p>	<p>This clause is restricting in nature and completely favoring NGFW vandors hence it's a humble request you to delete this clause to allow our participation</p>	Please See Revised Condition.
217	Clause No. 3.5 Page No. 15	<p>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.</p>	<p>The successful bidder has to submit the Performance Bank Guarantee (PBG) within fifteen (15) working days of receipt of award. The PBG should be 3% of total contract value and valid up to 180 days beyond the expiry of the contract.</p>	No Change, As per RFP

218		Clause No. 4.31.17 Page No. 28	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.	No product related to security on Emails, database security & proxy is mentioned in the SOR/BOQ. It is requested to add these components in the BOQ quantity. The annexure for the detailed specifications is also required	No Change, As per RFP
219		Clause No. 7 Page No 22	The solution should support integration with SIEM Tool (Esp. RSA Security Analytics) for real time log analysis and correlation.	We understand that customer have RSA SIEM tool. All the configurations & parser development on that tool will be managed by the customer. Please confirm if our understanding is correct.	Understanding is correct
220		Section IV Page No. 34	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).	We understand bidder needs to support the customer with the security tools provided under the scope of this RFP along with associated RCA and penalty. For any requirements mentioned in this clause which are not met through the BoQ shall not be bidder's responsibility and no penalty shall be levied in lieu of the same. Please confirm that our understanding is correct.	No Change, As per RFP
221		Section IV Page No. 34	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).	No tools like SIEM, Endpoint Protection, EDR, Anti-DDoS, APT, Sandboxing, Data Loss/Leak Prevention & Digital Right Management Solution have been procured to protect the network from the various attacks highlighted in this clause and to provide the RCA for the attack; Kindly add the same in BoQ and confirm that they are required to be supplied as part of this RFP along with any more tools with detailed specifications.	No Change, As per RFP
222		Volume II Section II Clause No: 1.1.10.2	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.	Request not to make OEM resources mandatory as SI is competent enough to carry out the activities	As per RFP. OEM professional services are required considering complexity of the solution
223		Volume II Section II Clause No: 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.	Understand that all hardware, interfaces required for integration in existing equipments will be provided by Purchaser. Further any development activity required in existing equipments for integration with newly supplied equipments will be carried out by Purchaser. Kindly confirm.	No Change, As per RFP
224		Volume II Section IV Clause No.: 1.1.3	Installation & Commissioning T2=T1+8 weeks	Considering the complexity of work, it is requested to extend the Installation and commissioning timeline from T1+8 weeks to T1+16 weeks	No Change, As per RFP

225		Patent Rights Page No. 17 Clause No 4.3	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.	The indemnity claimed is too broad. It is requested to modify the clause as under: Selected agency shall indemnify and hold harmless the Tenderer against any third party claim that any of the Selected agency deliverables created or material otherwise provided by Selected agency hereunder infringes a copyright patent of a third party. Tenderer shall promptly notify Selected agency of any third party claim and Selected agency shall at its option conduct the defence in any such third party action arising as described herein at Selected agency's sole expense and Tenderer shall cooperate with such defence. Selected agency indemnification shall not extend to any such liability which arises as a result (a) use of Selected agency deliverables or services in a manner inconsistent with instructions or documentation provided by Selected agency; (b) combination of bidder deliverables or services with software or other programs not provided by Selected agency.	No Change, As per RFP
226		Right of Monitoring, Inspection and Periodic Audit Page No.29	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.	It is modify the clause as follows: 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, once in a calendar year, after providing atleast thirty (30) days' prior 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 once in a calendar year by providing advance notice of not less than thirty (30) days 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. The scope of audit should be limited to project-related documents including timesheets, expenses, status reports, project management documents. conducted during Selected agency's business hours, without affecting Selected agency's day to day operations. The	No Change, As per RFP

				auditors must execute all necessary documents that Selected agency thinks suitable prior to the audit fulfilment.	
227		Indemnity Clause No. 4.44 Page. No. 36	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.	The indemnity claimed by the Tenderer is very broad and hence the bidder suggests the following for mutual acceptance and the red-lined text may be clarified: "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. <u>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.</u> 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, however, Selected agency indemnification shall not extend to any such liability which arises as a result (a) use of Selected agency deliverables or services in a manner inconsistent with instructions or documentation provided by Selected agency; (b) combination of bidder deliverables or services with software or other programs not provided by Selected agency.	No Change, As per RFP
228		Section II – Eligibility Criteria, Technical evaluation matrix. Sr. 2 Page No.7	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	We request to amend this as: 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 Data Center = 5 Marks 3 to 5 Projects Data Center = 10 Marks above 5 Projects Data Center = 15 Marks	Please See Revised Condition.
229		Section II – Eligibility Criteria, Technical evaluation matrix. Sr. 3 Page No.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. 2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks	We request to amend this as: On premise Cloud solution must have been implemented for Central / State Gov, PSU, BFSI in India during the last five years as on Bid submission date. 2-3 Projects Data Center = 5 Marks 4-5 Projects Data Center = 10 Marks above 5 Projects Data Center = 15 Marks	No Change, As per RFP
230		Gem Document	Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder.	These two clause are contradictory clauses. Request you to please clarify whether it is L1 bid or Indicative bid (Reverse Auction Bid).	Reverse Auction would be conducted.

231		Clause No 3.3, Page No.15 of RFP Evaluation Methodology	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.		TENDERER/ GIL may negotiate the prices with L1 Bidder, under each item/head offered by Bidder after Reverse Auction also.
232		Pg:69 / 1.1. WAN & Internet Router /	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	All other elements like NGFW, IPS/IDS, Spine, Leaf, etc are requested with 1G and 100G interfaces in them except for these routers. Also we understand that these are the only routers supporting the entire network connectivity requirement. Considering interface flexibility and future scalability, we suggest to have support of all interfaces inline with other ecosystem elements to support all kinds of 1G, 10G, 40G, 100G connectivity requirement. Also, throughput needs to be aligned with interfaces requirement. Hence, we request you to change the clause as follows: "From Day1 Router Should Have with necessary licenses and without any year based capping: 1. Port - 10 x 1/10 G with fully populated SFP+ 2. Uplink Ports - 4 x 40/100 G populate optics with SFPS 3. Aggregated throughput - 400 Gbps FD 4. RAM - 8 GB DRAM 5. Storage - 8 GB 6. Console Port - RJ45, usb/microusb for management"	No Change, As per RFP
233		Pg:69 / 1.1. WAN & Internet Router /	The Router should support : 1. Concurrent IPsec tunnel - 4000 2. VRF sessions - 4000 3. Access Control List (ACL)- 4000 4. IPv6 routes: 4 Million	These are the only routers supporting the entire GSDC networking requirement. Considering current network requirement and future scalability and to ensure that the routers integrate seamlessly with SDC network, we request to change the clause as follows: "The Router should support from Day-1 : 1. IPSEC throughput = 40Gbps Concurrent IPsec tunnel - 30000 2. VRF sessions - 4000 3. Access Control List (ACL)- 4000 4. FIB: IPv4 = 2Million, IPv6 routes = 1 Million"	No Change, As per RFP
234		Pg:69 / 1.1. WAN & Internet Router /	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	Considering core functional requirements of IP-MPLS routes that would be required to support GSDC networking requirement for Day-1 and future, we suggest to modify the clause as follows: "Other Functionality: 1. Should have hot swappable power	No Change, As per RFP

			<p>4. Should support IPv6 and IPv4 routing protocols like, BGP, OSPF and Static routing.</p> <p>5. Should support Static NAT, Dynamic NAT, NAT/PAT</p> <p>6. Should support TCP/IP, VPN, IPV4 & IPV6, SNMP, Resource Reservation Protocol (RSVP), etc</p> <p>7. Should support Role-based administrative access, SSHv2, RADIUS/TACACS+ , Authorization, and Accounting (AAA)</p> <p>8. Should support Netflow/cFlow/J-Flow/equivalent feature.</p> <p>9. The Router should be supplied with all applicable feature and interface perpetual-licenses from day one.</p> <p>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</p> <p>11. In case the primary route processor fails on the router, there should be ZERO packet loss on the whole router for the traffic</p>	<p>supplies, Fans, processor/controller card for 1+1 redundancy, All line-card slots should be universal. All the line-cards should be capable to be configured on all given line-card slots without any restriction.</p> <p>2. All the LAN/WAN ports should be in compliance with 802.3 standards</p> <p>3. Should support advanced encryption algorithms like AES-256 and AES-GCM</p> <p>4. Should support IPv6 and IPv4 routing protocols like, BGP, OSPF and Static routing, Segment Routing, Segment Routing Traffic-Engineering, EVPN, VxLAN, Flex-algo, GPB/GRPC/KAFKA encoding for telemetry data and must be provided with the required licenses from Day 1.</p> <p>5. Should support Static NAT, Dynamic NAT, NAT/PAT - 24 Million concurrent NAT sessions with 40Gbps NAT throughput from Day-1,</p> <p>6. Should support TCP/IP, VPN, IPV4 & IPV6, SNMP, Resource Reservation Protocol (RSVP), etc</p> <p>7. Should support Role-based administrative access, SSHv2, RADIUS/TACACS+ , Authorization, and Accounting (AAA)</p> <p>8. Should support Netflow/cFlow/J-Flow/equivalent feature.</p> <p>9. The Router should be supplied with all applicable feature and interface perpetual-licenses from Day-1 without any year-based capping.</p> <p>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.</p> <p>11. In case the primary route processor fails on the router, there should be ZERO packet loss on the whole router for the traffic"</p>	
235		Pg:76 / 1.4. SDN Controller	(5) Monitoring - On Premise Systems: Solution should provide network device specific monitoring capabilities - CISCO, Juniper, HP ,ARISTA etc.	We request to remove this clause.	No Change, As per RFP
236		Pg:76 / 1.4. SDN Controller	New clause additon requested	Should support 512 BGP-EVPN VXLAN VRF / Private Network. Should act as single distributed layer2 Switch, Layer3 Router and stateless distributed firewall etc. SDN controller should support Kubernetes based architecture. Should be on premise and must have all related licenses to support the entire fabric infrastructure. SDN controller must support intent based networking (IBN) framework with all the necessary licenses built in system from Day-1.	Not Accepted

237		Pg:76 / 1.4. SDN Controller	New clause additon requested	The SDN platform must have capability to define 'fabric as code' in a declarative way eg: in YAML format, for continuous integration and continuous deployment of network infrastructure and for configuring the network with 'infrastructure as code' model. SDN controller should support instantiation the DC fabric from intent by providing for example #of racks, #of uplinks per rack,#speed of uplinks,#speed of access interfaces.	Not Accepted
238		Pg:76 / 1.4. SDN Controller	New clause additon requested	SDN Controller using digital twin functionality should support functionality like Validate design, Deploy fabric intent, Deploy workload intent. Make configuration changes without risk, software upgrade without risk etc. In case multiple solutions and controllers are required to build this functionality, all the necessary hardware and licenses must be incorporated by the OEM in solution from Day-1. SDN Controller should not participate in Data plane and control plane path of the fabric.	Not Accepted
239		Pg:76 / 1.4. SDN Controller	New clause additon requested	SDN Controller should have support to be able to do pre-configuration / pre-change analysis of configuration CLI so that it can point out any challenges/issues even before actually pushing configuration to the Leaf & Spine Fabric. Should support to detect configuration deviation from designed and actual state of the fabric network. Should give flexibility to admin accept or reject the configuration deviation	Not Accepted
240		Pg:76 / 1.4. SDN Controller	New clause additon requested	SDN Controller should support for cable map generation of designed Leaf & Spine Fabric which can be shared with field team for physical connectivity. Controller / Management plane must have ability to automate BGP-EVPN peering across the leaf & Spine fabric as control plane protocol to federate routing information. SDN Controller should support integration with cloud management systems like VMWare and open source systems like open stack, K8S.	Not Accepted
241		Pg:76 / 1.5 Core-Spine Switch	2.2 Total aggregated system throughput minimum 6.4Tbps(Full Duplex:- Bi-Directional)	Total aggregated throughput 9.6Tbps is not matching with number of port asked (32*40/100GE) which can be maximum 3.2Tbps at linerate. We request to modify the clause as: "Total aggregated system throughput minimum 3.2 Tbps (Full Duplex:- Bi-Directional)".	No Change, As per RFP
242		Pg:77 / 1.5 Core-Spine Switch	5.4 Policy based Routing	We request to remove this clause.	No Change, As per RFP
243		Pg:77 / 1.5 Core-Spine Switch	5.10 Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	We request to modify this clause as: " Support Secure Shell v2 (SSHv2) or Telnet, SNMPv1/2/3 or next generation interfaces like gNMI, gRPC, JSON-RPC, NTP"	Please See Revised Condition.

244	Pg:77 / 1.5 Core-Spine Switch	6.6 Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using	We request to modify this clause as: Should support Remote Authentication Dial-In User Service (RADIUS) or Terminal Access Controller Access Control System Plus (TACACS+) , as currently using	No Change, As per RFP
245	Pg:77 / 1.5 Core-Spine Switch	7.4 Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption	We request to modify this clause as: " Switch should support for Management & Monitoring Status using different type of industry standard NMS using SNMPv3 or next generation interfaces like gNMI, gRPC, JSON-RPC securely "	No Change, As per RFP
246	Pg:77 / 1.5 Core-Spine Switch	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+	Switch platform should support Following 1. IPv4 host routes – Min. 120,000 2. MAC addresses – Min. 150,000 3. Ipv6 Host Routes – Min. 70,000 4. VLAN –4096	No Change, As per RFP
247	Pg:78 / 1.5 Core-Spine Switch	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	We request to modify this clause as below: Should support telemetry: 1. Flow path trace (ingress to egress switch) 2. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 3, Switch environmental like (CPU/memory/FAN/Power Supply) 4, Interface statistics like CRC error	Please See Revised Condition.
248	Pg:78 / 1.5 Core-Spine Switch	11. The OEM should be in the Leader's quadrant of the DataCenter and Cloud Networking in the latest Gartner Magic Quadrant.	We request to remove this clause for wider OEM participation. Also, as per our understanding, Gartner has discontinued their MQ in DC Switching space. The last version published was in 2020. They only have market guides for these areas currently.	Clause stands removed
249	Pg:78 / 1.5 Core-Spine Switch	New clause additon requested	Switch should support and EVPN(Ethernet VPN) symmetric IRB(integrated routing and bridges) for supporting Spine/core - Leaf architecture to optimise the east - west traffic flow inside the data centre	No Change, As per RFP
250	Pg:78 / 1.5 Core-Spine Switch	New clause additon requested	Switch should support at least 512 IP-vrf instances and 4K Mac-vrf instances, 250K IPv4 LPM routes, 32 MB Packet Buffer.	No Change, As per RFP
251	Pg:79 / 1.6 Leaf-Border	5.4 Policy based Routing	We request to remove this clause.	no Change, As per RFP
252	Pg:79 / 1.6 Leaf-Border	5.10 Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	We request to modify this clause as: " Support Secure Shell v2 (SSHv2) or Telnet, SNMPv1/2/3 or next generation interfaces like gNMI, gRPC, JSON-RPC, NTP"	Please See Revised Condition.
253	Pg:79 / 1.6 Leaf-Border	6.6 Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+) , as currently using	We request to modify this clause as: Should support Remote Authentication Dial-In User Service (RADIUS) or Terminal	No Change, As per RFP

				Access Controller Access Control System Plus (TACACS+) , as currently using	
254		Pg:79 / 1.6 Leaf-Border	7.4 Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption	We request to modify this clause as: " Switch should support for Management & Monitoring Status using different type of industry standard NMS using SNMPv3 or next generation interfaces like gNMI, gRPC, JSON-RPC securely "	No Change, As per RFP
255		Pg:79 / 1.6 Leaf-Border	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+	Switch platform should support Following 1. IPv4 host routes – Min. 120,000 2. MAC addresses – Min. 150,000 3. Ipv6 Host Routes – Min. 70,000 4. VLAN –4096	No Change, As per RFP
256		Pg:79 / 1.6 Leaf-Border	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	We request to modify this clause as below: Should support telemetry: 1. Flow path trace (ingress to egress switch) 2. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 3, Switch environmental like (CPU/memory/FAN/Power Supply) 4, Interface statistics like CRC error	Please See Revised Condition.
257		Pg:80 / 1.6 Leaf-Border	11. The OEM should be in the Leader's quadrant of the DataCenter and Cloud Networking in the latest Gartner Magic Quadrant.	We request to remove this clause for wider OEM participation. Also, as per our understanding, Gartner has discontinued their MQ in DC Switching space. The last version published was in 2020. They only have market guides for these areas currently.	Clause stands removed
258		Pg:80 / 1.6 Leaf-Border	New clause additon requested	Switch should support and EVPN(Ethernet VPN) symmetric IRB(integrated routing and bridges) for supporting Spine/core - Leaf architecture to optimise the east - west traffic flow inside the data centre	Not Accepted
259		Pg:80 / 1.6 Leaf-Border	New clause additon requested	Switch should support at least 512 IP-vrf instances and 4K Mac-vrf instances, 250K IPv4 LPM routes, 32 MB Packet Buffer.	Not Accepted
260		Pg:80 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48)	5.4 Policy based Routing	We request to remove this clause.	No Change, As per RFP

261	Pg:80 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	5.10 Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	We request to modify this clause as: " Support Secure Shell v2 (SSHv2) or Telnet, SNMPv1/2/3 or next generation interfaces like gNMI, gRPC, JSON-RPC, NTP"	Please See Revised Condition.
262	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	6.6 Should support Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+), as currently using	We request to modify this clause as: Should support Remote Authentication Dial-In User Service (RADIUS) or Terminal Access Controller Access Control System Plus (TACACS+), as currently using	No Change, As per RFP
263	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	7.4 Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP v3 with Encryption	We request to modify this clause as: " Switch should support for Management & Monitoring Status using different type of industry standard NMS using SNMPv3 or next generation interfaces like gNMI, gRPC, JSON-RPC securely "	No Change, As per RFP
264	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	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+	Switch platform should support Following 1. IPv4 host routes – Min. 120,000 2. MAC addresses – Min. 150,000 3. Ipv6 Host Routes – Min. 70,000 4. VLAN –4096	No Change, As per RFP
265	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	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	We request to modify this clause as below: Should support telemetry: 1. Flow path trace (ingress to egress switch) 2. Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW 3. Switch environmental like (CPU/memory/FAN/Power Supply) 4. Interface statistics like CRC error	Please See Revised Condition.
266	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	11. The OEM should be in the Leader's quadrant of the DataCenter and Cloud Networking in the latest Gartner Magic Quadrant.	We request to remove this clause for wider OEM participation. Also, as per our understanding, Gartner has discontinued their MQ in DC Switching space. The last version published was in 2020. They only have market guides for these areas currently.	Clause stands removed
267	Pg:81 / 1.7 Leaf switch (FC-10G-48) and Layer 3 Switches (FC- 10G-48)	New clause additon requested	Switch should support and EVPN(Ethernet VPN) symmetric IRB(integrated routing and bridges) for supporting Spine/core - Leaf architecture to optimise the east - west traffic flow inside the data centre	Not Accepted
268	Pg:82 / 1.8 Management Switch	2.1 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	We request to modify this clause as "Ports - 48 x 1G RJ45 for host connectivity and 2 x10G SFP+ Port for uplink to spin with multimode transceivers	Please See Revised Condition.
269	Pg:82 / 1.8 Management Switch	2.2 Total aggregated system throughput minimum 2.4 Tbps (Full Duplex:- Bi- Directional)	We request to modify this clause as "Total aggregated system throughput minimum 88 Gbps (Full Duplex:- Bi- Directional)"	Please See Revised Condition.
270	Pg:82 / 1.8 Management Switch	2.3 Throughput - Minimum 1 bbps (billion packets /sec.)	This clause is not relevant for Management switch as it switch carries only management traffic and throughput may not be relevant. We request to remove this clause.	No Change, As per RFP

271		Volume-2, Section-3, Technical Scope of Work 1.12 : point no 15. Page number 26	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	<p>Query : Since this is a cloud RFP, requesting to remove dynamic memory/core allocation since that is a traditional virtualization feature</p> <p>Justification : Red Hat OpenStack being a cloud platform it aligns to cloud Principal of Cloud Elasticity [1] through horizontal scaling. Horizontal scaling affords the ability to scale wider to deal with traffic dynamically. Only Virtualization platforms supports vertical scaling none of true cloud platforms. [1] https://en.wikipedia.org/wiki/Elasticity_(cloud_computing)</p> <p>Proposed Clause : Solution should support, 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</p>	Please See Revised Condition.
272		Volume-2, Section-3, Technical Scope of Work 5.1 : point no 1. Page number 27	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	<p>Query : Requesting to remove this clause since this is restrictive and non-generic.</p> <p>Justification : The usage of Gartner Magic Quadrant or other such entities is not recommended as per Meity guidelines. Additionally, gartner had retired releasing the report for virtualization infrastructure in 2017 itself (https://www.gartner.com/en/documents/3642418)</p>	Clause stands removed

273		Volume-2, Section-3, Technical Scope of Work 5.2 : point no 4. Page number 27	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	<p>Query : Requesting to remove the phrase "of Hot Add resources(CPU, RAM) to VM on the fly when needed"</p> <p>Justification : The feature of Hot Add is more catered towards Virtualization based solutions, we can dynamically provide resources to the application in case the need arises but with a different mechanism. The phrase "Hot add resources(CPU, RAM) to VM on the fly" is a traditional virtualization feature and limits us from competing and offering a cloud solution even though we can achieve end goal to provide resources to the application.</p> <p>Since RFP is more towards a cloud infrastructure, primarily private cloud, it would benefit to focus on horizontal scaling rather than vertical scaling. Other public clouds such as AWS as well do not vouch for vertical scaling. This is mentioned in this independent blog as well :- https://www.quickanswer.blog/question-does-aws-support-hot-add-cpu-and-ram/</p> <p>The existing Specification is OEM specific by defining and enforcing a specific way to scale resources needed, leaving it non-neutral and provides advantage to a specific OEM.</p> <p>Our solution being a cloud platform aligns to cloud Principal of Cloud Elasticity [1] through horizontal scaling. Horizontal scaling affords the ability to scale wider to deal with traffic dynamically. Only Virtualization platforms supports vertical scaling none of true cloud platforms. [1] https://en.wikipedia.org/wiki/Elasticity_(cloud_computing)</p> <p>Proposed Clause : Capabilities to dynamically add resources without disruption or downtime in working for both OS - windows and Linux based VMs</p>	Please See Revised Condition.
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274		Volume-2, Section-3, Technical Scope of Work 5.3 : point no 7. Page number 28	Should support live Virtual Machine migration between two or more servers in a cluster as well as between DC and DR	<p>Query : Requesting to not enforce the term "live"</p> <p>Justification : DR is ideally used when DC fails. if the DC fails live migration will not be possible anyways rendering the clause redundant. If however this feature is still needed, it can be done but this will require network latency of minimum 50 RTT and storage backend should be stretched causing it to be a very expensive affair outweighing it's benefits.</p> <p>The existing Specification is OEM specific by defining and enforcing a specific way to live migrate Virtual Machines, leaving it non-neutral and provides advantage to a specific OEM.</p> <p>Proposed Clause : Should support Virtual Machine migration between two or more servers in a cluster as well as between DC and DR</p>	Please See Revised Condition.
275		Volume-2, Section-3, Technical Scope of Work 5.4 : point no 3. Page number 28	Non-disruptive Scale-Up & Scale-Out to grow capacity and/or performance whenever required.	<p>Query : Requesting to amend to Scale-up / Scale-Out</p> <p>Justification : Non-disruptive scaling can be done either by scale up or scale out, however scale out mechanism is more aligned to cloud technologies giving wider range of scaling compared to scale up.</p> <p>Keeping it to both the properties is specific to OEM and hence requesting to relax to Scale-up / Scale-out</p> <p>Proposed Clause : Non-disruptive Scale-Up / Scale-Out to grow capacity and/or performance whenever required.</p>	Please See Revised Condition.
276		Volume-2, Section-3, Technical Scope of Work 5.5 ; Page number 28		<p>Query : Requesting to add additional functionality for container platform</p> <p>Justification : Features such as enhanced security, traffic control etc increase the scope with more functionalities giving better standard of technology to the customer</p> <p>Proposed Clause : The platform running containers should be hosted on immutable OS for enhanced security. It should support Service Mesh for microservices visibility, traffic control, security and observation with out-of-the-box for Istio, Kiali and Jaeger</p>	No Change, As per RFP

277		Volume-2, Section-3, Technical Scope of Work 5.5 ; Page number 28		<p>Query : Requesting to add additional functionality for container platform</p> <p>Justification : In-built pre-integrated solutions will give the customer better tested and integrated solutions, also since they are pre-integrated and out-of-box, it can save considerable amount of cost</p> <p>Proposed Clause : The platform shall have inbuilt pre-integrated management, monitoring, CI/CD Pipelines, observability & container image registry capabilities out of the box</p>	No Change, As per RFP
278		Volume-2, Section-3, Technical Scope of Work 5.5 ; Page number 28		<p>Query : Requesting to add non-vendor lock-in functionality for container platform</p> <p>Justification : Solutions based on open standards having no dependency with the underlying infrastructure should be considered to avoid vendor lock-in</p> <p>Proposed Clause : The platform running containers should be based on open standards, it should be infrastructure agnostic having capabilities to install directly on Bare metal. It should be interoperable and supported on multiple cloud, virtualization and hardware environments.</p>	No Change, As per RFP
279		Volume-2, Section-3, Technical Scope of Work 1.12		<p>Query : Requesting to add additional functionality to Automation suite to give clarity and keep all the bidders on same page.</p> <p>Justification : Features such as agentless solutions avoid performance problems over the server, make the installation easy and makes operations efficient via the use of certified automation content</p> <p>Proposed Clause : The Automation solution should be agentless to avoid performance overhead, it should also provide end-to-end automation and certified automation content by OEM's from a single platform for Storage, Network, Virtualized Infrastructure and Monitoring solutions</p>	Solution should provide agentless/ without any performance overhead mechanism to provide full stack visibility and automation for storage, network and virtualized infrastructure from a single platform
280		Volume-2, Section-3, Technical Scope of Work 1.12 : point no 30. Page number 26	Solution should support Full Automation solution validation (Infrastructure as code – Tool & Orchestration Set)	<p>Query : Requesting clarification on Detail of Automation Solution</p> <p>Justification : it would be helpful to add parameters such as Automation solution should be easy to use, highly customizable and based on easy to understand human readable language of YAML</p> <p>Proposed Clause : "Solution should support Full Automation solution validation (Infrastructure as code – Tool & Orchestration Set) which should be easy to</p>	No Change, As per RFP

				use, highly customizable and based on easy to understand human readable language of YAML"	
281		Volume-2, Section-3, Technical Scope of Work 5.5 : point no 5. Page number 28	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.	<p>Query : Requesting to add clause for subscriptions as well as licenses</p> <p>Justification : Multiple vendors offer different means for procurement. In a subscription model, the subscriptions are perpetually in the name of the customer satisfying the end goal and hence requesting to add subscriptions along with licenses allowing us and many other vendors to better compete.</p> <p>Proposed Clause : The bidder shall provide perpetual licenses or subscriptions 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.</p>	Please See Revised Condition.
282		Volume-2, Section-3, Technical Scope of Work 1.12		<p>Query : Requesting to add clause for Enterprise grade Operating systems in compliance and quantities in BoQ</p> <p>Justification : There is no mention of which and how many Operating Systems instances need to run in the cloud</p> <p>Proposed Clause : The bidder shall provide premium support 24x7x365 for Enterprise grade Operating system which should be from OEM, support credentials should be in the name of DST/GSDC</p>	Not Accepted
283	Next Generation Firewall	Page: 70 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-1	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	Customer will have best choice among OEM who are qualify under Leader Quadrant and it is fair compition among qualified OEM.	No Change, As per RFP
284	Next Generation Firewall	Page: 70 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-2.1	Appliance should be purpose build enterprise grade, scalable, Open architecture	Market Leader OEM are purposed build appliance and not open Architecture.	Please See Revised Condition.

285	Next Generation Firewall	Page: 70 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-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	<p>What does mean of file blocking? Are you referring file type block?</p> <p>Normally OEM publish Firewall performance throughput for following parameter:</p> <p>Firewall throughput IPS throughput NGFW Throguhput (Firewall, Application Control, IPS) Threat Protection throughput (Firewall, application control, IPS, AV) IPSec VPN Throughput</p> <p>We request you to please remove clause of File blocking so we can provide the performance parameter inline to your requirement.</p>	Please See Revised Condition.
286	Next Generation Firewall	Page: 70 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-3	Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 100 Virtual System for future use.	<p>Please confirm do you want us to factor the license for Virtual Systems of 25 or 100 from the day one?</p> <p>Or we just factor the Virtual systems license for 25 at this moment but box should capable to upgrade up to 100 virtual systems in future by addin top up license?</p>	Please See Revised Condition.
287	Next Generation Firewall	Page: 71 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-4	1 x 1G ports for out of band management .	Out of band management port is require for Firewall management. Not all Gartner leader OEM provide out of band management, however they provide dedicated management interface.	Please See Revised Condition.
288	Next Generation Firewall	Page: 71 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-7a.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.	<p>To collect Patch Updates and AV status on end user systems, we require to deploy the Agent on every system so Agent can share such detail with NGFW solution.</p> <p>Kindly confirm if you are looking to include our Endpoint solution as well for this functionality.</p> <p>Same apply with most OEM since this functionality is more of NAC and Larger enterprise customer normally depends on NAC kind of solution for such business requirement.</p> <p>Also confirm the total number of devices so we can include Endpoint license along with NGFW to meet this business requirement.</p>	Clause stands removed
289	Next Generation Firewall	Page: 72 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-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.	<p>Every OEM have their own way of designing hardware that include CPU/Memory. Ideally, NGFW hardware sizing to be done based on performance parameter and every OEM design their hardware to meet desiger performance.</p> <p>We request you to please remove the clause of CPU and Memory since we have already requested that "Proposed solution must be enterprise grade solution and</p>	Please See Revised Condition.

				should meet all require performance parameter from day one without any compromise"	
290	Next Generation Firewall	Page: 72 Section 1.2 - Next Generation Firewall (Internet + DMZ) - Point-17	Appliance should provide inline signature less attack prevention for file based attacks while identifying and immediately stopping them.	For inline Signature less attack prevention, ideally we require Sandboxing capability on NGFW. Kindly confirm if you would like to include Sandboxing solution for Zero day protection.	Yes, Understanding is correct
291	IPS	Page: 72 Section 1.3 - IPS/IDS - Point-1	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	Customer will have best choice among OEM who are qualify under Leader Quadrant and it is fair compition among qualified OEM.	No Change, As per RFP
292	IPS	Page: 72 Section 1.3 - IPS/IDS - Point-2.1	Appliance should be purpose build enterprise grade, scalable, Open architecture	Market Leader OEM are purposed build appliance and not open Architecture.	Please See Revised Condition.
293	IPS	Page: 73 Section 1.3 - IPS/IDS - Point-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	<p>What does mean of file blocking? Are you refering file type block?</p> <p>Normally OEM publish Firewall performance throughput for following parameter:</p> <p>Firewall throughput IPS throughput NGFW Throguhput (Firewall, Application Control, IPS) Threat Protection throughput (Firewall, application control, IPS, AV) IPSec VPN Throughput</p> <p>We request you to please remove clause of File blocking so we can provide the performance parameter inline to your requirement.</p>	No Change, As per RFP
294	IPS	Page: 73 Section 1.3 - IPS/IDS - Point-3	Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 100 Virtual System for future use.	<p>Please confirm do you want us to factor the license for Virtual Systems of 25 or 100 from the day one?</p> <p>Or we just factor the Virtual systems license for 25 at this moment but box should capable to upgrade up to 100 virtual systems in future by addin top up license?</p>	Please See Revised Condition.
295	IPS	Page: 73 Section 1.3 - IPS/IDS - Point-4	1 x 1G ports for out of band management .	Out of band management port is require for Firewall management. Not all Gartner leader OEM provide out of band management, however they provide dedicated management interface.	Please See Revised Condition.

296	IPS		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.	<p>To collect Patch Updates and AV status on end user systems, we require to deploy the Agent on every system so Agent can share such detail with NGFW solution.</p> <p>Kindly confirm if you are looking to include our Endpoint solution as well for this functionality.</p> <p>Same apply with most OEM since this functionality is more of NAC and Larger enterprise customer normally depends on NAC kind of solution for such business requirement.</p> <p>Also confirm the total number of devices so we can include Endpoint license along with NGFW to meet this business requirement.</p>	Point Not Mentioned
297	IPS	Page: 74 Section 1.3 - IPS/IDS - Point-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.	Every OEM have their own way of designing hardware that include CPU/Memory. Ideally, NGFW hardware sizing to be done based on performance parameter and every OEM design their hardware to meet desiger performance. We request you to please remove the cluase of CPU and Memory since we have already requested that "Proposed solution must be enterprise grade solution and should meet all require performance parameter from day one without any compromise"	Please See Revised Condition.
298	IPS	Page: 75 Section 1.3 - IPS/IDS - Point-18	Appliance should provide inline signature less attack prevention for file based attacks while identifying and immediately stopping them.	For inline Signature less attack prevention, ideally we require Sandboxing capability on NGFW. Kindly confirm if you would like to include Sandboxing solution for Zero day protection.	Clause stands removed, We do not require sandboxing in IPS/IDS solution
299	IPS	Page: 74 Section 1.3 - IPS/IDS - Point-24	IPS must support deployment in In-line bypass mode	Please confirm if Software bypass is acceptable.	No Change, As per RFP
300	WAF	Page: 21 Section: 1.9 WAF with SLB Point-1.5	Ports 10G x 16 and 1G X 8 without use of any Split out/ Breakout cable	The asked performance of SLB + WAF is atleast 40Gbs so It is advisable to reduce 10G interface upto 8 so other OEM can qualify with this requirement which can be inline with business requirement.	Please See Revised Condition.
301	WAF	Page: 21 Section: 1.9 WAF with SLB Point-2.4	Should support overall throughput of 40 Gbps and further scalable to 70 Gbps after applying all policies and signatures	<p>As per NGFW specs, we have asked for Threat Protection throughput max upto 30Gbs. So ideally SBL + WAF Performance should be inline with this.</p> <p>We request you to please consider max throughput upto 40Gbps.</p> <p>Applying all policies and signature - Do you refer WAF + SLB combine throughput after enable all functionality?</p>	no Change, As per RFP

302	WAN & Internet Router	Volume-II> 1.1. WAN & Internet Router >Clause no.2> page no. 7	Uplink Ports - 4 x 40 G populate optics with SFPS	Request you to change to "Uplink Ports - 4 x 40 G populate optics with SFPS or 16x10G port populate optics with SFPS" WAN & Internet router will connect to border leaf/service Leaf. So instead of 40G port we can have multiple of 10G port to connect to border leaf/service Leaf switch.	No Change, As per RFP
303	WAN & Internet Router	Volume-II> 1.1. WAN & Internet Router >Clause no.2> page no. 7	5. Storage - 8 GB	Please remove this clause. Storage at router will be provided by some OEM, all the Router logs will be send to external Syslog server from where network administrator can analyse the logs.	No Change, As per RFP
304	WAN & Internet Router	Volume-II> 1.1. WAN & Internet Router >Clause no.4 > page no. 8	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	Request you to change this clause to "The router should support Netconf, Python API /YANG, and other modern system management protocols. The device should support Python API/ YANG - A Data Modelling Language for the Network Configuration" Python is APIs tool. high level of abstraction is available with Python and its having extensive library support.	Please See Revised Condition.
305	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.2 > page no. 13	5. Should be integrate with different Hypervisors and Kubernetes, Redhat, Openshift and manage virtualise networking from SDN Controller.	Request you to change this clause to "Should be integrate with different Hypervisors using REST API from SDN Controller/orchestrator." All the integration will be done through REST API.	Please See Revised Condition.
306	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.3 > page no. 13	4. Should support declarative model based network automation or IBN (Intent based Networking)	Request you to change this clause to "Should support declarative model based network automation or IBN (Intent based Networking) or workflow based automation."	Please See Revised Condition.
307	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.3 > page no. 13	5. Solution should support OpenConfig/NetConf, YANG based model or equivalent open architecture.	Request you to change this clause to " Solution should support OpenConfig/NetConf/ REST API or YANG based model or equivalent open architecture." All the network devices support REST API.	No Change, As per RFP
308	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.3 > page no. 13	6. Should not participate in Data plane and control plane path of the fabric.	Request you to change this clause to " Should not participate in Data plane and control plane path of the fabric or should only do the management plane configuration of the switch"	No Change, As per RFP

309	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.3 > page no. 14	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.	Request you to change this clause to " Should provide dynamic device inventory of the Fabric, current network topology (like Real time Bandwidth Utilization; Traffic Throughput; Error Rates(Tx/Rx), Traffic & Tend Analytics, etc.) abnormal detection will be detect by thirdparty toll and it will integrate with SDN solution. Cabling connectivity fault will be detected by switch using UDLD protocol so this is feature of switch not SDN coltroller.	No Change, As per RFP
310	SDN Controller	Volume-II> 1.4. SDN Controller >Clause no.5 > page no. 14	2. Ability to monitor/collect network device core metrics - CPU /Memory / Disk / Network. Ability to monitor OS services and processes	Please remove "Ability to monitor OS services and processes" Request you to change this clause to " . Ability to monitor/collect network device core metrics - CPU /Memory." Ability to monitor OS services and processes is specific feature provided by specific OEM.	No Change, As per RFP
311	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.2 > page no. 14	4. Latency - < 1 microseconds	Request you to change to "Latency - < 3 microseconds" The switch is having ASIC. All ASIC is having his own latency and on top of that switch OS is also having latency. So for switch latency, ASIC latency plus Software OS latency will be added and it will have < 3 micro sec latency as per switch design.	Please See Revised Condition.
312	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.2 > page no. 14	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)	Request you to change to " Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/ Console port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP)" A serial port complying with the RS-232 is not coming with the switch. Standard port for console is now either RJ45 or USB.	Please See Revised Condition.
313	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.5 > page no. 15	8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2	Request you to change to " Support routing protocol : OSPFv2 with multiple instances, OSPFv3 or IS-IS , BGP, MP-BGP, and RIPv2" IS-IS and OSPF works on same algorithm. IS-IS protocol is used in service provider enviorement.IS-IS is a link-state routing protocol, operating by reliably flooding link state information throughout a network of routers. Like IS-IS protocol ,OSPF protocol uses Dijkstra's algorithm for computing the best path through the network. Packets (datagrams) are then forwarded, based on the computed ideal path, through the network to the destination.	No Change, As per RFP

				So for current requirement we can use OSPF instead of IS-IS protocol.	
314	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.5 > page no. 15	10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	<p>Please modify this clause to</p> <p>"Support Secure Shell Version 2 (SSHv2)/Telnet & SNMPv1, v2, and v3, NTP"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.</p>	Please See Revised Condition.
315	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.5 > page no. 15	11. Should protect against ARP and DHCP spoofing	<p>Please modify this clause to</p> <p>" Should protect against ARP/ gratuitous ARP/ Proxy ARP.</p> <p>Gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets.</p> <p>DHCP spoofing is required at the access switches where hosts are getting connected and getting the DHCP IP address. In Spine-Leaf deployment, no host will connect on the spine switch so DHCP snooping feature will not be required at spine switch.</p>	No Change, As per RFP
316	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.6 > page no. 15	9. Should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically, using orchestration layer	<p>Please modify this clause to</p> <p>"Should support REST API based integration with multi OEM hypervisor environment and should be able to configure network automatically while VM in created, using orchestration layer"</p> <p>REST API based integration support by orchestrator to integrate with different hypervisor.</p>	Please See Revised Condition.
317	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.7 > page no. 15	3. Switch should provide remote login for administration using Telnet, SSHV2, SSHV3	<p>Please modify this clause to</p> <p>"Switch should provide remote login for administration using Telnet/SSHV2, SSHV3"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.</p>	Please See Revised Condition.

318	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.8 > page no. 15	2. MAC addresses – Min. 2,00,000	Please modify this clause to "MAC addresses – Min. 98,000" At spine layer such a higher MAC address is not required, Higher MAC address is required at leaf where virtual servers are getting connected..	No Change, As per RFP
319	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.8 > page no. 15	3. Ipv6 Host Routes – Min. 1,00,000	Please modify this clause to " Ipv6 Host Routes – Min. 32,000"	No Change, As per RFP
320	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.9 > page no. 15	1. Flow path trace (ingress to egress switch)	Please modify this clause to "Flow path trace (ingress to egress switch) or paths between the fabric switches" paths between the fabric switches will provide the analysis to traffic between leaf switches in fabric.	Please See Revised Condition.
321	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.9 > page no. 16	2. Per Flow Hop by Hop packet drop with reason of drop	Please remove this clause	Please See Revised Condition.
322	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.9 > page no. 16	3. Per Flow latency (per switch and end to end)	Please modify this clause to "Per Flow analysis (per switch and end to end)" Flow analysis is an industry-standard sampling technology used to sample application-level packet flows and gather interface statistics from network devices. sFlow provides visibility into network activity, which helps in network management and control of network resources.	Please See Revised Condition.
323	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.9 > page no. 16	6, Interface statistics like CRC error	Please modify this clause to "Interface statistics like CRC error or provide LLDP info" LLDP info Indicates whether the port is in Disabled, RX Only, TX Only, or RX & TX modes.	No Change, As per RFP
324	Core-Spine Switch	Volume-II> 1.5. Core-Spine Switch >Clause no.11 > page no. 16	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.	Please modify this clause to " The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant /Wired and Wireless LAN access for last 3 years or IDC Worldwide Top 5 companies as per their revenue market share Report in switch"	Please See Revised Condition.

325	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.2 > page no. 16	4. Latency - < 1 microseconds	<p>Request you to change to</p> <p>"Latency - < 3 microseconds"</p> <p>The switch is having ASIC. All ASIC is having his own latency and on top of that switch OS is also having latency. So for switch latency, ASIC latency plus Software OS latency will be added and it will have < 3 micro sec latency as per switch design.</p>	Please See Revised Condition.
326	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.2 > page no. 16	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)	<p>Request you to change to</p> <p>" Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/ Console port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP)"</p> <p>A serial port complying with the RS-232 is not coming with the switch. Standard port for console is now either RJ45 or USB.</p>	Please See Revised Condition.
327	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.5 > page no. 17	8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2	<p>Request you to change to</p> <p>" Support routing protocol : OSPFv2 with multiple instances, OSPFv3 or IS-IS , BGP, MP-BGP, and RIPv2"</p> <p>IS-IS and OSPF works on same algorithm. IS-IS protocol is used in service provider environment. IS-IS is a link-state routing protocol, operating by reliably flooding link state information throughout a network of routers. Like IS-IS protocol ,OSPF protocol uses Dijkstra's algorithm for computing the best path through the network. Packets (datagrams) are then forwarded, based on the computed ideal path, through the network to the destination.</p> <p>So for current requirement we can use OSPF instead of IS-IS protocol.</p>	No Change, As per RFP
328	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.5 > page no. 17	10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	<p>Please modify this clause to</p> <p>"Support Secure Shell Version 2 (SSHv2)/Telnet & SNMPv1, v2, and v3, NTP"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.</p>	Please See Revised Condition.

329	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.5 > page no. 17	11. Should protect against ARP and DHCP spoofing	<p>Please modify this clause to</p> <p>" Should protect against ARP/ gratuitous ARP/ Proxy ARP.</p> <p>Gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets.</p> <p>DHCP spoofing is required at the access switches where hosts are getting connected and getting the DHCP IP address. In Spine-Leaf deployment, no host will connect on the border leaf switch so DHCP snooping feature will not be required at spine switch.</p>	No Change, As per RFP
330	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.6 > page no. 17	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	<p>Please modify this clause to</p> <p>"Should support REST API based integration with multi OEM hypervisor environment and should be able to configure network automatically while VM in created, using orchestration layer"</p> <p>REST API based integration support by orchestrator to integrate with different hypervisor.</p>	Please See Revised Condition.
331	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.7 > page no. 17	3. Switch should provide remote login for administration using Telnet, SSHV2, SSHV3	<p>Please modify this clause to</p> <p>"Switch should provide remote login for administration using Telnet/SSHV2, SSHV3"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.</p>	Please See Revised Condition.
332	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.8 > page no. 17	2. MAC addresses – Min. 2,00,000	<p>Please modify this clause to</p> <p>"MAC addresses – Min. 98,000"</p> <p>At spine layer such a higher MAC address is not required, Higher MAC address is required at leaf where virtual servers are getting connected..</p>	No Change, As per RFP
333	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.8 > page no. 17	3. Ipv6 Host Routes – Min. 1,00,000	<p>Please modify this clause to</p> <p>" Ipv6 Host Routes – Min. 32,000"</p>	No Change, As per RFP
334	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.9 > page no. 17	1. Flow path trace (ingress to egress switch)	<p>Please modify this clause to</p> <p>"Flow path trace (ingress to egress switch) or paths between the fabric switches"</p> <p>paths between the fabric switches will provide the analysis to traffic between leaf switches in fabric.</p>	Please See Revised Condition.
335	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.9 > page no. 17	2. Per Flow Hop by Hop packet drop with reason of drop	Please remove this clause	Please See Revised Condition.

336	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.9 > page no. 17	3. Per Flow latency (per switch and end to end)	Please modify this clause to "Per Flow analysis (per switch and end to end)" Flow analysis is an industry-standard sampling technology used to sample application-level packet flows and gather interface statistics from network devices. sFlow provides visibility into network activity, which helps in network management and control of network resources.	Please See Revised Condition.
337	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.9 > page no. 17	6, Interface statistics like CRC error	Please modify this clause to "Interface statistics like CRC error or provide LLDP info" LLDP info Indicates whether the port is in Disabled, RX Only, TX Only, or RX & TX modes.	No Change, As per RFP
338	Leaf – Border	Volume-II> 1.6. Leaf – Border >Clause no.11 > page no. 18	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.	Please modify this clause to " The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant /Wired and Wireless LAN access for last 3 years or IDC Worldwide Top 5 companies as per their revenue market share Report in switch"	Please See Revised Condition.
339	Leaf switch (FC-10G-48) and Layer	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.2 > page no. 18	4. Latency - < 1 microseconds	Request you to change to "Latency - < 3 microseconds" The switch is having ASIC. All ASIC is having his own latency and on top of that switch OS is also having latency. So for switch latency, ASIC latency plus Software OS latency will be added and it will have < 3 micro sec latency as per switch design.	Please See Revised Condition.
340	Leaf switch (FC-10G-48) and Layer	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.2 > page no. 18	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)	Request you to change to " Min. - RAM - 8 GB, CPU - 4 Cores, RS232 - 01/ Console port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP)" A serial port complying with the RS-232 is not coming with the switch. Standard port for console is now either RJ45 or USB.	Please See Revised Condition.
341	Leaf switch (FC-10G-48) and Layer	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.5 > page no. 18	8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2	Request you to change to " Support routing protocol : OSPFv2 with multiple instances, OSPFv3 or IS-IS , BGP, MP-BGP, and RIPv2" IS-IS and OSPF works on same algorithm. IS-IS protocol is used in service provider environment.IS-IS is a link-state routing protocol, operating by reliably flooding link state information throughout a network of routers. Like IS-IS protocol ,OSPF protocol uses Dijkstra's algorithm for computing the best path through the network. Packets (datagrams) are then forwarded, based on	No Change, As per RFP

				the computed ideal path, through the network to the destination. So for current requirement we can use OSPF instead of IS-IS protocol.	
342	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) and Layer 3	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.5 > page no. 18	10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	Please modify this clause to "Support Secure Shell Version 2 (SSHv2)/Telnet & SNMPv1, v2, and v3, NTP" Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.	Please See Revised Condition.
343	Leaf switch (FC-10G-48) and Layer 3	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.5 > page no. 18	11. Should protect against ARP and DHCP spoofing	Please modify this clause to " Should protect against ARP/ gratuitous ARP/ Proxy ARP. Gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets. DHCP spoofing is required at the access switches where hosts are getting connected and getting the DHCP IP address. In Spine-Leaf deployment, no host will have dynamic DHCP IP address on the leaf switch so DHCP snooping feature will not be required at leaf switch.	No Change, As per RFP
344	Leaf switch (FC-10G-48) and Layer 3	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.6 > page no. 19	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	Please modify this clause to "Should support REST API based integration with multi OEM hypervisor environment and should be able to configure network automatically while VM in created, using orchestration layer" REST API based integration support by orchestrator to integrate with different hypervisor.	Please See Revised Condition.
345	Leaf switch (FC-10G-48) and Layer 3	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.7 > page no. 19	3. Switch should provide remote login for administration using Telnet, SSHv2, SSHv3	Please modify this clause to "Switch should provide remote login for administration using Telnet/SSHv2, SSHv3" Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.	Please See Revised Condition.
346	Leaf switch (FC-10G-48) and Layer 3	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.8 > page no. 19	2. MAC addresses – Min. 2,00,000	Please modify this clause to "MAC addresses – Min. 98,000" At spine layer such a higher MAC address is not required, Higher MAC address is required at leaf where virtual servers are getting connected..	No Change, As per RFP

347	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.8 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.8 > page no. 19	3. Ipv6 Host Routes – Min. 1,00,000	Please modify this clause to " Ipv6 Host Routes – Min. 32,000"	No Change, As per RFP
348	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	Should support telemetry: 1. Flow path trace (ingress to egress switch)	Please modify this clause to "Flow path trace (ingress to egress switch) or paths between the fabric switches" paths between the fabric switches will provide the analysis to traffic between leaf switches in fabric.	Please See Revised Condition.
349	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	2. Per Flow Hop by Hop packet drop with reason of drop	Please remove this clause	Please See Revised Condition.
350	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	3. Per Flow latency (per switch and end to end)	Please modify this clause to "Per Flow analysis (per switch and end to end)" Flow analysis is an industry-standard sampling technology used to sample application-level packet flows and gather interface statistics from network devices. sFlow provides visibility into network activity, which helps in network management and control of network resources.	Please See Revised Condition.
351	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.9 > page no. 19	6, Interface statistics like CRC error		No Change, As per RFP
352	Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.11 > page no. 19	Volume-II> 1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48) >Clause no.11 > page no. 19	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.	Please modify this clause to " The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant /Wired and Wireless LAN access for last 3 years or IDC Worldwide Top 5 companies as per their revenue market share Report in switch"	Please See Revised Condition.
353	Management switch >Clause no.2 > page no. 20	Volume-II> 1.8. Management switch >Clause no.2 > page no. 20	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	Please modify this clause to "Ports - 48 x 1 / 10 G Base-T Port for host connectivity and 2 x 100 G for uplink to spin with multimode transceivers" none of the switch OOB ports are having 100Mbps speed. All the OOB or ILO ports are coming with 1/10Gbps speed. So 100Mbps speed is not required in Management switch,	Please See Revised Condition.

354	Management switch	Volume-II> 1.8. Management switch >Clause no.2 > page no. 20	2. Total aggregated system throughput minimum 2.4 Tbps (Full Duplex:- Bi-Directional)	<p>Please modify this clause to</p> <p>" Total aggregated system throughput minimum 1.36. Tbps (Full Duplex:- Bi-Directional)"</p> <p>for 48 port 1/10G and 2x100G port total 1.36 [(48*10)+(2*100)]*2 bidirection throughput will be required.</p>	Please See Revised Condition.
355	Management switch	Volume-II> 1.8. Management switch >Clause no.2 > page no. 20	4. Latency - < 1 microseconds	<p>Request you to change to</p> <p>"Latency - < 3 microseconds"</p> <p>The switch is having ASIC. All ASIC is having his own latency and on top of that switch OS is also having latency. So for switch latency, ASIC latency plus Software OS latency will be added and it will have < 3 micro sec latency as per switch design.</p>	Please See Revised Condition.
356	Management switch	Volume-II> 1.8. Management switch >Clause no.2 > page no. 20	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)	<p>Request you to change to</p> <p>" Min. - RAM - 8 GB, CPU - 2 Cores, RS232 - 01/ Console port, USB port - 01, Management ports: 01 (1 x 10/100/1000BASE-T or 1 x 1-Gbps SFP)"</p> <p>RAM - 28 GB is not required at management switch.</p> <p>in Management switch higher CPU core is not needed.</p> <p>A serial port complying with the RS-232 is not coming with the switch. Standard port for console is now either RJ45 or USB.</p>	Please See Revised Condition.
357	Management switch	Volume-II> 1.8. Management switch >Clause no.5 > page no. 20	8. Support routing protocol : OSPFv2 with multiple instances, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2	<p>Request you to change to</p> <p>" Support routing protocol : OSPFv2 with multiple instances, OSPFv3 or IS-IS , BGP, MP-BGP, and RIPv2"</p> <p>IS-IS and OSPF works on same algorithm. IS-IS protocol is used in service provider environment.IS-IS is a link-state routing protocol, operating by reliably flooding link state information throughout a network of routers. Like IS-IS protocol ,OSPF protocol uses Dijkstra's algorithm for computing the best path through the network. Packets (datagrams) are then forwarded, based on the computed ideal path, through the network to the destination.</p> <p>So for current requirement we can use OSPF instead of IS-IS protocol.</p>	No Change, As per RFP
358	Management switch	Volume-II> 1.8. Management switch >Clause no.5 > page no. 20	10. Support Secure Shell Version 2 (SSHv2), Telnet & SNMPv1, v2, and v3, NTP	<p>Please modify this clause to</p> <p>"Support Secure Shell Version 2 (SSHv2)/Telnet & SNMPv1, v2, and v3, NTP"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise</p>	Please See Revised Condition.

				network. Network administrator used SSH to access the switch.	
359	Management switch	Volume-II> 1.8. Management switch >Clause no.5 > page no. 20	11. Should protect against ARP and DHCP spoofing	<p>Please modify this clause to</p> <p>" Should protect against ARP/ gratuitous ARP/ Proxy ARP.</p> <p>Gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets.</p> <p>DHCP spoofing is required at the access switches where hosts are getting connected and getting the DHCP IP address. In Spine-Leaf deployment, in the management switch, no host will have dynamic DHCP IP address so DHCP snooping feature will not be required at leaf switch.</p>	No Change, As per RFP
360	Management switch	Volume-II> 1.8. Management switch >Clause no.6 > page no. 20	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	<p>Please modify this clause to</p> <p>"Should support REST API based integration with multi OEM hypervisor environment and should be able to configure network automatically while VM in created, using orchestration layer"</p> <p>REST API based integration support by orchestrator to integrate with different hypervisor.</p>	Please See Revised Condition.
361	Management switch	Volume-II> 1.8. Management switch >Clause no.7 > page no. 20	3. Switch should provide remote login for administration using Telnet, SSHV2, SSHv3	<p>Please modify this clause to</p> <p>"Switch should provide remote login for administration using Telnet/SSHV2, SSHv3"</p> <p>Telnet is not the secure protocol to access the switch. For security reason, telnet access will be block in the DC/enterprise network. Network administrator used SSH to access the switch.</p>	Please See Revised Condition.
362	Management switch	Volume-II> 1.8. Management switch >Clause no.9 > page no. 21	3. Interface statistics like CRC error	<p>Please modify this clause to</p> <p>"Interface statistics like CRC error or provide LLDP info"</p> <p>LLDP info Indicates whether the port is in Disabled, RX Only, TX Only, or RX & TX modes.</p>	No Change, As per RFP
363	Management switch	Volume-II> 1.8. Management switch >Clause no.11 > page no. 21	The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant.	<p>Please modify this clause to</p> <p>" The OEM should be in the Leader's quadrant of the Data Center and Cloud Networking in the latest Gartner Magic Quadrant /Wired and Wireless LAN access for last 3 years or IDC Worldwide Top 5 companies as per their revenue market share Report in switch"</p>	Clause Stands removed

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364	Management switch	Clause 3.11 bid price	The 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.	Bidder clarifies that price is quoted as per the solution required and any increase or decrease in quantity after final contract signing will be through change request process at mutually discussed price	No Change, As per RFP
365	Management switch	Clause 4.18.2 Statutory Deductions and Payment	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.	Bidder request to change payment term to 30 days from date of invoice and in case of delay payment will be release with 1% interest per month or part thereof. Interest is apart from other remedies available to bidder in case of delay or non payment.	No Change, As per RFP
366	Management switch	Clause 4.29 Performance Bank Guarantee of the Contract	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.	Bidder request to reduce BG amount to 3% of total contract value	No Change, As per RFP
367	Management switch	Section IV: Service Level Agreement (SLA), Penalties & Payment Terms	1.1. Implementation Timeline & Penalties	Bidder request to reduce maximum penalty to 10% of prescribed payment of each milestone	No Change, As per RFP
368	Management switch	1.2. Service Level Agreement & Penalties		Bidder request to cap SLA penalty to 10% of QP value for respective quarter.	No Change, As per RFP

369		1.2 Next Generation Firewall (Internet + DMZ) : 3 / Page 8	<p>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</p> <p>NGFW - Minimum 50 Gbps. Firewall throughput: 120 Gbps</p> <p>Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 100 Virtual System for future use.</p> <p>OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled</p>	<p>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</p> <p>NGFW - Minimum 50 Gbps.</p> <p>Virtual System: The Firewall must support minimum 25 virtual system/vrf and scalable upto 100 for future use.</p> <p>OEM has to provide publicly available document / OEM Legal Approved Test reports mentioning throughput with transaction size, traffic mix & security feature enabled.</p> <p>Justification : The ask is for NGFW firewall so requesting to consider only NGFW firewall throughput(not stateful or plain firewall) for consideration, hence requesting change. Virtual system doesn't ensure that CPU, Memory, and disk resources are dedicated to virtual context and doesn't provide complete separation of traffic processing and management.</p>	Please See Revised Condition.
370		1.2 Next Generation Firewall (Internet + DMZ) : 4 / Page 9	<p>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</p> <p>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</p>	<p>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</p> <p>6 x 10 G SFP+ 4 x 40G QSFP+ 4 x 100 G QSFP28 1 x 1G ports for out of band management</p> <p>Justification : Data Center Firewall does not typically require such port density count</p>	Please See Revised Condition.
371		1.2 Next Generation Firewall (Internet + DMZ) : 6 / Page 9	<p>Appliance should support atleast 5,50,000 new connections per second.</p>	<p>Appliance should support atleast 4,50,000 new connections per second with AVC/app-id enabled.</p> <p>Justification : NGFW differentiate from its predecessor that rules are define with application (micro/macro) instead of ports and hence it is important the new connections per second should be with AVC turned ON</p>	Please See Revised Condition.

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372		1.2 Next Generation Firewall (Internet + DMZ) : 11 / Page 10	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	Appliance should having min 2 x 32 core CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage & 1 TB of RAID1/5/6 storage for logging-related activities. Bidder may provide external Storage for this activities Justification; Different OEM require different size of storage and RAID type, we request you to allow bidder to architect their solution and while meeting the functional requirement and hence requested change	Please See Revised Condition.
373		1.2 Next Generation Firewall (Internet + DMZ) : 15 / Page 10	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	The solution should support the following File/Media Types for Malware identification: PDF, ZIP, 7Z, RAR, CAB, PKZIP, EXE, SCR, OCX, Java, Flash, MS office files. Justification : different OEM use different approach like AV or APT and hence requesting change for broader participation	Please See Revised Condition.
374		1.3 IPS / IDS : 4 / Page 11	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.	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 6 x 10 G SFP+ 4 x 40G QSFP+ 4 x 100 G QSFP28 1 x 1G ports for out of band management Justification : Data Center Firewall does not typically require such port density count	Please See Revised Condition.
375		1.3 IPS / IDS : 6 / Page 11	Appliance should support atleast 5,50,000 new connections per second.	Appliance should support atleast 4,50,000 new connections per second with AVC/app-id enabled. Justification : NGFW differentiate from its predecessor that rules are define with application (micro/macro) instead of ports and hence it is important the new connections per second should be with AVC turned ON	Please See Revised Condition.
376		1.3 IPS / IDS : 8.14 / Page 12	Solution must protect from DNS Cache Poisoning, and prevents users from accessing blocked domain addresses	Please remove the clause. Justification : For protection against DNS Cache Poisoning , org require dedicated dns security solution as resolvers need to validate the recursive dns request from them to upstream authorities.	No Change, As per RFP
377		1.3 IPS / IDS : 11 / Page 12	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	Appliance Should support more than 20,000 (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. Justification: Since IPS leverages signature to match against pattern, hence it is critical	No Change, As per RFP

				that solution should have high number of signature or extreme database	
378	1.3 IPS / IDS : 13 / Page 12	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	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	Appliance should having min 2 x 32 core CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage & 1 TB of RAID1/5/6 storage for logging-related activities. Bidder may provide external Storage for this activities Justification; Different OEM require different size of storage and RAID type, we request you to allow bidder to architect their solution and while meeting the functional requirement and hence requested change	Please See Revised Condition.
379	1.3 IPS / IDS : 16 / Page 12	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	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	The solution should support the following File/Media Types for Malware identification: PDF, ZIP, 7Z, RAR, CAB, PKZIP, EXE, SCR, OCX, Java, Flash, MS office files. Justification : different OEM use different approach like AV or APT and hence requesting change for broader participation	Please See Revised Condition.
380	1.11 SAN Switch - Page 24 - Point no 12	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	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	Request to remove this point ISL/Port-channel is the industry standard way of connecting 2 MDS switches with each other. Cascading is a proprietary technology and is not supported by all OEMs.	Please See Revised Condition.
381	1.11 SAN Switch - Page 24 - Point no 13	13. The switch should provide local switching feature with port to port latency of less than 800ns.	13. The switch should provide local switching feature with port to port latency of less than 800ns.	Request to remove this point as SAN Switch latency is not very important in overall storage performance. The purpose of a SAN is to carry SCSI or NVMe transactions between applications and storage. The most important performance measurement is the IO completion time of read and write transactions, not just frame switching latency. The fastest storage arrays in the market today claim the best-case response time of ~100 microseconds. But this is just the response time of the storage array, not the response time that the application sees. The end-to-end application response times include host storage IO stack, SAN and the storage arrays. In this end-to-end exchange of data, an additional switching latency of 1-2 microseconds does not cause any visible change in the application performance.	clause stands removed

382	1.11 SAN Switch - Page 25 -Point no 32	32. Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided	<p>Request to remove this point</p> <p>ISL/Port-channel is the industry standard way of connecting 2 MDS switches with each other. Cascading is a proprietary technology and is not supported by all OEMs.</p> <p>In addition ICL has inter-operability and reduced availability issues and hence Cisco doesnt recommend the same in Production Netowrks</p>	Please See Revised Condition.
383	Pg 75, clause : 1.4, Sr No: 5	<p>Monitoring - On Premise Systems</p> <ol style="list-style-type: none"> 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. 	<p>Change Request:</p> <p>Please modify the clause as follows:</p> <ol style="list-style-type: none"> 1. The solution should be able to provide SAAS Monitoring , Path Visualisation , Hop-by-hop metrics , BGP Route visibility and DNS monitoring for traffic upstream and downstream. 2. The solution should be able to provide insights into the device/ server Availability , Response Time and Throughput metrics, 3. The solution should be able to provide insights into the Packet Loss, Latency, Jitter changes at every hop along the network path, 4. The solution must include custom dashboarding and Alerting mechanism for above mentioned metrics. <p>Justification: It will provide End to end network monitoring, insights into network traffic beyond perimeter and will Ensure connectivity and availability between the DC and DR Visibility into traffic flow outside the DC to the Dr in failover</p>	No Change, As per RFP
384	Pg 75, clause : 1.4, Sr No: 4.2	Solution should support Micro Segmentation for the Virtualize and Non - Virtualize environment	<p>Change Request:</p> <p>Please modify the clause as follows: Solution should support Micro Segmentation for the Virtualize and Non - Virtualize environment. It must support segmentation of VM based attributes like hostname, OS, VM Tags</p> <p>Justification: Blocking east west lateral movement based on VM based attributes like hostname, OS, VM Tags in addition to IP attributes</p>	No Change, As per RFP
385	Pg 76, clause : 1.5, Sr No: 2.4	Latency - <1 micro second	<p>Change Request:</p> <p>Please modify the clause as follows:</p> <p>Latency - < 3 microseconds</p> <p>Justifications: generally 1 micro second latency (ULL) required for trading and exchange requirements. Since this requirement is not for that purpose so request to modify latency as 3 micro seconds</p>	Please See Revised Condition.

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386	Pg 78, clause : 1.6, Sr No: 2.4	Latency - <1 micro second	Change Request: Please modify the clause as follows: Latency - < 3 microseconds Justifications: generally 1 micro second latency (ULL) required for trading and exchange requirements. Since this requirement is not for that purpose so request to modify latency as 3 micro seconds	Please See Revised Condition.
387	Pg 80, clause : 1.7, Sr No: 2.4	Latency - <1 micro second	Change Request: Please modify the clause as follows: Latency - < 3 microseconds Justifications: generally 1 micro second latency (ULL) required for trading and exchange requirements. Since this requirement is not for that purpose so request to modify latency as 3 micro seconds	Please See Revised Condition.
388	Pg 82, clause : 1.8, Sr No: 2.2	Total aggregated system throughput minimum 2.4 Tbps	Change Request: Please modify the clause as follows: Total aggregated system throughput minimum 2.16 Tbps Justification: With 48 x10G, maximum throughput requirement would be $(48 \times 10G + 6 \times 100G) \times 2 = 2.16 \text{Tbps}$	Please See Revised Condition.
389	Pg 82, clause : 1.8, Sr No: 2.4	Latency - <1 micro second	Change Request: Request to modify the clause as follows: Latency - < 3 microseconds Justifications: generally 1 micro second latency (ULL) required for trading and exchange requirements. Since this requirement is not for that purpose so request to modify latency as 3 micro seconds	Please See Revised Condition.
390		solution should provides best-in-class servers, networking, and storage from industry-leading vendors in a single optimized computing system that is centrally managed from one OEM	Change Request: Please add the clause in RFP: Justifications: Considering large scale for IO and storae and manageability requirement converge stack is needed .	Not Accepted
391	Pg 88, clause : 1.12, Sr No: 16	Solution should have the ability enforce policies, track and report non-conformance.	Change Request: Please modify the clause as follows: should have ability to enforce policies/track/report non-compliance Justifications: solution should provide non-compliance	No Change, As per RFP

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392	Pg 88, clause : 1.12, Sr No: 27	Solution should be able to provide logs with date and time stamp along with the user details pertaining to configuration level changes.	Change Request: Please modify the clause as follows: should be able to provide logs accessed through the cloud platform Justifications: Solution to provide all operational logs through the single console.	No Change, As per RFP. Require Cloud solution audit trail like mechanism
393	Pg 88, clause : 1.12, Sr No: 28	Solution should support all OS level clustering (e.g. Windows, RedHat, Ubuntu, CentOS etc)	Change Request: Please modify the clause as follows: OS clustering is feature of OS/Virtualization platform	Please See Revised Condition.
394	Pg 88, clause : 1.12, Sr No: 39	Solution should be able to provide accounting and auditing of all the changes, resource utilization and reports on demand and periodically.	Change Request: Please modify the clause as follows: Solution should be able to provide resource utilization and reports on demand and periodically. Justifications: Accounting and auditing already covered in previous specs	No Change, As per RFP
395	Pg 88, clause : 1.12, Sr No: 40	Solution should provide Observability Stack - Automated log collections, Infrastructure monitoring (Active & passive) & alerting on the UI / Dashboard.	Change Request: Please modify the clause as follows: Solution should provide Observability Stack - Infrastructure monitoring (Active & passive) & alerting on the UI / Dashboard. Justifications: Observability stacks covers everything pertaining to operation req.	Please See Revised Condition.
396	Pg 89, clause : 1.12, Sr No: 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.	Change Request: Please modify the clause as follows: Solution should provide Observability Stack to provide the on demand and periodic reports for cloud resource utilization trend to reduce the meantime to resolve the issue & support the capacity & risk management.	Please See Revised Condition.
397		solution should create a more reliable, productive IT environment. It should enable for future-proof enterprise applications with cloud-connected workflows to provide a seamless data center transformation	Change Request: Please add the clause in RFP: Justifications: Solution should benefit and help IT to be more reliable and productive	Not Accepted
398		Compute should be High-speed, PCIe-based fabric topology which should provide extreme flexibility	Change Request: Please add the clause in RFP: Justifications: It should support AI/ML application	Not Accepted
399		The solution should support strong multi DC management strategy, managing DC, DC HA, DR* resources from single console. The tool should support for a range of public cloud platforms for future	Change Request: Please add the clause in RFP: Justification same solution should support multi-DC and multicloud environment	Not Accepted

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400			The solution should provide a cloud-independent application profile, which defines deployment and management requirements for the application stack, which abstracts the unique aspects of the environment and provisions infrastructure and deploys and configures application components in a way that is optimized for that environment's infrastructure and cloud services.	Change Request: Please add the clause in RFP: Justification It is help to automate the deployment on-prem and cloud as well	Not Accepted
401			The solution should provide facility to create an application profile in a portable and cloud-independent format with a simple, visual, drag-and-drop topology modeler using a library of ready-to-use or customized services, images, and containers	Change Request: Please add the clause in RFP: Justification It is help to automate the deployment on-prem and cloud as well	Not Accepted
402			The solution should deliver a full lifecycle approach to application deployment and management on any cloud. The solution should be designed to optimize work streams and provide users with the power of self-service on-demand deployment while reducing the need to understand the nuances of the underlying cloud environment.	Change Request: Please add the clause in RFP: Justification It empower operation team and provide full lifecycle visibility and self service features	Not Accepted
403			The solution should support for VMWare, open Stack , Amazon AWS, Google Cloud , Microsoft Azure* for future	Change Request: Please add the clause in RFP: Justification It gives customer to flexibility for On-prem or cloud.	Not Accepted
404			Ability to orchestrate third-party Monitoring and alerting tools via API	Change Request: Please add the clause in RFP: Justification It would facilitate third party integrations for operational requirement.	Not Accepted
405			Ability to integrate with industry standard authentication and authorization technologies such as SAML and the ability handle roles rather than user accounts for access to shared (team) resources and granular access to images	Change Request: Please add the clause in RFP: Justification This is required for security compliance	Not Accepted
406			The solution should be an agentless architecture which should provide full stack visibility & control being Application, network, storage, cloud aware	Change Request: Please add the clause in RFP: Justification solution should be technology agnostic and should work on multi-oem platform	Please See Revised Condition.
407			The proposed solution should understand the Optimal or Desired state of health for the environment and dynamically provide accurate automatable recommendations the Decision Analysis	Change Request: Please add the clause in RFP: Justification It would provide predictive analysis and automated recommendations.	Not Accepted
408			The solution should provide vertical and horizontal scaling of workloads and	Change Request: Please add the clause in RFP:	Already mentioned in RFP

			automate provisioning of infrastructure resources.	Justification It is needed for scaling	
409			The solution should provide what if capacity planning functionality to assist in decision making to right-size virtual workloads to assure application performance without over-allocating resources	Change Request: Please add the clause in RFP: Justification solution should provide module for effective planning considering future roadmap.	Already mentioned in RFP
410		1.1. WAN & Internet Router Page 69 of 96	Chassis based Router in nature which should support Software Defined Network (SDN). Device should support termination of internet link or WAN (Intranet) links	Request you to modify the clause as follows as modular router is not required. All the interfaces are being asked from day 1: Router should support Software Defined Network (SDN). Device should support termination of internet link or WAN (Intranet) links	No Change, As per RFP
411		1.1. WAN & Internet Router Page 69 of 96	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-8GBDRAM 5. Storage - 8 GB 6. Console Port - RJ45, usb/microusb for management	The router would connect over 40G to downstream switch and 10G ports will be used for WAN link termination. Request you to reduce the number of 10G interfaces asked and the throughput desired to 175Gbps as it would easily meet the current and future requirements. Request you to modify the clause as follows: From Day1 Router Should Have: 1. Port - 8 x 10 G with fully populated SFP+ 2. Uplink Ports - 4 x 40 G populate optics with SFPS 3. Aggregated throughput - 175 Gbps 4. RAM-8GBDRAM 5. Storage - 8 GB 6. Console Port - RJ45, usb/microusb for management	No Change, As per RFP
412		1.1. WAN & Internet Router Page 69 of 96	Other Functionality: 1. Should have hot swappable power supplies, Fans, processor/controller card for 1+1 redundancy	The WAN and Internet Routers are already asked in High Availability. Redundant processor and controller card in each router is not required as it would increase the overall cost of the solution. Please modify the clause as follows: Other Functionality: 1. Should have hot swappable power supplies, Fans, for 1+1 redundancy	No Change, As per RFP
413		1.1. WAN & Internet Router Page 69 of 96	In case the primary route processor fails on the router, there should be ZERO packet loss on the whole router for the traffic	The WAN and Internet Routers are already asked in High Availability. Redundant processor and controller card in each router is not required as it would increase the overall cost of the solution. Request you to please delete this clause.	No Change, As per RFP
414		Page no 63 Clause 1.1.2	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.	Request you to check with OEMs on perpetual and/or Subscription license as many OEM does not support perpetual license.	As per RFP. For Cloud solution see corrigendum
415		Page no 63 Section II: Scope of Work, 1.1.8	The architecture needs to be scalable to meet future demand.	Request you to kindly clarify the Period to be consider for the Scalability	Till the Tenure of contract

Request for Proposal Vol-II Scope of Work

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416		Page no 65, Section II: Scope of Work, 1.1.24	The bidder needs to provide a comprehensive, on-site training on deployed solution to the team nominated by DST/GIL, GoG.	We understand that the training has to be provided only once. Please clarify.	Understanding is correct
417		Page no 95, Section IV: Service Level Agreement (SLA), Penalties & Payment Terms, 1.1. Implementation Timeline & Penalties:	Delivery of Components (Hardware, Software, License, etc.) - 8 Weeks Installation and Commissioning - 8 weeks	Request you to kindly extend the timelines to - For Delivery 12 weeks. For Installation and Commissioning 12 weeks.	Please See Revised Condition.
418		Page no 64 clause no 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	Please clarify for which solution/component migration is expected. Also specify the role and scope of migration.	Details will be shared with successful bidder
419		Page # 5 Section II – Eligibility Criteria point # 3	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).	Request GIL to consider the financial details for (FY 2018-19 , 2019-20 & 2020-21) or consider the provisional balance sheet for FY 2021-22 since Auditing is going on for FY 2021-22.	No Change, As per RFP
420		Technical Evaluation Matrix (Max Marks -100) Point # 1 pg # 7	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	The min. turnover asked here is 500 Cr hence requesting you to consider below markings. < 600Crores = 5 Marks > 600 to <=800 Crores = 10 > 800 and <=1000Crores = 15 Marks	No Change, As per RFP
421		General Query		Who will load the application in Near & Far DR sites and how long GIL will take to complete the application for same.	Details will be shared with successful bidder
422		General Query		What is the current site readiness status.	Details will be shared with successful bidder
423		General Query		Are the required racks, cable trays already in place.	No Change, As per RFP
424		General Query		How many network port are required per rack.	No Change, As per RFP
425		General Query		Will each rack have two leaf switches for HA.	No Change, As per RFP
426		General Query		Is there any dark fiber / L1 circuit kind of links between all the 3 DCs for replication / backup.	No Change, As per RFP
427		General Query		Will new network devices part of this tender @ DC & Near DR will replace the existing devices or will they both co-exists.	Replace and then co-exist
428		General Query		What Kind of applications does GoK has like web based applications or client & server based applications.	Details will be shared with successful bidder
429		Page No. 41 / 3	Full support towards migration to IPV6 for the GSWAN network by studying, planning, designing and recommending the migration path and methodology.	What role will be play in GSWAN migration to IPV6.	Clause stands removed

430		Page No. 64 / 1.1.22.2	Successful 1 DR Drill of selected application by the Tenderer on the proposed DR sites	Does GoG already have DR. If NO, how will be the DR application tested, as both DC & DR applications cannot have same IPs.	No Change, As per RFP
431		Page No. 64 / 1.1.22.2	Successful 1 DR Drill of selected application by the Tenderer on the proposed DR sites	Will DR drill be executed with all the 3 sites (DC, Near DR & Far DR)	No Change, As per RFP
432		Page No. 64 / 1.1.22.2	Successful 1 DR Drill of selected application by the Tenderer on the proposed DR sites	How quickly will the DR drill be conducted after completion of SITC	No Change, As per RFP
433		Page No. 64 / 1.1.22.2.3	Drills to be conducted for applications selected by Tenderer which could simulate the failure of all systems.	How many applications will be tested during the DR drill.	Details will be shared with successful bidder
434		Page No. 64 / 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.	What will be the duration of DR drill.	Details will be shared with successful bidder
435		page no 66 Boq	Boq	No Network and compute asked in Near DR Site , how will the DR build	No Change, As per RFP
436		page no 66 Boq	Boq	As per our understanding we have to size the passive and Rack , is there any compliance requirement for that.	perforated 42U Rack (Max Width:600 mm, Max height: 1991 mm, Max Depth: 1000mm) with with iPDU
437		page no 66 Boq	Boq	You have not asked TOR switches for Compute (DC, NEAR DR) , can we assume that ports are available for connectivity.	No Change, As per RFP
438		1.5. Core-Spine Switch, Page 76, Clause 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	Request to remove this clause, as this is proprietary feature. Data Center Leaf and Spine Architecture is based on distributed Control Plane, and Tenant segmentation is achieved using VRF. Hence this feature would not be required.	Please See Revised Condition.
439		1.6. Leaf – Border, Page 80, Clause 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	Request to remove this clause, as this is proprietary feature. Data Center Leaf and Spine Architecture is based on distributed Control Plane, and Tenant segmentation is achieved using VRF. Hence this feature would not be required.	Please See Revised Condition.
440		1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48), Page 80, Clause 2	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	Request to modify this clause to have min 8* 100 Uplink ports. For 48*10/25 G the access Port bandwidth is 1.2 Tbps and Uplink of 6*100 will be only 50% of Input bandwidth. Also there will be no spare ports available. Having Min. 8*100 G uplink will give Uplink bandwidth of 800 G, which is a good subscription ratio. Hence request to modify this clause to have 8*100 G uplink ports	No Change, As per RFP
441		1.7. Leaf switch (FC-10G-48) and Layer 3 Switches (FC-10G-48), Page 81, Clause 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	Request to remove this clause, as this is proprietary feature. Data Center Leaf and Spine Architecture is based on distributed Control Plane, and Tenant segmentation is achieved using	Please See Revised Condition.

			there should not be any interference of traffic of one zone into others	VRF. Hence this feature would not be required.	
442		1.8. Management switch, Page 82, Clause 2	Latency - <1 micro second	This is Copper switch, which as Technology has longer Port to Port Latency. Request to make Latency of Less than or Equal to 3 micro second	Please See Revised Condition.
443		1.8. Management switch, Page 83, Clause 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	Request to remove this clause, as this is proprietary feature. Data Center Leaf and Spine Architecture is based on distributed Control Plane, and Tenant segmentation is achieved using VRF. Hence this feature would not be required.	Please See Revised Condition.
444		Solution should symmetric active-active multi-controller scale-up and scale-out architecture.(Clause 1.13,page29,SR #2)	Solution should symmetric / asymmetric active-active multi-controller scale-up and scale-out architecture. The proposed array should support Block, File (NFS, NFS4.1, CIFS/SMB3) data services natively/ or with add-on NAS header / gateway / appliance in HA & should be running speialized OS & File system owned by storage OEM for development & bug fixes.	We understand that GIL is considering to procure the best (performance and price) storage product across all available products for which abelow technical fatures are considered - (1) - Storage constrollers should actively take part in performance and capacity, (2) Storage controllers should have resiliency to tolerate the failure of one or more controllers.Proposed technologies from NetApp can meet the performance, capacity, resilliency as asked in RFP. If NAS header / gateway is offered the general pupose OS & File systems should not be offered as general pupose OS & File systems are not meant for storage resilliency performance and their bug fixes and develpment are not in control of storage OEM.	no Change, As per RFP
445		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.(Clause 1.13,page29,SR #2)	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.	We understand that GIL wishes to have solution with NoSPOF and NetApp offers the solution with noSPOF, Backplane is passive components and does not lead to failure.	no Change, As per RFP

446		<p>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 also support SCM (Storage Class Memory) (Clause 1.13,page29,SR #3)</p>	<p>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 also support SCM (Storage Class Memory)</p>	<p>NetApp will be able to offer the performance alongwith reliability, availability & serviceability on the offered technologies as envisaged in this RFP. SCM are not widely accepted by major storage OEMs and customers due to its limited availability by one specific Principal OEM.</p>	<p>no Change, As per RFP</p>
447		<p>Each storage Controller should be supplied with min 512 GB Cache and solution's total cache should be minimum 4 TB and expandable upto 6 TB of Cache, which should be available to all LUNs /Devices across all controllers 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.(Clause 1.13,page29,SR #6)</p>	<p>Each storage Controller should be supplied with min 512 GB Cache and and expandable upto 6 TB of Cache, which should be available to all LUNs /Devices across all/ owner controllers as a single unit. Cache should be dynamically used for Read and Write operations. Mirrored cache/ write cache protection to prevent data in the event of power failure.</p>	<p>As per RFP each controller is asked with 512 GB memory and total of 4 controllers are asked, which makes to 2 TB of memory. cache with write IO protection should be asked for data integrity protection mechanism. Netapp offers write cache protection with NVRAM technology which not only protects write cache data but also optimizes the memory used for user data by offering more cache availability. The existing clause is limiting factor and allows only one technology/type of OEM to participate, we request GIL to consider the functional requirement which is write IO protection.</p>	<p>no Change, As per RFP</p>

448	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)(Clause 1.13,page29,SR #7)	Storage array cache shall be globally shared / federated and mirrored across controllers/ write cache protection across controller HA pair 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)	We understand that GIL is considering to procure the best (performance and price) storage product across all available products for which below technical features are considered - (1) - Storage controllers should actively take part in performance and capacity, (2) Storage controllers should have resiliency to tolerate the failure of one or more controllers. Proposed technologies from NetApp can meet the performance, capacity, resiliency as asked in RFP. We request GIL to consider the functional requirement which is resiliency & performance.	no Change, As per RFP
449	Disk Drives - Dual ported NvME SSD drive, if compatible with SAS and NL-SAS , it is preferable.(Clause 1.13,page29,SR #8)	Disk Drives - Dual ported NvME SSD drive, if compatible with SAS and NL-SAS , it is preferable.	All OEM have separate product series for all Flash & hybrid.	no Change, As per RFP
450	Raid Level - 5/6 or equivalent Group of Raid may limited to 10 (Clause 1.13,page29,SR #10)	Storage should be offered with minimum dual disk protection in a RAID group.	GIL is looking for storage which should meet the performance, capacity, scalability & resiliency as envisaged in RFP. We suggest to allow OEMs to follow their best practices to meet the desired performance , capacity, resiliency & scalability. We request GIL to consider the functional requirement.	no Change, As per RFP
451	Number of Volume / LUN Supported for Remote Replications - 6000(Claue 1.13,page30,SR #18)	Number of Volume / LUN Supported for Remote Replications – 2000	With the latest technologies the LUN of as big as 100 TB can be carved out which allows the less qty of LUNs for replication. Earlier the LUNs use to be of smaller size so large qty of LUNs were required for replication. So we suggest to reduce it to 2000. Also 6000 LUNs for replication support may favor a particular OEM.	no Change, As per RFP

452		<p>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.(Clause 1.13,page30,SR #20)</p>	<p>Solution should having De-Duplication functionality min 2.5 x, Inline, hardware/software 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.</p>	<p>We understand that GIL is looking for de duplication functionality without having performance impact, NetApp supports de duplication with no performance impact. We request GIL to consider functional requirement which is de duplication with no performance impact and kindly allow all technologies available to achieve same functionality. The exiting clause is limiting factor.</p>	<p>no Change, As per RFP</p>
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453		<p>Solution should provide a Web and Mobile App based interface of Management software with Dashboard with minimum features of:</p> <ol style="list-style-type: none"> 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(Clause 1.13,page30,SR #23) 	<p>we request to modify as "Solution should provide a Web based interface of Management software with and Mobile App-Dashboard with minimum features of:</p> <ol style="list-style-type: none"> 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 7. Mobile app for management and monitoring. 	<p>Please share the more details on the features required at mobile app, as mobile app always has limited features as compared to full web GUI for management</p>	<p>Mobile App related functionality Not Asked</p>
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454		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. Data movement within the array from Front-End module to Cache to backend to Flash/NVMe drives be protected with T10-DIF.(Clause 1.13,page30,SR #24)	Proposed storage should be designed to store and retrieve data without any possibility of silent data corruption, it should comply to NVME Data Integrity standards / equivalent . Data movement within the array from Front-End module to Cache to backend to Flash/NVMe drives be protected with NVME Data Integrity standards / equivalent	T10 is SCSI standard not applicable on NVME. We suggest to change this to NVME data integrity protection or equivalent mechanism ensuring that there is no silent data corruption for storage. This clause is limiting factor and does not allow many OEM even if they are able to offer required functionality, we request GIL to consider functional requirement.	no Change, As per RFP
455		Solution should have 3 site DC-DR-Near DR replication and all required licenses for same needed to be provided by bidder(Clause 1.13,page30,SR #30)	Solution should have 3 site DC-DR-Near DR replication and all required licenses for same needed to be provided by bidder. The offered storage should support DR to cloud natively or with add on software for total capacity offered with minimum 3 different CSP/hyperscalers listed in MeITY. If bidder does not support DR to cloud natively then they should offer require software and hardware for entire capacity of storage for both file & block data. The license and required software and hardware should be offered from day one.	DR to cloud is the future and storage solution should be ready for future technology	no Change, As per RFP
456		Additional Point under 1.14. Unified Storage (NAS+SAN), page 30	Additional Point to be incorporated	1. The solution shall support native storage-based replication/data movement software for the full supported capacity of the system for data of our existing unified storage solution. To provide the licenses for maximum supported capacity of the proposed storage for asynchronous replication/ Data movement between existing DC to new proposed solution.'	Not Accepted
457				Proposed storage system should support local and remote replication/data movement for both file & block.	Not Accepted
458				For optimal usage of bandwidth and to reduce operating expenses remote replication/ data movement software should provide compression and entire data (Block and File) must be replicated without rehydrating the data before sending on WAN link, any additional hardware or software required to achieve the same should be provided along with solution.	Not Accepted

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459				The supplied solution should offer Object storage i.e. solution should offer NAS, SAN, Object storage S3 and should integrate with private/public cloud for asked protocols.	Not Accepted
460				The storage should support scaling up to 12 controllers in same storage as scale out architecture so that all controllers participate as active-active for both capacity and performance as single storage. It should be possible to create single file system from all controllers	Not Accepted
461	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	The OEM should be in the Leader's quadrant of the Network Firewalls in the Gartner Magic Quadrant from last 3 years	no Change, As per RFP
462	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	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	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, Sandboxing and Application Control, file blocking and logging enabled considering 64 KB Transaction size	Please See Revised Condition.
463	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	Firewall throughput: 120 Gbps	One OEM Specific this point should be removed or made optional	Clause stands removed
464	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 100 Virtual System for future use	Virtual System: The Firewall must support minimum 25 virtual system and scalable upto 65 Virtual System for future use	Please See Revised Condition.
465	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	4 x 1G SFP 8 x 10 G SFP+ 4 x 40G QSFP+ 4 x 100 G QSFP28	4 x 1G SFP 8 x 10 G SFP+ 4 x 40G QSFP+ / 100 G QSFP28	Please See Revised Condition.
466	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	Appliance should support atleast 32 Million concurrent sessions	Appliance should support atleast 32 Million concurrent Layer 4 sessions or at least 5 million concurrent Layer 7 sessions	no Change, As per RFP

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467	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	Appliance should support atleast 5,50,000 new connections per second.	Appliance should support atleast 5,50,000 new Layer 4 connections per second or minimum 3,70,000 new Layer 7 sessions per second	Please See Revised Condition.
468	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	The appliance should support comprehensive threat prevention security features including Antivirus, Anti Spam, Anti Bot etc from day one.	Please remove Anti-Spam	Anti-spam stands removed
469	Firewall	Request for Proposal Vol-II Scope of Work / 1.2 Next Generation Firewall (Internet + DMZ)	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.	Please change this clause as "Appliance should having min 32 cores CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage. Bidder may provide external Storage for this activities "	Please See Revised Condition.
470	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	The OEM should be in the Leader's quadrant of the Network Firewalls in the Gartner Magic Quadrant from last 3 years	Please See Revised Condition.
471	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 50 Gbps.	Appliance performance should be minimum real world/Enterprise mix traffic/Production mixed traffic IPS throughput should be min. 50 Gbps considering transaction size of 64 KB.	no Change, As per RFP
472	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	4 x 1 G SFP 8 x 10 G SFP+ 4 x 40G QSFP+ 4 x 100 G QSFP28	4 x 1G SFP 8 x 10 G SFP+ 4 x 40G QSFP+ / 100 G QSFP28	Please See Revised Condition.
473	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	Appliance should support atleast 32 Million concurrent sessions	Appliance should support atleast 32 Million concurrent Layer 4 sessions or at least 5 million concurrent Layer 7 sessions	no Change, As per RFP
474	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	Appliance should support atleast 5,50,000 new connections per second.	Appliance should support atleast 5,50,000 new Layer 4 connections per second or minimum 3,70,000 new Layer 7 sessions per second	Please See Revised Condition.
475	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	The appliance should support comprehensive threat prevention security features including Antivirus, Anti Spam, Anti Bot etc from day one.	Please remove Anti-Spam	no Change, As per RFP
476	IPS	Request for Proposal Vol-II Scope of Work / 1.3 IPS	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.	Please change this clause as "Appliance should having min 48 cores CPU , Minimum to 128 GB of RAM, 450 GB SSD for internal storage. Bidder may provide external Storage for this activities "	Please See Revised Condition.

477		Eligibility Criteria / 5	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.	Bidder must have average annual turnover of at least Rs. 100 crores for any three of last four audited financial years as on bid submission date. AND Average Annual Turnover of at least Rs. 25 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.	no Change, As per RFP
478		Eligibility Criteria / 5	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	Bidder Should have executed on premises Data Center/ on premises Disaster Recovery related work order of minimum one work order value of 80 Cr or two order of value 50 Cr in the last three financial years as on bid submission. Or Three order of value 40 Cr in the last three financial years as on bid submission All work orders / contracts should be in the name of the bidder	no Change, As per RFP
479		Eligibility Criteria / 5	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	The bidder must have positive net worth of INR 20 Cr and should be Profit making in any three of last four audited financial years as on 31st March, 2022	no Change, As per RFP
480		Technical Evaluation / 6	Average annual turnover of Bidder for three of last four audited financial years (2018-19, 2019- 20, 2020-21, 202122). As on submission date. >500 to <=800 Crores = 5 Marks >800 and <=1000Crores = 10 Marks Above 1000 Crores = 15 Marks	Average annual turnover of Bidder for three of last four audited financial years (2018-19, 2019- 20, 2020-21, 202122). As on submission date. >100 to <=120 Crores = 5 Marks >121 and <=150 Crores = 10 Marks Above 150 Crores = 15 Marks	no Change, As per RFP
481		Technical Evaluation / 6	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	if SOW to setup Multilocation (geographically Serepared) DCs / DR in single Project; Please Consider a Location as a Project.	Please See Revised Condition.
482		Technical Evaluation / 6	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	Same As above	no Change, As per RFP
483		1.10. FCIP Router	Pt no 1.10 (FCIP Router) Sr no 7	The license offered should include features such as IVR, multiple tunnels/ trunking and Port channeling	Please See Revised Condition.
484		1.10. FCIP Router	Pt no 1.10 (FCIP Router) Sr no 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	No Change, As per RFP. Not virtual environment of switch

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				and low priority QOS zones to expedite high-priority traffic	
485		1.11 SAN Switch	1.11 (SAN Switch) Sr no 32	Switch should be provided with ICL or equivalent technology compatibility and required license for the same to be provided	Please See Revised Condition.
486		1.11 SAN Switch	General	General	Link speed between DC and Near DR will be 1 Gbps
487		1.13.Minimum Specification for All Flash NvME Storage:	1.13.Minimum Specification for All Flash NvME Storage:	Point-10. Raid Level - 5/6 or equivalent Group of Raid may limited to 10	no Change, As per RFP
488		1.13.Minimum Specification for All Flash NvME Storage:	1.13.Minimum Specification for All Flash NvME Storage:	Point-19. Storage should be provided with all virtualization licenses	no Change, As per RFP
489		1.13.Minimum Specification for All Flash NvME Storage:	1.13.Minimum Specification for All Flash NvME Storage:	27. Data Migration from Existing Storage to new Storage	Migration should be with zero data loss
490		Section II - Eligibility Criteria - page 5 - Criteria No. 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.	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 7 years as on bid submission date. (Business interruption/loss due to Pandemic situation -Covid 19 for 2 Years)	Please See Revised Condition.
491		Section II - Eligibility Criteria - page 5 - Criteria No. 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	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 in the last Seven Years 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 Seven financial years as on bid submission. All work orders / contracts should be in the name of the bidder	Please See Revised Condition.

492		Section II - Eligibility Criteria - page 5 - Criteria No. 5	<p>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 <u>the last Five (5) years in India</u></p> <ul style="list-style-type: none"> · 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. 	<p>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.</p> <ul style="list-style-type: none"> · 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. <p><u>Bidder's experience of setting up Two on Premise DCs which works as DC as well as DR for the other DC will be considered.</u></p>	Please See Revised Condition.
493		Section II - Eligibility Criteria - page 5 - Criteria No. 5	<p>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</p> <ul style="list-style-type: none"> · Bidder's in house data centres shall not be considered. · <u>Bidders who have built their own Internet Data Centre (IDC) for commercial use will be considered.</u> 	<p>Kindly clarify that the highlighted clause can also include the IDCs set up for hosting DC/DR services for Companies located outside India i.e.the Global/Multi National Companies and are eligible for consideration. -</p> <p>Attachment: 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 should be in the name of the bidder and clearly mention the scope of work. <u>A Certification of Confirmation from Company Secretary /Chartered Accountant in this regard if there are restrictions to share the P.O. copies on account of confidentiality clause restrictions.</u></p>	No Change, As per RFP
494		Section II - Eligibility Criteria - page 5 - Criteria No. 7	<p>On premise Cloud solution must have been implemented at Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the <u>last five years</u> as on Bid submission date.</p>	<p>On premise Cloud solution must have been implemented at Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the <u>last Seven</u> years as on Bid submission date. (Business Interruption due to Covid 19 for 2 Years)</p>	Please See Revised Condition.
495		Technical Evaluation Matrix - Page 6 - Criteria 1	<p>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.</p> <p>>500 to <=800 Crores = 5 Marks >800 and <=1000Crores = 10 Marks Above 1000 Crores = 15 Marks -</p> <p>Documents Required - 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). Maximum Points - 15</p>	<p>Please clarify that the financials of the Parent Company will be considered if the Parent Company is into Same/Similar kind of Business for marking purpose.</p>	No Change, As per RFP

496	Technical Evaluation Matrix - Page 6 - Criteria 3	<p>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.</p> <p>2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks</p> <p>Documents Required: 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. Maximum Points - 15</p>	<p>On premise Cloud solution must have been implemented at Minimum two locations/Projects for Central / State Gov, PSU, BFSI in India during the last Seven years as on Bid submission date. (Business Interruption on account of Covid 19 (Panademic) for 2 years)</p> <p>2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks</p> <p>Documents Required: 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. Maximum Points - 15</p>	Please See Revised Condition.
497	3.10- Contract Obligations - Page 11	<p>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.</p>	<p>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 signing the Agreement 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.</p>	No Change, As per RFP
498	Section - IV- General Conditons of the Contract - 4.3- Patent Rights- Page 17	<p>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.</p>	<p>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 excluding the infringement on the products by OEM or 3rd Party branded products</p>	No Change, As per RFP
499	Section - IV- General Conditons of the Contract - 4.10- Patent Rights- Page 18	<p>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:</p> <p>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</p> <p>4.10.2 If the Selected agency fails to perform any obligations under the contract</p>	<p>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:</p> <p>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 post exercise of Risk purchase clause (Clause no. 4.45 in page no. 36) OR</p> <p>4.10.2 If the Selected agency fails to perform any material obligations under the contract</p>	No Change, As per RFP
500		Termination for default -Additional Clause	<p>if the Purchaser fails to make the payment to the Bidder/Selected Agency in a manner stipulated in clause no. 4.18.2 (Page 21) Statutory Deductions and Payments-Bidder may opt for suspending the project after 90 days from the Due date of the Invoice till the time payment is released.The Bidder/Selected Agency may terminate the Agreement if the payment is not released beyond 120 days from the due date of the Invoice.</p>	No Change, As per RFP

501	Section - IV- General Conditons of the Contract - 4.12- Force Majeure- Page 20	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.	4.12.7 - 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 Twenty One 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.	No Change, As per RFP
502	Section - IV- General Conditons of the Contract - 4.18- Statutory Deductions and Payments- Page 21	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.	4.18.2 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 <u>immediately on getting the clarifications.</u> In case of Payment delay, MSI is eligible for a Late Payment Interest fee @ 18% p.a. on the invoice value from the due date of the invoice till the date of actual realization of payment.	No Change, As per RFP
503	Section - IV- General Conditons of the Contract - 4.20- Insurance- Page 22	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.	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. <u>Tenderer will provide the Depreciated values immediately to the to facilitate the insurance on the existing assets/inventory.</u>	No Change, As per RFP
504	Section - IV- General Conditons of the Contract - 4.24- Limitation of Liability- Page 23	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.	The Bidder/Selected Agency shall not be liable to the Tenderer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser. b) Bidder's cumulative liability for direct damages under or in connection with this agreement for all claims, whether in contract, indemnity, tort or otherwise, shall not exceed the charges payable in 12	No Change, As per RFP

				months immediately preceding the cause of action (i.e., the Annual Contract Value); and the bidder shall not be liable for incidental, consequential, or indirect damages or any economic losses including loss of profit or saving.	
505		Section - IV- General Conditons of the Contract - 4.40- SLA Monitoring- Page 31	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.	4.40.1 - 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 <u>post discussions and Agreement with the Selected Agency on the changes in the measurement points and methodologies.</u>	No Change, As per RFP
506		Section IV: Service Level Agreement (SLA), Penalties & Payment Terms - Page 33	1.1. Implementation Timeline & Penalties: Measurement - Kick-off meeting - Target - 2 weeks from issuance of Lol/ Award of Contract - Penalty for Delay: Rs 50,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may terminate the contract and Forfeit the PBG.	Measurement - Kick-off meeting - Target - 2 weeks from the date of signing the Agreement - Penalty for Delay: Rs 50,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may terminate the contract and Forfeit the PBG.	No Change, As per RFP
507		Section IV: Service Level Agreement (SLA), Penalties & Payment Terms - Page 33	New Clause	1.2. Service Level Agreement & Penalties - Notwithstanding anything stated anywhere in the RFP, The maximum penalty cap for the above is at 10% of the value of the equated Quarters.	No Change, As per RFP
508		Section III- Instruction to Bidders - 3.4 - Page 15	Award of Contract: 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	Award of Contract: 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 to the extend of 20% without any change in Bid rate or other terms and conditions	No Change, As per RFP
509		Section - IV- General Conditons of the Contract - 4.6- Change Order- Page 17	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	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. However it is subject to discussion and mutual agreement with the bidder.	No Change, As per RFP
510		Section - IV- General Conditons of the Contract - 4.17- Backup Support- Page 21	Backup 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	Backup 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	No Change, As per RFP

			maintenance support required by TENDERER or that agency, and shall continue to make available the spare parts.	maintenance support required by TENDERER or that agency, and shall continue to make available the spare parts till <u>the time of Completion of Contract or Termination of the Contract as per Clause no. 4.10 in the RFP.</u>	
511		Section - IV- General Conditons of the Contract - 4.19- Taxes & Duties - Page no. 22	New Clause	Any cost of levies, Taxes, duty and any increase or decrease in the rates of the applicable taxes or any new levy on account of changes in law shall be to the account of Tenderer	No Change, As per RFP
512		Section - IV- General Conditons of the Contract - 4.22- Inspection & Testing - Page no. 22	Inspection and Testing (in case of replacement/new procurement, suggested by bidder as part of O&M solution) - Clause no. 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.	Inspection and Testing (in case of replacement/new procurement, suggested by bidder as part of O&M solution) - Clause no. 4.23.2-Any deviation found in the specification of the delivered equipments after inspection from the tender specifications will lead to the rejection of the delivered equipment and should be repaired/replaced within the delviery timelines failing which it may lead to termination for default mentioned in clause no. 4.10 in the tender	No Change, As per RFP
513		Section - IV- General Conditons of the Contract - 4.22- Inspection & Testing - Page no. 22	Inspection and Testing (in case of replacement/new procurement, suggested by bidder as part of O&M solution) - Clause no. 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.	Inspection and Testing (in case of replacement/new procurement, suggested by bidder as part of O&M solution) - Clause no. 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 <u>till its installation & Testing.</u>	No Change, As per RFP
514		Section - IV- General Conditons of the Contract - 4.44- Indemnity- Page 36	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	Indemnity - <u>Successful Bidder will defend and/or settle any claims against TENDERER that allege that Bidder branded product or service (i.e., which is manufactured by Bidder only) as supplied under this contract infringes the intellectual property rights of a third party.</u> 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	No Change, As per RFP

			Bidder is not responsible for claims resulting from deliverables content or design provided by Customer.	the relevant Support Material except that Bidder is not responsible for claims resulting from deliverables content or design provided by Customer.	
515		Section - IV- General Conditions of the Contract - 4.34- Indemnity- Page 29	4.34 TENDERER reserves the right to inspect and monitor / assess the progress / performance	Kindly Clarify the following points 1. such nominated 3rd party shall not be the competitor of the selected bidder 2. It stands clarified that such audits shall be carried out at the cost of GSDC and shall not include internal cost records or price sensitive information of the successful bidder. Such audits shall be conducted not more than once every eighteen (18) months and only after giving a prior notice of at least thirty (30) days to the successful bidder. 3. Audit report shall be subject to a mutual discussion between the parties to the contract. 4. scope of audit will be pre agreed between the parties.	No Change, As per RFP
516		Section - IV- General Conditions of the Contract - 4.28- Contract Period- Page 24	Contract Period The O&M contract shall remain valid for a period of five years from the date of taking over of O&M operations (within 60 days of kick-off meeting) and end with the date of completion of five years of service. However, <u>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.</u>	Contract Period The O&M contract shall remain valid for a period of five years from the date of taking over of O&M operations (within 60 days of kick-off meeting) and end with the date of completion of five years of service. However, <u>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 as mentioned in clause no. 4.10-Termination for Default.</u>	No Change, As per RFP
517		Volume II 1.1.System Integration Component: Page no. 1	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	OEM services are limited to their product , Hence request you to relax this clause to OEM certified resources , so that SI can deploy the solution with the desired support of OEM.	As per RFP. OEM professiona l services are required considering complexity of the solution
518		Volume II 1.1.System Integration Component: Page no. 2	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.	Please specify the shifting scope and the number of such instances to be expected.	No Change, As per RFP
519		Volume II 1.1.System Integration Component: Page no. 3	1.1.24.The bidder needs to provide a comprehensive, on-site training on deployed solution to the team nominated by DST/GIL, GoG.	Onsite training means the GSDC location or any other site. Please specify	Location decided by GoG
520		Volume II 1.1.System Integration Component: Page no. 3	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	The support duration may change product to product. Hence request you to modify this clause as Incident logging facility 24x7x365 and RMA should be Next Business Day.	No Change, As per RFP

521	Volume II 1.1.System Integration Component: Page no. 3	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.	The Specifications are governed by respective product OEM. Hence Request you to Please ask this clause to be complied by OEM letter.	No Change, As per RFP
522	Volume II 1.1.System Integration Component: Page no. 3	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.	The Specifications are governed by respective product OEM. Hence Request you to Please ask this clause to be complied by OEM letter.	No Change, As per RFP
523	Volume II 1.1.System Integration Component: Page no. 3	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	We understand that the PM plan will be agreed mutually between SI and GIL as per the requirement of product . SI has to adhere that approved PM process to avoid warranty period extension.	No Change, As per RFP
524	Volume II 1.1.System Integration Component: Page no. 4	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”.	The warranty is governed by respective product OEM. Hence Request you to Please ask this clause to be complied by OEM letter.	No Change, As per RFP
525	Volume II 1.1.System Integration Component: Page no. 1	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.	2x10 G Links will be required at Near DR and Far DR . Please confirm.	No Change, As per RFP
526	Volume II , Section III: Technical Specification 1.1. WAN & Internet Router Page No. 7	4. Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC	The support duration may change product to product. TAC Support facility 24x7x365 RMA should be Next Business Day.Please confirm	No Change, As per RFP
527	Volume II , Section III: Technical Specification 1.2. Next Generation Firewall (Internet + DMZ) , Page No. 8	Warranty of 5 years and premium support 24x7x365 should be from OEM, support credentials should be in the name of DST/GSDC	The support duration may change product to product. Hence request you to modify this clause as Incident logging facility 24x7x365 and RMA should be Next Business Day.	No Change, As per RFP
528	Volume II , Section IV: Service Level Agreement (SLA), Penalties & Payment	Delivery of Components (Hardware, Software, License, etc.) T1 = T + 8 weeks	Considering global supply chain disruption , Request you to please change T+8 to T+16 for delivery timeline	Please See Revised Condition.

		Terms 1.1. Implementatio n Timeline & Penalties: Page no.33			
529		Volume II , Section IV: Service Level Agreement (SLA), Penalties & Payment Terms 1.1. Implementatio n Timeline & Penalties: Page no.33	nstallation and Commissioning T2 = T1 + 8 weeks	The solution asked is complex in nature and arequired multiple site to be comissioned and synchronise . Hence request you to please provide at least 12 weeks for Implemantion.	No Change, As per RFP
530		1.3.Bill Of Material	Disaster Recovery Management (DRM) Software	The DRM software will be required to measure the desired RPO & RTO along wit hmock drill . Hence request you to add the requirment of DRM software in BOQ ands specifications .	No Change, As per RFP
531			New Clause	BIDDER SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, VIRUS PROOF, OR ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE.	No Change, As per RFP
532		Section II – Eligibility Criteria, Point No. 5, Page No. 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.	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) Seven (7) 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.	Please See Revised Condition.
533		Section II – Eligibility Criteria, Point No. 7, Page No. 6	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.	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 Seven years as on Bid submission date. We understand that on premise Data centre with virtualization technology would be considered for this eligibilty criteria. Kindly confirm	Please See Revised Condition.
534		Section II – Eligibility Criteria, Technical Evaluation Matrix, Point No. 1, Page No. 7	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	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 Note: Parent/Associate Company average	No Change, As per RFP

				annual turnover would be considered for only 100% subsidiary company	
535		Section II – Eligibility Criteria, Technical Evaluation Matrix, Point No. 3, Page No. 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. 2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks	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 Seven years as on Bid submission date. 2-3 Projects = 5 Marks 4-5 Projects = 10 Marks above 5 Projects = 15 Marks We understand that on premise Data centre with virtualization technology would be considered for this eligibility criteria. Kindly confirm	Please See Revised Condition.
536		1.3 IPS/IDS S.No.1 Pg 72	The OEM should be in the Leader's / Challenger's quadrant of the Network Firewalls in the latest Gartner Magic Quadrant.	IPS is a standalone purpose built solution so why are we asking for Gartner's MQ for Network Firewalls? Kindly remove the requirement.	Clause stands removed
537		1.3 IPS/IDS S.No.6 Pg 73	Appliance should support atleast 5,50,000 new connections per second.	For a 50G appliance, 550,000 new connections per second requirement is towards the lower side. It should support atleast 10,00,000 new connections per second. Kindly modify the requirement to - Appliance should support atleast 10,00,000 new connections per second.	Please See Revised Condition.
538		1.3 IPS/IDS S.No.8, Clause 6 Pg 74	Appliance should be integrate with other security devices and analytics systems that dynamically push IoCs to the firewall	Since this requirement is for a purpose built IPS/IDS appliance, we should not specify firewall requirements. Kindly remove the clause.	Please See Revised Condition.
539		1.3 IPS/IDS S.No.9, Clause 4 Pg 74	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.	Since this requirement is for a purpose built IPS/IDS appliance, we should not specify NGFW requirements. Kindly remove the clause.	Please See Revised Condition.
540		1.3 IPS/IDS S.No.9, Clause 5 Pg 74	The NGFW must support the ability to create custom reports directly from the WebGUI of the NGFW	Since this requirement is for a purpose built IPS/IDS appliance, we should not specify NGFW requirements. Kindly remove the clause.	Please See Revised Condition.
541		1.3 IPS/IDS S.No.9, Clause 6 Pg 74	Resources such as RAM, CPU, Storage must be provisioned to ensure continuous & uninterrupted access to NGFW irrespective load & CPU utilization..	Since this requirement is for a purpose built IPS/IDS appliance, we should not specify NGFW requirements. Kindly remove the clause.	Please See Revised Condition.
542		Page No:5, Point No 3 Section II – Eligibility Criteria	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.	Kindly request your esteemed department to modify as mentioned below so that many bidders can participate. Bidder must have average annual turnover of at least Rs. 300 crores for last three 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.	No Change, As per RFP

543	Page No:5, Point No 10 Section II – Eligibility Criteria	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.	Kindly request your esteemed department to modify as mentioned below so that many bidders can participate. The bidder must have positive net worth and should be Profit making in last three audited financial years as on 31st March, 2021 Audited and Certified Balance Sheet and Profit/Loss Account of last 3 Financial Years should be enclosed. CA certificate mentioning net profit of the bidder should be enclosed.	No Change, As per RFP
544	Page No:5, Point No 4 Section II – Eligibility Criteria	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	Kindly request your esteemed department to modify as mentioned below so that many bidders can participate. 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 five financial years as on bid submission. All work orders / contracts should be in the name of the bidder	Please See Revised Condition.
545	Page No:5, point No 1 Section II – Eligibility Criteria	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	Kindly request your esteemed department to modify as mentioned below so that many bidders can participate. 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). as on submission date. >250 to <=275 Crores = 5 Marks >275 and <=300 Crores = 10 Marks Above 300 Crores = 15 Marks	No Change, As per RFP
546	Page No:5, point No 2 Section II – Eligibility Criteria	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	The bidder has commissioned and installed IT Infrastructure of On Premises Datacenter/ on premises Disaster Recovery IT Infrastructure, On Premises Cloud Solution 1 Projects = 7.5 Marks 2 Projects = 15 Marks	No Change, As per RFP
547	Page No:5, point No 3 Section II – Eligibility Criteria	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	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. 1 Projects = 7.5 Marks 2 Projects = 15 Marks	No Change, As per RFP