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Tender Details

Date : 16-Oct-2025 05:01 PM

Print

Basic Details

Organisation Chain	Director-Indian Institute of Technology(IIT Delhi) Dy.Registrar(Stores) Central Store Purchase Section-IIT Delhi		
Tender Reference Number	FT/NCIIPC/RFP/2025-2026		
Tender ID	2025_IIT_881811_1	Withdrawal Allowed	Yes
Tender Type	Open Tender	Form of contract	Works
Tender Category	Services	No. of Covers	2
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Not Applicable	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Legal Entity
		.pdf	Financial Turnover
		.pdf	Financial Net Worth
		.pdf	Technical Capability
		.pdf	Certifications
		.pdf	Market Share and Ranking Clause
		.pdf	Manpower Strength
		.pdf	Local Presence
		.pdf	Mandatory Undertaking
2	Finance	.xls	Boq to be submitted in excel sheet format as given

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details

EMD Amount in ₹	0.00	EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Nil	EMD Payable At	Nil

[Click to view modification history](#)

Work /Item(s)

Title	Design, Build, Installation, Testing Commissioning, Integration, and Operations and Maintenance of IT Infrastructure for AI Grand challenge at NCIIPC Datacenter and incubation center at Ayanagar, New Delhi.				
Work Description	Design, Build, Installation, Testing Commissioning, Integration, and Operations and Maintenance of IT Infrastructure for AI Grand challenge at NCIIPC Datacenter and incubation center at Ayanagar, New Delhi.				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	NA				
Show Tender Value in Public Domain	No				
Tender Value in ₹	0.00	Product Category	Info. Tech. Services	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	120	Period Of Work(Days)	NA
Location	Indian Institute of Technology Delhi	Pincode	110016	Pre Bid Meeting Place	Foundation for Innovation and Technology Transfer

Pre Bid Meeting Address	Research and Innovation Park, IIT Delhi	Pre Bid Meeting Date	28-Oct-2025 11:00 AM	Bid Opening Place	Foundation for Innovation and Technology Transfer
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	16-Oct-2025 05:00 PM	Bid Opening Date	07-Nov-2025 05:00 PM
Document Download / Sale Start Date	16-Oct-2025 05:00 PM	Document Download / Sale End Date	06-Nov-2025 05:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	16-Oct-2025 05:00 PM	Bid Submission End Date	06-Nov-2025 05:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
	1	Tendernotice_1.pdf	Design, Build, Installation, Testing Commissioning, Integration, and Operations and Maintenance of IT Infrastructure for AI Grand challenge at NCIIPC Datacenter and incubation center at Ayanagar, New Delhi.	2520.03

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	BOQ	BOQ_926847.xls	Price to be quoted in the given BOQ	285.50

Auto Extension Corrigendum Properties for Tender

Iteration	No. of bids required for bid opening a tender	Tender gets extended to No. of days
1.	3	7

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	fitt00110@fitt.iitd.ac.in	NAMITA GUPTA	NAMITA GUPTA
2.	fitt00008@fitt.iitd.ac.in	UTTAM ASWAL	UTTAM ASWAL
3.	fitt00001@fitt.iitd.ac.in	Nikhil Agarwal	NIKHIL AGARWAL

GeMARPTS Details

GeMARPTS ID	TWI2VBK7Y7OZ
Description	Delivery of Hardware, Software and Operations for creation of IT Infrastructure
Report Initiated On	06-Oct-2025
Valid Until	05-Nov-2025

Tender Properties

Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Stage to disclose Bid Details in Public Domain	Technical Bid Opening
BoQ Comparative Chart model	Normal	BoQ Compative chart decimal places	2
BoQ Comparative Chart Rank Type	L	Form Based BoQ	No

TIA Undertaking

S.No	Undertaking to Order	Tender complying with Order	Reason for non compliance of Order
1	PPP-MII Order 2017	Agree	
2	MSEs Order 2012	Agree	

Tender Inviting Authority

Name	Managing Director
Address	Foundation for Innovation and Technology Transfer, IIT Delhi, Hauz Khas, New Delhi
<u>Tender Creator Details</u>	
Created By	NAMITA GUPTA
Designation	Senior Manager
Created Date	16-Oct-2025 01:01 PM



**FOUNDATION FOR INNOVATION
AND TECHNOLOGY TRANSFER**

Tender Enquiry No: FT/NCIIPC/RFP/2025-26

**Foundation For Innovation and Technology
Transfer New Delhi, India**

Part - A

**Delivery of Hardware, Software & Operations for Creation of
IT Infrastructure**

**(Design, Build, Installation, Testing Commissioning,
Integration, and Operations & Maintenance of IT
Infrastructure for AI Grand challenge)**

Disclaimer

The information contained in this RFP or subsequently provided to Bidders, whether verbally or in documentary or any other form by or on behalf of FITT or any of its employees or advisers, is provided to Bidders on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is issued by FITT. This RFP is not an agreement and is neither an offer nor invitation by FITT to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their bid pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by FITT. Such assumptions, assessments and statements do not purport to contain all the information that each applicant may require.

This RFP may not be appropriate for all persons, and it is not possible for FITT, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RFP.

The assumptions, assessments, statements and information contained in this RFP, may not be complete or adequate. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtains independent advice from appropriate sources. Information provided in this RFP to the Bidders is on a wide range of matters, some of which depends upon interpretation of law.

FITT, makes no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender or arising in any way in this Bid Stage.

FITT also accepts no liability of any nature whether resulting from negligence or otherwise howsoever, caused arising from reliance of any Bidder upon the statements contained in this Tender. FITT may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Tender. The issue of this Tender does not imply that FITT is bound to select a Bidder or to appoint the Preferred Bidder, as the case may be, for the Project and FITT reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

FITT reserves all the rights to cancel, terminate, change or modify this selection process and/or requirements of bidding stated in the RFP, at any time without assigning any reason or providing any notice and without accepting any liability for the same.

The information given is not an exhaustive account of statutory requirements and

should not be regarded as a complete or authoritative statement of law. FITT accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein. FITT its employees and advisers make no representation or warranty and shall have no liability to any person including any applicant under any law, statute, and rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this selection process.

FITT also accepts no liability of any nature whether resulting from negligence or otherwise however, caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by FITT or any other costs incurred in connection with or relating to its proposal. All such costs and expenses will remain with the Bidder and FITT shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the bid proposal, regardless of the conduct or outcome of the selection process.

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Acronyms

List of acronyms that has been used in this document has mentioned here along with its full form/meaning.

Abbreviations	Description/ Definitions
FITT	Foundation For Innovation and Technology Transfer
BOM	Bill of Material
BOQ	Bill of Quantity
BTA	Business Transaction Activity
CAPEX	Capital Expenditure
Cr.	Crores
DC	Data Centre
FAT	Final Acceptance Test
FTP	File Transfer Protocol
IP	Internet Protocol
ISO	International Organization for Standardization
ISP	Internet Service Provider
IT	Information Technology
LAN	Local Area Network
MeitY	Ministry of Electronics and Information Technology
NFPA	National Fire Protection Agency
NMS	Network Management Server
NOC	Network Operations Centre
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturer
OPEX	Operational Expenditure
POE	Power over Ethernet
PDU	Power Distribution Unit
PUE	Power Usage Effectiveness
QOS	Quality of Services
DC	Datacenter
STP	Spanning Tree Protocol
TCP	Transmission Control Protocol
TCV	Total Contract Value
GOP	Government Of NEW DELHI
UPS	Uninterrupted Power Supply
VRF	Variable refrigerant Flow
WAN	Wide Area Network

PART – A

Tender Document

1. Fact Sheet

Proposal inviting agency	FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSFER , INDIAN INSTITUTE OF TECHNOLOGY DELHI, NEW DELHI					
Downloading RFP Document	RFP can be download from https://fitt-iitd.in and e-procure Portal Organization Chain on e-procure portal:- • Director-Indian Institute of Technology (IIT Delhi) • Dy. Registrar (Stores) Central Store Purchase Section-IIT Delhi					
Scope of work	Delivery of Hardware, Software & Operations for Creation of IT Infrastructure to include : Design, Build, Installation, Testing Commissioning, Integration, and Operations & Maintenance of IT Infrastructure for AI Grand challenge at NCIIPC Datacenter and incubation center at Ayanagar, New Delhi.					
Language	The Proposal should be filled up by the Bidder in English language only.					
Taxes	Taxes: The Bidder must quote price in Indian Rupees only. The bid price to be offered by the Bidders must be exclusive of all taxes and tax % should be given separately. In case any item comes under multiple tax structures bidder is to quote for them separately					
Submission of Responses	Bidders must submit all required documents online on the portal and a hard copy					
The contact information	Project Head NCIIPC C/O Chief Operating Officer Foundation For Innovation and Technology Transfer (FITT) Indian institute of Technology IIT Delhi , Huaz Khas , New Delhi 110016 Email : nciipc@fitt-iitd.in					
Last date and time for submission of proposal	D+21					
Earnest Money Deposit - (EMD)	Rs.40 Lakhs in form of Bank Guarantee in the prescribed format in favour of FITT IIT DELHI from a nationalized / scheduled commercial bank in India. Bank Details <table><tr><td>1.</td><td>Bank Account No.</td><td>10773571968</td></tr></table>			1.	Bank Account No.	10773571968
1.	Bank Account No.	10773571968				

	2.	Beneficiary Name	FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSFER
	3.	Address	IITDelhi, Main Building, Dean's Complex, Hauz Khas, New Delhi-110016
	4.	Bank & Branch Name	STATE BANK OF INDIA , IIT Delhi
	5.	Adress:	IIT DELHI, HAUZ KHAS, NEW DELHI -110016, INDIA
	6.	MICR Code	110002156
	7.	Branch Code	1077
	8.	IFSC Code	SBIN0001077
Insurance		Contracted goods shall be insured by the Bidder in favor of the Purchaser on the terms and condition and insurance to the amount equal to 110%	
Performance Bank Guarantee (PBG)		A sum equal to 5%-of the bid value with respect to items + GST and applicable taxes. Performance Bank Guarantee should be valid up to 60 days beyond the date of successful completion of the Grand Challenge i.e. till 31st Dec 2026	

The Bidders are advised to submit the bids well in advance of the deadline as FITT will not be liable or responsible for non-submission of the bids because of any problems whatsoever.

2. Invitation for Bids

2.1 Important Dates

Sl. No.	Activity	Timeline
1.	Release of RFP	D Day (16 th Oct 2025) (Thursday)
2.	Site survey by Bidders (on request. Email to be sent by Interested parties by 21 st Oct 2025 1500 Hrs at nciipc@fitt-iitd.in)	D+7/8 (23/24 Oct 2025) (Thursday/ Friday)
3.	Last date of receipt of pre-bid queries submission	D+09 (25 th Oct 2025) (Saturday)
4.	Pre-bid Meeting date	D+12(28 th Oct 2025) (Wednesday)
5.	Posting of response to queries and release of corrigendum, if any	D+15 (31 th Oct 2025) (Friday)
6.	Last date for submission of Bids	D+21(06 th Nov 2025 by 1700 Hrs) (Thursday)
7.	Date of opening of pre-qualification bids	Will be intimated
8.	Date of opening of Technical Bids	Will be intimated
9.	Date of opening of Commercial Bids	Will be intimated

2.2 General Instructions to Bidders

1. While every effort has been made to provide comprehensive and accurate background information, requirements, and specifications, Bidders must form their own conclusions about the requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.
2. All information to be supplied by Bidders will be treated as contractually binding on the Bidders, on successful award of the assignment by FITT on the basis of this RFP.
3. No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of FITT with the Bidder. FITT may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of FITT.
4. This RFP supersedes and replaces any previous public documentation & communications in this regard and Bidders should place no reliance on such communications

2.3 Structure of RFP

The RFP is consisting with 3 parts. These are

1. Part A – Tender Document
2. Part B – Technical Specifications
3. Part C – Bill of Quantity cum Price bid

The bidder must submit compliance to Part A and part B in the response to bid invitation.

For Part C,

- **Bidder must submit an unpriced bid compliance along with technical bid. (Part C Para 1)**
- **List of Items proposed to be supplied with Cost and O&M cost needs to be submitted with Financial Bid (Part C Para 2 – Sub para 2.1,2.2 and 2.3)**
- **The priced bid has to be submitted separately.**

3. Project Profile & Background

3.1.About FITT

The Foundation for Innovation and Technology Transfer (FITT) is a prominent industry-academia interface organization established by the Indian Institute of Technology Delhi (IIT Delhi). FITT at IIT Delhi has been the vanguard of knowledge transfer activities from academia since its inception in 1992. This techno-commercial organization from academia is counted amongst the successful such organizations. FITT provides superior program management services and is steadily increasing its operational landscape. The varied roles of FITT can be seen in enabling innovations and technopreneurship, business partnerships, technology development, consultancy,

collaborative R&D, technology commercialization, development programs, corporate memberships etc. These roles are necessitated by the key agenda of the Foundation to showcase the Institute's "intellectual ware" to industry and thereby unlock its knowledgebase and inculcate industrial relevance in teaching and research at IIT Delhi.

FITT's core mission is to foster, promote, and sustain the commercialization of science and technology developed at IIT Delhi for mutual benefits with industry. It is designed to be an effective interface with the industry to foster, promote and sustain commercialization of Science and Technology for the Academia, Startup ecosystem and Industry mutual benefits."

With this mission mode, FITT has enabled knowledge transfer and created partnerships and linkages with business and community. Key functions and activities of FITT include:

- Research & Development Partnerships: Facilitating collaborations between IIT Delhi's researchers and industry partners for technology development, addressing specific technological challenges, and developing proprietary knowledge.
- Intellectual Property (IP) Management: Managing the intellectual property (IPR) of IIT Delhi, including filing patents and facilitating the commercialization of IP assets and know-how through technology transfer and licensing agreements.
- Innovation & Entrepreneurship: Nurturing an entrepreneurial ecosystem by managing incubation programs (like Technology Business Incubation Units - TBIUs, Biotechnology Business Incubation Facilities - BBIFs, and Atal Incubation Centers) to support startups and innovators. They provide mentorship, infrastructure, and access to funding.
- Technology Transfer & Commercialization: Bridging the gap between academic research and market needs by transferring proven R&D outputs to industry, leading to new products, processes, and services.
- Consultancy and Training: Offering innovative problem-solving consultancy services to industry clients and conducting specialist development programs and training courses in emerging technologies.
- Research Park: Developing and managing a research and innovation park that serves as a hub for interaction between IIT Delhi, industry, entrepreneurs, and government agencies to create advanced technological solutions.
- Government and Corporate Programs: Participating in various government initiatives (e.g., SPARSH, MSME, NIDHI) and collaborating with Startup ecosystem, corporate entities to support innovation and technology development.
- FITT plays a crucial role in translating academic research into real-world applications, supporting the startup ecosystem, and enhancing industry relevance in teaching and research at IIT Delhi. It has been recognized as a Scientific and Industrial Research Organization (SIRO) by DSIR, making it eligible for certain exemptions on imports for R&D programs.

3.2.About the Project

NCIIPC has partnered with FITT, IIT Delhi for conduct of NCIIPC Startup India Grand Challenge with the theme of "Responsible AI for National Security". The challenge focuses on identifying and fostering the development of cutting-edge AI solutions for thirteen critical problem statements defined by the technical and operational teams at NCIIPC and SME from the academia. (Refer to website <https://ai-grand-challenge.in/>)

for the details.)

The IT hardware being procured for the data center and incubation center will be used to provide Compute resources to the Startups which would be incubated in the Incubation facility being created as a part of this challenge in which shortlisted startups i.e. 3 Startups per problem statement (Maximum of 36 Startups) would work on the Problem statements to create AI models and utilize the infrastructure planned to be created through this RFP. The Startups will be provided with compute facility and resources.

4. Invitation for Bid

Foundation For Innovation and Technology Transfer (FITT), New Delhi invites offer/proposal from interested Bidders for “Design, Build, Installation, Testing, Commissioning, Integration and Operation & Maintenance of IT infrastructure **Data center and Incubation Center** at NCIIPC office at Ayanagar , NEW DELHI, ” for a period of one (1) years upto 31 Dec 2026. This RFP document is being published on eprocure portal, and this section provides general information about the issuer, important dates, and addresses for bid submission & correspondence for the Bidders. The Bidders are advised to study the RFP document carefully. Submission of bids shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

5. Brief Scope of Work

Create a Secure Air-Gapped Network for Compute and Training (SANCT) in Incubation Environment at Ayanagar. The HW and SW being procured under this RFP is required to be installed and commissioned in an existing Tier 3 Data Center at Ayanagar New Delhi and in an Incubation Center under construction in the same campus

5.1. Objectives

To implement a team-centric GPU resource allocation model that ensures dedicated and guaranteed access for research and development teams. The primary goal is to move beyond a pooled, first-in, first-out (FIFO) scheduling mechanism to establish fairness, predictability, and accountability in GPU usage. This approach will enable secure workload isolation and efficient utilization of high-value GPU hardware

5.2. Outcomes

- **Guaranteed GPU availability** and access for all teams, eliminating bottlenecks caused by job queues.
- **Enhanced training efficiency** by minimizing idle wait times and enabling the parallel execution of multiple AI/ML workloads.
- **Improved workload isolation**, ensuring data and model confidentiality across teams and reducing the risk of resource interference.
- **Greater accountability** for GPU utilization at a team level, facilitating better tracking of resource consumption.

- **Scalable compute governance**, allowing for the flexible reallocation of GPU resources based on evolving research and program requirements.
- **Optimized performance** for AI/ML model training and fine-tuning within an air-gapped, secure enclave.

6. Pre-Qualification / Eligibility Criteria

Following table mentions the pre-qualification criteria. The Prime bidder or its Consortium partner (One Only) participating in the procurement process shall possess the following minimum pre-qualification/ eligibility criteria individually and/or jointly. Any bid failing to meet the stated criteria shall be summarily rejected and will not be considered for Technical Evaluation.

S#	Criteria	Criteria Description	Documents / Proof to be submitted
1.	Legal Entity	(A) A company registered in India under Indian Companies Act, 1956 OR (B) A partnership firm registered under Indian Partnership Act, 1932. OR (C) Limited liability partnership company (LLP) under Indian LLP act 2008.	- Copy of valid Registration Certificates - Copy of Certificates of incorporation - Partnership deed And any other relevant document to satisfy legal entity condition. <i>Prime Bidder and the Consortium partner to comply the above separately.</i>
2.	Financial Turnover	The average annual turnover of the Prime Bidder and/or its consortium partner jointly during the last 3 financial years ending with year 2024-25 should not be less than INR 35 Crores from Govt./ PSU/ BFSI/ telecom/ Enterprise Infrastructure Projects (as per the last published audited balance sheets	- Audited Balance Sheets - CA Certificate with CA's Registration Number & Seal.
3.	Financial: Net Worth	The net worth of the Prime Bidder and its consortium partner in the last three financial year (asper the last published audited balance sheets), should be 'Positive' in each financial year.	- CA Certificate with CA's Registration Number & Seal

S#	Criteria	Criteria Description	Documents / Proof to be submitted
			<i>Prime Bidder and the Consortium partner to comply the above separately.</i>
4.	Technical Capability	During the last Five years, the Prime bidder should have implemented and completed similar project (Similar work means handled Creation of datacenter, storage, compute , NW security...) along with Information technology products supply installation for a reputed Govt./ PSU/ BFSI/ telecom/ Enterprise / Integrated Command Control Centre/ Data Centre (DC) / Network Operation center (NOC) with A. Single order of value 15 Crore or more, OR B. Two orders each having value of 8 Crores or more, OR C. Three orders each having value of 6 Crores or more.	Work Completion Certificates from the client. OR Work Order + Self Certificate of Completion (CA Certificate with CA's Registration Number and Seal) OR Work Order + Phase Completion Certificate from the client showing acceptance of completion of supply and installation. <i>Prime Bidder and the Consortium partner to comply the above jointly or separately</i>
5.	Certifications	The Prime bidder and/or its consortium partner should have followed certification: 1. Valid ISO 9001:2015 or latest 2. Valid ISO 27001:2013 or latest	Copy of valid certificate <i>Prime Bidder and the Consortium partner to comply the above jointly or separately</i>
6.	Market Share and Ranking Clause	The Original Equipment Manufacturer (OEM) for servers, GPUs, network switches, or any other hardware being bid must be a globally recognized leading vendor in the respective product category, having been ranked among the top five vendors in market share for at least one of the last four quarters, as per the latest available industry tracker reports from an independent and reputed market research firm (e.g., IDC, Gartner, or equivalent."	Copy of valid certificate <i>Prime Bidder and the Consortium partner to comply the above jointly or separately</i>

S#	Criteria	Criteria Description	Documents / Proof to be submitted
7.	Mandatory Undertaking	Bidder should: a) not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons; b) not have, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings; c) Not have a conflict of interest in the procurement in question as specified in the bidding document. d) Comply with the code of integrity as specified in the bidding document.	A Self Certified letter - Self-Declaration <i>Prime Bidder and the Consortium partner to comply the above separately.</i>
8.	Manpower Strength	The Prime Bidder and its consortium partner should have at least 10 IT professionals on its rolls as on 31 st March 2025.	Letter from HR of the firm duly signed and sealed of the firm.
9.	Local Presence	Prime Bidder must have a functional office in Delhi operating since last 5 years.	GST and PAN details should be furnished. <i>Prime Bidder and the Consortium partner to comply the above jointly or separately</i>

7. Instruction to Bidders (ITB)

7.1 Submission of Bid Proposals

1. Two Bid system is being followed:-
2. The bidder submits both sealed envelopes (Technical and Commercial) in a larger, single envelope. The tendering authority first opens and evaluates only the **technical bids**.
3. Any bid failing to meet the stated pre-qualification/ eligibility criteria shall be summarily rejected and will not be considered for Technical Evaluation. Only the bidders who are found to be **technically qualified** will have their commercial bids opened. The commercial bids of technically non-qualified bidders will be returned unopened.
4. The final selection is made by evaluating the commercial bids of the technically qualified bidders
5. Bids must be submitted in Hard copy to the address mentioned in the Fact Sheet i.e.

COO

**Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016**

6. Bidder must submit the bid complete in all respect; in the absence of which bid may be rejected. Also soft copy of the technical bid (**PDF file Searchable version**) should be submitted to email nciipc@fitt-iitd.in.
7. The bids also have to be submitted in hardcopy at the address mentioned in contact information i.e.

Chief Operating Office ,
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016

8. **Technical Bid:** This bid should contain all information related to the bidder's technical capabilities, experience, and proposed solution. It must be submitted in a separate, sealed envelope clearly marked "Technical Bid."

- **Key Instructions:**

- **No Pricing:** The technical bid **must not contain any pricing information**, directly or indirectly. Any mention of cost, rates, or financial terms in this part of the submission will lead to the disqualification of the entire bid.

- **Comprehensive Details:** This section should include:

- The bidder's company profile, including legal and financial stability documents.
- Detailed technical specifications of the proposed hardware, software, or services.
- **A clear plan outlining the approach, methodology, and project timelines.**

- **Unconditional Acceptance:** The bidder must include a letter of unconditional acceptance of all terms and conditions of the Request for

Proposal (RFP).(Performa 2 Para 18.2)

- 9. Commercial Bid:** This bid should contain all pricing and financial information. It must be submitted in a separate, sealed envelope clearly marked "Commercial Bid."
- **Clear Pricing:** The commercial bid must provide a complete and itemized breakdown of all costs, including hardware, software, services, taxes, and any other associated fees.
 - **No Technical Details:** This bid should **only contain financial information**. It must not include any technical specifications, solution descriptions, or details that belong in the technical bid.
 - **Validity:** The quoted prices must remain valid for the period of 180 days

7.2 Proposal Prices

The prices indicated in the price schedule shall be entered in the following manner i.e. The total price quoted must be inclusive of cost of IT supply, installation, commissioning and supplying / providing hardware, licenses, software, services for installation, testing and commissioning of the Solution and support, all applicable taxes, duties, levies, charges etc., it should also include the cost of incidental services such as transportation, insurance, training, factory acceptance test, acceptance test at site, Certification, Periodic health check, operation and maintenance etc.

1. The cost of operation and maintenance of IT infrastructure for a period upto 31 Dec 2026 after the date of Go Live.(**Go live is expected to be in Apr 2026**)
2. The Bidder cannot quote for the project in part.
3. The Bidder may visit all proposed site/location, which will be part of Datacentre at New Delhi, New Delhi before bidding to assess the actual physical & Technical requirement. Site visit will be be facilitated as mentioned in invitation of bid section.
4. The Bidder must submit a detailed Bill of material including Make & Model and Bill of quantity with prices of each component.
5. FITT will have in its discretion to increase and decrease in quantity and items in case of need arises.
6. Operations cost would be on actual time period i.e. from go live to end of support by SI/Bidder.

7.3 Earnest money deposit

1. Bidders shall submit, an EMD of Rs. 40 Lakhs , in the form of bank guarantee issued by any nationalized/scheduled commercial bank in favour of FITT, payable at NEW DELHI, NEW DELHI, and should be valid for minimum 180 days from the last date of the submission of Bid.

2. EMD of all unsuccessful Bidders would be refunded by FITT within 60 days after selection of successful Bidder. The EMD of successful Bidder would be returned upon submission of Performance Bid Security as per the format provided in [Proforma 10](#).
3. EMD amount is interest free and will be refundable to the unsuccessful Bidders without any accrued interest on it.
4. The proposal submitted without tender fee and EMD in the prescribed format mentioned above, shall be summarily rejected.
5. The EMD may be forfeited:
 - a. If a Bidder withdraws its proposal within the validity period.
 - b. In case of a successful Bidder, if the Bidder fails to sign the contract in accordance with this RFP.
 - c. Fails to deliver as per the Terms & conditions of RFP & deliverables.
 - d. Any material breach of contract

7.4 Bid Validity Period

1. The EMD submitted along with the bid will remain valid for validity period of the bid as mentioned in the fact sheet.
2. In exceptional circumstances, prior to expiry of the bid validity period, the Client may request the Bidders to extend the period of validity for a specified additional period at Bidder's cost. The request and the responses to the request shall be made in writing. A Bidder may refuse the request without risking forfeiting the EMD, but in this case, the Bidder will be out of the competition for the award. Bidder agreeing to the request will not be required or permitted to modify its bid but will be required to ensure that the bid remains secured for a correspondingly longer period.
3. On completion of the validity period, unless the Bidder withdraws his bid in writing, it will be deemed valid until such time that the Bidder formally (in writing) withdraws bid.

7.5 Compliant /Completeness of response

1. Bidders are advised to study, examine all instructions, forms, appendices, terms, conditions and deliverables in the RFP document. Failure to furnish all information required by the RFP documents or submission of RFP offer not substantially responsive in every respect to the RFP documents will be at the Bidder's risk and may result in rejection of its RFP offer.
2. The RFP offer is liable to be rejected outright without any intimation to the Bidder if complete information as called for in the RFP document is not given therein, or if particulars asked for in the forms / Proforma in the RFP are not fully furnished.

3. Bidder must:

- a) Include all documentation specified in this RFP, in the bid.
- b) Follow the format of this RFP while developing the bid and respond to each element in the order as set out in this RFP.
- c) Comply with all requirements as set out within this RFP.

7.6 Pre-bid Meetings Clarification

1. FITT shall organize a pre bid meeting on the scheduled date, time and venue as mentioned in Invitation of Bid section, at R&I Building, New Delhi, New Delhi. FITT may or may not incorporate any changes in the RFP based on acceptable suggestions received during the Pre-Bid Conference. The decision of FITT regarding acceptability of any suggestion/request shall be final in this regard and shall not be called upon to question under any circumstances. The prospective Bidders shall submit their queries in writing/email (nciipc@fitt-iitd.in) only in prescribed format below not later than date and time indicated in sheet.

SL.No	Page No	Clause No	Clause header	Clause details as in RFP	Query/ Clarification Required	Justification/Reason for changes required (If any)

2. At any time prior to the last date of submission of proposal, FITT may for any reason be able to modify the RFP.
3. Any modifications in RFP or reply to queries shall be posted in Portal/FITT website at its discretion may extend the last date for the receipt of proposals.
4. Once the similar queries shall be answered, same queries will not be entertained further.
5. It is expected that the Bidder shall do their own due diligence on the question they may ask. Any changes sought must be with proper justification. Any statements such as 'specification/requirement' is not vendor neutral OR it implies to single OEM or any such statement like this, must be asked with adequate and credible proof and justification. **Such Queries without any justification will not be answered.**

7.7 Responses to pre-bid queries and issue of corrigendum

1. Bidder may seek clarification on this RFP document not later than the date specified in the Invitation of Bid section. FITT reserves the right to not to entertain any queries post that date and time. The Bidders are requested to submit their queries in MS -Word as well as MS-Excel editable format. Queries those are not submitted, not adhering format as given in this RFP will be liable for rejection.
2. At any time prior to the last date for receipt of bids, FITT 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 a corrigendum.
3. Any modifications of the RFP Documents, which may become necessary because of the Pre-Bid queries, shall be made by FITT exclusively through a

corrigendum. Any such corrigendum shall be deemed to be incorporated into this RFP. However, in case of any such amendment, the bid submission date may be extended at the discretion of Client.

4. The corrigendum or clarifications (if any) to the queries from any Bidder will be published on the Portal and FITT Website
5. Any such corrigendum shall be deemed to be part of this RFP and it will be incorporated into this RFP. To provide prospective Bidders reasonable time for taking the corrigendum/modifications into account, FITT may, at its discretion, extend the last date for the receipt of Bids.
6. It is the responsibility of the Bidder to check the above websites time to time for updates.

7.8 Amendment of Proposals

1. RFP Proposals once submitted cannot be amended. However, in case of some administrative exigencies, FITT may decide to take fresh proposals from all the Bidders before opening of the Technical Proposal.
2. FITT in its discretion may ask for clarification in terms of letter, declaration, datasheets, brochures etc during technical evaluation. It will be binding on the Bidders to submit the same in the defined timeframe.

7.9 Change/Amendment of Make/Model of products

1. Only one make of products will be allowed. Multiple makes may be allowed (maximum 2 makes) on bid response. If 2 makes are offered as options, choice of final make will be prerogative of FITT.
2. Once the contract is signed with the Bidder, there may arise a situation where the Bidder may want to change the make. The change of make will be allowed in following conditions only
 - a) The product is no more available for procurement. A letter from OEM is required.
 - b) The product is available, but the OEM is not willing to sell. A letter of justification is required from OEM
 - c) The product fails during the testing at site or at factory.

7.10 Evaluation Procedure

1. FITT will constitute an Evaluation Committee to evaluate the responses of the Bidders
2. The Evaluation Committee constituted by FITT shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
3. The interpretation of the bids and the decision made by the Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be

entertained outside the process of evaluation with the committee.

4. Prequalification evaluation will be done first and then the technical evaluation will be done. In case any queries are there for any or all the bidders, FITT reserves the right to ask the bidders through portal/Email and bidders need to respond accordingly.
5. The Evaluation will be done on Lowest cost method for the technically qualified bidders. The Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their bids.
6. The Evaluation Committee reserves the right to reject any or all bids on the basis of any deviations.
7. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.
8. Evaluation Committee will prepare a list of responsive Bidders, who comply with all the Terms and Conditions of the RFP. All eligible bids will be considered for further evaluation by a committee according to the Evaluation process defined in this RFP document. The decision of the Committee will be final in this regard. All responsive Bids will be considered for further processing as below:
 - a) Evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order. The interpretations made by the evaluation committee will be final and binding on the Bidders.
 - b) In a case where the item is mentioned in the BOQ/BOM/Price bid but the prices are not mentioned against the item, then FITT shall have the discretion to consider the highest cost among all the qualified Bidders for that item for calculation to reach the total prices of the Bidder.
 - c) It is mandatory for Bidder to submit detailed BOQ and BOM (Bill of material with quantity) as unpriced bid in technical bid. Any discrepancy in price and unpriced bid will lead to disqualification of the bid OR FITT will have the right to consider the highest amongst the BOQ/BOM and the price bid.
 - d) In case of no price quoted or zero price quoted against an item by a Bidder, Bidder has to complete the SITC for the item at zero cost.
 - e) Arithmetical errors will be rectified on the following basis:
 - 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 there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected.
 - If the Bidder does not accept the correction of the errors, his proposal will be rejected.
 - If there is a discrepancy between words and figures, the amount in words will prevail. If there is a discrepancy on prices of item in Price bid and in price bid break up sheet (if

any) the lowest prices of the item mentioned in all the sheets will be considered.

- f) FITT may conduct clarification meetings with each or any Bidder to discuss any matters, technical or otherwise. Result of such meeting/ clarification may be published on specified website; however, no material changes in the bid shall be permitted.
- g) Further, the scope of the evaluation committee also covers taking any decision with regards to the RFP Document, execution/ implementation of the project including management period.
- h) **Proposal shall be opened in the presence of Bidder's representatives who intend to attend at their cost.** The Bidders' representatives who are present shall sign a register giving evidence of their attendance.
- i) Proposal document shall be evaluated as per the following steps.
 - Preliminary Examination of Eligibility Criteria documents: The Eligibility document will be examined to determine whether the Bidder meets the eligibility criteria, whether the proposal is complete in all respects, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or eligibility criteria specified in various sections of this RFP Document will be rejected and will not be considered further. If minor shortcoming are found the bidder can be asked to submit the supporting documents and in case documents are not received as per the timeline given by the committee the bid will be rejected and not be considered further.
 - Technical Evaluation: A detailed evaluation of the bids shall be carried out to determine whether the Bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the RFP document. Bids received would be assigned scores based on the parameters defined in the table.
 - The technically qualified Bidders shall be invited during opening of the commercial bids and subsequently commercial evaluation shall be carried out.
 - The technical compliance to be submitted by the Bidder to be strictly as per format. The Bidder must specify whether the technical parameter mentioned in the format is Fully complied, partially complied or Not complied. **In case it is partially complied, the Bidder may describe the partial non-compliance in the remark's column.** In case the Bidder writes Full complied in the column of "Fully complied, partially complied or Not complied" but writes a comment

in the remarks column that indicates non-compliance, then it will be considered as NOT COMPLIED only. The compliance statement must be signed and stamped by Bidder and OEM.

7.11 Evaluation of Bids and Award of Contract.

Technical Evaluation: A detailed evaluation of the bids shall be carried out in order to determine whether the Bidders are competent, enough and whether the technical aspects are substantially responsive to the requirements set forth in the RFP document. Bids received would be assigned scores based on the parameters defined in the table.

7.12 Deviations and Exclusions

Bids shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP. The Bidder shall submit a No Deviation Certificate.

7.13 Right to Reject any OR all bids

The FITT, New Delhi reserves its right to accept or reject any or all Bids, abandon/ cancel the Tender process at any stage, and issue another tender for the same or similar service at any time before the award of the contract. It would incur no liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for such action(s).

The bids shall be rejected on the following grounds:

1. In the event of any assumptions, presumptions, key points of discussion, recommendation or any points of similar nature submitted along with the Bid, FITT reserves the right to reject the Bid and forfeit the EMD.
2. If any of the eligibility criteria as per the Pre-qualification criteria is not met
3. EMD/ RFP fee not submitted
4. If RFP terms and conditions are not met
5. Commercial bid is enclosed with the same document as technical bid.
6. If Bidder gives incorrect/misleading/ fraudulent information in the bid.
7. Failure to furnish all information required in the RFP document.
8. Canvassing in any form in connection with the bids
9. If the bid is incomplete /partial bid/ conditional/unclear in any form, has deviations from the terms and conditions of RFP.
10. Information submitted in technical bid is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.

11. Bids submitted after due date and time.
12. If any of Bidders/members of one consortium becomes members of the other consortium, both the consortiums will be disqualified.
13. Bids are submitted through Telex/Fax/ e-mail
14. Erasure and/or overwriting
15. Bids not signed by authorized signatory or without power of attorney
16. Multiple makes of items more than Two
17. Not submitted with MAF or MAF not as per format
18. Not submitted with technical compliance or technical compliance not endorsed by the OEM with stamp/Letter head and signature.

7.14 Notification of Acceptance of Proposal

Prior to the expiry of the period of Proposal validity, FITT will notify the selected Bidder in writing by speed post or Fax or email that its proposal has been accepted and has been selected to do the project.

8. General Conditions of Contract

8.1 Definition of Terms

1. **“Acceptance of System”** The system shall be deemed to have been accepted by Client, after its installation, rollout and deployment of the trained manpower, when all the activities as defined in Scope of Work have been successfully executed and completed to the satisfaction of the Client as evidenced by an Operational Acceptance Certificate.
2. **“Applicable Law(s)”** Any statute, law, ordinance, notification, rule, regulation, judgment, order, decree, bye-laws, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision applicable to the relevant party and as may be in effect on the date of the execution of this Contract and during the subsistence thereof, applicable to the project.
3. **“Approvals”** FITT shall extend necessary support to SI to obtain, maintain and observe all relevant and customary regulatory and governmental licenses, clearances and applicable approvals (hereinafter the “Approvals”) necessary for SI to provide the Services. The costs of such Approvals shall be borne by SI. Both Parties shall give each other all co-operation and information reasonably.
4. **“Bidder”** shall mean organization/consortium submitting the proposal in response to this RFP.
5. **“Client”** means the Foundation for Innovation and Technology Transfer (FITT). The project shall be executed in at FITT, New Delhi, New Delhi and shall be owned by FITT, New Delhi.
6. **“Clause”** means a clause of the RFP, as may be supplemented

7. **“Contract”** means the Contract Agreement entered into by the Client and SI, together with the entire contract documentation specified therein. The Contract Agreement and the Contract Documents shall constitute the Contract and the term “Contract” shall in all such documents be construed accordingly.
8. **“Contract Agreement”** means the agreement entered between the Client and the SI using the form of Contract Agreement contained in the Contract Documents. The date of the Contract Agreement shall be recorded in a signed form.
9. **Contract Value”** means the price payable to SI under this Contract for the full and proper performance of its contractual obligations.
10. **Commercial Off-The-Shelf (COTS)”** refers to software products that are ready-made and available for sale, lease, or license to the general public.
11. **“Consortium”** shall mean the group of companies/entities which has emerged as the successful Bidder and to whom the Letter of Award (LoA) is issued by the Client and shall include the successors and permitted assigns.
12. **“Day”** means a working day as per the calendar of FITT.
13. **“Data Centre Site”** means the Data Centre sites including their respective Data Centre space wherein the delivery, installation, integration, management and maintenance services as specified under the Scope of Work are to be carried out for the purpose of this Contract.
14. **“Deliverable”** means a work product (including materials, equipment, installations, reports, software, know-how, design, drawings, diagrams, maps, models, specifications, analysis, solutions, data base, programmes technical information, data and other documents) to be prepared and submitted by the SI as a part of the Service, in accordance with the terms of this Contract and the term “Deliverables” shall be construed accordingly. The list of Deliverables to be provided by the SI is set out in scope of work.
15. **“Document”** means any embodiment of any text or image howsoever recorded and includes any data, text, images, sound, voice, codes, databases or any other electronic documents as per Information Technology Act, 2000 read along with the rules and regulations made thereunder.
16. **“Effective Date”** This Contract shall come into force and effect on the date on which the

Contract Agreement has been duly executed for and on behalf of the Client and the SI.
17. **“Force Majeure”** shall have the meaning ascribed to it in GCC Clause.
18. **“GCC”** means General Conditions of Contract.
19. **“GoI”** means Government of India.
20. **“Go-Live”** means commissioning of the project after commencement

of all smart city components, including training as per Scope of Work mentioned in RFP. SI should have the approval from the Client for user acceptance testing.

21. **“Goods”** means all of the equipment, sub-systems, hardware, software, products accessories, software and/or other material/items which SI is required to supply, install and maintain under the contract.
22. **“LoA”** means the letter of award issued to the selected Bidder pursuant to the RFP for its appointment as the SI.
23. **“OEM”** means the Original Equipment Manufacturer of any equipment/system/software/product or other Goods to be supplied by the MSI to the Client as a part of its Scope of Work.
24. **“Services”** means the work to be performed by the SI pursuant to the RFP and the contract to be signed by the Parties in pursuance of any specific assignment awarded by the Client.
25. **“Service Level(s)”** means the service level parameters and targets and other performance criteria which will apply to the Services and Deliverables as described in the RFP and the Service Level Agreement.
26. **“Service Level Agreement or SLA”** means the service level agreement specified in the RFP.

8.2 Right to terminate the process

1. FITT may terminate the RFP process at any time and without assigning any reason. FITT make no commitments, express or implied, that this process will result in a business transaction with anyone.
2. This RFP does not constitute an offer by FITT. The Bidders' participation in this process may result FITT selecting a Bidder to engage towards execution of the contract.

8.3 Language of Proposal & Correspondence

The proposal will be prepared by the Bidder in English language only. All the documents relating to the Proposal (including brochures) supplied by the Bidder should also be in English, and the correspondence between the Bidder & FITT shall be in English language only. The correspondence by E-mail must be subsequently confirmed by a duly signed copy (unless already signed digitally).

8.4 Modification and withdrawal of bids

1. The Bidder may be allowed to modify or withdraw its submitted proposal any time prior to the last date prescribed for receipt of bids, by giving a written notice to FITT.
2. The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in a manner similar to the original

Proposal.

3. Subsequent to the last date for receipt of bids, no modification of bids shall be allowed. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the of bid validity period specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of bid security/EMD.
4. No written, oral, telegraphic or telephonic proposals modifications will be acceptable.

8.5 Knowledge of Site Conditions

The SI's undertaking of this Contract shall be deemed to mean that the SI possesses the knowledge of all data center related requirements as stipulated in the Tender Document including but not limited to environmental, demographic and physical conditions and all criteria required to meet the design of the data center.

8.6 Failure to agree with terms & conditions of the contract

Failure of the SI to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event FITT may award the contract to the next best value SI or call for new bids from the interested Bidders as agreed by the committee. However, SI shall be allowed to submit minor deviations(As classified by committee) without any cost implications and allowed for opportunity to mutually discuss its terms and conditions. The final decision in such an occurrence lies with FITT.

The PBG/EMD in case of failure to agree to terms and conditions shall be forfeited.

8.7 Governing Law & Jurisdiction

The Contract shall be governed by and interpreted in accordance with the laws of India. The High Court of Judicature at Chandigarh and Courts subordinate to such High Courts shall have exclusive jurisdiction in respect of any disputes relating to the tendering process, award of Contract and execution of the Contract.

8.8 Termination and Effects of Termination

Termination

This Agreement shall be terminated by either party upon the happening of all or any of the following events: -

1. Upon either Party being declared insolvent or bankrupt.
2. Upon either Party committing a material breach or being in default of all or any of the major and significant terms, conditions, covenants, undertakings, and stipulations of this Agreement. In case the material breach is remediable the aggrieved Party shall give notice in writing of such default in observance or performance of any of the terms or conditions of this Agreement, to the Party in default. If the Party in

default effectively remedies such breach or default within the period, not being less than 60(sixty) days, designated by such notice then the Agreement shall remain in force. Where the default by the System Integrator is as a result of or consequent to technical non- feasibility, which requires to modify/alter the scope of work so as to replace the technical non-feasible deliverable , with a feasible deliverable, then such default shall not be considered a default by the System Integrator under the provisions of this clause

3. By mutual agreement in writing between the parties.
4. Termination for Breach- In the event of the breach of any of the major and significant terms and conditions of this Agreement by the system integrator, FITT shall be entitled to terminate this agreement by giving 60 days' notice. The decision of FITT as to such breach shall be final and binding on the system integrator
5. In the event of the breach of any of the major and significant terms and conditions of this agreement by the system integrator, FITT will give 60 days' notice to system integrator to cure the breach of the terms and conditions of the agreement then in that case System Integrator must cure within 60 days. In case the breach will continue till/after expiry of such cure period, FITT will terminate the agreement

Effects of Termination

Upon expiration or termination of this Agreement, The System integrator shall:

- a. Notify forthwith the particulars of all project assets.
 - b. Deliver forthwith actual or constructive possession of the pops free and clear of all encumbrances and execute such deeds, writings and documents as may be required for fully and effectively divesting the Bidder all of its rights, title and interest in the Datacentre.
 - c. Deliver relevant records and reports pertaining to the Datacentre and its design, engineering, operation, and maintenance including all operations & maintenance records and manuals pertaining thereto and complete as on the date of termination or expiration.
And
 - d. Shall expeditiously settle the accounts.
6. In the event FITT terminates this Agreement pursuant to any material breach by the System Integrator to complete its obligations under this Agreement, Performance Guarantee furnished by it may be forfeited for reasons, to be recorded in writing
 7. Upon termination (or prior to expiry/ upon expiry, as the case may be) of this Agreement, the Parties will comply with the Exit Management Clause set out in this Agreement
 8. FITT agrees to pay the System Integrator for all charges for Services / Equipment provided by it and accepted by FITT till effective date of

termination.

9. Any payments under this clause shall be payable only after the System Integrator has complied with and completed the transition and exit management as per the Exit Management Clause approved by FITT. In case of expiry of the Agreement, the last due payment shall be payable to the System Integrator after it has complied with and completed the transition and exit management as per the exit management clause.
Approved by FITT
10. Service Provider immediately upon termination, discontinue providing any or all of the services contemplated hereunder
11. FITT shall upon termination, by under no obligation to make any payments to service provider forthwith, except for any payments that may be due and payable to Service Provider in respect of satisfactory Services already completed as per scope of this agreement; and
12. Service Provider shall return all the property which belongs to FITT including any data, information, files of completed or unfinished work. Service Provider shall have no lien over the property of FITT.
13. Upon the termination or expiration this agreement, in case before complete delivery of materials, then the title and ownership of all materials, plans, ideas, slogans, or information (developed by Service Provider for FITT) shall be transferred by Service Provider to FITT. Thereafter, FITT, shall have no liability to Service Provider Service arising from FITT's use of any material was approved, used, published or presented by or on behalf of FITT, Service Provider shall transfer such property, and documentation related thereto, to FITT immediately after termination in case termination happens before complete delivery of materials.
14. **Termination due to bankruptcy of the System Integrator** – FITT shall serve a written notice on the System Integrator at any time to terminate this Agreement with immediate effect in the event that the System Integrator reporting an apprehension of bankruptcy to FITT or its nominated agencies. No Charges to the system integrator shall be payable in case of termination under this clause except for the equipment satisfactorily delivered and approved by FITT as per the terms of this Agreement and services performed by the System Integrator up to the date of termination.

8.9 Consequences of Breach and penalties

In the event of breach, FITT shall have the right to recover any loss, damage or cost of hardship caused due to the breach of the terms of this Agreement, from the payment due to the Service Provider Notwithstanding the above, in the event the amount due to the Service Provider fall short of the costs incurred or suffered by FITT on account of loss, damage or cost of hardship, the Service Provider shall also be liable to make good all such losses, damages or cost of hardship caused to FITT.

8.10 Statutory Compliances

1. System Integrator shall comply with all applicable statutes. FITT shall not be liable in any manner whatsoever for any non-compliance on part of the System Integrator of the applicable laws and in the event of any adverse claim of whatsoever nature arising thereof, the entire burden shall be strictly borne by the System Integrator.
2. System Integrator shall maintain all requisite records, registers, account books etc. related to this project which are obligatory under any applicable law in connection with the Services being rendered or work being performed to FITT and shall provide such information as may be required under any law to any authority.
3. All required approvals from Utility, Pollution control boards, Municipal corporation, CEIG, CCOE/PESO, Fire department, Forest department has to be taken up by the system integrator. However, the documents required from FITT side for the approvals, will be provided.

8.11 Consequences of Termination

In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated term of the Contract or otherwise, FITT shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/material breach, and further allow the next successor Vendor to take over the obligations of the erstwhile

1. Vendor in relation to the execution/continued execution of the scope of the Contract.
2. Nothing herein shall restrict the right of FITT to invoke the Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available FITT under law or otherwise.
3. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.
4. Upon Termination of the Contract, the System Integrator shall:
 - a. Prepare and present a detailed exit plan within five calendar days of termination notice receipt to the customer.
 - b. The customer and along with designated team will review the Exit plan. If approved, SI shall start working on the same immediately. If the plan is rejected, SI shall prepare alternate plan within two

calendar days. If the second plan is also rejected, the customer or the authorized person will provide a plan for SI and it should be adhered by in totality

8.12 Indemnification

Successful System Integrator hereby indemnifies, hold harmless & undertakes to defend FITT, its affiliates and their respective employees, officers and directors against any claim by a third party including but not limited to damages, costs, expenses as a result of such claim with regard to:

1. the extent that the System Integrator provided to FITT by System Integrator under this

Agreement infringes any third party's intellectual property rights;

2. Taxes/charges/ cess/ levies (and interest or penalties assessed thereon) against FITT that are obligations of System Integrator pursuant to this Agreement.
3. any damages for bodily injury (including death) and damage to real property and tangible personal property caused by the System Integrator.
4. any claim or action by or on behalf of the System Integrator personnel based on his or her employment with the System Integrator, including claims arising under occupational health and safety, worker's compensation, provident fund or other applicable laws or regulations.
5. Claims by government regulators or agencies for fines, penalties, sanctions or other remedies arising from or in connection with the System Integrator failure to comply with its regulatory/legal requirements and compliances.
6. Any claim on account of an alleged breach of confidentiality and security of data occurring as a result of acts of omissions or commission of the System Integrator employees or sub- contractors.
7. Any claim occurring on account of misconduct, negligence or wrongful acts of omission and commission of employees of the System Integrator, and/or its sub-contractors.
8. Any claim occurring on account of misuse or negligent application, misuse of systems, failure to follow established procedure by the System Integrator and/or sub-contractor's employees.
9. System Integrator shall ensure compliance with all applicable laws, local and Central, including all labour laws like ESI, EPF, Minimum Wages Act, New Delhi Shops & Establishments Act, Contract Labour (Regulation and abolition) Act 1970, Payment of Bonus Act etc. and shall keep First Part indemnified and harmless in case of any action for violation by Second Part of any of the applicable laws so long as this arrangement is in force. For all purposes the persons deployed will be employees of second part and they will have no relation whatsoever with First Part. Second Part shall be responsible to furnish all such

information/documents to First Part in this regard as may be required by it from time to time. Furthermore, second part shall be responsible to furnish self- attested copies of all returns/challans filed by second part in the office of ESI, EPF, Minimum Wages Act, Contract Labour etc. on monthly basis to the first party, in case, the second part fails to submit or not willing to submit the copies of returns, first part shall be entitled to stop the payments till the submissions of the returns.

10. In event of any theft, loss, damage, destruction, or any other act of vandalism or sabotage of the property of the Customer in the possession of the System Integrator by virtue of this agreement, the System Integrator shall be liable to indemnify the first part to the extent of damage or loss so caused.
11. System Integrator has all the requisite consents, licenses and permissions to (i) enter into this Agreement (ii) carry out the obligations set out in this Agreement, and it shall keep all such consents, licenses and permissions renewed and valid at all times during the continuance of the Agreement.

8.13 Limitation of Liability

1. Neither Party; nor its subsidiaries or its affiliates will be liable to the other Party, whether in contract, or (including negligence), strict liability or otherwise, for loss of business, revenue, profits, loss of Goodwill or reputation; or indirect, consequential, or special loss, arising in connection with any order, product, service, related documentation, information and/or the intended use thereof, even if a Party has been advised, knew or should have known of the possibility of such damages.
2. Subject to the above and notwithstanding anything to the contrary elsewhere contained herein, the maximum aggregate liability of the Bidder for all claims under or in relation to this agreement shall be regardless of the form of claims shall be limited to 100% of the amount to be paid to SI by FITT under the applicable statement of work that gives rise to such liability (as of the date the liability arose).

8.14 Dispute Resolution and Arbitration

Dispute Resolution

1. FITT and the System Integrator shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with this Agreement. All negotiations, statements and/or documentation pursuant to this disputed matter shall be without prejudice and confidential (unless mutually agreed otherwise). The time and resources costs of complying with its obligations under this provision shall be borne by respective Parties. All Arbitration proceedings shall be held at NEW DELHI, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.
2. On non-settlement of the dispute, same shall be referred to the

commissioner-cum- secretary to Government, MEITY and Government of India for his decision and the same shall be binding on all parties, unless either party makes a reference to arbitration proceedings, within sixty days of such decision.

Arbitration

1. Any and all disputes, controversies and conflicts ("Disputes") arising out of this Agreement between the Parties or arising out of or relating to or in connection with this Agreement or the performance or non-performance of the rights and obligations set forth herein or the breach, termination, invalidity or interpretation thereof shall be referred for arbitration in terms of the Arbitration and Conciliation Act, 1996 or any amendments thereof. Prior to submitting the Disputes to arbitration, the Parties shall resolve to settle the Dispute/s through mutual negotiation and discussions. In the event that the said Dispute/s are not settled within thirty (30) days of the arising thereof, the same shall finally be settled and determined by arbitration in accordance with the Arbitration & Conciliation Act ,1996 or any amendment thereof. The place of arbitration shall be New Delhi, New Delhi and the language used in the arbitral proceedings shall be English .
2. The arbitral award shall be in writing and shall be final and binding on each Party and shall be enforceable in any court of competent jurisdiction. None of the Parties shall be entitled to commence or maintain any action in a court of law upon any Dispute arising out of or relating to or in connection with this Agreement (infringement of IPR Excepted) ,except for the enforcement of an arbitral award or as permitted under the Arbitration & Conciliation Act ,1996 .

8.15 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the SI or FITT which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

1. Neither Party shall be responsible to the other for any delay or failure in performance of its obligations due to any occurrence commonly known as Force Majeure which is beyond the control of any parties, including, but is not limited to, flood, explosion, thundering, pandemic, acts of God or any Governmental body, public disorder, riots, embargoes, or strikes, acts of military authority, epidemics, lockouts or other labour disputes, insurrections, civil commotion, war, enemy actions.
2. If a Force Majeure arises, the System Integrator shall notify promptly within a reasonable time frame to FITT in writing of such condition and the cause thereof. Unless otherwise directed by FITT, System Integrator shall continue to perform his obligations under the Agreement as far as

is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

3. The System Integrator shall be excused from performance of his obligations in whole or part as long as such cases, circumstances or events shall continue to prevent or delay such performance. Neither Party shall have any liability to the other Party in respect of the termination of this Agreement as a result of an event of Force Majeure.
4. In case of a Force Majeure, all Parties will endeavour to agree on an alternate mode of Performance to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.
5. System Integrator shall be paid for supply and services till last date of termination in case of force majeure
6. If force majeure conditions continue for more than 30 days and the services are suspended, then either party has the right to terminate this agreement.

8.16 Confidentiality

1. FITT may allow the System Integrator to utilize Confidential Information and the System Integrator shall maintain the highest level of secrecy, confidentiality and privacy with regard to such Confidential Information. The System Integrator shall use its best efforts to protect the confidentiality and proprietary of Confidential Information.
2. Additionally, the System Integrator shall keep confidential all the details and information with regard to the Project, including systems, facilities, operations, management and maintenance of the systems/facilities. The System Integrator shall use the information only to execute the Project.
3. FITT shall retain all rights to prevent, stop and if required take the necessary punitive action against the System Integrator regarding any forbidden disclosure.
4. The System Integrator may share the confidential information with its employees, affiliates, agents and subcontractors but only strictly on a need-to-know basis in order to accomplish the scope of services under this Agreement. Upon request of FITT, the System Integrator shall execute a corporate non-disclosure agreement (NDA) with FITT in the mutually agreed format provided by FITT shall ensure that all its employees, agents and sub-contractors are governed by confidential obligations similar to the one contained herein. The SI and its antecedents shall be bound by the NDA. The SI will be held responsible for any breach of the NDA by its antecedents/ delegates/ employee/ subcontractors etc.
5. To the extent the System Integrator shares its confidential or proprietary information with FITT for effective performance of the Services, the provisions of the confidentiality Clause 1) to 3) shall apply mutatis mutandis on FITT.

6. The Bidder shall not use Confidential Information, the name or the logo of the FITT except for the purposes of providing the Service as specified under this contract

8.17 Fraud and Corrupt practices

1. The SI and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. For this purpose, the definition of corrupt and fraudulent practices will follow the provisions of the relevant laws in force. Notwithstanding anything to the contrary contained in this RFP, FITT shall reject a Proposal without being liable in any manner whatsoever to the SI, if it determines that the SI has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, FITT shall, without prejudice to its any other rights or remedies, declare the SI ineligible, either indefinitely or for a stated period of time, forfeit and appropriate the Proposal Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such SI Proposal.
2. Without prejudice to the rights of FITT under Clause above and the rights and remedies which FITT may have under the Lol or the Contract Agreement, if an SI or Systems Integrator, as the case may be, is found by FITT to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the Lol or the execution of the Agreement, such SI shall not be eligible to participate in any RFP or RFP issued by FITT during a period of 2 (two) > years from the date such SI, as the case may be, is found by FITT to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
3. For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
 - a. "Corrupt practice" means Engaging in any manner whatsoever, whether during the Selection Process or after the issue of the Lol or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the Lol or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of FITT in relation to any matter concerning the Project;
 - b. "fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process; the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any

manner whatsoever, directly or indirectly, any official of FITT who is or has been associated in any manner, directly or indirectly with the Selection Process or the LoA or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of FITT, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or

- c. “Coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person’s participation or action in the Selection Process.
4. “Undesirable practice” means establishing contact with any person connected with or employed or engaged by FITT with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or having a Conflict of Interest; and
5. “Restrictive practice” means forming a cartel or arriving at any understanding or arrangement among SIs with the objective of restricting or manipulating a full and fair competition in the Selection Process.

8.18 Exit Management Plan

The SI shall not exit from the contract within stipulated time period of One (1) years after Go-Live. However, in the event that the SI decides to opt out of the contract prematurely it has to notify the authority six months in advance through a written letter, SI will not seek ownership rights over the equipment and its PBG will also be forfeited.

If the SI exits from the contract during the execution within the stipulated time period, then FITT reserves the right to terminate the contract and may ask the L2/L3 bidder to execute the remaining work as per RFP scope of work.

Purpose of Exit Management Plan

1. This clause sets out the provisions which will apply upon completion of the contract period or upon termination of the agreement for default of the System Integrator. The Parties shall ensure that their respective associated entities, in case of FITT, any third party appointed by FITT and in case of the System Integrator, the sub-contractors, carry out their respective obligations set out in this Exit Management Clause. Exit Management criteria will be a part of Master Service Agreement with detailed information about exit criteria and exit management plan.
2. The exit management period starts, exactly period of 30 days before, in case of expiry of contract, or on the date when the contract comes to an end and up to period of 30 days in case of termination of contract, or on the date when the notice of termination is sent to the System Integrator. The exit management period ends on the date agreed upon by FITT or one year after the beginning of the exit management period,

whichever is earlier.

3. The System Integrator shall divest all the project assets at the beginning of the Exit management period to FITT at zero value in case of expiry of contract and at the depreciated rate as per Indian Income Tax Act if there is a termination of contract. The System Integrator shall pay all transfer costs and stamp duty applicable on transfer of project assets except in case the Project is being terminated due to default of FITT, where FITT, shall be responsible for transfer costs and stamp duty, if any. For clarification of doubt, transfer costs in this Clause relate to taxes and duties applicable due to transfer of the DATACENTER and Incubation Center project, if any.

At the beginning of the exit management period, the System Integrator shall ensure that

1. All Project Assets including the hardware, software, documentation, and any other infrastructure shall have been cured of all defects and deficiencies as necessary so that the Datacentre Project is compliant with the Specifications and Standards set forth in the RFP, Agreement and any other amendments made during the contract period.
2. the System Integrator delivers relevant records and reports pertaining to the Datacentre Project and its design, engineering, operation, and maintenance including all operation and maintenance records and manuals pertaining thereto and complete as on the Divestment Date.
3. On request by FITT , or any third party appointed by FITT, the System Integrator shall effect such assignments, transfers, licenses and sub-licenses related to any equipment lease, maintenance or service provision agreement between System Integrator and any third party, in favour of FITT, or any third party appointed by FITT, if it is required by FITT, or any third party appointed by FITT, and is reasonably necessary for the continuation of services by FITT, or any third party appointed by FITT.
4. The System Integrator complies with all other requirements as may be prescribed under Applicable Laws to complete the divestment and assignment of all the rights, title and interest of the System Integrator in the Datacentre Project free from all encumbrances absolutely and free of any charge or tax to FITT or its nominee.

During the Exit Management period

1. The System Integrator will allow FITT, or any third party appointed by FITT access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable FITT or any third party appointed by FITT to assess the existing services being delivered.
Promptly on reasonable request by FITT or any third party appointed by FITT the System Integrator 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 (whether provided by the Datacentre System Integrator or sub-contractors appointed by the System Integrator). FITT or any third party appointed shall be

entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The System Integrator shall permit FITT, or any third party appointed to have reasonable access to its employees and facilities as reasonably required by FITT or any third party appointed to understand the methods of delivery of the services employed by the System Integrator and to assist appropriate knowledge transfer.

2. Before the end of exit management period, the System Integrator will assist in a successful trial run of Network administration, Facility management including helpdesk management by FITT or by any third party appointed.

Hand Over of Assets/ Documents

1. SI shall handover the peaceful possession of Project Assets in working condition with detail list showing the name of the equipment and with configuration to the Purchaser/replacement SI as authorized by Purchaser customer within 30 days of the date of serving of notice or within the Transition Period.
2. The SI shall provide all such information available with it during the contract execution or during the operation & management phase as may reasonably be necessary within a reasonable period not exceeding 30 days of the date of serving of notice or within the Transition Period.

8.19 Severability and Waiver

If any provision of this Agreement, or any part thereof, shall be found by any court or administrative body of competent jurisdiction to be illegal, invalid or unenforceable the illegality, invalidity or unenforceability of such provision or part provision shall not affect the other provisions of this Agreement or the remainder of the provisions in question which shall remain in full force and effect. The relevant Parties shall negotiate in good faith to agree to substitute for any illegal, invalid or unenforceable provision by a valid and enforceable provision which achieves to the greatest extent possible the economic, legal and commercial objectives of the illegal, invalid or unenforceable provision or part provision. No failure to exercise or enforce and no delay in exercising or enforcing on the part of either Party to this Agreement of any right, remedy or provision of this Agreement shall operate as a waiver of such right, remedy or provision in any future application nor shall any single or partial exercise or enforcement of any right, remedy or provision preclude any other or further exercise or enforcement of such right, remedy or provision or the exercise or enforcement of any other right, remedy or provision.

8.20 Intellectual Property Rights

1. All Intellectual Property of FITT under the Letter of Invitation and/ or the Contract will belong exclusively to FITT , except the pre-existing intellectual property rights of the Bidder, its consortium and subcontractors (if any). On payment of all of consultant's fees in connection with this Agreement and subject to the other provisions of

this Agreement, GOI shall at all times retain to use within its internal business all right title and interest in and to any Intellectual Property Rights in the deliverables to be provided by the Bidder under this Agreement and any modifications thereto or works derived from there except the pre- existing intellectual property rights of Consultant or its subcontractors (if any, and Consultant Technology. It is hereby expressly clarified that Bidder shall have no right, title or interest in or to such Intellectual Property Rights of FITT for any purpose, except the right to use, modify, enhance and operate such designs, programs, modifications as per requirement of FITT. Bidder shall not use such Intellectual Property of FITT for any other purpose during and after the term of the Contract.

2. No services covered under the Contract shall be sold or disposed by the Bidder to FITT in violation of any right whatsoever of third party, and in particular, but without prejudice to the generality of the foregoing, of any patent right, trademark or similar right, or any charge mortgage or lien.
3. Subject to clause (c) below, the Intellectual Property Rights of all the database, programs, reports, formats etc. developed/created for this project would be of FITT / GOI.
4. The Bidder shall continue to retain sole ownership of the pre-existing proprietary knowledge, tools, source code, records, SOPs, application configurations, drawings, methodology, templates, works of authorship, materials, information plus any modifications or enhancements thereto and intellectual property content brought in by Bidder to this engagement and/or incorporated in the deliverables submitted by Bidder to FITT or created independently of the performance of the Services ("Consultant Technology"). For avoidance of doubt, it is clarified that subcontractor shall have the right to use any works of authorship or other intellectual property that may be included in the Deliverables, to develop for themselves, or for others, materials or processes that may be similar to those produced as a result of the Services. Further, any third-party licenses other than the hardware and software to be used by the Bidder resources for delivering the deliverables under this Agreement, necessary for the performance of the Services under this Agreement, would need to be procured by FITT. Bidder hereby undertakes.

Not to provide access to the Intellectual Property of FITT to persons other than authorized users to ensure that all authorized users are appropriately notified of the importance of respecting the Intellectual Property Rights of FITT and that they are made aware of and undertake to abide by the similar terms and conditions of this Agreement. Not to permit any person, other than the authorized users, to copy, duplicate, translate into any language, or in any way reproduce the Intellectual Property of FITT. To effect and maintain reasonable security measures to safeguard the Intellectual Property of FITT from unauthorized access or use by any third party other than the authorized users. To notify FITT promptly of any unauthorized disclosure, use or copying of the Intellectual Property of FITT of which Bidder becomes aware. To change the manpower deployed if FITT notifies

issue (along with the justifiable ground) in the satisfactory performance of the respective resource.

5. The SI shall retain exclusive ownership of all methods, concepts, algorithms, trade secrets, software documentation, other intellectual property or other information belonging to the SI that existed before the effective date of the contract.

Notices

Any queries or other document, which may be given by either Party under this Agreement or under the SLA, shall be given in writing in person or by pre-paid recorded delivery post or by facsimile transmission or through email to the notified address.

8.21 Taxes and Duties

All payments will be subjected to tax deduction at source as applicable/ required at the prevailing tax rates. Any changes, revision or enactment in duties like GST, taxes or any CESS during the period of validity of the Bids and also during the contract period by Central/State/Other Government bodies will be considered and applied after due consideration. The decision of FITT in this regard will be final and binding and no dispute will be entertained. Any taxes at the time of supply goods and services shall be applicable as per the LAW.

For goods supplied from outside the Purchaser's country, the SI shall be entirely responsible for all applicable taxes, license fees, and other such levies imposed outside the Purchaser's country. The basic price quoted item wise by the Bidder in respect of the transaction between FITT & the SI shall include all taxes & duties and charges payable by the Bidder except for the GST. CGST plus OGST, or IGST, as the case may be, at applicable rate shall be quoted alongside the basic price for all the items. However, while quoting the basic price against the package/works, benefit of Input Tax Credit (ITC) should be adjusted in the quoted price by the SI.

8.22 Insurance

The contracted goods shall be insured by the SI in favour of the FITT/NCIIPC on the terms and condition and insurance to the amount equal to 110% of value of bid on all risk basis upto the premises of the Purchaser. In case of any Insurance claims, SI may authorize the FITT/NCIIPC to claim the same. Appropriate insurance to cover all solution components for the transit period and until the time of its acceptance at the respective site is to be taken by the SI. As the SI will carry the risk for the material in his books during transit, the SI should arrange insurance for the total system as period from the dispatch till Acceptance Test is successfully achieved. Audit, Access and Reporting

The System Integrator shall allow access to or its nominated agencies to restricted to all data related to DATACENTER and Incubation center which is in the possession or control of the System Integrator or its subcontractors, agents, suppliers etc. and which relates to the provision of the Services as set out in the Audit, Access and Reporting Schedule and which is reasonably required by FITT to comply with the terms of the Audit, Access and Reporting of this Agreement.

FITT would also conduct audit of the process, plan and results of the Acceptance Test carried out by the System Integrator. FITT shall verify availability of all the defined services as per the contract signed between the SI and FITT. The SI shall be required to demonstrate all the services / features / functionalities as mentioned in the agreement.

8.23 Safety Regulations

1. Successful Bidder shall be responsible to take all precautions to ensure the safety of the person or property of the FITT and Data Centre while performing its obligations hereunder
2. It is the responsibility of the Bidder to carry the material/equipment to the location of the installation; SI will be penalized for any damage caused to property/ FITT building.
3. It is the responsibility of the Successful Bidder to comply with all sorts of safety measures under applicable law in regards to men and material deployed for the project.

8.24 Warranty of Equipment

1. The Bidder is required to provide warranty valid for Three (3) Years, for all supplied equipment as per financial bid format provided in the RFP. All Products supplied under the RFP should not reach end of support before 6 years from the date of FAT or start of O & M services or handover, whichever is later. All the products quoted should be supported by the SI/OEM for next 3 years from the end date of warranty. (**Except GPU which is for 3 years Warranty and 2 years EoL support**)
2. The Bidder shall warrant that all the equipment supplied under the contract is newly manufactured and shall have no defect arising out of design, materials or workmanship or from any act or omission of the Bidder that may develop under normal use of the supplied equipment's in the conditions prevailing across the country.
3. The Bidder shall warrant that the services provided under the contract shall be as per the Service Level Agreement (SLA) defined in the tender.
4. This warranty, for all equipment's, shall remain valid for Three (3) Years after the complete installation and final commissioning of the Data Centre. The installation will be deemed incomplete if any component of the equipment or any documentation/media is not delivered or is delivered and not installed and/or not operational or not acceptable to FITT after final acceptance testing.
5. FITT shall promptly notify the Bidder about any claims arising under this warranty. Upon receipt of such notice, the Bidder shall repair/ replace/ reconfigure/ re-provision the defective equipment or service.
6. The supplier shall ensure during the comprehensive warranty period

that all the supplied stores continue to function as per the parameters mentioned in technical specification. During warranty period, maintenance of all stores including pick-up of the faulty equipment for repair, replacement and repair/fault rectification, delivery of the rectified equipment shall be undertaken by the supplier at no additional cost to the buyer. The supplier will be responsible for the maintenance/preventive maintenance of the complete system. Any Malfunctioning or defective items shall be replaced by the supplier free of cost at project site as early as possible, under the following condition: -

7. If the Bidder, having been notified, fails to remedy the defect(s) within the period specified in the SLA, FITT may proceed to take such remedial action as may be necessary at the Bidder's risk and expense and without prejudice to any other rights, which FITT may have against the Bidder under the contract.
8. All the software's used for providing data center services shall be licensed to FITT/NCIIPC and will be the property of NCIIPC.
9. The SI shall be responsible for end-to-end implementation and shall quote and provide/supply any items not included in the bill of material but required for **commissioning of the cloud, network, Infrastructure Monitoring, including any Compute equipment. FITT shall not pay for any such items, which have not been quoted by the SI in the bid but are required for successful completion of the project.**

8.25 OEM Certificate of Equipment

1. The OEM Certificate as per the Proforma applicable stating that the bidding company is the Original Equipment Manufacturer of the equipment they are offering, shall produce signed declaration certificates, giving reference of this Tender Enquiry, who is authorized to offer their equipment and a commitment to provide maintenance support during the comprehensive warranty period.
2. In case the stores are supplied by the authorized supplier of the OEM, then the OEM certificate shall state that, in case the authorized supplier fails to repair/ maintenance the equipment during the comprehensive warranty, the responsibility for maintenance of the equipment provided would then be taken over by the OEM.
3. The complete contact details of the OEM (Name and designation of contact person, postal address, e mail ID will be furnished, and the buyer may at his discretion verify the authorization from the OEM, failure of which may result in the Bidder being blacklisted and / or barred from participating for any future tender of this organization.
4. OEM certificate (Manufacturer Authorization) is Mandatory for following items
 - GPU Servers
 - Servers

- Storage
- Network switches
- Workstations
- Firewalls

Note: FITT reserves to right to ask for manufacturer authorization during the bid evaluation and during execution of the project for any item other than mentioned above. FITT may also reserves the right to ask for hard copy original signed and stamped letter of MAF in OEM letter head.

8.26 Spares and Performance of Equipment

1. The Bidder shall specify in the Technical Proposal the complete list of spares that will be maintained for meeting the various SLA parameters specified in the tender. It is advised that the mandatory spares are kept at site for adhering the SLA requirements.
2. The Successful Bidder shall stand guarantee for the supply of spares of all the equipment under the scope of supply for a minimum period of 3 years from the date of awarding the contract and guarantee that discontinuity of production of any item offered as a part of the system shall not affect the maintainability of the system for a period of 3 years from the start date of operation and maintenance support of data centre.

9. Design Consideration

Datacenter Low side design and implementation (Installation, design and connectivity for all supplied equipment) is completely Bidder/MSI's responsibility in this project. However, while doing so, the Bidder must take into account the considerations/assumptions/suggestions as mentioned in this document. In case there is any discrepancy or contradiction, the same may be brought to the notice of the purchaser during pre- bid meeting only.

Design considerations are divided into following sections.

1. Space Allocation
2. General Design Requirements
3. Technical, Functional and Operational Requirements

9.1 Data Centre Consideration

1. The following are general design requirements. The requirements are not limited to the best practices and standards prevalent for Data Centre has to be adhered while designing. The successful Bidder must execute the project with accordance to the detailed scope as mentioned in the RFP.

2. The scope includes the supply, installation & commissioning of any material or equipment that are not specifically mentioned in the specifications and design details but are required for successful commissioning of the project.
3. The solution shall comprise of supply, installation, testing, commissioning training and handing over of all materials, equipment, hardware, software.
4. The lead Bidder shall provide detailed design, documentation, make, and model, efficiency including user, system, and operation manuals along with the necessary diagrams, design drawings and details bifurcation of Bill of Quantity (BOQ) along with details description. The Fabrication and Installation Drawings (to be submitted before execution or as on when required) may include but not limited to the following
 - a. Site layout
 - b. Equipment placement layout
 - c. All drawing for Electrical scheme including single line diagram
 - d. All General Arrangement drawing of equipment

As on when required, the successful Bidder has to submit the coordinated drawing for the solution.

5. The lead Bidder shall be responsible for performing verification tests at at site to ensure all proposed software and hardware are functioning as per design at their own cost.
6. The lead Bidder shall take the necessary clearance / approval of the drawings, design, quality of material, make and model of the quoted material etc. prior to the execution of the project.

10. Scope of Work (SANCT)

10.1. Overview HW and SW

- a) Air-gapped enclave with no internet egress; all ingress via CDTs.
- b) GPU servers, each 8× NVIDIA H200 141 GB; 2 × 200 GbE per server to dual leaves.
- c) **MIG**
 - **Form Factor:** The solution can be based on either:
 - **SXM5:** A high-density module with NVLink interconnect for maximum inter-GPU bandwidth.
 - **PCIe:** A standard PCIe Gen5 card with an NVLink bridge to support multi-GPU communication.
- d) 8 non-GPU servers for VMware VCF/vSAN ESA hosting platform services and Kubernetes.
- e) **Storage 100TB** storage (PFS/NAS/object storage/ any others storage) for the GPU cluster which shall provide at least 200 Gbps or 25GBps throughput with NVMe disks (20% of 100TB) Low latency and Scalable
- f) Routing/switching and firewalls; FTD HA at perimeter and ISFW HA inside the enclave.
- g) 110 workstations: 35 internet-connected GPU systems + 70 enclave-only systems including NW of the Workstations
- h) Conference room solutions
 - TV
 - Camera
- i) vSAN Storage: ≥ 100 TB usable ESA (FTT=1) with a documented growth path to ≥ 400 TB; select critical datasets may move to FTT=2 post-baseline.
- j) FOSS : Kubernetes (upstream, LTS) with Cilium, NGINX Ingress, MetalLB as available; Harbor OSS, Kyverno, Falco, Wazuh, Suricata, OpenSearch/Grafana/Loki, Shuffle, Keycloak/FreeIPA, OpenBao. (**Refer para 10.4**)
- k) Resident Engineer O&M model, on-site only (8×5) and for non working hours 24×7 options remote/online.
- l) A+B PDUs required in each rack. **PDUs: 4×** (A + B per rack), 32A/Three-phase or per site standard, mixed C13/C19
- m) Power, cooling, UPS at site are available;
- n) Windows licensing for Cuckoo sandbox VMs is customer-provided.

NOTE ***Data media retention DMR would be the policy which has to be followed keeping the sensitivity of the organisation.***

NETWORKING: All configuration and connectivity for data Centre and Incubation Centre is in scope of SI (Except dark Fibre connectivity between Data centre and

Incubation Center which will be provided by FITT/NCIIPC . SI is responsible for lighting and connecting the fibre for Air gapped NW)

Internet Lease line would be provided by FITT/NCIIPC. SI is to provide internal connectivity and distribution (Inclusive of Hardware, connectors wires etc)

Right to amend BoM: The quantities specified in the Bill of Materials (BoM) are indicative and provided for bidding purposes. FITT reserves the right to increase, decrease, add, or omit the quantity of any item(s) prior to the final award of the contract. It is anticipated that any such variations will be minor and intended for final project optimization within budgetary constraints. Bidders are required to provide itemized unit pricing, which will be used to adjust the total contract value in the event of such modifications. The quoted unit prices shall remain firm regardless of any change in quantities.

10.2. Summary BoM (Quantities)

Tower	Item	Qty
GPU Compute	GPU server (2x56 cores @2.1 Ghz, 2048GB RAM, 8x H200 141 GB; 2x200 GbE) or equivalent PCIe GPUs. Form Factor: The solution can be based on either: SXM5: A high-density module with NVLink interconnect for maximum inter-GPU bandwidth. PCIe: A standard PCIe Gen5 card with an NVLink bridge to support multi-GPU communication.	4
Non GPU Servers	2x32 cores@2.1Ghz, 512 GB RAM, 20–24 TB raw per node (NVMe)	8
Virtualisation/Platform	VCF/vSAN ESA server (all-NVMe)	512 Cores
Storage	100 TB at least 200 Gbps throughput with NVMe disks (20% of100TB) Low latency and Scalable	1
Switching – Core	DC leaf/L3 switch (upto 400G-capable) High-Performance Leaf Switch (24 x 200G Downlinks; 400GbE Uplinks)	2
Switching – Access (Enclave)	Access switch (48x1G; 10G uplinks)	2
Switching – Access (Internet LAN)	Access switch (48x1G; 10G uplinks)	2

Tower	Item	Qty
Switching – Management/OOB	Management/OOB switch (48×1G) Management/OOB switch (16×1G)	2+1
Firewalls – Perimeter	Secure Firewall (FTD) – HA pair	2 (1 HA pair)
Firewalls – Intranet (ISFW)	Secure Firewall (FTD) – HA pair	2 (1 HA pair)
CDTS Enclave	CDTS scanning server (With Windows OS)	2
CDTS Enclave	CDTS management/ops server (With Windows OS)	1
Time & DNS	GPS Stratum-1 NTP appliance (dual PSU)	1
Time & DNS	GPS outdoor antenna + surge kit + cabling	1 lot
End-User Compute	Internet GPU workstations (RTX 4000 or 770 class)	35
End-User Compute	Enclave standard workstations	70
Conference room Solution	Display Device 75” LED/QLED/OLED Camera with Audio devices	2 each
PDU for existing RACKs	PDUs: 4× (A + B per rack), 32A/Three-phase or per site standard, mixed C13/C19	4 racks
Media for Cold Export	Encrypted removable HDDs (≥ 4TB)	12/yr + 2 spares
Optics/Cabling	QSFP56 200G modules/DACs, QSFP-DD 400G leaf optics, SFP+/SFP28 where needed, OM4/OS2 fibre, Cat6A copper	As per detail
Software/Subscriptions	VMware VCF licences (8 nodes), Cisco FTD licences (Perimeter + ISFW), support	As per detail
Services	Build & integration WPs, training, hypercare	1 lot
O&M	Resident Engineers (8×5 and 24×7 options)	As per model
Spares	Server/optics/NIC/PSU spares kit	1 lot

NOTE : “SI need to cater for any other cables/connectors required to realize the solution”

10.3. Detailed Hardware BoM

a) GPU Servers (Air-Gapped Enclave)

- Quantity: 4
- Form factor: 4U high-density GPU chassis, **Form Factor:** The solution can be based on either:
 - **SXM5:** A high-density module with NVLink interconnect for maximum inter-GPU bandwidth.
 - **PCIe:** A standard PCIe Gen5 card with an NVLink bridge to support multi-GPU communication.
- XM5 backplane with NVSwitch
- **GPU:** 8× **NVIDIA H200 141 GB** per server
- **CPU:** 2× latest 4th Gen or higher Intel based server CPUs (≥ 56 cores each)
- **Memory:** ≥ **2 TB RAM** per server
- **Local NVMe:** 6–8× U.2/U.3 NVMe (≥ 3.84 TB each) for OS/scratch
- **NICs:** 2× **200 GbE** (QSFP56/112G-ready), RoCEv2-capable (disabled initially)
- **BMC/iLO/iDRAC/Redfish;** Dual hot-swap PSUs
- **Rails & bezels** included

Note: Exact CPU/RAM/NVMe SKU to be confirmed with vendor sizing; NICs must match Cisco leaf optics/DAC.

b) VCF/vSAN ESA Servers (Platform Cluster)

- Quantity: 8
- Form factor: 1U/2U general purpose
- Intel based **CPU:** 2× latest 4th -gen or higher server CPUs (≥ 32 cores each)
- **Memory:** ≥ **512 GB RAM** per server
- **NVMe for vSAN ESA:** capacity to achieve ≥ **100 TB usable** (FTT=1) across 8 nodes; recommend ≥ **20-24 TB raw per node** using 6–8× 3.84–7.68 TB NVMe devices
- **Boot/Cache:** Per OEM best practice for ESA
- **NICs:** 25/100 GbE as per leaf uplinks (at least 2×25 GbE per node)
- Dual hot-swap PSUs, rails

Note: vSAN ESA capacity and failure domains to be validated with VMware sizing tool.

c) Storage

- Parallel File System (PFS) / NAS / Object Storage (vendor choice, must meet performance criteria)
- Minimum **200 Gbps (25 GB/s)** sustained read/write throughput
- Minimum usable **100 TB** (scalable beyond 1 PB without major re-architecture)
- At least **20% of capacity (~20 TB)** on NVMe SSDs (tier-0) for hot data, balance may be HDD or other SSD tier
- Must support linear scaling of throughput and capacity (scale-out architecture)
- End-to-end encryption (in-transit TLS 1.2+ / at-rest AES-256); Role-Based Access Control (RBAC) / LDAP / AD integration
- Must be certified or validated for interoperability with leading GPU platforms including **NVIDIA DGX/HGX systems** and **H200 GPUs (SXM5 and PCIe configurations)**.

d) Switch & Firewalls

i) DC Leaf/L3 Pair (Core)

- Quantity: **2** (MLAG/VPC pair)
- **Ports:** 400G-capable QSFP-DD line cards; ability to provide **2×200G** per GPU server (via 200G ports or 400G split)
- **Uplinks:** Sufficient 40/100/400G for future expansion (at least **4 or more x 100G uplink ports.**)
- **Features:** VRF-lite, QoS, MLAG/VPC, PTP pass-through, NetFlow/sFlow

Device Type	Port Speed	Quantity of Devices	Ports per Device	Total Ports Required
GPU Servers	200 GbE	4	2	8
Storage	200 GbE	1	2	2
Other Servers	25/40 GbE	8	1	16
Total Downlinks				26
Uplinks (to spine)	200 GbE	2 (HA Pair)	1	2
Total Ports				28

ii) Access Pairs

- **Enclave Access:** 2× switches, 48×1G copper with 4×10/25G uplinks to leafs/L3

- **Internet LAN Access:** 2× switches, 48×1G copper with 4×10/25G uplinks to perimeter and/or leaves
- **Management/OOB:** 2× switches, 48×1G copper, OOB-only (BMC/iLO/iDRAC, management ports)
- **Management/OOB:** 2× switches, 16×1G copper, OOB-only (BMC/iLO/iDRAC, management ports)

iii) **Firewalls**

- **Perimeter (Internet LAN): Secure Firewall HA pair** with URL filtering, IPS, DNS security
- **ISFW (Internal Segmentation): Secure Firewall HA pair** sized for east-west inter-VRF traffic; IPS enabled on allowed flows; no NAT

Note: Final models sized during procurement based on rulebase, throughput, and SSL policy (no SSL decryption assumed inside enclave).

e) **CDTS Enclave** (With Windows OS)

- **CDTS scanning servers: 2× 1U/2U x86 servers** (12–16 cores, 64–128 GB RAM, 2×10/25 GbE), NVMe ≥ 3.84 TB
 - Roles: multi-AV, YARA, file hashing, staging to Harbor-Quarantine
- **CDTS management/ops server: 1× 1U x86** (8–12 cores, 64 GB RAM) for workflow/orchestration, dashboards, and audit log frontend
- **Sandbox VMs (on CDTS servers): Cuckoo with customer-provided Windows images** (licences by customer)
- **Secure storage:** Uses Harbor-Quarantine (on platform cluster) for large artefacts; CDTS local disk for transient staging

f) **Time & DNS**

- **GPS Stratum-1 NTP appliance**, dual PSU, 1× GPS outdoor antenna with coax, lightning arrestor, and grounding kit
- **Mounting kit & cabling** to DC rooftop or suitable GPS sky-view position

g) **End-User Compute**

i) **Internet GPU workstations:**

35× mid-tower SFF, RTX 4000 Ada (20–24 GB) or Intel UHD Graphics 770 (or equivalent integrated graphics), CPU ≥ 24 cores, 64–128 GB RAM, 1–2 TB NVMe, dual display outputs, Windows 11 Enterprise (Qty 5 In Bangalore center)

- **Enclave standard workstations: 70× business desktop, CPU ≥ 12 cores, 32 GB RAM, 512 GB–1 TB NVMe, Windows 11 Enterprise**

(Qty 15 in Bangalore Center)

- ii) **Peripherals:** Wired keyboard/mouse sets, cable locks as per site policy

h) Conference room Solutions**i) Display Solutions**

- 75 inches (diagonal) or more
- Direct LED Backlit LCD Panel (LED/QLED/OLED)
- 4K Ultra HD (UHD) - 3840 x 2160 pixels.

ii) Camera solutions

- Full HD 1080p (1920 x 1080) at 30 frames per second (fps) or higher. With support for lower resolutions and standard resolutions
- Minimum 12x Optical Zoom (or equivalent lossless digital zoom with comparable quality at 12x).
- Pan: Minimum ±170 degrees; Tilt: Minimum ±90 degrees
- Integrated microphone array with a minimum pickup range of 4.5 meters (15 feet).
- Support for full-duplex audio communication.

i) Racks, Power & Cabling

- **PDUs:** 4× (A + B per rack), 32A/Three-phase or per site standard, mixed C13/C19
- **Power cords:** All required C13/C19; colour-coded for A/B feeds
- **Optics & Cables:**
 - GPU server to leaf/L3: **QSFP56 200G** DACs/AOCs or transceivers (per distance) × 8 (2 per GPU server × 4 servers)
 - Leaf uplinks & interconnects: **QSFP-DD 400G** transceivers/AOCs as per design
 - VCF hosts to leaf/L3: **SFP28 25G** or **SFP+ 10G** DACs/AOCs (2 per host) × 8
 - Access uplinks: **SFP+ 10G** DACs/AOCs (2–4 per access switch)
 - Fibre: **OM4** multimode jumpers; **OS2** single-mode if needed; LC-LC; quantity per patching plan
 - Copper: **Cat6A** patch cords – colour-coded per VRF
 - **Labelling:** Machine-printed labels for racks, power, patch panels, port IDs

j) Media for Cold Export

- Encrypted removable HDDs: 12× ≥ 4 TB (For data centre)

k) Conference room Solution

- **LED TV/LED TV high-definition : 2X 75-Inch** or larger Conference Room Display 4K Ultra HD (UHD) - 3840 x 2160 pixels; serving as the primary display for content sharing and remote participants.
 - **Conference Camera Solution: 2X Full HD 1080p (1920 x 1080)** at 30 frames per second (fps) or higher with support for lower resolutions.
- Audio input and output to be catered for**

10.4. Software, Subscriptions & Support

To ensure the operational integrity of the air-gapped network, the System Integrator (SI) will manage and support all necessary repositories. This ensures that the platform's applications and security patches are updated in a secure, offline environment, eliminating the need for direct internet connectivity

10.4.1. VMware

- **VMware Cloud Foundation (VCF)** licences for **8 nodes (512 Cores)** (include vSAN ESA)
- **Support & Subscription** for one years

10.4.2. Security

- **Perimeter Firewall HA pair** subscriptions: **Threat/IPS, URL Filtering, DNS Security** (term 1–3 years), with OEM support
- **ISFW HA pair** subscriptions: **Threat/IPS** (URL/DNS filtering optional internally), with OEM support

10.4.3. No licence cost; implementation included

NOTE : (SI CAN USE ANY ALTERNATIVE SOFTWARE TO DELIVER THE SERVICES REQUIRED(COLUMN (B) .THE BELOW MENTIONED SOFTWARES ARE INDICATIVE)

Sno (A)	Services (B)	FOSS (C)	Purpose (D)
(i)	GPU Management	Kubernetes + NVIDIA Device Plugin	The foundation for container orchestration and exposing GPU resources to the cluster.
		NVIDIA KAI Scheduler or ClearML	Provides a fair-share scheduling policy, resource guarantees, and fractional GPU allocation for multiple users.
		NVIDIA DCGM	Monitors GPU health, performance, and provides diagnostics for datacenter GPUs.
(ii)	Application Server	Apache HTTP Server or Nginx, Node.js, Django (Python)	Hosts web applications, APIs, and other software applications.
(iii)	Management Server	Prometheus + Grafana	Provides a complete observability platform for monitoring system metrics, creating dashboards, and alerting on anomalies.

		Ansible or Puppet	Automates the deployment and configuration management of all servers.
(iv)	Database Server	MySQL, PostgreSQL, MariaDB	Manages relational databases to store and retrieve application data.
		MongoDB, Cassandra	Manages NoSQL databases for unstructured data.
(v)	Domain Management Server	FreeIPA or OpenLDAP	Provides centralized identity management and authentication services for all users and services.
(vi)	Email Server	Postfix + Dovecot + Rspamd	A modular stack for sending, receiving, and filtering emails.
		Mailu	An all-in-one, easy-to-deploy email server solution.
(vii)	Collaboration Suite Server	Nextcloud	Offers file hosting and sharing, calendars, and contacts.
		Rocket.Chat or Mattermost	Provides real-time team chat and collaboration features.
(viii)	Cyber Security • SIEM & HIDS • Network Security	Wazuh	Acts as a central security information and event management system to collect and analyze security logs from all endpoints, while also providing host-based intrusion detection.
		Suricata or Zeek	Provides a network-based intrusion detection system (NIDS) to monitor network traffic for malicious activity and security policy violations in real time.

10.5. Services (Build, Integration, Training, Hypercare)

- i) **Work packages WP-01 to WP-14** as defined in the SoW, including:
- Site readiness, passive works, labelling
 - Network fabric, Out-of-Band(OOB), access, firewall baselines
 - GPU nodes build and validation
 - VCF/vSAN ESA deploy and performance validation
 - Kubernetes platform, GPU Operator (MIG), namespace/quota setup
 - Harbor registry (Quarantine→Prod), provenance/signing/SBOM gates
 - CDTS build (multi-AV, YARA, sandbox), SOP and chain-of-custody
 - SOC/NOC (Wazuh/Suricata/OSINT feeds; dashboards; playbooks)
 - IT services (mail/chat/wiki), identity (Keycloak/FreeIPA), OpenBao

- j) Backups and monthly cold export runbooks
- k) Documentation, training (Admin/SOC/Desktop/CDTS), acceptance testing
- l) Cut-over and two-week hypercare

10.6. O&M Resident Engineer (On-Site) — 8 X5 on site

Role	FTE
DC RE (K8s/VCF generalist)	1.0
Desktop RE	1.0
SOC/NOC Analyst (business hours)	1.0
Service Delivery Manager (governance/reporting)	0.5
On-site call-outs (network/storage/GPU)	As needed

SLAs: Sev-1 on-site ≤ 4 h (business hours), same-day restore; patch compliance and reporting as per SoW.

Offline/Remote support 24X7 (refer Annexure N Part 2)

10.7. Spares & Consumables

- 10.7.1.**Server spares:** 2× NVMe (per size class), 1× PSU per server type, 1× GPU node fan module, 1× GPU server NIC
- 10.7.2.**Network spares:** 4× QSFP56 200G, 2× QSFP-DD 400G, 4× SFP+ 10G, 4× SFP28 25G, assorted DAC/AOC
- 10.7.3.**Cabling:** 10% overage on fibre and copper patch cords
- 10.7.4.**Firewall spares:** 1× AC PSU per FTD family in use
- 10.7.5.**Workstation spares:** 2× GPU cards (RTX 4000 Ada), 10× keyboards/mice, 5× NVMe

10.8. Port-Map & Optics (Extract)

- 10.8.1.**GPU server → leaf:** 2× 200G per server; total **8× 200G** links; **QSFP56 200G** DAC/AOC (≤ 3 m DAC; longer use AOC/optics).
- 10.8.2.**VCF hosts → leaf:** 2× 25G per host; total **16× 25G** links; **SFP28 25G** DAC/AOC.
- 10.8.3.**Access uplinks → leaf:** per access switch 2–4× 10/25G; **SFP+ 10G** DAC/AOC (or SFP28 25G if access supports).
- 10.8.4.**Leaf interconnect/expansion:** **QSFP-DD 400G** as required.

10.9. Built and Integration Work Package

WP ID	Title	Summary of Activities	Key Deliverables	Entry Criteria	Exit/Acceptance
WP-01	Site Readiness & Passive Works	Racks, PDUs (A+B), containment, structured cabling (OM4/OS2, Cat6A), labelling	As-built rack elevations; PDU schedules; cable schedule; labelling plan	Room handover; power & earthing available	Visual audit; continuity tests; as-built sign-off
WP-02	Switching Fabric & OOB	2× DC leaf/L3; OOB pair; VLAN/VRF; MLAG/VPC; QoS; NetFlow/sFlow	L2/L3 design; VRF/ACL runbook; config backups	WP-01 complete	Dual-path failover; VRF isolation tests passed
WP-02A	Intranet Firewall	Design and deploy ISFW in HA in routed L3 mode between User-Enclave, Workload, Storage, and CDTs VRFs. Create zone-to-zone rulebase (default-deny; allow-by-exception) and IPS profiles mapped to permitted flows. Integrate logging with Wazuh/OpenSearch; create dashboards and use-cases (e.g., lateral movement attempts, unusual inter-VRF access). Conduct HA failover and policy validation tests; back up configs.	ISFW high/low-level design; rulebase and object groups; IPS profile mapping; logging dashboards; config backups.	WP-02 complete	HA failover test passed with < 5 s session impact on allowed flows. Isolation tests: traffic between VRFs is blocked unless explicitly permitted. IPS policy active; test signatures trigger alerts (no false permits). Logs visible in SIEM with correlation to K8s/host events.
WP-03	Perimeter (Internet LAN)	HA with URL/DNS filtering & IPS; policy baseline	Rulebase; objects; logging to SIEM; test report	Internet circuit live	HA failover; policy audit; logging verified
WP-04	GPU Nodes	4× servers, each 8× H200; Ubuntu LTS; CUDA/NCCL; DCGM; 2×200 GbE LACP	Build book (BIOS/FW/driver); DCGM dashboards	WP-02 complete	24-h burn-in; DCGM metrics; NIC path failover

WP-05	VCF & vSAN ESA	8× servers; VCF domains; vSAN ESA ≥200 TB usable (FTT=1)	VCF LCM plan; datastore policy & growth plan	WP-02 complete	vMotion/HA; vSAN perf/SLOs met
WP-06	Kubernetes Platform	Upstream K8s LTS; containerd; Cilium ; NGINX Ingress; MetalLB/NSX-T	Cluster build book; namespace/quota matrix	WP-05 complete	Conformance tests; NetworkPolicies effective
WP-07	GPU Scheduling & Policy	NVIDIA GPU Operator; device plugin; MIG catalogue ; fair-share policy	MIG profile catalogue; scheduling SOP	WP-04 & WP-06 complete	12 concurrent team deployments scheduled
WP-08	Registry & Provenance	Harbor OSS ; Notary v2; Trivy; immutable tags; Quarantine→Prod	Promotion workflow; retention policy	WP-06 complete	Pull ≥20 Gb/s; promotion gates enforced
WP-09	CDTS & Ingress Workflow	Multi-AV, YARA, Cuckoo (customer Windows images); audit trail	CDTS SOP; approval forms; chain-of-custody	WP-03 complete	Simulated artefacts processed end-to-end
WP-10	SOC/NOC (FOSS)	Wazuh, Suricata, osquery, Shuffle, OpenSearch/Loki, Prometheus, LibreNMS, NetBox, Zammad	Use-case catalogue; dashboards; runbooks	WP-02/05/06 complete	5–7 simulated incidents detected & ticketed
WP-11	IT Services (FOSS)	Postfix+Dovecot+Rspamd (or Mailu), Rocket.Chat, Wiki.js/BookStack, BIND/Kea	Service build sheets; SSO via Keycloak	WP-05/06 complete	Functional & security tests; SSO verified
WP-12	Backups & Cold Exports	Velero+restic; vSAN snapshots; monthly encrypted cold export to vault	Backup matrix; restore drill report	WP-05/06 complete	Quarterly restore drill success; export verified
WP-13	Documentation & Training	As-builts, SOPs, security playbooks; Admin/SOC/Desktop training	Document set; attendance & assessment	All WPs substantial	Document QA; training sign-off
WP-14	Cut-over & Hypercare	Cut-over plan; stability watch; ticket SLAs	Hypercare report; acceptance	All WPs complete	Exit criteria met; formal acceptance

10.10. Acceptance Tests & Benchmarks

i) Infrastructure

Domain	Test	Target / Criteria
Power & Cooling	Rack thermal soak	Within OEM limits at full load
Cabling	Fibre/UTP continuity & labelling audit	100% pass
Leaf/L3 Fabric	MLAG/VPC failover	No packet loss on LACP peers
VRF/ACLs	Isolation between VRFs	Only approved flows permitted

Perimeter	HA failover	< 5 s session impact; logs visible in SIEM
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ii) Compute and Storage

Domain	Test	Target / Criteria
GPU Nodes	24-hour burn-in with DCGM	Error-free; thermal stable
NIC Paths	Link/node failover	Job persists; telemetry stable
vSAN ESA	Aggregate throughput	≥ 5 GB/s read, ≥ 3 GB/s write (platform volumes)
vSAN ESA	Metadata latency	P99 < 5 ms
Backups	Restore drill (VM + PV)	Success; RTO/RPO documented

iii) GPU scheduling policies and Kubernetes

Domain	Test	Target / Criteria
K8s Conformance	Sonobuoy/basic conformance	Pass
Namespaces	36 namespaces created	Quotas enforced
MIG Scheduling	12 teams concurrent	All scheduled; no conflicts
Admission (Kyverno)	Unsigned/High-CVE image	Blocked with audit trail
Runtime (Falco)	Privileged pod attempt	Alert in SIEM; ticket auto-raised
Registry Pull	Harbor → GPU node	Effective ≥ 20 Gb/s per node

iv) Security SOC /NOC

Domain	Test	Target / Criteria
CDTS	Image + SBOM + signature → Quarantine → Prod	Policy enforced; approvals logged; hashes match
NIDS (Suricata)	Malicious egress sim on internet PC	Alert + ticket
HIDS (Wazuh)	Suspicious process on GPU node	Alert + ticket
SOAR (Shuffle)	Playbook execution	Enrichment + assignment within SLA
Log Throughput	SIEM EPS	≥ 5k sustained; ≥ 20k burst
DRILL	Table-top + live incident	Outcomes recorded; improvements logged

The acceptance of the Data Centre including DC site in accordance with the requirements shall be conducted. After successful testing of the features, facilities, functionalities and integrity of the commissioned devices, equipment and services by the PMU, a Final Acceptance Test (FAT) Certificate shall be issued by FITT to the System Integrator. The date on which Final Acceptance certificate is issued shall be deemed to be the date of successful commissioning of the DC. The FAT certificate will be signed by the System Integrator, Consultant and FITT.

- Any delay by the System Integrator in the Final Acceptance Testing shall liable the SI for imposition of appropriate Penalties.

10.11. Documentation Training and Handover

i) Documentation Set

- **High/Low-Level Designs, As-Built** diagrams, **IP Plan, VRF/ACL runbooks**
- **Build Books** for GPU nodes, VCF/vSAN, K8s, Harbor, CDTs, FOSS services
- **Security Artefacts:** Kyverno policies, Falco rules, SOC use-case catalogue, incident playbooks
- **Operations SOPs:** Backups, patching from mirrors, capacity & performance, change control
- **BCP/DR:** Recovery procedures, cold export chain-of-custody
- **Acceptance Test Reports** and **Benchmark Records**

ii) Training

Track	Duration	Audience	Coverage
Ops (K8s/Harbor/Policies)	3 days	Platform admins	Namespaces/quotas; policy gates; upgrades
SOC (Wazuh/Suricata/Shuffle)	3 days	SOC L1/L2	Detections; playbooks; forensics handoff
Desktop (Imaging/Hardening)	1 day	Field support	Gold images; patch mirrors; compliance
CDTS Operations	1 day	Customer Security	Workflow; approvals; audit review

- ### iii) Handover and Hyper care **Handover dossier; two-week hypercare** with daily stand-ups; defect log; final acceptance

10.12. Commissioning of System

- Bidder should describe in advance the tests and details of the process that will be adopted to demonstrate the correct working of the equipment supplied both individually and as an integrated system.
- System testing schedules, formats for testing and commissioning reports and dissemination mechanism for such reports shall be drawn by the Lead Bidder in consultation with FITT.
- Commissioning of the solution shall be considered to be complete only after the following conditions have been met successfully to the satisfaction of FITT.
 - a. Successful completion of Integrated system Acceptance Tests with fully simulated load on each rack, and submission of necessary reports and certificates to FITT.
 - b. Delivery of all the items under the proposed bill of material at the

designated locations of installation. Short shipment of Goods will not be acceptable.

- c. Installation and Configuration of all the components of the solutions including, but not limited to, hardware, software, devices, accessories, etc. to the satisfaction of FITT.
- d. Successful completion of Commissioning would need to be certified by FITT and operations shall commence only after approval of FITT.

11. Health Safety Adherence

SI Team Responsibilities:

- Ensure all workers are knowledgeable and have access to the latest publications of applicable laws and regulations, including:
 - HSE rules and safe work standards.
 - Operating and critical task procedures.
 - Emergency response procedures; and
 - Environmental protection requirements.
- Ensure worksites offer safe and healthy working conditions.
- Ensure property and equipment are maintained to Company and manufacturer standards.
- Ensure site-specific safe work practices (e.g., start-up and shutdown practices) are developed for each facility as required and implement training of site employees and contractors to ensure procedures are understood.
- Communicate HSE performance expectations, requirements and results to employees and contractors.
- Reinforce program objectives, policies and regulatory requirements by insisting on performance and behaviour that meet Company standards.
- Ensure compliance and incident reports are submitted as required.
- Ensure incidents are investigated and followed up with appropriate corrective actions.
- Identify training programs and opportunities as needed.
- Understand regulatory requirements.
- Understand and implement the corporate HSE Management System.
- Identify, eliminate or minimize hazards.
- Identify and correct unsafe work habits.
- Ensure workers are properly qualified and trained to perform their work, know what is expected of them, and are prepared to deal with

the hazards of their work and worksites; Monitor work to ensure contractors and their employees comply with corporate standards and government legislation and regulation.

- Ensure personal protective equipment is available, properly used, maintained and replaced as necessary.
- Monitor facilities for HSE performance, hazards and general housekeeping standards.
- Assist management in the continued development of HSE programs.
- Ensure required pre-job meetings and regular HSE meetings are held and recorded; and
- Review inspection, audit reports, and respond to reported deficiencies.

12. Project Timelines

SI shall deliver all project activities/milestones/deliverables to the Client as per the timelines stated in this section. FITT or its authorized representative shall take thirty (30) days to review and provide comments on all respective deliverables. SI shall ensure that all comments provided by the FITT, or its authorized representative shall be incorporated in the final version of all deliverables.

All deliverables indicated in the tables below are indicative only and shall be read in conjunction with the Scope of Work section and Standard Form of Contract of the RFP for detailed requirements. Client or its authorized representative reserves the right to ask for additional information, documents and deliverables throughout the Project.

D0- Represents the Project Start Date (i.e. agreement signoff Date of kick off meeting).

Timelines		
Milestone	Deliverables	Timelines
1	Acceptance of LOI, project kick-off meeting, Mobilization of resources at site, Submission of (Technical datasheet)TDS for approval for products mentioned in Milestone 2 deliverables.	D0 + 1Month (D0 is acceptance of LOI)
2	Delivery of All Hardware and Software	D0 + 3 Months
3	Installation of all items under the scope.	D0 + 4 Months
4	Commissioning, System Acceptance test, Integrated system acceptance test	
5	Completion of Training by SI and OEMs for operation to FITT staff, Go-Live of Datacenter and Engagement of O&M Manpower and successful demonstration of TCOS (Tier certification for operational sustainability	D0 + 5 Months

13. Project Management

To consider the complexity of the project, the implementation of the same requires a robust but flexible project governance and management structure. It is proposed to form a Project Monitoring Committee chaired by Competent Authority for providing overall strategy and policy guidelines with adequate members from the project stakeholders. Further, it is proposed that a Project Management Unit (PMU) shall be designed and set up for ongoing tracking of the project. The proposed PMU shall be supporting FITT in project monitoring and management of the project. The Project Governance team should be adequately staffed and strong enough to identify the risk and suggest risk mitigation.

The Project Monitoring Committee, chaired by Competent Authority, a flexible membership will exist from the stakeholders on need basis. The committee will be supported by the Project Management Unit (PMU).

The Bidder should submit the project plan along with technical bid submission

Indicative Reporting Mechanism

Activity	Daily	Weekly	Fortnightly	Monthly	Quarterly
Project Review Meetings by FITT		√	√	√	√
Weekly status review meetings		√			
Daily team review meetings	√				
SLA review report		√			
Issue matrix		√			
Risk matrix			√		

13.1 Roles and Responsibilities of System Integrator

1. Preparation of Low side Design IT works required to build Datacentre.
2. Preparation and submission of Comprehensive and Detailed Project implementation Plans and Schedules separately for each module.
3. Supply, deployment and implementation of multi-layer security, Networking, IT Components.
4. Ensure timely resolution of all errors, faults and problems related to operation of the Datacentre coordinating with the OEMs.
5. Scheduled and preventative maintenance of all Equipment (active and passive) installed to run the operation.
6. Routine review of operational and other associated service availability at Incubation facility.
7. Proper cabling and Tagging at Datacentre and should be periodically updated.
8. Management, Maintenance and operations of all the Equipment.
9. Ensure compliance of Security Standards of the network and enforcing access control as per the information security policy of MeitY.

10. Liaison with the Primary/Secondary Bandwidth Service Provider(s) and Internet Bandwidth provider(s) for better availability of the network as per SLA defined in this document.
11. Preparation and submission of separate PAT & FAT Plans and schedules for all infrastructure, equipment's (IT) and services.
12. Preparation and submission of Manpower Deployment plan and schedule with list of staff to be deployed under the project at various positions during different parts/stages of the project.
13. All type of statutory approvals
14. Any other task as per requirement

14. Liquidated Damages

Except as provided under clause "Force Majeure", if the selected Bidder fails to deliver any or all the goods or perform the Related Services within the period specified in the Contract, FITT may without prejudice to all its other remedies under the Contract deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage below for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified. Once the maximum timeline is reached, the Purchaser may terminate the Contract pursuant to clause "Termination". (Refer 8.8 Para)

The time specified for delivery in the tender form shall be deemed to be the essence of the contract and the selected Bidder shall arrange goods supply and related services within the specified period

Delivery and completion period may be extended with or without liquidated damages if the delay in the supply of Goods or service is on account of hindrances beyond the control of the selected Bidder to be determined by FITT.

- a) The supplier/ selected Bidder(s) shall request in writing to FITT giving reasons for extending the delivery period of service if he finds himself unable to complete the supply of Goods or service within the stipulated delivery period or is unable to maintain prorate progress in the supply of Goods or service delivery. This request shall be submitted as soon as a hindrance in delivery of Goods and service occurs or within 15 days from such occurrence but before expiry of stipulated period of completion of delivery of Goods and service after which such request shall not be entertained.
- b) FITT shall examine the justification of causes of hindrance in the delivery of Goods and service and the period of delay occurred due to that and recommend the competent authority on the period of extension which should be granted with or without liquidated damages.
- c) If the competent authority agrees to extend the delivery period/ schedule, an amendment to the contract with suitable denial clauses and with or without liquidated damages shall be issued. The amendment letter shall mention that no extra price or additional cost for any reason, whatsoever beyond the contracted cost shall be paid for the delayed supply of Goods and service.
- d) It shall be at the discretion of the competent authority to accept or not to

accept the supply of Goods and/ or services rendered by the contractor after the expiry of the stipulated delivery period, if no formal extension in delivery period has been applied and granted. The competent authority shall have right to cancel the contract with respect to undelivered Goods and/ or service.

i) The maximum amount of liquidated damages shall be 7.5% of the total order value.

ii) FITT reserves its right to recover these amounts by any mode such as adjusting from any payments to be made by FITT to the Bidder.

iii) In case of extension in the delivery and/ or completion period is granted with full liquidated damages, the recovery shall be made on the basis of following percentages of value of Goods which the selected Bidder has failed to supply or complete:

For delay in delivery and services and/ or completion beyond the schedule mentioned in the Project timelines milestone wise (mentioned in payment schedule) , **LD @ 0.5%** per week or part thereof for the pending materials order value up to maximum **7.5%** will be deducted.

15. Payment schedule

Payment will be released to the successfully shortlisted Bidder in phased manner as stated below:

PAYMENT TERMS			
Milestone	Deliverables	Timelines	Payment
1	Acceptance of LOI, project kick-off meeting, Mobilization of resources at site, Submission of (Technical datasheet)TDS for approval for products..	D0 + 1Month (D0 is acceptance of LOI)	5% of total quoted value
2	Against Delivery of all Items under the scope of work 1. Against dispatch confirmation 2. Delivery	D0 + 3 Months	40% of total quoted value 1. 20% 2. 20%
3	installation of all items under the scope.	D0 + 4 Months	15% of total quoted value
4	Commissioning, System Acceptance test, Integrated system acceptance test.		10% of total quoted value
5	Completion of Training by SI and OEMs for operation to FITT staff, Go-Live of Datacenter and Engagement of O&M Manpower and successful demonstration of TCOS (Tier certification	D0 + 5 Months	20% of total quoted value

	for operational sustainability)		
6	At the end of each quarter counted from the date of Engagement of O&M manpower or Go-Live whichever is later against successful adherence of SLA	Quarterly	10% of the quoted value divided by 3 quarters.

Note: -

1. All the payments will be made to the successful Bidder in Indian Rupees only. Payments will be made after thirty (30) days of receiving the invoice subject to approval from competent authority. The billing has to be made in the name of FITT.
2. Tax shall be shown extra by the Bidder in their invoices for the items applicable. The same shall be paid by FITT as per actual after verification. Similarly, if there is any tax savings, the same shall be reduced from the payable amount.
3. In case of any new incidence of tax or any change in existing tax rates taking place during the Agreement Period, that shall be borne and payable by FITT over and above the agreed price for each item as may be applicable as per the Invoice raised by either Party/Member of the on FITT. Similarly, any reduction in taxes shall be to the benefit of FITT. All invoices produced to FITT for payment should be with TAX invoice.
4. The Bidder must raise the GST invoice within 7 days of Delivery of the complete items as per milestone. No partial payment will be accepted beyond the stated milestone.
5. Payment will be made on actual measurement of products and services consumed at site. There are approximate quantities mentioned in the Bill of material. Bidder may increase the quantity as per their solution. Decreasing of quantity at bidding stage for the quantity already mentioned in the price bid is not allowed. The 'rate only' items will not be considered for evaluation.

16. Service Level Adherence

This SLA are defined in document provides for minimum level of services required as per contractual obligations based on performance indicators and measurements thereof to be offered by SI. The SI shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels to provide quality services. The SI shall meet service level objectives and corresponding parameters to ensure the delivery and quality of services on time as per standard mentioned in the document. Service level indicators & and the target performance levels to be maintained by the Bidder during the contract period. SLA shall be strictly imposed, and a third-party audit/certification agency shall be deployed for certifying the performance of the

Bidder against the target performance metrics. All logs, reports and data that shall be made available for the purpose of evaluation/audit of SLA parameters/target performance metrics should be system generated only.

The benefits of this SLA are to:

1. Trigger a process that applies Customer and the Bidder management attention to some aspect of performance when that aspect drops below an agreed upon threshold, or target.
2. Makes explicit the expectations that Customer has for performance.
3. Helps Customer to control the service level and performance of Bidder services.
4. The Bidder shall have to submit a quarterly report to monitor the performance of the services being provided by the Bidder and the effectiveness of this SLA

16.1 SLA Definitions

For purposes of this Service Level Agreement, the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below:

"Availability" shall mean the time for which the services and facilities offered by the Bidders are available for conducting operations from the equipment hosted in the Data Centre.

"Downtime" is the time the services and facilities are not available to Customer, which excludes the scheduled outages planned in advance for the Data Centre.

"Helpdesk Support" shall mean the Bidder's 24x7x365 Helpdesk Support Centre which shall handle Fault reporting, Trouble handling, Ticketing and related enquiries during this contract

"Incident" refers to any event / abnormalities in the functioning of the Data Centre Equipment / Services that may lead to disruption in normal operations of the Data Centre services.

Critical: Incidents, whose resolution shall require additional investment in component or time or shall involve coordination with OEMs. These incidents shall impact the overall functioning of the DC. For example, Power failure, failure of Spine switch, etc.

Medium: Incidents, whose resolution shall require replacement of hardware or software parts, requiring significant interruption in working of that individual component. For example, installation of operating system, replacement of switch, etc.

Low: Incidents, whose resolution shall require changes in configuration of hardware or software, which will not significantly interrupt working of that component.

"Resolution Time", means time taken by the Bidder staff to troubleshoot and fix the problem from the time the call has been logged at the Helpdesk till the time the problem has been fixed.

16.2 Category of SLA

This SLA document provides minimum level of services required as per contractual obligations based on performance indicators and measurements thereof. The SI

shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels.

16.3 Targets of Service Level Agreement

SLA clause provides for minimum level of services required as per contractual obligations based on performance indicators and measurements thereof. The Bidder shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels. The services provided by the Bidder shall be reviewed by the Consultant/ TPA and Customer shall:

1. Check performance of the Bidder against this SLA over the review period and consider any key issues of the past period's performance statistics including major incidents, service trends, etc.
2. Discuss escalated problems, new issues and matters still outstanding for resolution.
3. Review of statistics related to rectification of outstanding faults and agreed changes.
4. Obtain suggestions for changes to improve the service levels.
5. In case desired, Consultant /Customer may initiate an interim review to check the performance and the obligations of the Bidder. The SLA may be reviewed and revised in accordance to the define procedures. The procedures in will be used if there is a dispute between Consultant/TPA
6. Customer and the Bidder on what the performance targets should be.

16.4 Manpower Service Levels

Sl. No.	Definition	Measurement Interval	Target	Penalty
1	Resource availability for all services agreed for Operation and Maintenance purpose of the project. SI manpower should be available 8X5 and remote assistance 24x7x365 days. (Refer Annexure N Staffing Model , Part B of document)	Quarterly	Single absence of a single resource	No Penalty (if replaced by equivalent skilled resource) Replacement should be subject to prior approval of FITT. Double of the cost of the absent resource for the period of absence.

NB: Minimum no of Resource need to be present in all shift at Data Centre and incubation centre should be not less than as specified in the RFP. (Excluding Holidays)

The replacement of manpower by Bidder after deployment will be allowed (without penalty) only in below cases.

1. The resource leaves the organization by submitting resignation with

- present employer and a copy of resignation should be marked to FITT
2. Bidder will withdraw the resource as per its own organization policy in case of non- performance and non-corporation in line with the guidelines.
 3. For Skills and Competence level the resource profile, educational qualification and certifications should be verified by the Consultant and FITT jointly prior to deployment.
 4. No resource will be absent without prior permission from the designated authority.
 5. A Background Verification may be carried out for selected resources to ensure no criminal history present.
 6. All resources required to be covered under EPFO, ESIC and minimum wages as applicable.

17. Operations and Maintenance Management

The selected Bidder will provide operating and maintaining services for a period upto 31 Dec 2026 or 12 months from the date of final acceptance test as per the project closure. (Part B : Annexure N Staffing Schedule). The goal is to achieve full uptime potential, obtain maximum leverage of the installed infrastructure or design, improve operations efficiency .

The right number of qualified individuals organized correctly is critical to the project meeting performance objectives. Enough qualified in-house staff and/or vendor support must be available to perform all the maintenance activities and operate the hardware and software

Requirements

1. Organizational Structure - this shows the structure of DC department and define which team is responsible or related to the Data Centre operations.
2. DC Team Escalation Matrix – this specifies multiple user contacts to be notified in the event of critical issues or emergency.
3. Staff Qualifications – this is to ensure that the team assign to handle the Data Centre are qualified, trained and has enough experience to properly manage its operations.
4. RACI Matrix **Part B Annexure L** – this clearly states or assigns who is Responsible, Accountable, Consulted or Informed in relation to each specific tasks to be defined as per the requirement.

Resource Qualification and Experience

Employee's Qualifications and Certifications will be verified by FITT/ Consultant after award of the contract. Upon finding any deficiency in any of the profile parameter, may reject any of the manpower by giving 15 days' time, which the Bidder must replace the resource within the time frame.

17.1 Maintenance Management

An effective maintenance program is necessary to keep equipment in an optimum condition, minimize failures and prevent downtime. This includes preventive and predictive maintenance, strong vendor support, failure analysis, life cycle tracking and documentation. Any level of vendor support to maintain infrastructure should have a corresponding list of qualified vendors with formal contracts specifying the scope of work, call-in process, qualifications, and response times to ensure the level of service required meets the uptime objectives.

Requirements

1. List of Equipment – this includes Servers, Storage etc.
2. Specialized Vendor Details – This contains the details of the vendor(s) assigned to maintain DC equipment. Technician information, qualifications and certifications should be available.
3. Service Level Agreements – Should clearly define the Response Time and Conditions to match our requirement as well as OEM recommendations.
4. Planned Preventive Maintenance (PPM) – PPM schedule should be fixed for the entire period of contract. So we can plan other activities accordingly without conflict.
5. Escalation Matrix or Emergency Call-out Matrix – This allows to clearly identify the response team responsible for any equipment failure
6. Service Evaluation – This is to evaluate the assigned team and request for changes if required. This will increase the quality to the support from the service team.
7. Methodology and Risk Assessment – This is to provide information on how the maintenance will be performed and the risk that comes with it. This is required for all maintenance activities – may it be major or minor.
8. Critical Spare Parts - These are list of spare parts to be made available on site to sustain operation of DC critical equipment.
9. Anticipation and Forecasting – This is essential for laying out plans to sustain or improve the Data Centre services.

17.2 Operations & Maintenance Monitoring

The O& M monitoring should continuously observe at the network level for the ability to look at all assets, physical and virtual, that reside on the LAN, even those that are offline, and all inter- connections between them. This monitoring should be done on a continuous basis and should be capable of monitoring dynamic network fabrics. This is should also include monitoring for missing patches or application or configuration changes that can introduce vulnerabilities that can be exploited.

Requirements

1. Physical or Visual Inspection – This should be on daily basis at random times.
2. Online / Remote monitoring – This type of monitoring is applied to all Data Centre components connected to the network
3. Critical Alerts – There should be an system capable of sending alerts or

notification through Email or SMS to all Data Centre managers for any critical system failure that requires immediate action.

17.3 Access Management

This access guideline specifies the criteria for granting access to specific individuals or groups, and the different levels of access allowed. These would be governed by the NCIIPC policies for the Data Center.

17.4 Training and Development

Proper training and induction ensures that the team understands the policies, procedures, and unique requirements for working inside the Data Centre. This is essential in avoiding unplanned outages and ensuring proper response to both anticipated and unplanned events.

Requirements

1. Data Centre Induction – This is having the team familiarize with the existing configuration of the Data Centre and to follow the guidelines for operation.
2. Data Centre Trainings – All DC operations team should have the basic and effective knowledge on how the facility operates as per the implemented design. This involves network connection, power, cooling and support.
3. Lead Bidder shall provide all necessary training to NCIIPC/ FITT officials and authorised team members for the purpose of successful functioning of the Data Centre operation and management.

17.5 Documentation

These are set of references or records provided on paper or on digital media. These documents act as the store of collective organizational and operational knowledge regarding the processes and can be accessed by anyone in times of need. All these documents should be latest, updated, protected and available.

17.6 Reporting

This is to communicate the compiled information as outcome of any activity related to the Data Centre operations. It is important that these documents are accurate, objective and complete according to its purpose as this is the only relevant factor used for referencing. Below are indicative reports and can be changed by end user (FITT/NCIIPC) as per requirement:-

1. Data Centre Activity Report – This includes total number of PTA (Permit to access), PTW (Permit to Work), NOC and CR (Change Request) can be monitored monthly, quarterly and annually.
2. PM (Preventive maintenance Reports) – This should be submitted monthly or as per OEM. This ensures proper maintenance has been done.
3. Incident Report – It is required to monitor every incident to prevent recurrence.
4. KPI Report – This is to monitor all targeted activities. Can be monitored

monthly, quarterly and annually.

5. Any other required reports

17.7 Monthly reports

Consolidated component-wise infrastructure availability and resource utilization report as mentioned below has to be submitted to all the stockholders involved in the project in hardcopy as well as in softcopy. Below are indicative reports and can be changed by end user (FITT/NCIIPC) as per requirement

1. Component wise infrastructure availability and resource utilization.
2. Consolidated SLA / non-conformance report.
3. Summary of issues / complaints logged at the Technical Support desk
4. Summary of resolved, unresolved and escalated issues / complaints
5. Issues / Complaints Analysis report for virus calls, call trend, call history, etc.
6. Summary of systems rebooted.
7. Log of backup and restoration undertaken
8. Summary of issues / complaints logged with the OEMs.
9. Summary of changes undertaken in the Data Centre including major changes like configuration changes, patch upgrades, database reorganization, storage reorganization, etc. and minor changes like log truncation, volume expansion, user creation, user password reset, etc.
10. Summary of component wise Data Centre uptime.
11. Summary of changes in the Data Centre.
12. Log of preventive / scheduled maintenance undertaken
13. Log of break-fix maintenance undertaken
14. Summary of attendance of Bidder's staff at the Data Centre.
15. Inventory of spare parts in the Data Centre.

Note: In addition any report required by management, will be required to be shared and submitted in the agreed timeframe

17.8 Constitution of the Team

1. The SI shall provision for adequate onsite support to provide onsite operations and maintenance services to FITT as defined in the scope of work and staffing model Part B Annexure N
2. Onsite resources will follow five working days per week cycle and will be entitled for all national holidays. In required resources would be called on Holiday/odd hours, in such case they will be entitled for compensatory leaves.

3. All the critical onsite resources deployed at DC have to be on Lead Bidder's payroll.
4. All the concerned onsite staff shall log an attendance on a daily basis. Lead Bidder shall maintain a database of attendance of his staff at the DC. The attendance database should have facility to track attendance and draw out MIS reports as desired by FITT. Lead Bidder shall submit the attendance records in a format and as per schedule desired by FITT.
5. SI should ensure that all the personnel identified for this project have high level of integrity. Lead Bidder should undertake necessary due diligence to ensure that the personnel have high standard of trustworthiness. Lead Bidder should obtain an undertaking from each of the personnel assigned and the same should be submitted to FITT as and when demanded by FITT.
6. SI shall be responsible for any mishaps or security breaches that happen due to Bidder's personnel / personnel appointed by Bidder for execution of services.
7. A Project In-charge should be appointed on a full-time basis. The Project In-charge shall be responsible for the overall project and shall be a single point of contact for FITT.
8. SI should estimate and propose the personnel required during the Installation, Commissioning and Maintenance phase and provide the estimation as part of the Technical Bid in the format specified in Contents of the Bid.
9. The following clause defines the skill sets and qualification requirement for **Project In- Charge**.
 - a. Should be deployed at the Data Centre site on a full-time basis.
 - b. Should be responsible for the overall contract performance and should not serve in any other capacity under this contract.
 - c. Should be responsible for organizing, planning, directing, and coordinating the overall program effort and managing the team.
 - d. Should have extensive experience and proven expertise in managing infrastructure project of similar type and complexity.
 - e. Should have a thorough understanding and knowledge of the principles and methodologies associated with program management, vendor management, quality assurance metrics and techniques, and configuration management tools.

17.9 O & M Roles and Responsibilities

Responsibilities of the Lead Bidder:

1. Lead Bidder shall prepare and then seek approval from FITT/NCIIPC on all the infrastructure solution architecture, diagrams and plans before commencement of installation.
2. Lead Bidder shall follow Change Management Procedures, Information

Security Policies as suggested by FITT/NCIIPC.

3. Lead Bidder shall ensure proper handover/ takeover of documents & other relevant materials in the event of change in personnel.
4. Lead Bidder shall share and review all internal documents / reports used to monitor & execute the project with FITT as and when desired. Lead Bidder shall proactively interact with other vendors / third parties / OEMs to ensure that the equipment is upgraded and maintained at a periodic interval. FITT would only pay the services charges applicable for operations and maintenance of the Data Centre.
5. Lead Bidder would manage all aspects of Vendor management.

Responsibilities of FITT:

1. FITT shall provide approvals & signoffs to the deliverables within the stipulated time period.
2. FITT shall direct and monitor the activities performed by the Lead Bidder as per the RFP Document and in turn validate the service levels attained as per the SLA document.

18. Proforma and Schedules

18.1 Proforma 1: Proposal Covering Letter

<On Bidder's Letter Head>

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016
nciipc@fitt-iitd.in Sir/Madam,

Ref: Request for Proposal (RFP): Selection of System Integrator for “Design, Build, Installation, Testing, Commissioning, Integration and Operation & Maintenance of IT infrastructure for Datacenter and Incubation center at FITT, New Delhi, New Delhi.

Have examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide best of quality Goods and professional services as required and outlined in the RFP for the Selection of System Integrator for Design, Build, Commission and O&M of Datacenter and Incubation center to meet such requirements and provide such services as required are set out in the RFP.

We attach hereto the technical response as required by the RFP, which constitutes our proposal. We undertake that, if our proposal is accepted, to adhere to the Project Timeline and Service Levels given in the RFP for various activities.

If our proposal is accepted, we will obtain a performance bank guarantee in the given format in the RFP document issued by a Scheduled Commercial Bank in India, acceptable to FITT, for a sum equivalent to 5% of the total price as quoted in our financial proposal for the due performance of the contract.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and also agree to abide by this RFP response for a period of 180 days from the bid opening date and it shall remain binding upon us with full force and virtue, until within this period a formal contract is prepared and executed, this RFP response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us and FITT.

We confirm that the information contained in this proposal or any part thereof, including its exhibits, schedules, and other documents and instruments delivered or to be delivered to FITT is true, accurate, and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead FITT as to any material fact.

We agree that you are not bound to accept the lowest or any RFP response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products / services specified in the RFP response.

It is hereby confirmed that we are entitled to act on behalf of our corporation/ company/ firm / organization and empowered to sign this document as well as such relevant documents, which may be required in this connection.

Dated this _____ Day of 2025

(Signature)

(In the capacity of)

Having the Power of Attorney & duly authorized to sign the RFP Response for and on behalf of:

(Name and Address of Company)

Seal/Stamp of Bidder

Witness Signature:

Witness Name:

Witness Address:

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am of the
and that

..... who signed the above Bid is
authorized to

bind the corporation by authority of its governing body.

18.2 Proforma 2: Declaration of Acceptance of Terms & Conditions of RFP

DECLARATION OF ACCEPTANCE OF TERMS & CONDITIONS CONTAINED IN THE RFP

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016

nciipc@fitt-iitd.in

Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the RFP Document [FITT/____/____] regarding RFP for Selection of System Integrator “Design, Build, Installation, Commissioning, Integration and Operation & Maintenance of IT /Non-IT infrastructure for Extension of Data Centre and Incubation Centre, NEW DELHI”

I declare that all the provisions of this RFP document read along with the proposal submitted by my Company. I certify that I am an authorized signatory of my company and therefore, competent to make this declaration. I further certify that, interpretation made by FITT technical committee is the final and binding on me.

Yours sincerely,

(Seal & Signature of the Authorized signatory of the System Integrator)

Name:

Place:

Designation:

Date:

18.3 Proforma 3: Format of Technical Proposal Document

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016

nciipc@fitt-iitd.in

Subject: Submission of Technical proposal for “Selection of System Integrator for Design, Build, Commission and O&M of Datacenter and Incubation Center

Dear Sir/Madam,

We, the undersigned, offer to provide Systems Implementation solutions to FITT on Design, Build, Commission and O&M of Datacenter and Incubation Center with your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes this technical bid and the Financial Bid separately.

We hereby declare that all the information and statements made in this technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Data sheet.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

(Seal & Signature of the Authorized signatory of the System Integrator)

Name:

Place:

Designation:

Date:

18.4 Proforma 4: Format for furnishing Earnest Money Deposit

Whereas _____ (hereinafter called the “tenderer”) has submitted their offer dated _____ for Selection of System Integrator for “Design, Build, Installation, Testing, Commissioning, Integration and Operation & Maintenance of IT infrastructure for Data Center and Incubation Center at Ayanagar NEW DELHI, NEW DELHI” hereinafter called the “RFP”) against the purchaser’s RFP enquiry No. FITT/ _____ / _____ KNOW ALL MEN by these presents that We _____ < Bank Name > of _____ having our registered office at _____ are bound unto _____ (hereinafter called the “Purchaser”) in the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said Bank this ____ day of _____, 2019.

THE CONDITIONS OF THIS OBLIGATION ARE:

If the Bidder withdraws or amends, impairs or derogates from the RFP in any respect within the period of validity of this RFP.

If the Bidder having been notified of the acceptance of his RFP by the purchaser during the period of its validity: -

If the Bidder fails to furnish the Performance Security for the due performance of the contract. Fails or refuses to accept/execute the contract.

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

This guarantee will remain in force up to and including 180 days from the last date of RFP submission date/ RFP validity date and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

18.5 Proforma 5: Undertaking on Not Being Black-Listed

Undertaking on Not Being Black-Listed

This is to certify that << COMPANY NAME >> is not blacklisted by the any Government or any of its agencies for any reasons whatsoever and not blacklisted by Central / any other State/UT Government or its agencies for indulging in corrupt or fraudulent practices or for indulging in unfair trade practices and not backed out from executing the work after award of the work as on the RFP submission date.

Company Secretary / Authorized
Signatory Name of Signatory:

Bidder Company Name:

Date:

Place:

18.6 Proforma 6: Undertaking of Service Level Compliance

Undertaking of Service Level Compliance

(On the Bidder's Letterhead)

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016
nciipc@fitt-iitd.in

Dear Sir/Madam,

Sub: Undertaking on Service Level Compliance

I/We as Implementing Agency do hereby undertake that we shall monitor, maintain, and comply with the service levels stated in the RFP to provide quality service to FITT.

However, if the proposed resources, Non-IT Infrastructure are found to be insufficient in meeting the RFP and/or the service level requirements given by FITT, then we will augment the same without any additional cost to FITT.

Yours sincerely,

(Seal & Signature of the Authorized signatory of the System Integrator)

Name:

Place:

Designation:

Date:

18.7 Proforma 7: Authorization Letters from OEMs

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016

nciipc@fitt-iitd.in

Dear Sir

WHEREAS *<Name of the Original Equipment Manufacturer>* who are official producers of *<Name of Products intended for this Tender>* and having production facilities at *<Address of Mfg. Facility>* do hereby authorize *<Name of the Bidder with complete address>* (hereinafter, the “Bidder”) to submit a bid of the following Products produced by us, for the Supply and Support Requirements associated with the above Invitation for Bids.

When resold by *<Name of the Bidder>*, these products will carry a 3-year warranty from the date of handover of the project to FITT by our reseller.

We assure you that in the event of *<name of the Bidder>* not being able to fulfil its obligation as our Service Provider in respect of our standard Warranty Terms we would continue to meet our Warranty Terms as prescribed in the tender terms.

We confirm that *<Name of the Bidder>* is our authorized service provider/system integrator and can hence provide maintenance and upgrade support for our products.

We confirm that the products quoted are on our current product list and are not likely to be discontinued within 7 years from the day of this letter. We assure availability of spares for the products for the next Seven years.

We also confirm that any Bidder who offer our products without our authorization as above, FITT at its discretion may decide to disqualify the Bidder and we will have no objection in this regard. Further, in such case we confirm that such Bidder will not be authorized to bid for our products in any of the RFP call by FITT in future.

We confirm that our products, the ones for which this MAF is being issued to Bidder are manufactured in a country that does not shares geographical border with India.

We confirm that the technical compliance submitted by <Name of the Bidder> has been duly endorsed by us with stamp and signature.

Signature

Note: This letter of authority must be on the letterhead of the Manufacturer and duly signed by an authorized person not below capacity of General Manager/Business unit head or Equivalent

Yours faithfully,

For and on behalf of M/s _____(Name of the manufacturer)

Signature _____

Name _____

Designation _____

Address _____

Date :

Directorate Seal

Note: This letter of authority should be on the letterhead of the manufacturer concerned and should be signed by a person competent and having the power of attorney to bind the manufacturer.

18.8 Proforma 8: Technical specification compliance by OEM/Bidder.

Minimum Criteria and Condition for OEM and Bidder for Technical Specifications

The OEM for all the above-mentioned equipment's should be able to support the Warranty and Replacement services efficiently.

Please fill up compliance statement as per below format with Technical Proposal for all items as per Technical specification mentioned in this RFP.

<< OEM Name >> << Table need to modify as per specification table>>

Device Name				
Make				
Model				
S No.	System	Description	Compliance (Y/N)	Remarks

Yours sincerely,

(Seal & Signature of the Authorized signatory of the System Integrator and OEM) Name:
Designation:

Place:
Date:

18.9 Proforma 9: Project Credentials Format

More than one same table content may be provided for more than one project detail.

Sl. No.	Item	Detail
General Information		
1.	Customer Name	
2.	Details of Contact Person • Name: • Designation: • Email: • Phone: & Fax: • Mailing Address:	
Project Details		
3.	Name of the project	
4.	Government/Non-government	
5.	Start Date/End Date	
6.	Current Status	
7.	Contract Tenure	
8.	Area of the Data Centre	
9.	Effort involved in Payroll person-months in the complete project	
10	Order Value of the project (in Crores)	
11.	Please provide copies of Work Order or Certificate of Completion for completed projects from the customer	

I do hereby acknowledge that the details provided above are true to best of my knowledge. Yours sincerely,

(Seal & Signature of the Authorized signatory of the System Integrator)

Name:

Place:

Designation:

Date:

18.10 Proforma 10: Format for Performance for Bank Guarantee (PBG)

Ref. No. _____

Bank Guarantee No _____

Dated _____

To

Project Head NCIIPC
C/O Chief Operating Officer
Foundation For Innovation and Technology Transfer (FITT)
Indian institute of Technology IIT Delhi ,
Huaz Khas , New Delhi 110016

nciipc@fitt-iitd.in

Dear Sir/Madam,

In consideration of FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSFER , FITT, NEW DELHI, NEW DELHI India, India (hereinafter referred to as 'FITT', which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) after receipt of the Letter of Intent (LOI) dated __ with M/s having its registered / head office at _____ (hereinafter referred to as the SYSTEMS INTEGRATOR) which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and FITT having agreed that the SYSTEM INTEGRATOR shall furnish to FITT a performance guarantee for 5% of the Total Project Cost for the faithful performance of the entire contract.

We (name of the bank) _ registered under the laws of ____ having head / registered office at __ (hereinafter referred to as "the Bank", which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay immediately on first demand in writing any / all moneys to the extent of 5% of the Total Project Cost without any demur, reservation, contest or protest and / or without any reference to the SYSTEMS INTEGRATOR. Any such demand made by FITT on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and / or any other matter or thing whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by FITT in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the SYSTEM INTEGRATOR and shall remain valid, binding and operative against the bank.

The Bank also agrees that FITT 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 SYSTEM INTEGRATOR and notwithstanding any security or other guarantee that FITT may have in relation to the SYSTEMS INTEGRATOR's liabilities.

The Bank further agrees that FITT shall have the fullest liberty without our consented without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the said SYSTEMS INTEGRATOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in FITT against the said SYSTEMS INTEGRATOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said SYSTEMS INTEGRATOR(s) or for any forbearance, act or omission on the part of FITT or any indulgence by FITT to the said SYSTEMS INTEGRATOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the contract and all dues of FITT under or by virtue of this contract have been fully paid and its claim satisfied or discharged or till FITT discharges this guarantee in writing, whichever is earlier.

This Guarantee shall not be discharged by any change in our constitution, in the constitution of FITT or that of the SYSTEMS INTEGRATOR.

The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of FITT.

Notwithstanding anything contained herein above, our liability under this Guarantee is limited to Indian Rs. (in figures) _____ (Indian Rupees (in words) _____) and our guarantee shall remain in force until _ (indicate FITT date of expiry of bank guarantee). Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of FITT under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of FITT under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

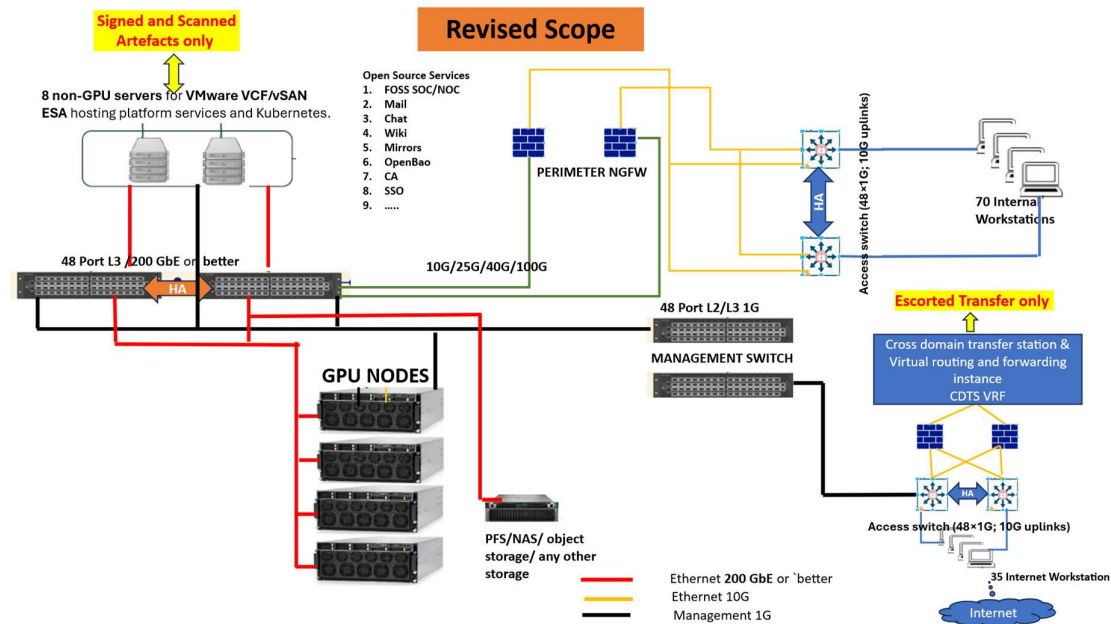
In witness whereof, the Bank through its authorized officer has set its hand and stamp on this

_____ Day of _____ 2025 at _____

PART B

TECHNICAL SPECIFICATION HARDWARE, PROJECT GOVERNANCE and SECURITY

1. Technical Specification and compliances



NOTE: Separate management Switch 16 Port for CDTs enclave

2. Hardware

2.1. GPU Server

SI NO	Components	Specifications	Compliance Yes/No
1	CPU	Min Two or more Intel based x86 Architecture based server Processors*, Each CPU with at least 56 Cores, 2.1GHz Base or higher with 105MB Cache or more.	
2	RAM	2048 GB using Dual Rank x4 DDR5-5600 Registered Standard Memory or better Registered ECC RAM installed from day one. Total 24 DIMM Slots or higher.	
3	Storage for OS	Each Node must have the provision to be configured with minimum 2 (or More) x 480 GB SATA SSD/NVME M.2 Drives for OS	
4	Local Storage	6-8x U.2/U.3 NVMe (≥ 3.84 TB each) for OS/scratch	
5	Networking	2x 200 GbE (QSFP56/112G-ready)	

6	Networking GPU	Embedded dual port 1/10GbE Copper for Management	
		The proposed system must have a PCI-5 slots as per industry standards if proposed	
		Minimum 2 USB ports per node	
		Each Node must be configured with 8 x H200 141GB GPUs connected connected with 4-way NVIDIA NVLink bridge bidirectional communication bandwidth The GPU card should be able to logically slice during the submission of jobs; that is a job can be submitted in all or any of the GPU card through the Workload Manager The quoted model at time of application of EoI should be available in the market place of NVIDIA.	
7	GPU Memory	The total aggregate memory per node from the GPUs should be at least 1128 GB.	
8	Multi Instance GPU	The deployed system must utilize the full capabilities of Multi-Instance GPU (MIG) technology, enabling a single GPU to be securely partitioned into a maximum of seven (7) isolated instances. • NVIDIA AI Enterprise Requirement: Since the H200 GPU often includes a bundled NVIDIA AI Enterprise software subscription , this subscription must be supplied, activated, and fully transferable to the organization upon project handover. • Supplementary Software: All additional software required to provide the slicing, fair-share scheduling, and resource management functionality within the operating environment (e.g., in a virtualized or Kubernetes-based cluster) must be included in the supply.	
9	Power Supply	6x 2800-Watt capacity or similar high wattage per server system providing N+1	

		or better redundant hot-swap Power Supplies	
10	Industry Standard Compliance	1. ACPI 6.3 or above complaint	
11	Industry Standard Compliance	2. PCIe Base Specification Rev. 4.0 or above Compliant	
		3.WOL Support	
		4.PXE Support	
		5.VGA/Display Port	
		6.USB Specification 2.7 or above Compliant	
		7. 80 Plus compliant	
		8.SMBIOS 2.7 or above complaint	
		9.Redfish API	
		10.IPMI 2.0	
		11.Advanced Encryption Standard (AES) support	
		12.SNMP v3	
		Integrated management controller should support:	
12	Embedded Remote Management System management and system security	OEM's server management software should be provided. Hardware and management software should be from the same OEM.	
		a. Monitoring fan, power supply, memory, CPU, RAID, NIC for failures.	
		b. Silicon root of trust/Hardware root of trust, authenticated BIOS, signed firmware updates	
		c. Real-time power meter, temperature monitoring, Policy based administration and management of System Temperature and Cooling Sub-System	
		Secure Boot that enables the system firmware, option card firmware, operating systems, and software collaborate to enhance platform security	
13	Operating System Operating Environment Latest Versions	a) Red Hat Enterprise Linux (RHEL)	
		b) Ubuntu	
		Quoted OS should be under enterprise support from the OEM.	
		Air cooled with support up to 30 degrees C inlet	
14	Installation	Installation, Testing, Training, and Implementation costs for all above	

		mentioned solution must be included from day one.	
15	Form Factor	6U rack mountable or lower	
16	Warranty	3 years + 2 years EoL(End of Life) support	

2.2. Non GPU Server VCF/vSAN ESA Servers (Platform Cluster)

Item	Description of Requirement	Compliance Yes/No
Chassis	1U/2U Rack Mountable	
CPU	Min Two or more Intel based x86 Architecture based server Processors*, Each CPU with at (≥ 32 Cores 4 th Gen or Higher)	
Chipset	Compatible with C741-class chipsets or equivalent, supporting processors with equivalent or higher specifications to meet the required performance, scalability, and operational efficiency	
Memory	- ≥ 512 GB RAM per server -1TB DIMMS scalable up to 8.0 TB using DDR5 Registered DIMM (RDIMM) operating at 4800 MT/s	
Bus Slot	Server should support up to six PCI-Express Slots 4.0/5.0 X16 slots (Can be a mix of 4.0 or 5.0 OR only 5.0) Additional two x8 or higher OCP 3.0 slots or Higher	
HDD Bays	Capacity to achieve ≥ 100 TB usable (FTT=1) across 8 nodes; recommend ≥ 20-24 TB raw per node using 6–8× 3.84–7.68 TB NVMe devices	
Controller	Server should support below controllers, must support Mixed Mode which combines RAID and HBA mode operation simultaneously : Embedded / PCIe based RAID controller with 4GB Flash backed write cache supporting RAID 0, 1, 5, 6, 10, 50, 60. Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe/24 G SSD. Above mentioned controller must support following : 1. Hardware root of trust and secure encryption and decryption of critical drive data 2. Online Capacity Expansion (OCE) 3. Configurable stripe size up to 1 MB 4. Global and dedicated Hot Spare with Revertible Hot 5. Instant Secure Erase 6. Migrate RAID/Stripe Size 7. Modifying Cache Write Policy	

	8. Move Logical Drive 9. Re-enable Failed Logical Drive	
Networking features	25/100 GbE as per leaf uplinks (at least 2×25 GbE per node)	
Interfaces	Serial - 1 (Optional) USB support with Up to 4 total or higher. 1GbE Dedicated management port	
Power Supply	Should support hot plug redundant low halogen power supplies with minimum 94% efficiency	
Fans	Redundant hot-plug system fans	
Industry Standard Compliance	ACPI 6.3 or above Compliant PCIe 5.0 Compliant WOL Support Microsoft® Logo certifications PXE Support Energy Star UEFI 2.7 Redfish API IPMI 2.0 Advanced Encryption Standard (AES) support SNMP v3 Active Directory v1.0 ASHRAE A3/A4	
System Security	UEFI Secure Boot and Secure Start support Tamper-free updates - components digitally signed and verified Immutable Silicon Root of Trust Ability to rollback firmware FIPS 140-2 validation Secure erase of NAND/User data Common Criteria certification TPM (Trusted Platform Module) 2.0 option Advanced Encryption Standard (AES) on browser Bezel Locking Kit option Support for Commercial National Security Algorithms (CNSA) Chassis Intrusion detection option Secure Recovery - recover critical firmware to known good state on detection of compromised firmware	
Operating Systems and Virtualization Software Support	Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESXi. Canonical Ubuntu OpenSource	

Provisioning	1. Should support tool to provision server using RESTful API to discover and deploy servers at scale 2, Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell	
Firmware security	1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable 2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware 3. End-to-end supply chain controls to ensure component integrity, security, and vendor responsibility 4. One-Button Secure Erase - Making server retirement and redeployment simpler. 5. Security Dashboard for Server to detect possible security vulnerabilities.	
Embedded Remote Management and firmware security	1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication 2. Server should have dedicated 1G remote management port 3. Remote management port should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware 4. Server should support agentless management using the out-of-band remote management port 5. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur 6. Two factor Authentication and Local or Directory-based user accounts with Role based access control 7. Remote console sharing up to 6 users simultaneously during pre-OS and OS runtime operation, 128 bit SSL encryption and Secure Shell	

	Version 2 support. Should provide support for AES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console. 8. Should support RESTful API integration 9. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support 10. Should support managing multiple servers as one via : Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media/Encrypted Virtual Media Group License Activation	
Server Management	OEM server management Software should be provided. The Hardware and software should be from the same OEM	
	Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center. It should provide an at-a-glance visual health summary of the resources user is authorized to view.	
	The Dashboard minimum should display a health summary of the following: • Server Profiles • Server Hardware • Appliance alerts	
	The Systems Management software should provide Role-based access control	
	Zero Touch Provisioning (ZTP) using SSDP with remote access or equivalent	
	Management software should support integration with popular virtualization platform management software like Vmware vCenter & vRealize Operations, and Microsoft System Center & Admin Center	
	Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD.	
	Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status. The Portal should also provide a personalized dashboard to monitor device health, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal	

	should be available on premise (at our location - console based) or off premise (in the cloud).	
	Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components.	
	Should have dashboard for firmware baselines while performing minimum required firmware checks and highlighting out-of-compliance devices for updates with the selected firmware baseline	
	The Server Management Software should be of the same brand as of the server supplier.	
Warranty	3 years + 3 years support	

2.3. Storage

Category	Specification Requirement	Compliance Yes/No
Storage Type	Parallel File System (PFS) / NAS / Object Storage (vendor choice, must meet performance criteria). More than 2 controllers/nodes for HA. Minimum 1.5TB DRAM based cache for ability to cache training datasets	
Primary Use Case	High-throughput data access for GPU clusters (AI/ML, HPC workloads)	
Connectivity	100/200/400 Gbps Ethernet (RoCEv2 or TCP/IP supported); must integrate with GPU servers via Ethernet fabric	
Aggregate Throughput	With NVME Disk Minimum 160 Gbps (20 GB/s) or more sustained throughput at 100% read, minimum 100Gbps (12.5 GB/s) sustained throughput at 100% write	
Latency	Low-latency design, ≤ 5 ms (end-to-end for I/O, 128-512K KB I/O size)	
Storage Capacity	Minimum usable 100 TB (scalable beyond 1 PB without major re-architecture)	
Performance Tier	On NVMe SSDs At least 20% of capacity (~20 TB) on NVMe SSDs (tier-0) for hot data, balance may be HDD or other SSD tier Bidder can provide >20% NVME also	
Scalability	Must support linear scaling of throughput and capacity (scale-out architecture)	
Data Protection	Erasur coding or RAID equivalent, ensuring fault tolerance with minimal overhead	

File / Object Protocols	Must support at least NFSv4.1, SMB3 , and/or S3 API ; POSIX-compliance for Storage solutions	
Security	End-to-end encryption (in-transit TLS 1.2+ and at-rest AES-256) Should not be possible to turn off data at rest encryption; or should have Encrypted Drives; Role-Based Access Control (RBAC) / LDAP / AD integration Offered storage must provide autonomous ransomware protection to detect, protect and restore data in case of ransomware attack. Storage must offer following features for protecting critical data- 1. Immutable snapshots 2. Multi Admin Validation 3. Multi Factor Authentication 4. Data at rest and in flight encryption 5. Synchronous and Asynchronous Replication	
Management Interface	Web-based GUI and REST API for monitoring, provisioning, and alerting	
High Availability	No single point of failure; redundant controllers, network paths, and power supplies	
Compatibility	Certified to interoperate with leading GPU server platforms (NVIDIA HGX/DGX or equivalent). Documentation from Nvidia website, on interoperability of offered family of storage to be provided Offered storage OEM must be certified from Nvidia for both BasePOD / SuperPOD architecture. Documentation from NVIDIA website/Storage OEM, on interoperability of offered family of storage to be provided	
Monitoring & Telemetry	Real-time performance metrics, SNMP/Prometheus export	
Rack Space & Power	Vendor to specify; must fit standard 19" racks	
Support	24x7 vendor support, with SLA for critical failures ≤6 hours	

2.4. Switching & Firewalls

2.4.1. DC leaf/L3 Switch (Upto 400G capable)

Sr. No	Specifications	Compliance (Yes/No)
1	Architecture	
	The switch should have 32 x 100G/200G/400G QSFP-DD and 2 x 10G SFP+ Ports from day one.	
	The proposed switch should have switching performance of 2.5 Tbps throughput. All switching and routing are wire-speed to meet the demands of bandwidth-intensive applications today and in the future.	
	The switch should have 128GB SSD RAM, 32GB Flash and 132MB Packet buffer	
	The proposed switch should support High-speed fully distributed architecture	
	The proposed switch should have High availability with redundancy, and redundant power supplies and fans	
	Switch shall 1RU 19" rack mountable.	
2	Management	
	The proposed switch should support automation and programmability using REST APIs or equivalent and Python scripts fine-grained programmability of network tasks	
	The proposed switch should support access to all network state information to allow unique visibility and analytics	
	The proposed switch should support centralized configuration with validation for consistency and compliance	
	The proposed switch should support simultaneous viewing and editing of multiple configurations	
	The proposed switch should support Network health and topology visibility	
	The proposed switch should support Flexible active-active network designs at Layers 2 and Layer 3	
	The proposed switch should support High availability by design during upgrades, Live Upgrade with LACP traffic.	
	The proposed switch should support real-time state and resiliency and allowing individual software modules to be independently upgraded for higher availability	
	The proposed switch should support Industry-standard CLI with a hierarchical structure	
	The proposed switch should be able to restrict access to critical configuration commands to offer multiple privilege levels with password protection, ACLs provide SNMP access, local and remote Syslog capabilities to allow logging of all access	
	The proposed switch should support IPSLA or equivalent to monitor the network for degradation of various services, including monitoring voice. Monitoring is enabled via the	

	NAE for history and for automated gathering of additional information when anomalies are detected.	
	The proposed switch should support SNMP v2c/v3	
	The proposed switch should support sFlow (RFC 3176) to Provides scalable ASIC-based wire speed network monitoring and accounting with no impact on network performance and gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes.	
	The Proposed switch shall support RMON, TFTP/SFTP, IPv4 and IPv6 traceroute and ping, NTP	
	The proposed switch should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
	The proposed switch should support Dual flash images to provide independent primary and secondary operating system files for backup while upgrading	
3	Quality of Service (QoS)	
	The proposed switch should support congestion actions	
	The proposed switch should support Strict priority (SP) queuing and Deficit Weighted Round Robin (DWRR)	
	The proposed switch should support Data Center Bridging (DCB)	
	The proposed switch should support lossless Ethernet networking standard PFC, ETS and DCBX.	
	Storage Solution Support, iSCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMeOF)	
4	Resiliency and high availability	
	The proposed switch should support distributed and redundant architecture by deploying two switches with each switch maintaining independent control and synchronized during upgrades or failover and should support upgrades during live operation.	
	The proposed switch should support Virtual Router Redundancy Protocol (VRRP)	
	The proposed switch should support Ethernet Ring Protection Switching (ERPS) to supports rapid protection and recovery in a ring topology.	
	The proposed switch should support Unidirectional Link Detection (UDLD)	
	The proposed switch should support IEEE 802.3ad LACP with 128 link aggregation groups (LAGs), each with 16 links per group, with a user-selectable hashing algorithm	
	The proposed switch should support N+1 high reliability with hot swappable, redundant power supplies	
	The proposed switch should support Redundant, Hotswappable and load-sharing fans and power supplies	

	The proposed switch should support Separates control from services and keeps service processing isolated to increases security and performance	
5	Layer 2 switching	
	The switch should have 64K MAC address table size	
	The proposed switch should support up to 4000 port-based or IEEE 802.1Q-based VLANs	
	The proposed switch should support VLAN Translation	
	The proposed switch should support Static VXLAN to manually connect two or more VXLAN tunnel endpoints (VTEP).	
	The proposed switch should support Dynamic VXLAN with BGP-EVPN to Deep segmentation for campus networks or Layer 3 designs	
	The proposed switch should support Port mirroring to duplicates port traffic (ingress and egress) to a local or remote monitoring port andsupport minimum 4 mirroring groups with an unlimited number of ports per group	
	The proposed switch should support IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	
	The proposed switch should support Rapid Per-VLAN spanning tree plus (RPVST+) to allow each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs	
6	Layer 3 routing	
	The switch should support 60K IPv4 and 30KIPv6 Unicast Routes	
	The proposed switch should support Static IPv4 routing, RIPv2, RIPv4, Policy Based Routing (PBR), Border Gateway Protocol 4 (BGP-4)	
	The proposed switch should support Open shortest path first (OSPF) with support of ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery	
	The proposed switch should support Multiprotocol BGP (MP-BGP) with IPv6 Address Family	
	The proposed switch should support 6in4 tunnels to tunnelling of IPv6 traffic in an IPv4 network.	
	The proposed switch should support Advanced Layer 2/3 feature set includes BGP, OSPF, VRF-lite, and IPv6	
	The proposed switch should support IP performance optimization to Provides a set of tools to improve the performance of IPv4 networks which include directed broadcasts, customization of TCP parameters, support of ICMP error packets and extensive display capabilities	
	The proposed switch should support Dual IP stack	
	The proposed switch should support Equal-Cost Multipath (ECMP)	
	The proposed switch should support Generic Routing Encapsulation (GRE)	

7	Security	
	The proposed switch should support Access control list (ACL) Feature for both IPv4 and IPv6 and ACLs should also protect control plane services such as SSH, SNMP, NTP or web servers.	
	The proposed switch should support Remote Authentication Dial-In User Service (RADIUS)	
	The proposed switch should support Terminal Access Controller Access-Control System (TACACS+)	
	The proposed switch should support Management access security	
	The proposed switch should support Secure shell (SSHv2)	
8	Multicast	
	The switch should support 7000 IPv4 and IPv6 Multicast Routes	
	The proposed switch should support Internet Group Management Protocol (IGMPv1, v2, and v3)	
	The proposed switch should support Anycast RP	
	The proposed switch should support MSDP Mesh Groups to provide redundancy and load-sharing capabilities.	
	The proposed switch should support FastLeave (FL) and Forced-FastLeave (FFL)	
	The proposed switch should support Multicast Listener Discovery (MLD)	
	The proposed switch should support Multicast Service Delivery Protocol (MSDP)	
	The proposed switch should support IGMP/MLD Snooping	
	The proposed switch should support Protocol Independent Multicast (PIM)	
	The proposed switch should support PIM for IPv4 and IPv6 supports one-to-many and many-to-many and support for PIM Sparse Mode (PIM-SM, IPv4 and IPv6).The proposed switch should support PIM-Dense Mode	
9	Environmental Features	
	The proposed switch should support for RoHS (EN 50581:2012) regulations	
	The Switch shall have common criteria NDPP certified	
	Compliant with DoDIN, APL, NDcPP, FIPS, and USGv6 requirements for federal certifications.	
	The switch support Operating temperature of 0°C to 45°C	

	Immunity EN55024:2015 / CISPR 24:2015, ESD: EN 61000-4-2, Radiated: EN61000-4-3, EFT/Burst: EN 61000-4-4, Surge: EN 61000-4-5 Conducted: EN 61000-4-6 Power frequency magnetic field: IEC 61000-4-8 Voltage dips and interruptions: EN 61000-4-11 Harmonics: EN 61000-3-2, IEC 61000-3-2 Flicker: EN 61000-3-3, IEC 61000-3-3 Emissions EN 55032:2015 / CISPR 32:2015, Class A, VCCI-32:2016 Class A, CNS 13483, AS/NZS, ICES-003 Issue 5 FCC CFR 47 Part 15:2010, Class A RoHS-6 Compliant (EN 50581:2012)	
10	Warranty and Support	
	The switch shall be offered with minimum three years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly and 3 Years EoL support	
	Software upgrades/updates shall be included as part of the warranty	

2.4.2. Enclave Access and Internet LAN Access: 2× switches(Each) , 48×1G copper with 4×10 or 25G uplinks to leafs/L3

Sr.No	Minimum Technical Specification	Compliance (Yes/No)
1	General Features:	
	The switch should be Gigabit Layer 2 and Layer 3 switch with console/auxiliary ports along with all accessories.	
	Switch should have hot swappable redundant Power Supply and fan tray from day-1.	
	Switch should have non-blocking throughput capability on all ports from day 1	
	Software upgrades, updates shall be included as part of the warranty	
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software or Open Networking Install Environment capabilities to have 3rd party Network OS installed to optimize performance and capacity	
	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source	
	OR	
	The Switch should support image pre-check. The firmware installation is performed only if the result of the pre-check is successful.	
	Switch shall support cloud-based and on-premises management.	
	Operating temperature of 0°C to 45°C	
	All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1.	
2	Performance:	
	Should have 8GB DRAM and 32GB Flash.	
	The switch will have at up to 880 Gbps switching capacity.	

	Forwarding rates: The switch should have 650Mpps forwarding rates.	
	IPv4 Routing entry support : 60K or more.	
	IPv6 Routing entry support : 60K or more.	
	IPv4 and IPv6 Multicast Routes : 4K or more.	
	MAC addresses support: 32K or more.	
	VLANs ID: 4K or more and 4K VLANs simultaneously.	
	ACL /QOS entry support : 4K or more.	
	Packet buffer : 8 MB or more	
	The device should be IPv6 ready from day one. Should support the ability to configure backup of the previous configuration automatically.	
3	Functionality:	
	The switch should support MC-LAG / vPC / MLAG to allow two switches to form a virtual chassis or have front plane stacking on uplink port or Backplane stacking and should have 200 Gbps of Virtual Chassis performance or Stacking Performance of minimum 160 Gbps. The switch should support minimum 10 switch in stack	
	The Switch should support long distance across the Rack and Floor Switch virtual-chassis or Stacking..	
	Must support EVPN, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM-SM / PIM-DM / PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1	
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking.	
	The switch should support IEEE 802.1s Multiple Spanning Tree	
	The switch should support STP, Trunking, Private VLAN (PVLAN) / VLAN autostate / NAT, Q-in-Q, Shaped Round Robin (SRR)/Deficit Weighted Round-Robin (DWRR) scheduling, Committed Information Rate (CIR)/Equivalent and or eight egress queues per port	
	Switch shall support rolled back to the previous successful configuration	
	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute	
	The switch should support TPM & Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests	
	Switch should have Data Center Bridging (DCB), Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow, Priority Flow Control (PFC) 2 priorities per port, Enhanced Transmission Service (ETS) DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)	
	Switch should have SCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	
	The switch should be manageable from cloud and On-premises solution.	
	The switch should support IEEE 802.1X or MAC filtering	
	The switch should support Port-based authentication, if solution is based on 802.1x	
	The switch should support MAC-based authentication, if solution is based on 802.1x	
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number	
	The switch should support Source-port filtering or IP and Layer-4 port filtering	

	The switch should support RADIUS/TACACS+, Dynamic ARP protection or MAC filtering, Port Security, STP route guard, BPDU guard.	
	OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology	
	Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology	
4	Interface Requirement:	
	i) 48nos. of 1G/10G SFP+ ports	
	ii) 4 nos. of 100G SFP28 uplink ports.	
5	Regulatory Compliance:	
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.	
	Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.	
6	OEM qualification criteria, Warranty and Support	
	The switch shall be offered with minimum 3 Years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly and 3 years of Support	
	Switch or Switch's Operating System on different hardware platform should be tested for EAL 2/NDPP or above under Common Criteria Certification.	
	The OEM shall be in Leaders Quadrant of Gartner report for Wired & Wireless LAN Infrastructure for minimum 5 Consecutive Years.	

2.4.3.A Management/OOB: 2× switches, 48 nos. of 1000 Base-T Ports and 4 x 1G/10G SFP+." OOB-only (BMC/iLO/iDRAC, management ports)

Sr.No	Minimum Technical Specification	Compliance (Yes/No)
1	General Features:	
	Access Switch "48 nos. of 1000 Base-T Ports and 4 x 1G/10G SFP+."	
	Access switch should be Gigabit Layer 2/Layer 3 switch with console/auxiliary ports along with all accessories.	
	Switch should have non-blocking throughput capability on all ports from day1.	
	Software upgrades, updates shall be included as part of the warranty.	
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software or Open Networking Install Environment capabilities to have 3rd party Network OS installed to optimize performance and capacity.	
	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source	
	OR	
	The Switch should support image pre-check. The firmware installation is performed only if the result of the pre-check successful.	
	Operating temperature of 0°C to 40°C.	
	All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1.	
2	Performance:	
	Should have 8 GB DRAM and 16 GB Flash.	
	The switch will have at up to 128 Gbps switching capacity.	

	Forwarding rates: The switch should have 95Mpps forwarding rates.	
	IPv4 Routing entry support : 24K or more.	
	IPv6 Routing entry support : 12K or more.	
	IGMP Groups and MLD Group : 1K or more.	
	MAC addresses support: 32K or more.	
	VLANs ID: 4K or more and 1K VLANs simultaneously.	
	ACL /QOS entry support : 1K or more.	
	Packet buffer : 8 MB or more	
	The device should be IPv6 ready from day one.	
	Should support the ability to configure backup of the previous configuration automatically.	
3	Functionality:	
	The switch should support front plane stacking on uplink port or Backplane stacking or equivalent technology and should have Stacking Performance of minimum 40 Gbps. The switch should support minimum 8 switch in stack."	
	The Switch should support long distance across the Rack and Floor virtual chassis or Switch Stacking.	
	Must support , VXLAN, SPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, and Virtual Router Redundancy Protocol (VRRP) from Day 1.	
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking.	
	The switch should support IEEE 802.1s Multiple Spanning Tree.	
	The switch should support STP, Trunking, Private VLAN (PVLAN), VLAN tagging, Q-in- Q, Deficit Weighted Round-Robin(DWRR) or equivalent scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port"	
	Switch shall support rolled back to the previous successful configuration	
	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute	
	The switch should support Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests.	
	The switch should be manageable from cloud NMS or On-premises NMS solution offered.	
	The switch should support IEEE 802.1X and MAC filtering	
	The switch should support Port-based authentication,	
	The switch should support MAC-based authentication,	
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number	
	The switch should support Source-port filtering or IP and Layer-4 port filtering	
	The switch should support RADIUS/TACACS+, Dynamic ARP protection or MAC filtering, Port Security, STP route guard, BPDU guard.	
	OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology.	
	Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology.	
4	Interface Requirement:	
	48 nos. of 1000 Base-T Ports and 4 x 1G/10G SFP+."	
5	Regulatory Compliance:	

	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.	
	Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.	
6	OEM qualification criteria, Warranty and Support	
	The switch shall be offered with minimum 3 Years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly and 3 years of Support	
	Switch or Switch's Operating System on different hardware platform should be tested for EAL 2/NDPP or above under Common Criteria Certification.	

2.4.4. A Management/OOB: 1× switches, 16 nos. of 1000 Base-T Ports and 4 x 1G/10G SFP+." OOB-only (BMC/iLO/iDRAC, management ports)

Specifications same as Switch in para 2.4.3. above except number of ports is 16

2.4.5. Firewalls

2.4.5.1. Perimeter (Internet LAN): Secure Firewall HA pair with URL filtering, IPS, DNS security

2.4.5.2. ISFW (Internal Segmentation): Secure Firewall HA pair sized for east-west inter-VRF traffic; IPS enabled on allowed flows; no NAT

Common Features

S. No.	Feature Set	Compliance
1	General Requirement	Yes/No
1.1	The Switch should support non-blocking architecture, all proposed ports must provide wire speed line rate performance	
1.2	Switch should support the complete STACK of IPV4 and IPV6 services. Switch should support the complete STACK of IPV4 and IPV6 services. The Spine switch must support active-active spine role in the CLOS fabric to ensure 0 packet drops in case a production spine is taken out of the network	
1.3	All relevant licenses for all the features and scale should be quoted along with switch and all these licenses and features should be available from Day 1.	
1.4	The Switch and Transceivers should be from the same OEM	
1.5	The proposed solution and switches should be part of Gartner Leader Quadrant for DC Networking for last 3 years	
2	Hardware and Interface Requirement	
2.1	Switch should have Minimum 32 non-blocking interfaces populated with Multi Mode Fiber SFP 100G from day 1. Switch should also support 10/25/40G natively or using breakout cable.	
2.2	Switch should have console port for local management & Out of band management interface for remote management	

2.3	Switch should have adequate power supplies for the complete system usage and for providing N+1 power supply redundancy	
2.4	All Transceivers/ Cables should be added as per the BOQ from Day 1	
3	Performance Requirement	
3.1	Switch should support minimum 1000 VRF/VNI instances with route leaking functionality	
3.2	The switch should support minimum 500 k Ipv4 Longest Prefix Match routes	
3.3	The switch should support 30k multicast routes	
3.4	Switch should support a minimum of 6.4 Tbps Bandwidth	
3.5	Device should be based on simple and intelligent shared-memory buffered architecture that simplifies the system buffer management and queuing implementation.	
3.6	The switch proposed should have minimum 60 MB Packet Buffer	
3.7	The switch should have capability to support 200G or more without any additional software or module from day 1	
4	Network Virtualization Features	
4.1	Switch should support VXLAN to achieve Network Virtualisation.	
4.2	Switch Hardware should have the capability to support VXLAN and EVPN symmetric/ asymmetric IRB for supporting Spine – Leaf architecture to optimize the east-west traffic flow inside the Data Center	
5	Layer2 Features	
5.1	Switch should support minimum 90K no. of MAC addresses	
5.2	Spanning Tree Protocol (IEEE 802.1D, 802.1W, 802.1S)	
5.3	Switch should support VLAN Trunking (802.1q)	
5.4	Switch should support layer 2 extension over VXLAN across all Data Centres to enable VM mobility & availability	
5.5	Switch should support IEEE Link Aggregation and Ethernet Bonding functionality (IEEE 802.3ad) to group multiple ports for redundancy	
5.6	Switch Hardware should have capability to support BGP EVPN Route Type 1, Type 2, Type 3, Type 4, Route Type 5, Type 6/Type 7/Equivalent and routed multicast for the overlay control plane.	
6	Layer3 Features	
6.1	Switch should support static and dynamic routing Switch should support segment routing /VRF route leaking functionality from day 1	
6.2	Switch should provide multicast traffic reachable using PIM-SM, PIM-SSM and Multicast Source Discovery Protocol (MSDP)	
6.3	Switch should support Multicast routing	
7	Quality of Service	
7.1	Switch should support 802.1P classification and marking of packet using CoS (Class of Service) and DSCP (Differentiated Services Code Point)	
	Switch should support different type of QoS features for real time traffic differential treatment using Weighted Random Early Detection and Strict	
7.2	Priority Queuing.	
7.3	Switch should support to trust the QoS marking and priority settings of the end points as per the defined policy	
8	Security	

8.1	Switch should support control plane Protection from unnecessary or DoS traffic by control plane protection policy	
8.2	Switch should support external database for AAA using TACACS+ and RADIUS	
8.3	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined	
9	Manageability	
9.1	Switch should support for sending logs to multiple centralised syslog servers for log monitoring and audit trail.	
9.2	Switch should provide remote login for administration using SSHv2	
9.5	Switch should support monitoring using different type of Industry standard NMS tools using SNMP v3.	
9.6	Switch should provide different privilege for login into the system for monitoring and management	
9.8	All relevant licenses for all the features and scale should be quoted along with switch and all these licenses and features should be supported from Day 1 from Single OEM.	

Note: Final models sized during procurement based on rulebase, throughput, and SSL policy (no SSL decryption assumed inside enclave)

2.5. CDTs Enclave (All CDTs SERVERS with Windows OS)

2.5.1. CDTs scanning servers: 2× 1U/2U x86 servers (12–16 cores, 64–128 GB RAM, 2×10/25 GbE), NVMe ≥ 3.84 TB

2.5.2. Roles: multi-AV, YARA, file hashing, staging to Harbor-Quarantine

2.5.3. CDTs management/ops server: 1× 1U x86 (8–12 cores, 64 GB RAM) for workflow/orchestration, dashboards, and audit log frontend

2.5.4. Sandbox VMs (on CDTs servers): Cuckoo with customer-provided Windows images (licences by customer)

2.5.5. Secure storage: Uses Harbor-Quarantine (on platform cluster) for large artefacts; CDTs local disk for transient staging

2.6. Time Time & DNS

2.6.1. GPS Stratum-1 NTP appliance, dual PSU, 1× GPS outdoor antenna with coax, lightning arrestor, and grounding kit

2.6.2. Mounting kit & cabling to DC rooftop or suitable GPS sky-view position

2.7. Workstations (GPU Workstation Qty- 35(5 for Bangalore) and Standard Workstations-70(15 for Bangalore) for End User Compute)

SNo	Category	Specification Item	OEM-Agnostic Requirement
1	General System	Purpose	High-performance workstation for professional use (CAD/CAM, content creation, data analysis, software dev, light simulation) with standard Monitor and Windows OS, Keyboard and Mouse
		Form Factor	Professional Tower or Small Form Factor (SFF) Workstation
2	Processor (CPU)	Model	Intel Core i9-or similar on benchmark test
		Cores / Threads	GPU Workstations:- ≥24 Cores Standard Workstations: ≥ 12 Core
		Base Clock (P-cores)	Minimum 2.0 GHz
		Max Turbo Frequency	Up to 5.8 GHz or higher
		Intel Smart Cache	36 MB or higher
		Processor Base Power (TDP)	65W, with dynamic Max Turbo Power support
		Integrated Graphics	GPU Workstations:- RTX 4000 Ada (20–24 GB) or Intel UHD Graphics 770 (or equivalent integrated graphics)
3	System Memory (RAM)	Total Installed Capacity	GPU Workstations:- ≥64–128 GB RAM Standard Workstations: ≥ 32GB
		Configuration	≥2 DDR5 UDIMM Supported
		Speed	Minimum DDR5-5600 MHz
		Type	Non-ECC (Error-Correcting Code)
4	Storage	Primary Drive Type	NVMe (Non-Volatile Memory Express) SSD
		Primary Drive Capacity	GPU Workstations:- ≥ 1TB Standard Workstations: ≥ 512 GB
		Primary Drive Interface	PCIe Gen4 x4 (or Gen5 x4)
		Primary Drive Performance	Min. 5000 MB/s Sequential Read, Min. 4000 MB/s Sequential Write
		Storage Expansion Slots	Min. 1 additional M.2 NVMe slot (PCIe Gen4 or higher)
		Storage Expansion Bays	Min. 2 x 3.5-inch or 2.5-inch SATA drive bays
5	Operating System	Version	Microsoft Windows 11 Enterprise (64-bit)
6	Network Connectivity	Wired Ethernet	Integrated 10/100/1000 Mbps Gigabit Ethernet (RJ-45)
		Wireless Connectivity	Wi-Fi 6E (802.11ax) with Bluetooth 5.2 or newer (Recommended)
7	Audio	Integrated Audio	High Definition Audio

8	I/O Ports	Front Ports	Min. 2 x USB 3.2 Gen 1 Type-A, 1 x USB 3.2 Gen 2 Type-C, Audio Combo Jack
		Rear Ports	Min. 4 x USB 3.2 Gen 1 Type-A, 2 x USB 2.0 Type-A, 1 x RJ-45 Ethernet, Audio Line-in/Line-out
9	Power Supply	Type	Internal, Auto-sensing
		Wattage	Sufficient wattage to power all components at full load, including future expansion.
10	Security Features	Trusted Platform Module	TPM 2.0 (Discrete TPM preferred)
		Secure Boot	UEFI Secure Boot enabled by default
		Chassis Intrusion	Chassis Intrusion Switch
		Physical Security	Kensington Lock Slot
		BIOS/UEFI Security	BIOS/UEFI Password Protection
11	Management Features	Remote Management	Standard desktop manageability features
12	Peripherals	Keyboard	Full-size USB Keyboard
		Mouse	USB Optical Mouse
13	Warranty & Support	Duration	3 Years Warranty and 3 years Support
14	Environmental & Physical	Operating Conditions	Operating Temperature: 10°C to 35°C, Humidity: 20% to 80% non-condensing
		Acoustics	Optimized for quiet operation in an office environment.

2.8. Conference Solutions

2.8.1. Camera Solution

Sn o	Category	Specification Item	Required Specification
1	Video Capabilities (Camera)	Resolution	Full HD 1080p (1920 x 1080) at 30 frames per second (fps) or higher. With support for lower resolutions and standard resolutions
		Zoom Capability	Minimum 12x Optical Zoom (or equivalent lossless digital zoom with comparable quality at 12x).
		Pan/Tilt Range	Pan: Minimum ± 170 degrees; Tilt: Minimum ± 90 degrees.
		Field of View (FOV)	Diagonal Field of View (DFOV): Minimum 82 degrees.
		Autofocus	Fast and accurate autofocus.
		Exposure/White Balance	Automatic exposure and white balance control for various lighting conditions.
		Image Sensor	High-quality image sensor for clear video, even in low light conditions.
2	Audio Capabilities	Microphone Array	Integrated microphone array with a minimum pickup range of 4.5 meters (15 feet).

	(Speakerphone/Microphone)	Speaker Output	Integrated speaker with clear audio output for spoken word.
		Full-Duplex Audio	Support for full-duplex audio communication.
		Echo Cancellation	Acoustic Echo Cancellation (AEC) to eliminate echo.
		Noise Reduction	Noise suppression technology to reduce background noise (e.g., keyboard clicks, HVAC sounds).
		Automatic Gain Control (AGC)	Automatic adjustment of microphone levels based on participant distance/volume.
3	Connectivity & Compatibility	Host Connectivity	Single USB 3.0 Type-B connection to host PC/laptop. Backward compatible with USB 2.0 (with potential feature limitations).
		Operating System Support	Compatible with Windows 10/11, macOS (latest versions), and Chrome OS.
		Platform Compatibility	Certified or fully compatible with leading UC platforms (e.g., Microsoft Teams, Zoom, Google Meet, Webex, Skype for Business).
		Physical Interface	RJ45 port for connecting camera to speakerphone (if separate units). Power connection.
4	Features & Control	Camera Presets	Minimum 10 programmable camera presets.
		Auto-Framing/Smart Speaker Tracking (Recommended)	Intelligent framing technology to automatically frame meeting participants or track the active speaker.
		Remote Control	Dedicated IR or RF remote control unit included.
		Management Software	Software utility for advanced configuration, firmware updates, diagnostics, and management from a host PC.
		Security Features	Privacy shutter or equivalent for camera. Firmware updates with security patches.
5	Physical & Environmental	Components	Consists of a PTZ camera unit and a separate speakerphone unit.
		Mounting Options	Camera should support wall mounting, ceiling mounting, and TV/monitor top mounting. Speakerphone to be tabletop.
		Cable Lengths	Sufficient cable length (e.g., 5-10 meters) for connecting camera to speakerphone, and speakerphone to host PC/power. Extendable options available.
		Power Supply	AC Power adapter included. Power over Ethernet (PoE) for camera (if applicable) is a plus.
		Operating Conditions	Operating Temperature: 0°C to 40°C. Operating Humidity: 20% to 80% (non-condensing).
6	Warranty & Support	Warranty	3 years hardware warranty and 3 years support.
		Technical Support	Access to technical support via phone, email, and web portal.

2.8.2. Display Solution for 75-Inch Conference Room Display (Only standard Brands like Sony, Samsung, LG, Panasonic to be provided)

Category	Specification Item	Required Specification	Notes / Considerations
1. Display Panel	Display Size	75 inches (diagonal).	Ideal for medium to large conference rooms to ensure visibility from all seating positions.
	Display Technology	Direct LED Backlit LCD Panel.	Ensures uniform brightness and color across the screen.
	Native Resolution	4K Ultra HD (UHD) - 3840 x 2160 pixels.	Provides exceptional detail and clarity for presentations, video conferencing, and multimedia content.
	Brightness	Minimum 350 cd/m ² (nits) typical.	Sufficient for well-lit conference rooms without direct glare. Higher brightness is preferable for brighter environments.
	Refresh Rate	60Hz native.	Standard for smooth video playback and content display.
	Viewing Angle	178° (H) / 178° (V).	Ensures consistent image quality and color accuracy from wide viewing angles within the conference room.
	Panel Life	Rated for minimum 50,000 hours of typical operation.	Indicates long-term reliability for commercial use.
2. Connectivity	HDMI Inputs	Minimum 3 x HDMI 2.0 (or newer) ports.	For connecting various sources like laptops, video conferencing codecs, presentation systems. HDMI 2.1 is preferred for future-proofing where supported.
	USB Ports	Minimum 2 x USB Type-A ports (e.g., USB 2.0 or 3.0) for media playback, firmware updates, or peripheral connections.	For direct content display from USB drives or powering external accessories.
	Network Port	1 x RJ-45 Ethernet port for network connectivity (for smart features, digital signage, or remote management).	Essential for remote management, firmware updates, and integration into corporate networks. Wi-Fi (802.11ac/ax) is also highly desirable.
	Audio Outputs	1 x Digital Audio Output (Optical or HDMI ARC/eARC), 1 x 3.5mm Analog Audio Out.	For connecting to external sound systems or conference room audio solutions.
	Control Port	1 x RS-232C port (or equivalent for professional control systems like Crestron/Extron).	For integration with room control systems and automation.
3. Audio	Integrated Speakers	Minimum 2 x 10W (RMS) built-in speakers.	For basic audio playback. Integration with a dedicated conference room audio system is often preferred for optimal sound quality.

4. Smart & Professional Features	Operating System	Integrated Smart TV OS (e.g., proprietary OS from vendor) with app support.	Allows for direct app installation (e.g., video conferencing apps, content sharing apps) without requiring an external PC.
	Wireless Screen Sharing	Built-in wireless screen sharing capabilities (e.g., Miracast, Apple AirPlay 2, or proprietary solutions).	Enables convenient wireless content presentation from laptops, tablets, and smartphones.
	Digital Signage Capable	Support for digital signage functionality (e.g., scheduling content playback, remote content management).	Useful for displaying company announcements, schedules, or welcome messages when not in use for conferencing.
5. Physical & Mounting	Dimensions & Weight	Vendor to provide exact dimensions and weight.	For planning mounting solutions.
	VESA Compatibility	Standard VESA mounting pattern (e.g., 400x400mm or 600x400mm) for wall mounts or floor stands.	Ensures compatibility with a wide range of mounting solutions.
	Bezel Design	Slim bezel design for a sleek appearance and minimized distraction.	Modern aesthetic suitable for professional environments.
6. Power & Reliability	Power Supply	AC 100-240V, 50/60Hz.	Standard power input.
	Power Consumption	Energy Star certified; vendor to specify typical and maximum power consumption.	For energy efficiency and operational cost planning.
7. Warranty & Support	Commercial Warranty	Minimum 3-year commercial warranty.	Also Provide 3 years support
	Technical Support	Access to manufacturer's technical support for troubleshooting and assistance.	

2.9. PDUs

PDUs: 4× (A + B per rack), 32A/Three-phase or per site standard, mixed C13/C19 There are **four racks** for GPU servers with each rack having a fully **redundant power setup**. The "A + B" configuration refers to two separate, independent power feeds running into each rack. This ensures that if one power source or PDU fails (e.g., "A" side), the servers remain powered by the other source ("B" side), providing high availability and preventing downtime. The total quantity of PDUs required is 8 (4 racks x 2 PDUs/rack).

2.10. Media for Cold Export

Encrypted removable HDDs: 12× ≥ 12 TB (one per month) + 2× spare

Docking kit and tamper-evident seals; storage logbook for chain-of-custody

3. Governance

This section and its accompanying annexures provide a comprehensive overview of the proposed solution's technical architecture, security framework, and implementation plan. The following documents contain the specific details necessary for a thorough evaluation, outlining our approach to resource management, system security, data handling, and project management to ensure a robust and scalable deployment.

4. Annexure A — Namespace, Quota & Isolation Matrix (Kubernetes)

Scope: One namespace per team; quotas sized to MIG allocations and vSAN capacity; strict network isolation; admission controls enforced.

Policy:

- Each team receives a dedicated namespace (teamXX-ns) with the following:
 - Resource Quota and Limit Range aligned to the agreed MIG profile (S/M/L).
 - Default-deny **Network Policy**; explicit egress only to platform services (Harbor, logging, metrics, DNS).
 - Kyverno policy pack applied (signed-only, SBOM-mandatory, CVE thresholds, no root/privileged, quota enforcement).
- Namespace lifecycle: Created at onboarding; suspended or archived at challenge end; artefacts governed by retention policy.

Namespace/Quota Table (Teams 01–36):

Team	Name space	CPU Limit	Memory Limit	GPU Allocation (MIG)	PVC Quota (GiB)	Max Pods	Network Policy Profile	Admission Policies Applied
Team-01	team 01-ns	32 vCPU	128 GiB	1× S (1g)	500	150	Default-deny; allow platform egress	signed-only; sbom-present; cve-threshold; no-root; quota-enforce
Team-02	team 02-ns	32 vCPU	128 GiB	1× S (1g)	500	150	Default-deny; allow platform egress	

Team-03	team 03-ns	48 vCP U	192 GiB	1× M (2g)	750	180	Default- deny; allow platform egress	signed-only; sbom-present; cve-threshold; no-root; quota- enforce
Team-04	team 04-ns	48 vCP U	192 GiB	1× M (2g)	750	180	Default- deny; allow platform egress	
Team-05	team 05-ns	64 vCP U	256 GiB	1× L (3– 4g)	1,000	220	Default- deny; allow platform egress	
...	...	...	...	...	...	...	...	
Team-36	team 36-ns	32 vCP U	128 GiB	1× S (1g)	500	150	Default- deny; allow platform egress	

Notes:

- The matrix above is fully repeatable for Teams 01–36;

Quota upshifts require written approval; downshifts occur automatically on inactivity >30 days.

5. Annexure B — MIG Profile Catalogue (H200) & Scheduling Policy

Objective: Provide predictable GPU access per team while fitting the 36-concurrent-team baseline.

Profiles:

Profile	MIG Instance (conceptual)	Indicative Use-Cases	Typical Per-Node Maximum
S	1g (small)	Lightweight inference, evaluation runs, preprocessing/feature extraction	7–8
M	2g (medium)	Moderate inference, LoRA/QLoRA fine-tuning, batch scoring	3–4
L	3–4g (large)	Heavier fine-tuning, large batch scoring, embedding build	2

Scheduling & Fair-Share:

- Baseline concurrency: **36teams**. Default mapping: 24 teams on **S**, 9 teams on **M**, 3 team on **L**, adjustable by change control.
- Policy: “use-it-or-kill-it”—idle MIG allocations >2 hours revert to the shared pool.

Operational Controls:

- NVIDIA GPU Operator governs MIG lifecycle; DCGM exports telemetry; alerts raised on oversubscription attempts.

6. Annexure C — Admission Policy Catalogue (Kyverno) Global Policies (Enforced | **Deny on Violation**):

- signed-only:** Only images signed with **Cosign** keys from the approved keyring may be admitted.
- sbom-present:** SBOM (Syft) must be attached and recorded in Harbor; artefacts without SBOM are denied.
- cve-threshold:** Images with **Critical/High** CVEs are denied; **Medium** requires approved waiver ticket ID.
- no-root/no-privileged:** Containers may not run as root, be privileged, or mount hostPath.
- resource-quotas:** CPU/Memory/GPU/PVC quotas enforced; exceeding requests are denied.
- network-policy-present:** Each namespace must maintain a default-deny NetworkPolicy and an “allow-platform-egress” policy.
- image-immutability:** Mutable tags (e.g., “latest”) prohibited; digests or immutable tags required.
- repository-allow-list:** Only **Harbor-Prod** approved repositories; direct public registries disallowed.
- Validation & Reporting:** All Deny events log to Wazuh; daily exception report to Security Board; monthly policy effectiveness review.

7. Annexure D — Falco Runtime Rulepack (Extract):

a) High-Severity Rules:

- Privileged Container Start** (blocked by policy; if bypassed, alert/secops).
- Unexpected Kernel Module Load** (GPU nodes).
- Container Escape Indicators** (mounts into /proc, /sys, /var/lib/kubelet, host namespaces).
- Write to Sensitive Paths** (/etc, /root) by container process.
- Shell Spawned in Restricted Container.**
- Crypto Miner Indicators** (persistent high CPU/GPU without scheduled job context).

b) Medium/Low:

- Unexpected Outbound to Non-Platform Endpoints.**
- Abnormal Process Trees** (e.g., curl → bash).

Response: All High generate ticket + paging in 24×7; Medium consolidated for review.

8. Annexure E — SOC Use-Case SLA Catalogue

Use-Case ID	Scenario	Detection Source	Required Artefacts	MTTD	MTTR (8×5 / 24×7)	Acceptance Test ID
UC-ADM-01	Unsigned image admission attempt	Kyverno→Wazuh	Kyverno audit; Harbor registry logs	≤ 1 min	≤ 60 min / ≤ 30 min	ATP-K8s-ADM-01
UC-ADM-02	Image with Critical CVE attempted	Kyverno→Wazuh	Trivy report; Kyverno deny log	≤ 1 min	≤ 60 min / ≤ 30 min	ATP-K8s-ADM-02
UC-RT-01	Privileged pod attempt	Falco	Falco event; Kubernetes audit log	≤ 1 min	≤ 60 min / ≤ 30 min	ATP-K8s-RT-01
UC-NIDS-01	Suspicious egress on internet PC	Suricata	PCAP snippet; Suricata alert	≤ 2 min	≤ 2 h / ≤ 1 h	ATP-NIDS-01
UC-HOST-01	Suspicious process on GPU node	Wazuh/osquery	Process tree; hash; DCGM metrics	≤ 2 min	≤ 2 h / ≤ 1 h	ATP-HOST-01
UC-CDTS-01	Attempt to bypass CDTS path	Wazuh + system audit	File integrity events; audit logs	≤ 2 min	≤ 2 h / ≤ 1 h	ATP-CDTS-01

9. Annexure F — Acceptance Test Procedures

a) ATP-K8s-ADM-01: Unsigned Image Deny

- i) **Objective:** Verify admission control blocks unsigned images.
- ii) **Steps:**
 - a. Attempt to deploy pod using unsigned image in team01-ns.
 - b. Observe Kyverno **deny**; confirm event in Wazuh; confirm no pod created.
 - c. Harbour shows no promotion record.
- iii) **Pass/Fail:** Deny recorded; no workload started; ticket auto-created.

b) ATP-REG-PERF-02: Registry Pull Throughput

- i) **Objective:** Validate effective pull ≥ 20 Gb/s per GPU node.
- ii) **Steps:**
 - a. Warm caches off; pull 40–80 GB image layers to a GPU node; record duration and bytes.
 - b. Repeat 3 runs; compute effective throughput.
- iii) **Pass/Fail:** P50 ≥ 20 Gb/s effective.

c) ATP-NIDS-01: Suspicious Egress (Internet PC)

- i) **Objective:** Validate Suricata alerting and ticket workflow.
- ii) **Steps:**
 - a. Generate known malicious DNS/HTTP pattern on a test internet PC.
 - b. Confirm Suricata alert; Wazuh ingestion; ticket in Zammad; playbook in Shuffle executed.
- iii) **Pass/Fail:** Alert visible within 2 min; ticket assigned; enrichment complete.
- iv) *(A full ATP catalogue will be included covering all UC entries.)*

10. Annexure G — CDTs SOP & Chain-of-Custody (Full)

- a) **Purpose:** Ensure all artefacts crossing from the internet network into the air-gapped enclave are validated, scanned, approved and fully auditable.
- b) **Roles:**
 - i) **Submitter (Team Lead):** Packages artefact bundle (image, SBOM, signature, attestation).
 - ii) **CDTS Operator (Customer Security):** Runs scanning, triage and sandbox.
 - iii) **Security Approver:** Reviews SBOM/CVE status; grants promotion to Harbor-Prod.
 - iv) **Auditor:** Reviews logs monthly.
- c) **Process (Authoritative Path Only):**
 - i) **Bundle Preparation:** image.tar + image.sig (Cosign) + sbom.json (Syft) + cve.json (Grype) + attestation.json.
 - ii) **Intake:** Submitter deposits bundle on **CDTS ingress share**.
 - iii) **Static Analysis:** Multi-AV and **YARA** run; hashes recorded.
 - iv) **Dynamic Analysis: Cuckoo Sandbox** detonates suspicious samples (customer Windows images).
 - v) **Quarantine Import:** Clean bundle is imported to **Harbor-Quarantine** (non-deployable).
 - vi) **Security Review:** Approver verifies signature, SBOM and CVE policy; creates approval record.
 - vii) **Promotion:** Harbour promotion to **Harbor-Prod** (deployable).
 - viii) **Audit:** Every step logged immutably with: submitter, time, hashes, decisions, approver.
- d) **Artefact Rejection:** Fails any step → reject; raise ticket; record evidence and reason.
- e) **Chain-of-Custody:** Logbook with sequential IDs; monthly audit by Customer Security; quarterly external audit optional.

11. Annexure H — Backup & Cold Export Matrix

Workload	Tool/Method	Frequency	Retention (Hot/Warm)	Cold Export	Restore Drill
K8s cluster state (etcd)	Velero	Daily incr; weekly full	30d	Monthly encrypted bundle	Quarterly
Namespaces + PVs	Velero + restic	Daily incr; weekly full	30d + 90d warm	Included in monthly	Quarterly
Harbor registries	vSAN snaps + export	Daily snaps	30d + 90d warm	Monthly signed tar	Quarterly
OpenBao secrets	Secure snapshot	Weekly	30d	Monthly encrypted	Quarterly
SOC/NOC configs	Git-ops repo (air-gapped) + vSAN snap	Weekly	30d	Included in monthly	Quarterly

Core VMs	vSAN snapshots	Daily	30d	Monthly image set	Quarterly
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Cold Export Procedure: Encrypt with customer key; seal; inventory; store in **customer DC vault**; record chain-of-custody.

12. Annexure I — VRF/VLAN/IP Plan (Authoritative)

VRFs: MGMT, WORKLOAD, STORAGE, USER_ENCLAVE, INET_LAN, CDTs.

Illustrative VLAN & Subnet Map (to be instantiated as per DC IP schema):

VRF	VLAN	Purpose	Subnet (Example)	Gateway	DHCP
MGMT	10	OOB & mgmt NICs	10.10.10.0/24	.1	Static
WORKLOAD	20	K8s nodes & pods (node network)	10.20.0.0/22	.1	Static
STORAGE	30	vSAN ESA / storage services	10.30.0.0/23	.1	Static
USER_ENCLAVE	40	Enclave workstations	10.40.0.0/23	.1	Kea
INET_LAN	50	Internet PCs + FTD	10.50.0.0/23	.1	Kea
CDTS	60	Transfer enclave	10.60.0.0/24	.1	Static

ACL Model: Default-deny inter-VRF; explicit allow:

WORKLOAD→Harbor/Logging/DNS/NTP; USER_ENCLAVE→platform minimal;

INET_LAN→FTD only; INET_LAN↔CDTS per SOP.

13. Annexure J — Naming, Labelling & Tagging Standards

- a) **Hostnames:** [role]-[site]-[index] (e.g., gpu-SVR-01).
Namespaces: teamXX-ns.
Registry Repos: harbor.local/teamXX/*.
Labels:
- b) Kubernetes: team, sensitivity, owner, app, release.
- c) Assets: Rack/U, power feed, patch panel/port, VLAN/VRF, serial.
- d) **Documentation IDs:** All documents carry version, author, approval, date, change log.

14. Annexure K Change / Exception Templates (Complete)

- a) **Standard Change Request Form** (fields: requester, CI, impact, back-out, approvals).
- b) **Security Exception Waiver** (for Medium CVEs): ticket ID, expiry, compensating controls, approver.
- c) **Emergency Change** form with post-implementation review checklist.

15. Annexure L — RACI

Function	Accountable	Responsible	Consulted	Informed
CDTS Operations & Approval	Customer Security	Customer Security	SI (build/support)	Governance Board
Harbor Operations	Customer IT Ops	SI RE (DC)	Security	SOC/NOC
Policy Packs (Kyverno/Falco)	Security Board	SI RE (DC)	SOC/NOC	All teams
SIEM/NIDS Ops	Customer Security	SI RE (SOC/NOC)	Network	Governance Board
Backups & Cold Export	Customer IT Ops	SI RE (DC)	Security	Governance Board
Workstations	Customer IT Ops	SI RE (Desktop)	Security	Users
Reporting/SLA	Governance Board	SDM	Security, IT Ops	All stakeholders

16. Annexure M — Capacity & Growth Plan

a) **Starting Usable:** ≥ 100 TB on vSAN ESA (FTT=1), headroom ~25–30%

i) **Growth Triggers:**

- Team data > 75% of allocated;
- SOC hot + warm > 80% planned;
- Promotion backlog from Harbor due to capacity.

ii) **Expansion Paths:** Add NVMe capacity groups per node; or add two capacity-heavy nodes; migrate selected datasets to **FTT=2** as required.

iii) **Review:** Monthly capacity report; quarterly forecast.

17. Annexure N — Staffing Model

a) *8×5 Resident Engineers (business hours)*

Role	FTE	On-Site	Notes
DC RE (K8s/VCF generalist)	1.0	Yes	Platform ops, policy gates, CDTS support
Desktop RE	1.0	Yes	EUC builds, compliance, break/fix
SOC/NOC Analyst	1.0	Yes (BH)	Alerts, tuning, reports (BH); handover to customer after hours
Service Delivery Manager	0.5	Yes (as needed)	Governance, reporting, audits
On-Call Specialists	Pool	On-site when called	Network, storage, GPU firmware/CUDA

Remote assistance 24X7

b) *SLAs / KPIs*

- **Incident (Sev-1): 8×5**—on-site ≤ 4 h, same-day restore;
- **Policy Gate Efficacy:** 100% of non-compliant images blocked

- **SOC Throughput:** $\geq 5k$ EPS sustained; $\geq 20k$ EPS burst; alert-to-ticket < 60 s P95
- **Patch Compliance:** Critical patches mirrored ≤ 5 business days; enclave rollout in next quarterly cycle unless emergency
- **Workstation Compliance:** $\geq 98\%$ on current gold image; $\geq 95\%$ patches ≤ 14 days
- **Capacity Reports:** Monthly, with growth recommendations

c) Add-on Clauses for 24x7 Remote Support/Assistance

- **Incident (Sev-1) - Non-Working Hours:** For critical incidents that occur outside of the standard 8x5 business hours, remote support will provide an initial response time of ≤ 2 hour, with a target resolution time of ≤ 4 hours.
- **On-Site Escalation Clause:** If a critical incident cannot be resolved through remote assistance within the specified SLA, the remote team will initiate an on-site escalation. The on-site team will be engaged and dispatched with an arrival time of ≤ 4 hours from the time of escalation.
- **After-Hours Monitoring & Alerting:** The SOC will maintain 24x7 monitoring to ensure that all critical alerts (e.g., system outages, security breaches) are triaged and routed to the correct remote support personnel within ≤ 15 minutes.
- **Communication Protocol:** A clear communication protocol will be established for non-working hours, detailing how the support team will provide updates to the client (e.g., via a ticketing system, email, or a direct call for Sev-1 incidents).

18. Formal Acceptance

The solution will be deemed accepted when all **Acceptance Tests** are passed, **document sets** delivered, **training** completed, **hypercare** exited with no open Sev-1/2 defects, and governance sign-off obtained.

PART- C: Bill of Quantity cum Price bid

1. Unpriced BID Compliance (Submit with technical Bid)

Tower	Item	Qty	Compliance (Yes/No)	Proposed Make and Model	Reference to the Technical Proposal (Page #)
GPU Compute	GPU server (2x56 cores @2.1 Ghz, 2048GB RAM, 8× H200 141 GB ; 2×200 GbE) or equivalent PCIe GPUs. Form Factor: The solution can be based on either: • SXM5: A high-density module with NVLink interconnect for maximum inter-GPU bandwidth. • PCIe: A standard PCIe Gen5 card with an NVLink bridge to support multi-GPU communication.	4			
Non GPU Servers	2x32 cores@2.1Ghz, 512 GB RAM, 20–24 TB raw per node (NVMe)	8			
Virtualisation/Platform	VCF/vSAN ESA server (all-NVMe)	512 Cores			
Storage	100 TB at least 200 Gbps throughput with NVMe disks (20% of 100TB) Low latency and Scalable	1			
Switching – Core	DC leaf/L3 switch (upto 400G-capable)	2			

Tower	Item	Qty	Compliance (Yes/No)	Proposed Make and Model	Reference to the Technical Proposal (Page #)
	High-Performance Leaf Switch (24 x 200G Downlinks; 400GbE Uplinks)				
Switching – Access (Enclave)	Access switch (48×1G; 10G uplinks)	2			
Switching – Access (Internet LAN)	Access switch (48×1G; 10G uplinks)	2			
Switching – Management/OOB	Management/OOB switch (48×1G)(Qty 2) Management/OOB Switch(16X1G)(Qty1)	2+1			
Firewalls – Perimeter	Secure Firewall (FTD) – HA pair	2 (1 HA pair)			
Firewalls – Intranet (ISFW)	Secure Firewall (FTD) – HA pair	2 (1 HA pair)			
CDTS Enclave	CDTS scanning server	2			
CDTS Enclave	CDTS management/ops server	1			
Time & DNS	GPS Stratum-1 NTP appliance (dual PSU)	1			
Time & DNS	GPS outdoor antenna + surge kit + cabling	1 lot			
End-User Compute	Internet GPU workstations (RTX 4000 or 770 class)	35			
End-User Compute	Enclave standard workstations	70			
Conference room Solutions	LED TV, Camera and audio (Speaker Microphone)	2 Set			
PDU for existing RACKs	PDU: 4× (A + B per rack), 32A/Three-	4 racks			

Tower	Item	Qty	Compliance (Yes/No)	Proposed Make and Model	Reference to the Technical Proposal (Page #)
	phase or per site standard, mixed C13/C19				
Media for Cold Export	Encrypted removable HDDs ($\geq$ 4TB)	12/yr + 2 spares			
Optics/Cabling	QSFP56 200G modules/DACs, QSFP-DD 400G leaf optics, SFP+/SFP28 where needed, OM4/OS2 fibre, Cat6A copper	As per detail			
Software/Subscriptions	VMware VCF licences (8 nodes), Cisco FTD licences (Perimeter + ISFW), support	As per detail			
Services	Build & integration WPs, training, hypercare	1 lot			
O&M	Resident Engineers (8×5 and 24×7 options)	As per model			
Spares	Server/optics/NIC/PSU spares kit	2 lot			

Name:

Place:

Designation:

Date:

2. LIST OF ITEMS PROPOSED TO BE SUPPLIED WITH COSTING(Submit with Financial Bid)

2.1. DETAILS OF BILL OF MATERIAL HARDWARE. SOFTWARE AND OPERATIONS COST

Cat	SNo	Description	Item	Qty	UoM	Unit Price (INR, excl. Tax)	Total Price (INR, excl. Tax)
A	Hardware						
	1	GPU Compute	GPU server (2x56 cores @2.1 Ghz, 2048GB RAM, 8x H200 141 GB ; 2x200 GbE)	4	No		
	2	Non GPU Servers	2x32 cores@2.1Ghz, 512 GB RAM, 20-24 TB raw per node (NVMe)	8	No	1.	
	3	High-Performance Storage System (100 TB usable, ≥200 Gbps throughput)					
B	Networking						
	4	Switching – Core	DC leaf/L3 switch (upto 400G-capable)	2	No		
	5	Switching – Access (Enclave)	Access switch (48x1G; 10G uplinks)	2	No		
	5	Switching – Access (Internet LAN)	Access switch (48x1G; 10G uplinks)	2	No		
	6	Switching – Management/OOB	Management/OOB switch (48x1G)	2	No		
	7	Switching – Management/OOB	Management/OOB switch (16x1G)	1	No		
		Firewalls – Perimeter	Secure Firewall (FTD) – HA pair	2 (1 HA pair)	Pair		

	8	Firewalls – Intranet (ISFW)	Secure Firewall (FTD) – HA pair	2 (1 HA pair)	Pair		
C	Platform & End-User Hardware						
	9	CDTS Enclave	CDTS scanning server	2	No		
	10	CDTS Enclave	CDTS management/ops server	1	2		
	11	Time & DNS	GPS Stratum-1 NTP appliance (dual PSU)	1	Lot		
	12	Time & DNS	GPS outdoor antenna + surge kit + cabling	1	Lot		
	13	End-User Compute	Internet GPU workstations (RTX 4000 or 770 class)	35	No		
	14	End-User Compute	Enclave standard workstations	70	No		
	15	Conference room	LED TV, Camera and audio (Speaker Microphone)	2 each	Set		
	16	Media for Cold Export	Encrypted removable HDDs (≥ 4 TB)	14	No		
	17	Optics/Cabling	QSFP56 200G modules/DACs, QSFP-DD 400G leaf optics, SFP+/SFP28 where needed, OM4/OS2 fibre, Cat6A copper	As per detail	Lot		
E	Software and subscriptions						
	18	Software/Subscriptions	VMware VCF Licences for 8 Nodes (512 Cores) with Support	1	Lot		

	19		Perimeter Firewall Subscriptions (Threat/IPS, URL Filtering, DNS Security) with Support ISFW Firewall Subscriptions (Threat/IPS) with Support	1	Lot		
	20	Services	Build & integration WPs, training, hypercare	1	Lot		
	21	O&M	Resident Engineers (8×5 and 24×7 options)	1	Lot		
	22	Spares	Server/optics/NIC/PSU spares kit	1	Lot		
F	Data Center Infrastructure						
	23	PDUs	PDUs for 4 Racks (A+B Feeds, 32A/Three-phase)	8	No		
Other items \$\$							
	24						
	25						

NOTE: SI needs to cater for NW wiring and connectors for the Nodes as per the building layout which would be a prefab shelter under construction.

\$\$ Add items if not in the above table

2.2. Operations & Maintenance (O&M) Section

This section should be priced based on the staffing model in Annexure N

SNo	O&M Role	FTE	Monthly Rate (INR, excl. Tax)	Total for 12 Months (INR, excl. Tax)	
1	DC RE (K8s/VCF generalist)	1			
2	Desktop RE	1			
3	SOC/NOC Analyst (business hours)	1			
4	Service Delivery Manager	0.5			
5	On-Call Specialists Support (24x7 Remote Assistance)	1	Lot		
	Sub-Total (B)			<Amount>	

Name:

Place:

Designation:

Date:

2.3. Summary of Price Bid(Submit with Price Bid)

Description	Amount (INR, excl. Tax)
Sub-Total - Hardware, Software & Services Etc	
Sub-Total - Operations & Maintenance	
Grand Total (A+B)	
Applicable GST (%)	
Total Project Cost (Including Tax)	

Name:

Place:

Designation:

Date:

