Notice Inviting Tender

Management Development Institute -Gurgaon

Tender Ref. No.: MDI/CC/2025-26/AI-CCTV/07 **Date:** 30.09.2025

Sub: Invitation of sealed quotations for AI based FRS System for 02 Nos. CCTVs

Tender Schedule: -

Bid System	Single Bid System Bid to be submitted in sealed envelope superscribing "Bid for AI based FRS System for 02 Nos. CCTVs"
Last Date of Bid Submission	10.10.2025 2:30 PM
Bid should be addressed to	Senior Systems Analyst Computer Centre Management Development Institute Mehrauli Road, Sukhrali Gurgaon - 122 007, Haryana (INDIA)

The Complete Tender details and any updates on the Tender will be available on the MDI Website at the link: https://mdi.ac.in/infrastructure/tenders.html

For any clarifications, write to Email- ittender@mdi.ac.in

The notice inviting bid along with instructions to vendor, Scope of Work, eligibility criteria, system of award of contract, etc. form part of the bid document containing 27 pages in all.

Sd/- For MDI-Gurgaon
(Senior Systems Analyst)

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Section-A

General Information and Terms and Conditions

1. The bid shall be submitted under Single Bid system in a sealed envelope superscribing "Bid for AI based FRS System for 02 Nos. CCTVs"
2. The vendors are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the vendor from the bidprocess.
3. All documentation is required to be in English.
4. Corrections/overwriting is not allowed.
5. Please ensure that Tender document must be signed and stamped on all pages as a token of acceptance of all the terms and conditions.
6. This tender document is not an offer and is issued with no commitment. Institute reserves the right to withdraw this notice inviting tender and or vary any part thereof at any stage.
7. Institute further reserves the right to disqualify any vendor, should it be so necessary at any stage. Institute shall not be bound to accept the lowest tender.
8. Institute reserves the right for distributing the work among several vendors. The Institute reserves the right to accept or reject any bid or to select the item or to reject the bidding process or any bid wholly or partly without assigning any reason.
9. Incomplete bids or receiving the bid after closing date and time are liable to be ignored and rejected.
10. The Institute will not be responsible for non-receipt of bids within the specified date and time due to any reason including postal delay or holidays. Bid received after the closing date/time will not be considered.
11. No quotations would be accepted by E-mail and only sealed hard copies will be accepted.
12. The tender documents are non-transferable and should be submitted in the exclusive name of the party to whom we will actually provide the Purchase order.
13. Sub-contract is not allowed.
14. The bid should be submitted on company letter head and should be submitted duly signed by the authorized person.
15. Tender once submitted shall not be returned to the tenderer in future.
16. The Institute reserves the right not to disclose names and rates of successful vendor (s).
17. The financial bid shall be valid for at least 180 Days. Institute will not entertain any request in respect of escalation of price due to any reason whatsoever.
18. For any other query relating to the tender, the vendors may write to- ittender@mdi.ac.in .
19. Institute may, at its discretion, extend the date for submission and/or opening of the bid.
20. Only those vendors should quote who can satisfy the scope of work and other requirements of Institute as stated in Section D.
21. **Place of Service:** Place of maintenance shall be Management Development Institute Mehrauli Road, Sukhrali, Gurugram - 122007, INDIA. No additional freight or any other charges would be payable towards transportation etc.
22. Tenderers should note that the work is to be executed under the existing site conditions

while quoting their rates, terms and conditions. The tenderers may visit the site to get fully acquainted with the site conditions. No compensation/claims in regard to site conditions /constraints /rules and regulations etc shall be entertained.

23. The vendor must examine the specifications; conditions etc., inspect the site of work and acquaint himself with all conditions and matters pertaining there to. The site can be inspected on all working days from Monday to Friday between 10:30 A.M. to 4:30 P.M. Please call 0124-4560281 to fix an appointment prior to visiting the campus for inspection.
24. **Termination of contract-**
    - In case of continued non-performance and inability to meet requirements, Institute shall reserve the right to terminate the purchase order after giving 15 days' notice in writing.
    - After the contract comes null and void the amount deemed payable to the vendor (if any) will sine die without any further payment. No further claim from the vendor will be entertained.
    - The contractor will return the documents, assets etc in working condition.
    - Decision of competent authority of Institute regarding determining the performance will be final.
25. **Format of Price Schedule and related terms:**
    - Price must be quoted in Indian Rupees. Prices should be quoted as per the enclosed format both in figures and words. The rates offered should be inclusive of all proposed work and comprehensive in nature.
    - The charges quoted shall be kept firm throughout the pendency of contract of this work and no price escalation shall be entertained.
26. **Payment Terms:**
    - 90% (Ninety percent) of the total bill value of items supplied will be paid within 1 month of complete delivery of items and satisfactory commissioning of all the items and delivery of warranty documents, Software Licenses and certification of site, Documentation and training at the MDI campus
    - 10% of will be one month after successful delivery, test and installation.
27. **Any dispute/ difference arising out or relating to this Tender:**

    Matters regarding any dispute shall be referred for arbitration to any officer appointed by the Director of Management Development Institute Gurgaon, whose decision shall be binding and final. Even after arbitration if any questions, disputes and/or differences arises under and out of, or in connection with the contract, if concluded, shall be referred to the High Court of Haryana or any other court in the district of Gurugram (Haryana).

28. Laws of the Republic of India are applicable to this tender.
29. The vendors are expected to examine all instructions, forms, terms& conditions, other details in the tender document carefully. Failure to furnish complete information as asked in the tender document or submission of a proposal not substantially responsive to the tender documents in every respect will be at the vendor's risk and may result in rejection of the

proposal.

30. **Force Majeure:**

Force Majeure is herein defined as any cause, which is beyond the control of the selected vendor or the Institute as the case may be 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:

Natural phenomena, including but not limited to floods, droughts, earthquakes, epidemics; Acts of any Government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes; Terrorist attacks, public unrest in work area Restriction, Freight Embargo; provided either party shall within ten (10) days from the occurrence of such a cause notify the other in writing of such causes. The vendor or the Institute shall not be liable for delay in performing his/her obligations resulting from any Force Majeure cause as referred to and/or defined above.

Declaration:

I/We do hereby confirm that I/We have the necessary authority and approval to submit this bid for items as detailed in the tender as per the terms & conditions mentioned above and also, hereby, agree and accepts the terms & conditions mentioned in clause 1 to 31 under General Information and Terms and conditions.

(Signature)

(Name of Authorised Signatory)

(Designation of Authorised Signatory)

Company Stamp

Date:

Place:

Section B

31. **Bid Rejection Criteria**:

a. Bids without Profile and declaration on company's letterhead would be rejected.
b. Bidder not having average turnover of Rs. 01 Crore during last three financial years.
c. The Bidder has to be profitable and should not have incurred loss in any of the last 3 consecutive Financial Years. Bidders required to submit CA Certificate or any other relevant certificate indicating the turnover for the last 3 consecutive Financial Years (FY 2021-22, 2022-23, 2023-24)
d. Declaration On Non-Judicial Stamp Paper of Rs. 10/- as per format given in Section C.
e. Not submitting copy of GST & PAN registration certificate.
f. The bidder should have adequate facilities, manpower and staff for installation, testing, commissioning and for providing services.
g. Bidder must have the STQC certification/ compliance for the Product quoted as per Government of India circular. Valid Certificate to be attached.
h. Bidder must have VAPT Certificate for the Product. Valid Certificate to be attached.
i. Not having minimum qualification criteria mentioned in clause below.

32. **Minimum Required Qualification Criteria**:

Following will be the minimum pre-qualification criteria. Each eligible vendor should possess all the following pre-qualification criteria. Responses not meeting the minimum pre-qualification criteria will be rejected and will not be evaluated.

S. No.	***Pre-qualification Criteria***	***Supporting Compliance document***
1.	The applicant shall be a firm/ company registered under the Indian Companies Act, 2013 and who have their registered offices in India and (office in National Capital Region of Delhi will be preferred)	Copy of Certificate of incorporation or any other relevant documents, brief company profile with copy of GST & PAN.
2.	The firm should be in the business of providing similar services since 05 (Five) years as on 31.03.2025 for OEMs mentioned in the scope of work and item details	Certificate by Company Secretary of the Bidder's Organization or any other relevant documents.
3.	The Bidder has to be profitable and should not have incurred loss in any of the last 3 consecutive Financial Years (FY 2021-22, 2022-23, 2023-24)	Attach certificate from CA or any other relevant certificate.
4.	The Bidder should have an average turnover of Rupees 01 Crore during last 3 consecutive Financial Years (FY 2021-22, 2022-23, 2023-24).	CA certified document with name of CA registration number, signature and stamp or any other relevant certificate.
5.	Names & addresses of prestigious clients (at least three) along with their contact details (telephone number/E-mail) of the contact persons of the clients of recent past if available.	1. 2. 3.
6.	The firm should not be blacklisted by any Central Govt. / State Govt. / PSU/Govt. Bodies/ IITs &	Affidavit on Non Judicial Stamp Paper as per format in Affidavit-1

	IIMs/Reputed Educational Institutes in India.	to be submitted
7.	**Support** The Vendor shall provide comprehensive Support for all the equipment's/ services listed in the Scope. Letter of Authorization from all mentioned OEMs as indicated in scope and item list , specific to the tender should be enclosed. The Bidder should be Authorized Service Provider for the OEM.	Declaration in this regard to be submitted in company letterhead.
8.	Agree to the Scope of work given in Section D. Deviations would be rejected.	Submit declaration on letterhead. Also submit signed and stamped copy of scope mentioning "I Agree" on each page

33. Evaluation Procedure and Selection

- Bidders possessing minimum required qualification will be technically qualified based on Information/documents provided by the Bidder and meeting the scope given in the Tender
- MDI decision will be final for the evaluation of Technical Bids and binding on all bidders.
- The work shall be awarded to the L1 bidder from among the technically qualified bids.

In exceptional situation, the committee may negotiate price with the qualified bidder quoting the lowest price before awarding the contract.

Section C

Checklist

Please prepare and submit your bid as per the details given below.

S. No.	Document to be Attached	Whether submitted	Mention Page Number
1.	Applicant's expression of interest (Format-1)	Yes ❑ / No ❑	
2.	Organizational Details (Format-2)	Yes ❑ / No ❑	
3.	Experience in related fields (Format-3) annexed with Work Order/ Completion	Yes ❑ / No ❑	
4.	Financial strength of the organization (Format-4). CA certificate attached.	Yes ❑ / No ❑	
5.	The tender document signed & stamped in each page.	Yes ❑ / No ❑	
6.	Copy of GST / PAN No./ TAN No./ EPF registration/ ESIC Registration Certificate	Yes ❑ / No ❑	
7.	Affidavit as per format in Affidavit-1	Yes ❑ / No ❑	
8.	Whether agree to the scope of project including the specifications of items given in Section-D	Yes ❑ / No ❑	
9.	Copies of Work Order Attached	Yes ❑ / No ❑	
10.	Financial Bid (Section E) (To be submitted in separate sealed envelope)	Yes ❑ / No ❑	

FORMAT-1

(Applicant's Expression of Interest)

To,
Senior Systems Analyst
Computer Centre
Management Development Institute
Mehrauli Road, Sukhrali
Gurgaon - 122 007, Haryana (INDIA)

Sub: Submission of bid for AI based FRS System for 02 Nos. CCTVs

Dear Madam,

In response to the NIT for items as detailed above in tender at MDI Gurgaon (published in https://mdi.ac.in/infrastructure/tenders.html) we would like to express our interest to supply the above proposed printer.

As instructed, we are attaching all the documents as per the checklist given in Section C.

Sincerely Yours,

Signature of the applicant
[Full name of applicant]

Stamp.....
Date:

Encl: As above.

Note: This is to be furnished on the letter head of the bidder.

FORMAT – 2

S. No	Organizational Contact Details	
1.	Name of Organization	
2.	Year of establishment (Attach Registration certificate)	
3.	Whether MSME? If MSME provide Udyam number and also attach the MSME registration certificate	
4.	Number of employees	
5.	Main areas of business	
6.	Type of Organization Firm/ Company/ registered under the Indian Companies Act, 2013 (Attach	
7.	Whether the firm has been blacklisted by any Central Govt. / State Govt./PSU/ Govt. Bodies / Autonomous bodies/ IITs & IIMs/Reputed Educational Institutes in India. **If yes, details thereof also please, If No, attach Undertaking in regards to not being blacklisted.**	
8.	Address of registered office with telephone no. & E-mail	
9.	Address of office - in Delhi NCR	
10.	Authorized Contact Person Name: Telephone no. E-mail ID	

Enclose all supporting documents

Signature of the Applicant
Full name of the applicant

Stamp & Date

Note: This is to be furnished on the letter head of the bidder.

FORMAT – 3

Experience of similar works as per scope in Section D at MDI Gurgaon
Add a row for Each Client
Minimum three required

S .No.	Client Name (Higher Education Institute / University/ Govt. / PSU/ Company)	Value of the Project	Client Contact No.	Client Email ID	Completion Certificate Attached
					Yes ❑ / No ❑
					Yes ❑ / No ❑
					Yes ❑ / No ❑
					Yes ❑ / No ❑
					Yes ❑ / No ❑

Encl: As above.

Note: This is to be furnished on the letter head of the bidder.

Signature of the applicant's Full name of applicant
Stamp & Date

FORMAT – 4

Financial Strength of the Organization				
S. No	Financial Year	Whether profitable (Yes/NO)	Annual net profit (in Lakhs of Rs.)	Overall annual turnover (in Lakhs of Rs.)
1	**2021-22**			
2	**2022-23**			
3	**2023-24**			
Note: Please enclose auditor's certificate or any other relevant document in support of your claim.				

Signature of the applicant
Full name of applicant

Stamp & Date

Encl: As above.

Note: This is to be furnished on the letter head of the bidder.

Affidavit-1

(DECLARATION ON NON-JUDICIAL STAMP PAPER OF RS. 10/-)

I/we_____Partner(s)/legal Attorney/ Proprietor(s)/ Accredited Representative(s) of M/s_____solemnly declare that:

2. I/we are submitting tender for ---------- against Tender Notice No._____ dated_____.

3. All information furnished by me/us in respect of fulfillment of eligibility criteria and information given in this tender is complete, correct and true. All documents/credentials submitted along with this tender are genuine, true and valid.

4. My/our bid shall remain valid for a period of 180 days from the last date fixed for the bid submission in accordance with the Bidding Documents and shall be binding upon us and maybe accepted at any time before the expiry of the period.

5. The Price-Bid submitted by me/us is "WITHOUT ANY CONDITION".

6. If any information or document submitted is found to be false/incorrect, MDI may cancel my/our Tender and can take any action as deemed fit including termination of the contract, for forfeiture of all dues including blacklisting of my/our firm and all partners of the firm etc.

7. I/we also declare that the Government of India or any other Government body has not issued any show-cause notice or declared us ineligible or blacklisted us on charges of engaging in corrupt, fraudulent, collusive or coercive practices or any failure/lapses of serious nature.

8. I/We understand that MDI decision will be final for the evaluation and rejection of Bids.

9. I/We have gone through all terms & conditions of the tender documents before submitting the same and accept the same along with the technical specification and all other conditions mentioned in the documents; including the condition that MDI is not bound to accept the lowest bid.

(Signature of the Tenderer with Seal)

Date:

Section D

Scope of Work

Technical Specifications for AI based FRS System for 02 Nos. CCTV's

***Attach technical data sheet of all the products quoted**

Unified AI based Facial Recognition System along with Attendance Management

A	**Unified Platform For Facial Recognition System and other Video AI**		
	Platform Deployment, Scaling and Management		**Complaince Yes/No**
1	Support for Various Use cases	The platform shall support various applications, video analytics use-cases of surveillance and other use-cases, and algorithms for diverse use cases on a unified analytics application platform. It must allow the addition of new applications, video analytics, or algorithms without requiring changes to the unified platform.	**Yes/No**
2	Hardware Provisioning	The inferencing hardware provisioned to run the video analytics application should be common to all the video analytics applications irrespective of the type of architecture of deployment. Any application including but not limited to surveillance use cases like FRS, person attribute etc. should be capable of running on any device be it a central server or an edge-based device or LPU or in a hybrid mode.	**Yes/No**
3	Real-Time Analytics Capabilities	The platform shall include a real-time video analytics engine that utilizes advanced image processing algorithms to transform video into actionable intelligence. The system should also provide evidence for any incidents detected.	**Yes/No**
4	Integration with other systems	The unified video intelligence platform should have capability to integrate with other video management systems and command and control application.	**Yes/No**
	Platform Deployment architecture support		
5	Multi-Site/Multi-Cloud/Multi-Datacentre	A flexible and scalable architecture designed to operate across multiple sites, clouds (public, private), and data centres, enabling a truly distributed and resilient setup.	**Yes/No**
		Centralized management and monitoring capabilities that provide a unified view of the system's health and performance across all locations.	**Yes/No**
6	On-Prem/On-Cloud/Hybrid Architecture	Support for various deployment models including on-premises for full control and data sovereignty, cloud-based for scalability and flexibility, and hybrid configurations that combine the best of both worlds.	**Yes/No**
		Easy migration pathways between deployment models to accommodate changing business needs and technology landscapes.	**Yes/No**
		Comprehensive security measures tailored to each deployment model to protect against threats and ensure data privacy.	**Yes/No**

7	Distributed Architecture	A fully distributed system architecture that leverages multiple nodes across different locations to enhance scalability, fault tolerance, and performance.	**Yes/No**
		Decentralised processing capabilities that allow for workload distribution, minimising bottlenecks and improving response times.	**Yes/No**
8	Distributed Storage Across Control Plane/Management Server	Implementation of distributed storage solutions for the control plane and management server data, ensuring scalability.	**Yes/No**
		Support for storage federation, allowing data to be seamlessly accessed and managed across multiple storage systems and locations.	**Yes/No**
9	Encrypted Communication Between Servers	All communications between servers, including data transfers and control messages, are encrypted using industry-standard protocols to safeguard against eavesdropping and data tampering.	**Yes/No**
		Support for configurable encryption settings, allowing organizations to balance between security requirements and performance impacts.	**Yes/No**
		Regular updates and patches to encryption algorithms and protocols to address emerging security threats and vulnerabilities.	**Yes/No**
	Deployment, Configuration and Calibration - Computer Vision Models / Video Analytics Algorithms		
10	Containerized Deployment	Each model/algorithm shall be packaged and run as individual applications inside containers to ensure consistent operation across centralized servers, server clusters, edge devices, and cloud environments.	**Yes/No**
11	Use Case Structuring	Each video analytics use case shall be structured as an independent module deployable on any camera stream via a simple user interface utility, providing visibility into use case assignments, configurations, and status across associated cameras.	**Yes/No**
12	Advanced AI compatible	The Video Analytics system shall be compatible with the latest technological advancements in the domain of computer vision and AI. Hence, it shall be able to quickly adapt to newer libraries and AI advancements. All the analytics and use-cases shall be based on advanced AI technology and shall not depend on traditional algorithms.	**Yes/No**
	Central Dashboard and Web Based Interface		
13	Web-Based Interface	The platform shall provide a web-based interface accessible from any laptop/desktop within the local area network (LAN) or wide area network (WAN) using ADS login credentials. The interface shall support multiple simultaneous users, real-time alerts and notifications, and role-based access control.	**Yes/No**
14	Common UI for all the use-cases	The user interface shall be a unified dashboard that shows events from all the Video Analytics use-cases and all the cameras in a common UI, and which gets populated in real time from event notifications	**Yes/No**

15	Integrated Dashboard Access	The platform shall provide an integrated dashboard accessible from all device types, viewable by multiple users simultaneously, without login caps. The dashboard shall provide comprehensive visibility of alerts and the status of all cameras and applications.	**Yes/No**
16	User Types and Role based access control	Dashboards shall be provisioned for different user profiles and types, ensuring role-based access.	**Yes/No**
		The alerts and notifications should be based upon the user profile.	**Yes/No**
		The user can log in from any device and yet should be able to access the system according to his/her profile privileges.	**Yes/No**
17	Login Integration	The platform shall provide login credentials or integrate with existing Active Directory for single sign-on (SSO).	**Yes/No**
18	Location Analysis	The platform shall enable comprehensive analysis of any location, displaying a summary of events for selected locations and periods.	**Yes/No**
19	Report Generation	The platform shall support custom report generation by users.	**Yes/No**
20	Event Review	The platform shall support reviewing and displaying each alert/event	**Yes/No**
21	Reporting tool	The platform shall include a report generation tool for on-demand report generation.	**Yes/No**
22	Use Case Deployment Window	The platform shall provide an intuitive interface to manage and deploy use cases on cameras, showing the status of use cases and associated cameras.	**Yes/No**
23	Event Filter	The platform shall offer filters to retrieve events based on various parameters (e.g., date, time, event type, location).	**Yes/No**
		a) Time of the event	**Yes/No**
		b) Objects in the event	**Yes/No**
		c) Type of the use-case	**Yes/No**
		d) Camera Location	**Yes/No**
		e) Confidence Score	**Yes/No**
		f) Faces	**Yes/No**
		g) Virtual Lines and Regions	**Yes/No**
24	Resource Status Management	The platform shall display the status of all devices (e.g., computing servers, cameras) within the application for monitoring and management.	**Yes/No**
	Configuration and Calibration of use-cases		
25	Use Case Configuration	The platform shall provide an interface to configure detection parameters, application parameters, and recognition parameters for each use case/application/algorithm. It should also allow adding additional parameters to enhance accuracy.	**Yes/No**
26	Scheduling Utility	The platform shall include a utility for time scheduling (start and stop) each use case on individual cameras, enabling easy selection by tag, group, or location, and allowing central application deployment with a minimum	**Yes/No**

		of hourly granularity.	
		Advanced scheduling capabilities for analytics tasks, allowing for the efficient allocation of resources based on priority, data availability, and computational requirements.	**Yes/No**
		Support for both real-time and batch processing modes, enabling the platform to handle a wide range of analytics scenarios from live monitoring to historical analysis.	**Yes/No**
		User-friendly interface for creating, managing, and monitoring scheduled tasks, with support for notifications and alerts to keep users informed about task status and results.	**Yes/No**
27	Configuration per-use-case per-camera level	The system shall allow each use-case to be uniquely configured for every individual camera stream, with parameters for camera calibration,	**Yes/No**
28		Each use-case shall be able to run on different cameras with different settings (e.g., different Zones for Intrusion, different lines for line crossing detection, etc.) at different hours of the day.	**Yes/No**
29	Flexible Deployment	The platform shall allow flexible deployment of each use case on individual cameras, without dependency on MAC or IP addresses, enabling dynamic configuration changes.	**Yes/No**
30	Key configuration parameters	The use case on each camera shall allow setting up configuration of multiple detections zones such as lines and regions that can be used to define perimeters, regions of interest.	**Yes/No**
31		The configuration user interface shall allow adjusting various sensitivity and confidence parameters to adjust each video-analytics use-case's performance with respect to the physical deployment of the camera.	**Yes/No**
	Search Functionality of Platform		
32	Dynamic and Static Search Functionality	The platform shall support static and dynamic search functionality for alerts, ensuring efficient and accurate retrieval of information.	**Yes/No**
		Static search will be for filtering based on camera location, alert type, and camera groups etc.	**Yes/No**
		Dynamic search enabled on platform should help for searching across the entire metadata with a single search bar.	**Yes/No**
33	No. of days of search availability	The design of platform at deployment should have provisioning for below functionality:	**Yes/No**
		The maximum number of days, the events will be kept for and maximum number of days the search should be applicable for.	**Yes/No**
34	Real-Time Search Updates	Search results shall update automatically for every change made in the search bar, ensuring up-to-date information display.	**Yes/No**

35	Clickable and Searchable Metadata	Every part of the metadata of alerts shall be clickable and searchable, enabling comprehensive drill-down functionality for in-depth analysis.	**Yes/No**
36	NLP Support	The Platform must support advanced natural language processing (NLP) to enable users to search for objects using simple, conversational queries.	**Yes/No**
		(Example: The system should understand and accurately process queries such as "find me all the black sedan that have crossed the entry camera in the past 2 days")	**Yes/No**
37	Accuracy	The NLP engine should achieve at least 90% accuracy in understanding and processing queries.	**Yes/No**
38	Response Time	Search results should be delivered within 5 seconds for typical queries.	**Yes/No**
39	Resource Allocation	The system must efficiently utilise available computational resources to handle natural language queries without significant delays.	**Yes/No**
40	Scalability	The NLP functionality should be scalable and adaptable to support increasing data volumes and concurrent user searches in case additional hardware is provisioned in future.	**Yes/No**
	Central Unified Monitoring and Orchestration		
41	Central Dashboard Functionality	The platform shall provide a central dashboard to monitor, manage, and orchestrate edge devices, offering real-time insights and management tools.	**Yes/No**
42	Encryption & Data Integrity	The platform shall ensure data encryption in transit and at rest, safeguarding data integrity and confidentiality.	**Yes/No**
43	Geographic Data Restrictions	The platform shall ensure that data remains within the country and is stored in secure, compliant facilities.	**Yes/No**
44	Highly parallel and distributed	The algorithms powering the video intelligence system shall possess capability to operate parallel and distributed manner across multiple clusters of machines, irrespective of network, data centre or cloud provider	**Yes/No**
45	Flexible Technology Stack	The technology stack shall be modular and scalable based on containerized micro services. Each use-case shall be orchestrated as a stand-alone micro service, which communicates with a central server for exchanging of the data.	**Yes/No**
46	Portability	The analytics use cases shall seamlessly integrate with other components and shall be portable/ replicable easily across the machines automatically irrespective of the hardware of the machine be it CPU or GPU.	**Yes/No**
47	Model Encryption	System should be able to use the encrypted models for VA applications that are fine-tuned on the client dataset only.	**Yes/No**
	General Platform specifications		
48		The Video Analytics system shall be based upon Machine Learning and Deep Learning framework.	**Yes/No**

49		The system should report evidence. Evidence of any incident should contain any relevant info such as type & attribute of the incident in the metadata along with a wider Field of View Image with a highlight of the incident itself.	**Yes/No**
50		It shall be possible to run the analytic as per hourly/daily/weekly schedule. There should be a provision to define multiple such schedules. It should be possible to set the schedule to any analytic use case. It should be possible to assign multiple analytics on the same camera.	**Yes/No**
51		It shall enable common configuration settings in a batch mode on multiple cameras.	**Yes/No**
52		The application shall allow searching the analytics events based on priority, date, and time (from and to) and camera. It should be possible to generate statistical analysis of various use cases across the time of the day.	
53		The analytics shall enable the operator to define an unlimited number of detection regions per camera. The system shall allow setting each region independently to be 'Active for Analytics' for any given period of the day.	**Yes/No**
54		The analytics events shall be stored in the database upto a defined period.	**Yes/No**
55		The system shall have a single platform for setting analytics, and the administrator functions.	**Yes/No**
56		The System shall be a real-time video analytics engine that utilizes advanced image processing algorithms to turn video into actionable intelligence. The AI based Video Analytics system shall consist of video-processing & analytics engine that works seamlessly both on saved videos or camera streams in real-time and provide events to the user based on the use-case basis. The system shall be compatible with all ONVIF compliant IP cameras with H.264/H.265 video decoding.	**Yes/No**
	CV/AI/ML Models		
57	Edge-Optimised Models	The platform shall use edge-optimized deployable ML inference models.	**Yes/No**
58	Reduced Inference Latency	The models shall have reduced inference latency.	**Yes/No**
59	Special Purpose Hardware	The models shall be optimized for special-purpose hardware accelerators like GPU's	**Yes/No**
60	Model Compression	The platform shall apply model compression techniques like quantization and pruning to reduce model size.	**Yes/No**
61	Hardware Optimization	The platform should have capabilities to optimize the model according to the accelerator provided (CPU/GPU). Accordingly, memory and power consumption should be optimized.	**Yes/No**
62	Accuracy Metrics	The models shall maintain an accuracy of over 90%, with an F-score over 0.9 for imbalanced or rare event detection/classification tasks.	**Yes/No**

63	Responsible AI Guidelines	The platform shall adhere to Niti Aayog's Responsible AI guidelines for facial or PII use cases.	**Yes/No**
64	NIST AI Framework Compliance	The platform shall comply with NIST's AI Risk Management Framework 1.0 for AI system design, development, deployment, and use.	**Yes/No**
			Yes/No
B	**Facial Recognition System**		
1	Detection	The Face Recognition System (FRS) shall seamlessly operate in real-time and offline mode, identifying and recognizing faces from digital image files, live video streams, or archived footage. The system should be compatible with various input sources including IP cameras, body-worn cameras, mobile handset cameras, Tablet cameras, UAVs, and drones.	**Yes/No**
2	Deep Learning Technology	The FRS shall leverage cutting-edge and latest AI technology, enabling real-time 1:1 (one-to-one), 1: N (one-to-many), and N:N (many-to-many) matching applications.	**Yes/No**
		The system shall guarantee high accuracy in non-voluntary face detection and recognition, even in open and crowded scenarios.	**Yes/No**
3	LiveFace Database Update	The FRS system should support real-time updates to its database, enabling the immediate addition or modification of entries without requiring reconfiguration or application/system restarts.	**Yes/No**
		It should also allow for the seamless integration of faces detected in live feeds from various sources, thereby constantly improving the accuracy and completeness of the database.	**Yes/No**
		The FRS system should support Advanced deduplication and quality control mechanisms to maintain a high-integrity database suitable for security and surveillance applications.	**Yes/No**
4	Severity of database	The system shall possess the capability to establish distinct categories for individuals, with the flexibility to tailor severity levels according to the specific needs of each category.	**Yes/No**
5	Enrolment of faces	The system shall offer the capability to automatically enrol multiple facial images of an individual from CCTV cameras/video sources or local systems while maintaining consistent identification number of the face as allocated in the first instance. This feature should be seamlessly available onto both the Facial Recognition System (FRS) application and the Video Intelligence platform.	**Yes/No**
		Furthermore, the system should provide an option for Bulk Enrolment, allowing for the efficient addition of facial data either from the file system or from external databases such as UID, SAARTHI, IT, NCRB, EPIC, etc	**Yes/No**
6	Ability to add reference Images	The system shall be able to add photographs obtained from law enforcement agencies to the criminals' repositories tagged for gender, age, scars, tattoos etc. for	**Yes/No**

		future searches.	
7	Performance	The system shall support performing a full 1: N search of the probe image in under 5 seconds against a database of up to 50mn face records given sufficient hardware.	**Yes/No**
8	Deduplication	The Facial Recognition System (FRS) should possess the capability to verify whether a newly enrolled face already exists within the database prior to proceeding with the registration of the new face into the system.	**Yes/No**
		In addition, the system must have the capability to swiftly locate any prior detection of a Person of Interest (POI) when enrolled into the watch list, achieving a retrospective search in under 2 seconds.	**Yes/No**
		It should incorporate advanced deduplication and quality control mechanisms to uphold a high-integrity database, ensuring suitability for security and surveillance purposes	**Yes/No**
9	Environment	FRS should run in constrained and unconstrained environments both with optimised compute power and minimum hardware sizing provided below.	**Yes/No**
		FRS system shall be able to recognize a minimum 70 x 70 Pixel face size in video or live feed.	**Yes/No**
10	Adaptable to the Indian condition	The FRS System shall demonstrate exceptional accuracy in detecting and recognizing faces across a wide spectrum of Indian facial characteristics, functioning seamlessly in various environmental conditions.	**Yes/No**
		It shall provide the capability to be fine-tuned or sustained using Indian-centric datasets, ensuring consistent and adaptable performance to meet local needs.	**Yes/No**
11	Live and Offline Mode	FRS shall be able to capture face images from live & pre-recorded CCTV / archived feeds and generate alerts if a watch listed / blacklisted (pre-registered face from suspect list) match is found.	**Yes/No**
			Yes/No
12	Detection of partial faces	The FRS shall provide support to recognize partial faces with varying angles from multiple videos simultaneously from Video clips and VMS Playback directly from FRS Client Interface. FRS shall be able to process uploaded pre-recorded video feeds depending on the proposed hosting hardware and the video quality.	**Yes/No**
		The FRS system shall provide detection output indicating the orientation of the detected face, distinguishing between front and side faces with score.	**Yes/No**

13	Algorithm Benchmarking	The Vendor should have any performance benchmarking certificate. For NIST 1:1 FNMR at FMR = 10-6 on Mugshot-Mugshot should be less than 0.0024 & FNMR at FMR = 10-6 on VISA-Border should be less than 0.0029 for 1:N FNIR (N=12M, R=1, T=0) Mugshot-Mugshot should be less than 0.001 or Developer rank should be in top 20 rank in FNIR(N=12M, R=1, T=0).	**Yes/No**
14	Recognition score & Filter	The FRS system shall include a user-friendly feature that presents a straightforward percentage score to visualise the degree of matching. Additionally, it should offer the capability to filter matching scores for enhanced usability.	**Yes/No**
15	Support for cameras/video formats	The system shall support diverse graphic & video formats as well as live cameras. FRS shall support day/night operation with ability to detect faces both in colour and in black/white mode by using any H.264, H.265 Fixed IP and PTZ Cameras with IR Illuminators without any special configurations required.	**Yes/No**
16	Image Enhancement Capabilities	The FRS system must have capability to enrol whatever images fed in the system with image enhancement and ability to verify the quality of the enrolled images with different colour indicators for low quality images enrolled in the watch list/database.	**Yes/No**
17	User Management	FRS must support a user management module that enables different user level groups to support various permission levels. FRS clients shall have the ability to share recognition data like images & videos with multiple users and operators for better reference, alarm & incident management.	**Yes/No**
18	Image Format support	The system shall be able to utilise any of the file formats like JPEG, PNG, BMP, TIFF etc. format for enrolment / registration of faces.	**Yes/No**
19	Full HD Support	The system shall be able to work on full HD Camera video with maximum performance.	**Yes/No**
20	Implementation	The system shall be able to be implemented on IT hardware like Server or Workstation.	**Yes/No**
21	OS Support	The FRS algorithm should be able to use proven open-source tools and technologies like Linux to bring down the total cost of ownership of the solution.	**Yes/No**
22	Mobile Application Support	The FRS system should have open API endpoints to facilitate third party Mobile App integration.	**Yes/No**
23	Detection robustness	System shall be able to detect the faces across the multiple CCTV video sources for online (real-time) and offline modes regardless of following conditions:	**Yes/No**
		a. Changes in Facial expression	**Yes/No**

		b. Changes in facial hair or hairstyle	**Yes/No**
		c. Changes by moderate ageing (up to 15 years)	**Yes/No**
		d. Partially hidden faces or occluded faces like wearing dark glasses mask etc	**Yes/No**
		e. Changes in lighting conditions	**Yes/No**
24	Search Capabilities	Simple Search UI that facilitates quick and easy access to the collection of events recorded by the system without the constant monitoring by operators and must perform a full 1: N search of the probe image. It shall support following-	**Yes/No**
		a. Search previous events by images from previous detections	**Yes/No**
		b. Search previous events by images uploaded by operator	**Yes/No**
		c. Search previous events by enrolled names	**Yes/No**
		d. Search previous events by date and time	**Yes/No**
		e. Search previous events by camera group	**Yes/No**
25	Retrospective Search	FRS shall have capability of Search backwards for previous detections and/or recognitions (events) of the detected person without enrolment from live CCTV & other forensic videos / offline videos.	**Yes/No**
26	Up to 5 nearest matches support	FRS shall have ranking features to show next 5 closest & similar subjects in the Watch list with nearest score to the detection. This option enables you to review POIs that are potential matches for this detection for efficient system performance.	**Yes/No**
27	OEM owned algorithm	The FRS OEM should have ownership of Face Recognition Engine/Algorithm for any custom specific development as required by the client.	**Yes/No**
28	Map feature	FRS must allow tracking of faces on maps to be uploaded in the system for cameras connected to FRS and shall highlight the camera location on the map for each detection/alert.	**Yes/No**
29	SDK/API for integration	FRS shall provide an API for integration with any third-party software like C4I (Command, Control Communication & Compute Centre). API must be available with a full set of documentation of each method with accompanying sample code. All FRS functions shall be fully accessible via API.	**Yes/No**
30	Use of AI accelerator hardware	FRS shall use extensive AI Technology and perform video processing on GPUs like NVIDIA; INTEL or similar as per design & sizing vetted by AI FRS Algorithm OEM. The number of servers to be supplied, shall be based on the number of camera channels on which the FRS needs to be performed.	**Yes/No**
C	**Facial Recognition based Attendance Management System**		
1	Application Type	Enterprise-class, IP-enabled facial recognition software fully integrated with existing institutional databases and systems.	**Yes/No**

2	AI Technology	Leverages state-of-the-art deep learning models such as CNNs, Vision Transformers and diffusion models for facial recognition and context-based image processing.	**Yes/No**
3	Algorithm Adaptation	Supports adaptive learning to improve accuracy over time by integrating new facial data and user corrections.	**Yes/No**
4	Processing Time	Less than 500 milliseconds per frame for real-time facial recognition on standard hardware.	**Yes/No**
5	Real-Time Monitoring	Provides real-time facial recognition and attendance status updates via IP-enabled cameras.	**Yes/No**
6	Performance Optimization	Utilizes parallel processing and edge computing for optimized resource utilization and low-latency recognition.	**Yes/No**
7	Data Encryption	Encrypts all facial data and personal information in transit.	**Yes/No**
8	Access Control	Implements role-based access control (RBAC) to restrict access to sensitive data based on user roles and permissions.	**Yes/No**
9	Data Retention	Configurable data retention policies aligned with institutional and regulatory requirements (e.g., GDPR, CCPA).	**Yes/No**
			Yes/No
	User Enrollment, Attendance Marking, Reporting		
10	Facial Data Collection	Captures and stores high-quality facial images during user enrollment via connected IP cameras.	**Yes/No**
11	Database Integration	Integrates with institutional databases to automatically retrieve and update user records.	**Yes/No**
12	Bulk Upload	Supports bulk user data uploads in CSV format for efficient onboarding.	**Yes/No**
13	Automated Attendance	Automatically marks attendance based on facial recognition results in predefined zones (e.g., classrooms, offices).	**Yes/No**
14	Custom Attendance Workflows	Allows administrators to define custom attendance workflows based on time, location, and organizational requirements.	**Yes/No**
15	Error Handling	Provides users with the ability to raise attendance correction requests in case of errors via their dashboards.	**Yes/No**
16	Real-Time Monitoring	Displays real-time attendance status and camera feeds on the admin dashboard.	**Yes/No**
17	Attendance Reports	Generates detailed daily, weekly, and monthly attendance reports, including summaries and exception reports.	**Yes/No**
18	Exception Reporting	Identifies and reports missed attendances, late arrivals, and anomalies.	**Yes/No**
			Yes/No
	Management		
19	Role-Based Access Control	Provides different access levels for administrators, supervisors, and attendees.	**Yes/No**

20	User Profile Management	Allows users to view and update their profiles, including facial data and personal information.	**Yes/No**
21	User Roles	- **Admin:** Manages system settings, workflows, and user access.	**Yes/No**
		- **Primary Attendees:** Check and download their attendance reports, raise correction requests.	**Yes/No**
		- **Secondary Attendees:** Manage attendance of assigned users and rectify attendance errors.	**Yes/No**
22	Attendance Alerts	Sends automated alerts to users regarding attendance status, missed attendances, or late arrivals.	**Yes/No**
23	System Alerts	Notifies administrators of system errors, recognition failures, or performance issues.	**Yes/No**
24	Database Integration	Synchronizes user records and attendance data with institutional databases.	**Yes/No**
25	API Access	Provides REST APIs for integration with third-party systems like ERP, HRMS and educational management software.	**Yes/No**
			Yes/No
	Security and Privacy		
26	Data Encryption	Utilizes encryption for all metadata	**Yes/No**
27	Access Control	Enforces access restrictions based on user roles and permissions.	**Yes/No**
28	Compliance	Complies with global data protection regulations like GDPR, CCPA, and local privacy laws.	**Yes/No**
			Yes/No
	User Interface		
29	Admin Dashboard	Provides a centralized dashboard for managing users, monitoring attendance, and generating reports.	**Yes/No**
30	User Portal	Allows primary and secondary users to access attendance records, request corrections, and download reports.	**Yes/No**
31	Mobile Access	Supports mobile-friendly access for real-time monitoring and management.	**Yes/No**
			Yes/No
	Performance and Scalability		
32	Scalability	Designed to support thousands of users and high volumes of facial recognition data.	**Yes/No**
33	Performance Optimization	Optimized for high-speed recognition and low latency, ensuring accurate results even under heavy load.	**Yes/No**

Section E

Financial Bid

Sealed Quotation for AI based FRS System for 02 Nos. CCTVs for MDI-Gurgaon Campus

S. No.	Description	Mention Make & Model	Qty.* in Units	Unit Price in Rs.	GST (%)	Total Price excluding GST in Rs.	Total Price including GST in Rs.
1.	AI Based FRS System for 2 no's CCTVs with standard one year warranty as per above scope & specification in Section D		02				
2.	Appliance (Hardware) including software for processing, analysis and retrieval		01				
3.	AMC for Year1 post one year warranty		--				
4.	AMC for Year 2		--				
5.	AMC for Year 3		--				
6.	**Total**						

*Items may increase / decrease at the time of placing the order.

Total Price in Figures: Rs._____
Total Price in Words: Rupees _____
Delivery Time: _____
Installation & Commissioning Time: _____

Note:

- Delivery and installation at MDI Gurgaon, at site only
- Total bid price should be inclusive of all taxes and levies, transport, loading, unloading, installation and commissioning etc.
- **Warranty Period:** One Year
- **Delivery:** Immediate.
- **Installation Period:** Immediately on delivery
- The Scope give in Section D must be agreed. The bid with deviations would be rejected.
- Quotation Validity Period: - 180 days from the last date of Submission of quotation/tender.
- In case of discrepancy in the amount quoted, the amount mentioned in word or number which results in lowest payable by MDI will be taken into consideration.
- Price quoted should be inclusive of freight, cartage, delivery at MDI Gurgaon Campus. Nothing extra will be paid.
- MDI may place the order for the whole/ some of the items indicated above. Quantity

of each item may vary (increase/ decrease) at the time of placing the order. Decision of competent authority of MDI in this regard shall be final and acceptable to the bidder.

- SLAs as per Section D and penalty terms as defined in Section A are applicable
- During the year, whenever a device is removed from AMC for whatsoever reason, the prorate cost of that device would be deducted from the AMC invoice to be raised by the vendor.

Sign of bidder:

Name of bidder:

Firm's Name with stamp:

Date:

Place: