Department of Social Justice & Empowerment,

Invites

Request for proposal for Central Smart Surveillance Unit (CSSU) for Department of Social Justice and Empowerment On BOO (Build, Own, Operate) Model

Department of Social Justice & Empowerment,
Delhi – 11007

RFP Reference: 13011(6)/28/2021-DP-I dated _____

Sealed documents on behalf of Department of Social Justice & Empowerment, Delhi, the 'RFP' through one cover system for RFP for Central Smart Surveillance Unit (CSSU) for Department of Social Justice & Empowerment BOO (Build, Own, Operate) Model are invited.

1. The documents may be downloaded from Department's web site https://socialjustice.gov.in (for reference only) and CPPP site https://eprocure.gov.in/epublish/app as per the schedule as given in Critical Date Sheet as under.

Important Dates and Details

Sr. No.	Activities	Details
1.	Cost of tender document	NIL
2.	Earnest Money Deposit	EMD Declaration Form
3.	Publicity Date	27/07/2022 after 14:00 hrs
4.	Document submission Start Date and Time	27/07/2022 after 14:00 hrs
5.	Document Submission End Date and Time	30/08/2022 after 05:30 hrs
6.	Tender Opening Date and Time	31/08/2022 after 05:30 hrs
7.	Pre-Bid Meeting	02/08/2022 after 14:00 hrs
8.	Contact Information	

Corrigendum/Addendum, if any, shall be issued on Department of Social Justice & Empowerment Website only.

[A] Important Definitions:-

Following terms are used in the document interchangeably to mean:

1. Department means 'Department of Social Justice & Empowerment'.
2. RFP means "Request for Proposal Documents"
3. Recipient, Respondent and Bidder, Vendor, means "Respondent to the RFP Document".
4. Tender means RFP response documents prepared by the Bidder and submitted to Department of Social Justice & Empowerment
5. Proposal, Bid means "Response to the RFP Document"

Confidentiality:

This document is meant for the specific use by the Company / person/s interested to participate in the current tendering process. This document in its entirety is subject to Copyright Laws. Department of Social Justice & Empowerment expects the bidders or any person acting on behalf of the bidders to strictly adhere to the instructions given in the document and maintain confidentiality of information. The bidders will be held responsible for any misuse of the information contained in the document and liable to be prosecuted by the Department. In the event of such a circumstance is brought to the notice of the Department. By downloading the document, the interested party is subject to confidentiality clauses.

1. AIM

The aim of floating the RFP is to get an overall proposal from the existing Service Providers in Indian market for implementation of Comprehensive Central Smart Surveillance Unit (CSSU) in the associated centres of Department of Social Justice & Empowerment.

2. Background and Purpose

Department of Social Justice & Empowerment is going to establish Comprehensive Centrally Monitored E- Surveillance System which will allow effective monitoring of the Security aspects at multiple centres on Real-time basis and reduce unlawful activities within the areas under all Centres and assist in investigation, as and when required, at a reduced cost.

3. Scope of Work

Department of Social Justice & Empowerment proposes to install on BOO (Build, Own, Operate) Basis Centrally Monitored e-surveillance at its all centres. The facility should cover the e-Surveillance by Centrally Monitoring and alert generated response.

The scope will also include a process of report generation to check the Health Status of the Security Equipment. The reports to be generated at the Command Centre to be instituted by the Service provider and communicated to Department of Social Justice & Empowerment at its all Centres of Department of Social Justice & Empowerment.

(a) Department of Social Justice & Empowerment requires the services of well-established Service Providers/ Original Equipment Manufacturers / Authorized distributors of international repute, having offices in Pan-India for implementation of Comprehensive Central Smart Surveillance Unit (CSSU) at all Centres of Department of Social Justice & Empowerment on BOO Model, **initially for a period of five (05) years*** from the date of signing of contract, with an extension clause of another 3 years on mutual discussion basis between the Department and the System integrator.

(b) A sound CSSU should be provided. The system should be capable of online real-time Centrally Monitored e-surveillance, by installation of Security equipment (IP CCTV System, NVR, Hard Disk, wherever required, etc). The recordings (Video) must be made available to the Department / other Govt. Authority as and when required on express written orders of the Department. The NVR at all Centres should have minimum storage capacity of **30 days***.

(c) With an aim for real-time, 24x7, Comprehensive Central Smart Surveillance Unit (CSSU) across the length and breadth of all centres on BOO Model the Central Smart Surveillance Unit (CSSU) should have the following features:

(i) Comprehensive Central Smart Surveillance Unit by establishing remote/ online connectivity on BOO Model for the CCTV System, wherever is required at all centres of Department.

(ii) Service provider shall ensure the installation of Bandwidth aggregation and ensure the connectivity of the specified areas with Command Centre at all Centres on BOO Model.

(iii) The Service provider should be able to comprehensively Centrally Monitor E-Surveillance, raise various types of alerts like CCTV tampering / CCTV not working, detrimental to the smooth working of Department as per escalation matrix, with various agencies.

(iv) The Service provider should be able to share CCTV image/footage in case of the investigation by the Department / Police /other Govt Authorities as and when required.

The service provider shall be responsible for the overall program management for implementing CSSU and the installation and commissioning at all Centres of Department.

The installation must be completed within **45 Days*** from the date of contract is signed.

4. Flowchart:

a) Receipt of the proposals.
b) Technical Evaluation by the Department.
c) Financial evaluation by the Department.
d) Based on the above evaluation, only one Service provider will be short listed.

5. Bidder's Eligibility Criteria

Applications for awarding the project in prescribed form are hereby invited from professional consultant firms fulfilling the eligibility conditions set out below for their empanelment:

Sr.	Particulars	Criteria
I	Legal Entity	The bidder shall be a firm/ company/ proprietorship firm / registered under the Indian Companies Act or any other statutory Act of GOI and should be into existence in India for last 5 years. Consortium / Joint venture bid not allowed.
II	Experience	• **Minimum 3 years** in the field of providing Centrally monitored Smart CCTV Surveillance unit (CSSU) on BOO model as on date of submission of bid. • Must have executed a single CSSU project of minimum **4000 camera's on BOO model**, in last seven years by one Bidder only, as on date of submission of bid. • The firm should have implemented CSSU project on BOO model in at least 2 different States of India i.e. one client each from 2 different states, in the last 5 years. • The firm should have working experience of executing atleast 2 CSSU projects, of 4 Cameras per Site, on BOO model and a business value of One Crore each in the last seven years. • The firm should have experience of managing atleast 2 nos. of Integrated Command Control Centre. • The firm should have its own/rental site of Tier-3 Data centre and Disaster recovery site at 2 different seismic zones within India. • Only direct Govt. Work orders on the name of Bidder would be considered and not in joint venture.
III	Presence / reach	The firm should have preferably offices in New Delhi NCR with engineering /technical support. The firm should have Office presence in atleast 10 States of India.
IV	Annual Turnover	The Bidder has to be profitable with Average Annual Turnover of INR 15 Crores during the last three financial years i.e. 2018-19, 2019-20 & 2020-21.

No exemption would be allowed to any organization w.r.t Bidder's Eligibility criteria.
The intending applicants are required to submit the self-attested copies of documents/ certificate in conformation of their meeting the above eligibility criteria along-with the other details/ documents as specified above.

The Bidder should have never been barred/ disqualified by any regulator/ Organization. A self-declaration is required/ statutory body in India.

(All the above eligibility criteria will have to be supported by documentary evidence which will need to be attached to the Technical bid.)

In response to the RFP, the Bidder is required to submit sealed documents as per the

details in the Eligibility criteria, along with the documentary evidence, and other documents related to the RFP.

The Bidder must enclose the following along with RFP:

a) Bidder's eligibility details
b) Bidder's general information
c) Key People who will be involved in the project
d) Documentary proofs of the experience claimed by the Bidder.
e) Brief write up of the Product/ service being offered.
f) OEM Eligibility Criteria

6. OEM ELIGIBILITY CRITERIA

Sr. No	General Conditions
1	OEM company for Camera & NVR should have its own company registered in India (under Incorporation of Companies Act, 1956/ 2013) since last 10 year. Any representation through a Dealer/ Distributor/ Joint Venture/ Subsidiary/ consortium shall not be treated as OEM. This has to be supported by necessary statutory documents. CCTV OEM should have manufacturing in India since last Five years and Foreign CCTV OEM should have manufacturing unit globally from last 10 Years. (Documentary evidence should be submitted).
2	The OEM of the IP Camera, Storage, NVR/ VMS Software and Network Switches should not be blacklisted or banned by any country or government department in any country. The OEM should not have any cheating or fraud case filed against their company for their respective product line.
3	CCTV Camera OEM should be fulltime member of ONVIF and quoted models should be listed on ONVIF official website (All the certifications & Credentials should be valid on the date of technical evaluation). The CCTV OEM should not be suspended/ blacklisted by ONVIF.
4	The CCTV OEM should have CMMI Level 5 along with below ISO Certifications for Quality, Environment, Security management and Health & Safety Management system for manufacturing of all types of Cameras & NVR. The Bidder/s shall attach the copy of the OEM's ISO Certificate along with the bid. > ISO 9001:2015 > ISO 14001:2015 > ISO 27001:2013 > ISO 45001:2018
5	All CCTV cameras offered in the project should be UL, CE, FCC, RoHS and BIS certified.
6	The OEM should have an average Annual turnover of Rs. 500 Crores during the last 3 Financial Year ending 31st March 2021.
7	The CCTV OEM should have its office and service/ support centre in atleast 10 states of India. Required sales, service tax number/ certificate to be provided along with the bid.
8	The Bidder(s) must propose 'Makes' that are in compliance to 'Make In India' guidelines of Government of India. The following are key Guidelines/Advisories/ Orders / Notifications published by published by Department of Expenditure (Ministry of Finance)/CERT-IN/MeitY/DIPP/DOT, Government of India and any Guidelines /Advisories/ Orders / Notifications published by Government for reference. > PPP-Make in India Order, from Department of Industrial Policy and Promotion > Procurement dated 23 July 2020 (F.No.6/18/2019-PPD, Ministry of Finance, Department of Expenditure Public Procurement Division
9	The OEM of the CCTV camera must have more than 500 employees on its payroll in India. Any OEM which is a part of a larger group company but meeting the 500 employee criterion in India is also eligible. This is to justify that CCTV OEM has made investment in India and is serious

	about its business in India which will ensure long term after sales support and spare support from the OEM. Respective document/ certificate to be provided along with the bid.
10	The CCTV OEM must have supplied minimum 10,000 No. of IP Cameras in one Single P.O to any State Govt. / Central Govt. / Public sector undertaking in India, as on bid submission date. P.O Copy to be submitted along with supply proof.
11	OEM of IP CCTV cameras should have supplied at least 1,00,000 IP CCTV cameras during the last 03 years to any State Govt. / Central Govt. / Public sector undertaking in India, as on bid submission date. P.O Copies to be submitted along with supply proof.
12	Brochure and OEM Compliance of the offered product (CCTV, NVR, HMS/VMS, UPS, Workstation, Server) on OEM Letterhead.
13	Prevailing Geo-Political situation to be considered in selecting the OEMs for the solution. Bidder to note that it's mandatory to meet the requirements for minimum technical specifications of hardware and software. All the hardware and software should be from the reputed OEMs. Bidder is responsible for complete integration of all the Hardware and Software proposed in the bid.

On the basis of the responses received from the interested parties, eligible bidders will be shortlisted for Financial bid opening.

7. BID SUBMISSION

a. Sealed documents are to be submitted at the office of _____, Department of Social Justice & Empowerment, Delhi before last date of submission i.e. __/__/2022 at 4:00 PM.
b. Tenderer who has downloaded the tender from the Department website _____ and Central Public Procurement Portal (CPPP) https://eprocure.gov.in/epublish/app, shall not tamper/modify the document form in any manner. In case if the same is found to be tempered / modified in any manner, tender will be completely rejected
c. Intending tenderers are advised to visit again Department website _____ and CPP Portal https://eprocure.gov.in/epublish/app at least 1 day prior to closing date of submission of tender for any corrigendum / addendum/ amendment.

8. Submission of Applications :

Notwithstanding the submission of this Capability Document, Department of Social Justice & Empowerment is not under obligation to include any Company /Institution/ Individuals in the final list or entertain any queries in this regard.

a. All the interested companies/ agencies are required to submit application form as per ANNEXURE A and submit declaration as per ANNEXURE B.

b. All costs and expenses associated with submission of application shall be borne by the applicants submitting the application and Department shall have no liability in any manner in this regard or if it decides to terminate the entire process for any reason whatsoever.

c. The right to suspend the RFP process or part of the process, to accept or reject any or all applications at any stage of the process and / or to modify the process or any part thereof at any time without assigning any reason thereto is reserved by the

Department without any obligation or liability whatsoever.

9. Pre RFP meeting

A Pre RFP meeting shall be arranged __/__/2022 **at 2:00 p.m** at _____ to clarify queries / doubts of prospective bidders. The queries may be forwarded to Email ID _____ **on or before 4.00 pm on __/__/2022**

10. Bid Evaluation Criteria

Will be based as per Bidder eligibility criteria (para 5), OEM criteria (para 6).

11. Period of Bid Validity

The Bids shall be valid for a period of 90 days from the closing date for submission of the bid. However Department may extend the validity period further, if required.

12. Bid Security/Earnest Money Deposit

a. The bidder shall furnish, 5 % of of his bid, as Bid Security/Earnest Money of the amount. Bid Security may be submitted in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's cheque or Bank Gaurantee from any of the commercial Banks or payment online in an acceptable form.

b. Any Bid not accompanied by an acceptable Bid Security/EMD shall be summarily rejected by the employer as non-responsive.
The bid security/EMD, of successful bidder may be retained and adjusted with performance security/security deposit, at bidder's option.

c. The Bid Security/Earnest Money may be forfeited:
(i) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity/extended validity with mutual consent;
OR
(ii) in the case of a successful Bidder, if the Bidder fails within the specified time limit to:
(A) sign the Agreement; OR
(B) Furnish the required Performance Security/ Security Deposit.

Additionally, the company shall ban such defaulting contractor from participating in future tenders in concerned Subsidiary/CIL HQ for a period of minimum one year from the date of issue of such letter.

d. The Bid Security/ EMD deposited with the Employer will not carry any interest.

e. No claim from the bidders will be entertained for non-receipt of the refund in any account other than the one from where the money is received.

f. If the refund of EMD is not received by the bidder in the account from which the EMD has been

made due to any technical reason, then it will be paid through conventional system of e-payment. For this purpose, bidder should submit E-Mandate form in format provided by company.

g. In case the tender is cancelled then EMD of all the participating bidders will be refunded unless it is forfeited by the department.

h. If the bidder withdraws his/her bid online (i.e. before the end date of submission of tender) then his/her EMD will be refunded automatically after the opening of tender

13. Performance Security:

Within 28 days of receipt of Order, the Contractor shall furnish to the Ministry, a performance security in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's cheque or Bank Guarantee from any of the commercial Banks or payment online in an acceptable form for an amount equal to (3) three percent of the originally awarded contract price by way of guarantee valid till one month beyond the Contract period as mentioned in the Order for the due and faithful performance of the contract along with the other terms and conditions agreed to. The Contractor shall, at his/her own cost get the validity period of bank guarantee furnished by him/her extended from time to time till one month beyond the completion of work as per the provisions of the contract. He/she shall furnish the extended/revised Bank Guarantee to the Department one month before the expiry date of the original bank guarantee or any extension thereof. In case the extended/revised Bank Guarantee is not received by the Department within the specified period of one month, the Department entirely at discretion shall be at liberty to encash the aforesaid bank guarantee.

Alternatively , in case of non-submission of BG towards Performance Security, Security Deposit shall be deducted from initial payments due to the Contractor till total amount of security deposit becomes 10% of the Contract Value.

The Performance Security/Security deposit shall be released after successful completion of the entire Contract Period, including extension, if any. The Performance Security / Security deposit amount will not earn any interest for the whatsoever period detained by Department.

Bidders shall communicate the following bank details to the issuing Bank for online confirmation of Bank Guarantee to be submitted in terms of this clause:

State Bank of India
Account No: 65121695912
IFSC Code: SBIN0050203
Address of the Bank: Shastri Bhawan, New Delhi

14. Department of Social Justice & Empowerment reserves the right to:

a) Reject any and all responses received in response to the RFP.
b) Waive or Change any formalities, irregularities, or inconsistencies in proposal format delivery.
c) Amend/ modify terms & conditions of RFP.

d) Extend the time for submission of the tender. Select the most responsive Bidder (in case no Bidder satisfies the eligibility criteria in totality)

e) Share the information/ clarifications provided in response to tender by any Bidder, with any other Bidder(s) /others, in any form.

f) Cancel the tender at any stage, without assigning any reason whatsoever.

ANNEXURE A

Bidder's Profile

(Attach self attested supporting documents)

1.0	Name of the Applicant / Organization	
1.1	Address of the registered offices (With Phone Nos. Fax Nos. & Email ID & Contact Person)	
2.0	Year of Establishment	
3.0	Type of the Organization (whether Sole Proprietorship, Partnership, Private Ltd. Or Ltd. Co. etc.)(Enclose Certified Copies of documents as evidence)	
4.0	Name & Qualification of the Proprietor / Partners /Directors of the Organization / Firm a) b) c) Enclose certify- copies of document as evidence	
5.0	Details of Registration - Whether Partnership Firm, Company, etc. Name of Registering Authority, Date & Registration Number. Enclose certified copies of Document as evidence.	
6.0	Whether Registered with Government / Semi Government / Municipal Authorities of any other Public Organization and if so, in which class and since when?	
	(Enclose certified copies of document as evidence)	
a)	No. of years of experience in the field and details of work in any other field.	

b)	Whether ISO Certified, furnish the details.	
7.0	Address of office through which the proposed work of The Department will be handled and the name & designation of officer in charge.	
	Yearly turnover of the organization during last 3 years (year wise) and furnish audited balance sheet and Profit & Loss A/c (Audited) for the last -3-years. Turnover in 2020- 2021 2019-2020 2018-2019 Average Turnover for last Three (3) Financial years	Attach CA's Audited certified certificate in Original)
8.0	PAN No. :	
9.0	Details of Registration of GST and others	
10.0	Details of clients and the nature of jobs carried out (Please attach relevant documentary evidence)	
10.1	Total Number of installations completed as on date, with relevant report.	
11.0	Any employee of Department of Social Justice & Empowerment or their Family member in the job of the Company or Director of the Company.	YES / NO
12.0	If "YES" then details	
13.0	OEM Selection Criteria (As per Para 6 of this RFP)	Attach all Documentary proof and Certificates

Place:
Date:

Name of Authorised Signatory
Name & Seal of Company

Annexure B

(This letter should be on the letterhead of the bidder duly signed by an authorized signatory)

To
The Secretary,
Department of Social Justice and Empowerment,
Delhi

Sir,

Subject: RFP for implementation of Comprehensive Central Smart Surveillance Unit (CSSU) at multiple centres of Department of Social Justice and Empowerment on BOO Model

RFP Reference : …………dated ……..

Further to our proposal dated ……., in response to RFP for **Comprehensive Central Smart Surveillance Unit (CSSU) at all Centres on OPEX Model** issued by "Department of Social Justice & Empowerment", we hereby covenant, warrant and confirm as follows:

1. We confirm that we will abide by all the terms and conditions contained in the RFP.
2. We, hereby unconditionally accept that Department can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the RFP, in short- listing of Bidders.
3. All the details mentioned by us are true and correct and if Department observes any misrepresentation of facts on any matter at any stage, Department has the absolute right to reject the proposal and disqualify us from the selection process.
4. We confirm that this response, for the purpose of short-listing, is valid for a period of three months, from the date of expiry of the last date for submission of response to RFP.
5. We confirm that we have noted the contents of the RFP and have ensured that there is no deviation in filing our response to the RFP and that the Department will have the right to disqualify us in case of any such deviations.

Yours faithfully,

Signature of the
Authorized Signatory
Name:
Designation:
Address:

Seal of the Company

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

To:
The Secretary,
Department of
Social Justice &
Empowerment,
Delhi.

Subject: Acceptance of Terms & Condition of
Tender. Tender Reference No:__Name of Tender /
Work:- _____

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:
   _____
2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. ____ to ____ (including all documents like annexure(s), schedule(s), etc.,), which form part of the contract agreement and I/we shall abide hereby by the terms /conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirely.
5. I/we do hereby declare that our firm has not been blacklisted / debarred by any State/Central Govt. Department/Public Sector undertaking/Autonomous body/ Department in India in the last three years.
6. I/we certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason thereof may summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.
7. I am / we are not blacklisted in any authorities/ Departments.

Yours faithfully,
(Signature of the Bidder, With Official Seal

Annexure C

Bid Security Declaration Form

Date:_

To

The Secretary
Department of
Social Justice &
Empowerment
Delhi

Ref: Tender document No. dated

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration) Name:

(insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder) Dated

on day of (insert date of signing) Corporate Seal (where appropriate)

Performa for Earnest Money Deposit Declaration

Whereas, I/we….....(name of agency) have submitted bids for **RFP for Centrally Smart Surveillance Unit (CSSU) for Department of Social Justice & Empowerment BOO Model.**

I/we hereby submit following declaration in lieu of submitting Earnest Money Deposit.

i) If after the opening of tender, I/we withdraw or modify my/our bid during the period of validity of tender (including extended validity of tender) specified in the tender documents,

or

ii) If, after the award of work, I/we fail to sign the contract, or to submit performance guarantee before the deadline defined in the tender documents,

I/we shall be suspended for one year and shall not be eligible to bid for Department of Social Justice & Empowerment Tenders from date of issue of suspension order.

Signature of the contractor(s)"

Annexure D
MINIMUM TECHNICAL SPECIFICATIONS

S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.1	**4MP Bullet IP Camera**		
	Make		
	Model		
1	Type of Camera	Bullet	
2	Image Sensor	1/3"CMOS	
3	Resolution	4MP or 2688(H)×1520(V)	
4	ROM / RAM	128 MB	
5	Scanning system	Progressive	
6	Minimum Illumination	0.008 Lux@F1.6	
7	Illumination Distance	30 m(IR)	
8	Illuminator On/Off Control	Auto/Manual	
9	Illuminator Number	1 (IR LED)	
10	Pan/Tilt/Rotation Range	Horizontal: 0°–360° Vertical: 0°–90° Rotation: 0°–360°	
11	Lens Type	Fixed-focal	
12	Lens Mount	M12	
13	Focal Length	2.8mm / 3.6mm	
14	Max. Aperture	F1.6	
15	Field of View	Horizontal: 84.0°;Vertical: 45.0°;Diagonal: 100.0°	
16	Iris Control	Fixed	
17	Close Focus Distance	0.9 m / 1.6m	
18	DORI Distance	D: 56 m; O: 22.4 m; R: 11.2 m; I: 5.6 m	
19	IVS	Intrusion; tripwire	
20	Video Compression	H.265; H.264; H.264B; MJPEG	
21	Smart Codec	H.264: Yes H.265: Yes	
22	Video Frame Rate	50Hz Main stream (2560 × 1440 @ 25 fps); sub stream (704 × 576 @ 25 fps) Main stream (2688 × 1520 @ 20 fps); sub stream (704 × 576 @ 20 fps); Third stream: CIF@1fps 60Hz Main stream (2560 × 1440 @ 30 fps); sub stream (704 × 480 @ 30 fps) Main stream (2688 × 1520 @ 20 fps); sub stream (704 × 480 @ 20 fps); Third stream: CIF@1fps	
24	Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 ×480); CIF (352 × 288/352 × 240)	
25	Bit Rate Control	CBR/VBR	
26	Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps	
27	Day/Night	Auto(ICR)/Color/B/W	
28	BLC	Yes	
29	HLC	Yes	
30	WDR	120 dB	
31	White Balance	Auto/Natural/Street Lamp/Outdoor/Manual/Regional Custom	
32	Gain Control	Auto/Manual	
33	Noise Reduction	3D NR	
34	Motion Detection	OFF/ON (4 areas, rectangular)	
35	Region of Interest (RoI)	Yes (4 areas)	
36	Smart Illumination	Yes	
37	Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution.)	
38	Mirror	Yes	
39	Privacy Masking	4 areas	

40	Network Port	RJ-45 (10/100 Base-T)	
41	Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP	
42	Interoperability	ONVIF profile S,G	
43	User/Host	20	
44	Storage	FTP; Micro SD card (max. 256 GB); NAS	
45	Browser	IE Chrome Firefox	
46	Management Software	Smart PSS;DSS;DMSS	
47	Mobile Client	iOS; Android	
48	Power Supply	DC12V/PoE(802.3af)	
49	Power Consumption	Basic power consumption: 2.2W (12V DC); 2.7W (POE) Max power consumption: (H.265, Max resolution, Max stream, WDR, IR full intensity, IVS): 4.2W (12V DC), 5W (POE)	
50	Operating Temperature	-40°C to +60°C (-40°F to +140°F)	
51	Operating Humidity	≤95%	
52	Storage Temperature	-40°C to +60°C (-40°F to +140°F)	
53	Protection	IP67	
54	Casing	Metal	
55	Standards	CE, FCC, UL/ BIS Certified	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.2	**4MP Dome IP Camera**		
	Make		
	Model		
1	Type of Camera	Dome	
2	Image Sensor	1/3"CMOS	
3	Max. Resolution	4 MP or 2688(H)×1520(V)	
4	ROM	128 MB	
5	RAM	128 MB	
6	Scanning System	Progressive	
7	Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s	
8	Min. Illumination	0.008 Lux@F1.6	
9	Illumination Distance	30 m(IR)	
10	Illuminator On/Off Control	Auto/Manual	
11	Illuminator Number	2 (IR LED)	
12	Pan/Tilt/Rotation Range	Horizontal: 0°–360° Vertical: 0°–78° Rotation: 0°–360°	
13	Lens Type	Fixed-focal	
14	Lens Mount	M12	
15	Focal Length	2.8mm/3.6mm	
16	Max. Aperture	F1.6	
17	Field of View	Horizontal: 84.0°;Vertical: 45.0°;Diagonal: 100.0°	
18	Iris Control	Fixed	
19	Close Focus Distance	0.9 m	
20	DORI Distance	D: 56 m; O: 22.4 m; R: 11.2 m; I: 5.6 m	
21	IVS	Intrusion; tripwire	
	Video Compression	H.265; H.264; H.264B; MJPEG	
22	Smart Codec	H.264: Yes H.265: Yes	
23	Video Frame Rate	50Hz Main stream (2560 × 1440 @ 25 fps); sub stream (704 × 576 @ 25 fps) Main stream (2688 × 1520 @ 20 fps); sub stream (704 × 576 @ 20 fps); Third stream: CIF@1fps 60Hz Main stream (2560 × 1440 @ 30 fps); sub stream (704 × 480 @ 30 fps) Main stream (2688 × 1520 @ 20 fps); sub stream (704 × 480 @ 20 fps); Third	

		stream: CIF@1fps	
24	Stream Capability	3 streams	
25	Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 ×480); CIF (352 × 288/352 × 240)	
26	Bit Rate Control	CBR/VBR	
27	Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps	
28	Day/Night	Auto(ICR)/Color/B/W	
29	BLC	Yes	
30	HLC	Yes	
31	WDR	120 dB	
32	White Balance	Auto/Natural/Street Lamp/Outdoor/Manual/Regional Custom	
33	Gain Control	Auto/Manual	
34	Noise Reduction	3D NR	
35	Motion Detection	OFF/ON (4 areas, rectangular)	
36	Region of Interest (RoI)	Yes (4 areas)	
37	Smart Illumination	Yes	
38	Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution.)	
39	Mirror	Yes	
40	Privacy Masking	4 areas	
41	Built-in MIC	Yes	
42	Audio Compression	G.711a; G.711Mu; G.726	
43	Network Port	RJ-45 (10/100 Base-T)	
44	Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP	
45	Interoperability	ONVIF (Profile S/Profile G); CGI; P2P	
46	User/Host	20	
47	Storage	Cloud; FTP; Micro SD card (max. 256 GB); NAS	
48	Browser	IE Chrome Firefox	
49	Management Software	Smart PSS;DSS;DMSS	
50	Mobile Client	iOS; Android	
51	Power Supply	DC12V / PoE (802.3af)	
52	Power Consumption	Basic power consumption: 2.1W (12V DC); 2.5W (POE) Max power consumption: (H.265, Max resolution, Max stream, WDR, IR full intensity, IVS): 5.7W (12V DC), 6.6W (POE)	
53	Operating Temperature	-40°C to +60°C (-40°F to +140°F)	
54	Operating Humidity	≤95%	
55	Storage Temperature	-40°C to +60°C (-40°F to +140°F)	
56	Protection	IP67	
57	Casing	Metal + Plastic	
58	Standards	CE, FCC, UL/ BIS Certified	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.3	**4/8 Channel Network Video Recorder (NVR)**		
	Make		
	Model		
1	**System**		
2	Main Processor	Dual-core embedded processor	
3	Operating System	Embedded LINUX	
4	**Audio and Video**		

5	IP Camera Input	4/8 Channel	
6	Two-way Talk	1 Channel Input, 1 Channel Output, RCA	
7	**Display**		
8	Interface	1 HDMI, 1 VGA	
9	Resolution	HDMI: 3840×2160, 1920×1080, 1280×1024, 1280×720	
10		VGA: 1920×1080, 1280×1024, 1280×720	
11	Decoding Capacity	1ch@8MP 30fps, 4ch@1080P 30fps	
12	Multi-screen Display	4CH: 1/4	
13		8CH: 1/4/8/9	
14	OSD	Camera title, Time, Camera lock, Motion detection, Recording	
15	**Recording**		
16	Compression	Smart H.265+/H.265/Smart H.264+/H.264	
17	Resolution	8MP/6MP/5MP/4MP/3MP/1080P/ 720P/ D1&etc.	
18	Record Rate	80Mbps	
19	Bit Rate	16Kbps ~ 20Mbps Per Channel	
20	Record Mode	Manual, Schedule (Continuous, MD (Motion Detection), Alarm, IVS)	
21	Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec	
22	**Video Detection and Alarm**		
23	Trigger Events	Recording, PTZ, Tour, Video Push, Snapshot, and Screen Tips	
24	Video Detection	Motion Detection, MD Zones: 396 (22 × 18), and Tampering	
25	**Playback and Backup**		
26	Sync Playback	1/4	
27	Search Mode	Time /Date, MD and Exact Search (accurate to second)	
28	Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Shuffle, Backup Selection, Digital Zoom	
29	Backup Mode	USB Device/Network	
30	**Third-party Support**		
31	Third-party Support	Onvif, RTSP	
32	**Network**		
33	Interface	1 RJ-45 port (10/100Mbps)	
34	Network Function	HTTP/HTTPS, TCP/IP, IPv4/IPv6, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, IP Search(Support IP camera, DVR, NVS and etc.), P2P	
35	Max. User Access	128 users	
36	Smart Phone	iPhone, iPad, Android	
37	Interoperability	ONVIF 2.4, SDK, CGI	
38	**Storage**		
39	Internal HDD	1 SATA III port, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature	
40	HDD Mode	Single	
41	**Auxiliary Interface**		
42	USB	2 ports (1 Rear USB2.0, 1 Front USB2.0)	
43	**Electrical**		
44	Power Supply	Single, DC12V/2A	
45	Power Consumption	<3W (without HDD)	
46	**Environmental**		
47	Operating Conditions	-10°C to +55°C (+14°F to +131°F), 86–106kpa	
48	Storage Conditions	0°C to +40°C (+32°F to +104°F), 30–85% RH	

49	Standards	CE, FCC, UL/ BIS Certified	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.4	**Surveillance Hard Disk (4TB/6TB/8TB/10TB)**		
	Make		
	Model		
1	Hard Disk	Surveillance Hard Disk 4TB/6TB/8TB/10TB SATA (Serial ATA) for 30 days local recording setup	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.5	**8 Port PoE Switch**		
	Make		
	Model		
1	Architecture	Switch with 8 Ports 10/100/1000Mbps + 2 SFP Port with Lightning protection 6kv on all copper port.	
2	Performance	The Switch shall have Non-blocking wire speed switch fabric of 20 GBPS	
3		Switch should have Console Port RJ45 port for Out-of-band CLI configuration.	
4		The Switch shall have Min 14 MPPS or higher	
5		The Switch shall support Min. 16K MAC address	
6		The Switch Should support Jumbo Frame (up to 9K Bytes)	
7	Network Media	SFP's 1000 BaseSX,1000BaseLX,1000BaseTX	
8	Layer 2 Features	The Switch should have Spanning Tree Protocol with 802.1D STP, 802.1W RSTP, 802.1s MSTP(Instances >64) with BPDU Filtering, Root Restriction	
9		The Switch should support ITU-T G.8032 (Ethernet Ring Protection Switching)	
10		The Switch should have 802.3ad & 802.1AX Link Aggregation Up to 8 groups per device with 8 ports per group with Traffic load sharing based on Source and destination address	
11		The Switch should have Port Mirroring One to one/Many to One	
12		The Switch should support Loopback Detection (LBD) Per port, Per VLAN which is STP independent.	
13		The Switch should support L2 Protocol Tunneling	
14	L2 Multicast	The Switch should have IGMP Snooping with IGMP v1/v2 Snooping, IGMP v3 awareness, Supports 1024 IGMP groups, Supports at least 1024 MLD Snooping Groups, IGMP per VLAN, Supports IGMP Snooping Querier	
15	VLAN	It shall have Management VLAN, Asymmetric VLAN, Voice VLAN, Auto Surveillance VLAN, Port-based VLAN, Double VLAN (Q in Q), ISM VLAN (Multicast VLAN)	
16	Quality of Service	It shall support 802.1p Priority Queues (8 Queues)	
17		Queue Handling mode: Strict Priority Queue (SPQ), Weighted Round Robin (WRR), Simple Random Early Detection (SRED)	
18		Class of service shall be based on DSCP,802.1p queues	
19		The switch should support Queue-based, Flow-based, Port-based Bandwidth Control with Minimum Granularity of up to 64Kb/s.	
20	Management	It shall support SNMPv1/V2c and V3	
21		It shall support LLDP, LLDP-MED	
22		The switch should be Energy Efficiency Ethernet (EEE)with Power Saving By Link Status, LED Shut-Off, Port Shut-Off and System Hibernation	
23	Security	The switch should support IP-MAC-Port Binding	

24		The switch should support Broadcast / Multicast / Unicast Storm Control	
25	Operating Temperature	-5 to 50°C	
26	Certification	OEM should have ISO 9001:2008 and ISO 14001:2004	
27		OEM Should have Toll-Free number and local Service Center.	
28		OEM should have supplied minimum 1500+ switches in any surveillance project/multi-location project in Government.	
29		To ensure stability and credibility of OEM, Company should not have any history of merger / acquisition in last 10 years.	
30		Switches and Fiber Modules should be from same OEM.	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.6	**24 Port PoE switch**		
	Make		
	Model		
1	Architecture	Switch with 24 Ports 10/100/1000Mbps + 4 SFP support with Lightning protection 6kv on all copper PoE port.	
2	Performance	The Switch shall have Non-blocking wire speed switch fabric of 56 GBPS	
3		Switch should have Console Port RJ45 port for Out-of-band CLI configuration.	
4		The Switch shall have Min 41 MPPS or higher	
5		The Switch shall support Min. 16K MAC address	
6		The Switch Should support Jumbo Frame (up to 9K Bytes)	
7	Network Media	SFP's 1000 BaseSX,1000BaseLX,1000BaseTX	
8	Layer 2 Features	The Switch should have Spanning Tree Protocol with 802.1D STP, 802.1W RSTP, 802.1s MSTP (Instances >64) with BPDU Filtering, Root Restriction	
9		The Switch should support ITU-T G.8032 (Ethernet Ring Protection Switching)	
10		The Switch should support Loopback Detection (LBD) Per port, Per VLAN which is STP independent.	
11		The Switch should support L2 Protocol Tunneling	
12	L2 Multicast	The Switch should have IGMP Snooping with IGMP v1/v2 Snooping, IGMP v3 awareness, Supports 1024 IGMP groups, Supports at least 1024 MLD Snooping Groups, IGMP per VLAN, Supports IGMP Snooping Querier	
13	VLAN	It shall have Management VLAN, Asymmetric VLAN, Voice VLAN, Auto Surveillance VLAN, Port-based VLAN, Double VLAN (Q in Q), ISM VLAN (Multicast VLAN)	
14	Quality of Service	It shall support 802.1p Priority Queues (8 Queues)	
15		Queue Handling mode: Strict Priority Queue (SPQ), Weighted Round Robin (WRR), Simple Random Early Detection (SRED)	
16		Class of service shall be based on DSCP,802.1p queues	
17		The switch should support Queue-based, Flow-based, Port-based Bandwidth Control with Minimum Granularity of up to 64Kb/s.	
18	Management	It shall support SNMPv1/V2c and V3	
19		It shall support LLDP, LLDP-MED	
20		The switch should be Energy Efficiency Ethernet (EEE)with Power Saving By Link Status, LED Shut-Off, Port Shut-Off and System Hibernation	
21	Security	The switch should support IP-MAC-Port Binding	
22		The switch should support Broadcast / Multicast / Unicast	

		Storm Control	
23	Operating Temperature	-5 to 50°C	
24	Certification	OEM should have ISO 9001:2008 and ISO 14001:2004	
25		OEM should have Toll-Free number and local Service Center.	
26		OEM should have supplied minimum 1500+ switches in any surveillance project/multi-location project in Government.	
27		To ensure stability and credibility of OEM, Company should not have any history of merger / acquisition in last 10 years.	
28		Switches and Fiber Modules should be from same OEM.	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.7	**CAT 6 UTP**		
	Make		
	Model		
1	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801		
2	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.		
3	Conductor Solid bare Copper and Jacket FR PVC and UL approved CM rated cable		
4	Insulation :High Density Polyethylene		
5	Dielectric Strength of cable should be 1.0KV dc		
6	Attenuation (< 17 db), Pair – to – pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR.		
7	Bending Radius should be < 25.4mm at –20°C ± 1°C and Pulling Force: 11.5 Kg		
8	Nominal Outer Diameter of Cable should be 6.1 mm and Conductor Diameter (23 AWG)		
9	Cable should support operating Temperature from -20° to +60°C		
10	Cable should come with printed sequential Length Counter on each meter		
11	OEM should have ISO 9001:2008 and ISO 14001:2004		
12	OEM Should have Toll-Free number and local Service Center.		
13	All Copper and fiber components should be from Same OEM.		
14	To ensure stability and credibility of OEM, Company should not have any history of merger / acquisition in last 10 years.		
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.8	**CAT 6 STP**		
	Make		
	Model		
1	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801		
2	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.		
3	Conductor: 23 AWG Solid bare Copper		
4	Insulation :High Density Polyethylene		
5	Pairs: 2 Insulated conductors twisted together		
6	Shield: Aluminum / Polyester Foil Tinned copper Braiding		
7	Sheath: PVC Type		
8	Nominal Outer Diameter of Cable should be 7.5 mm and Conductor Diameter (23 AWG)		
9	Cable should support operating Temperature from -20° to +70°C		
10	Cable should come with printed sequential Length Counter on each meter		
11	OEM should have ISO 9001:2008 and ISO 14001:2004		
12	OEM Should have Toll-Free number and local Service Center.		
13	All Copper and fiber components should be from Same OEM.		
14	To ensure stability and credibility of OEM, Company should not have any history of merger / acquisition in last 10 years.		

S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.9	**Mounting Cords**		
	Make		
	Model		
1	Features	Category 6 STP equipment cords complete a proper ground connection and allows longer runs with less effect of Electromagnetic Interference {EMI} and Radio Frequency Interferene. These patch cords are appropriate for high speed data transmission.	
2		Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.	
3		Should have 50 micro inches of gold plating over nickel contacts.	
4	Mechanical – Cable	Conductor size: 24 AWG stranded bare copper with 26 AWG drain wire	
5		Jacket: low smoke zero helozen type	
6	Mechanical Characteristics – Plug	Operating life: Minimum 750 insertion cycles	
7		Contact blade: Phosphor bronze , Contact plating: 50µ" Gold	
8	Electrical Characteristics – Plug	Dielectric withstanding voltage :500 V AC, Insulation resistance : 35 M Ohm (Max)	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.10	**24 Port Jack Panel**		
	Make		
	Model		
1	Features	Be made of powder coated steel, in 24 port configurations Allow for a minimum of 700 re-terminations without signal degradation below standards compliance limit.	
2		Have port identification numbers on the front of the panel and self-adhesive, clear label holders (transparent plastic window type)	
3		Improved cable management with optional cable management bar	
4		The Cat-6 UTP transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard, IDC: Suitable for 22-26 AWG stranded wire compatible with both 110 & Krone punch down tools	
5	Mechanical Characteristics	PBT +glass fiber, UL-94V-0	
6	Jack Connector	Operating Life: Minimum 750 insertion cycles	
7		Contact Material: Copper Alloy, Contact Plating: 50µ" Gold plated on plug contact area	
8		Contact Force: 20N max (IEC 60603-7-4), Plug Retention Force: 15 lb.	
9	IDC Connector	Housing: PBT+ Glass fiber , UL94V-0 rated	
10		IDC cap : ABS, UL 94V -0	
11		Contact Material: Copper Alloy	
12		IDC Contact Plating: Phosphor bronze with tin plated	
13		Insertion Force: 20N max (IEC 60603-7-4)	
14		Wire Accommodation: 22-26 AWG solid	
S. No.	Technical Specifications	Description	Compliance (Yes/No)

A.11	**6 Core Single Mode Fibre**		
	Make		
	Model		
1	6 core Fibre with Central Loose tube with jelly compound, Nominal Corrugated Steel Tape Armouring, suitable load Indoor / Outdoor (duct) Local Area network system. With excellent water proof layer & good moisture resistance, crush resistant performance, light weight, Compact structure.		
2	"Standards:-ISO : 11801 , IEC : 60793-1/60794-1-2, ITU-T : REC G.652D		
3	Telcordia : GR-20 Core"		
4	Fibre - type & Refractive Index:- 9/125 / G.652D /1.4674/1.4679		
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.12	**CAT6 UTP I/O at Camera location**		
	Make		
	Model		
1	Features	All information outlets for 100 W, 22-26 AWG copper cable shall Use insulation displacement connectors (IDC) and comply to Category 6, TIA568 C.2	
2		Information outlet (RJ45 jack) should be covered program for compliance with TIA568.C.2	
3	Face Plate	Min. Required Specification	
4		Single & DUAL square plate, Quad in Rectangular shape	
5		Face Plate with shutter, support variety of jacks – UTP	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.13	**Media Convertor**		
1	Make		
2	Model		
3	Media converter should have 1000BASE-T Gigabit RJ45 port and o 1000BASE-LC Type Gigabit single-mode fiber port		
4	Media converted should support Fiber Distance: 10 km		
5	Media converted should support Auto negotiation of duplex mode on twisted-pair port		
6	Media converted should support Auto MDI/MDIX for twisted-pair port		
7	Media converted should support Full wire-speed forwarding rate		
8	Media converted should support Front panel status LEDs		
9	Media converted can work as a stand-alone device		
10	Media converted should support Link Pass Through function		
11	Media converted should have LED: Power (PWR), LINK/ACT		
12	Media converted should have external power adapter		
13	The Dimension of Media converter should be 94×70×26mm		
14	Media converted should support Temperature: Operating: 0 °C to 50 °C & Storage: -20 °C to 70 °C.		
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.14	**Wall mount rack 4U / 6U / 9U**		
	Make		
	Model		
1	Size Rack	4U / 6U / 9U Floor Mount/ Wall Mount Rack as per standard sizes	
2	Rack Standard Construction	Conforms to DIN 41494 or equivalent standard Welded	
3	Front Door	Lockable Toughened Glass Door with Lock and Key	
4	Basic Frame	Steel	
5	Equipment Mounting	DIN Standard Slots	
6	Mounting Angle	19" Mounting angle made of formed steel	
7	Standard Accessories:	The Rack must have 1U Cable Manager, Hardware Packet, 6 Socket 5 Amp. Power Distribution Unit, Roof	

		Mounted Fan Unit / 90 CFM /230V AC	
8	Standard Finish	Powder Coated	
9	Top and Bottom Cover	Welded to Frame, Vented and Cable entry exit cut outs	
10	Standard Color	Grey or Black	
11	Static Load	40 kgs.	
12	OEM should have ISO 9001:2008 and ISO 14001:2004		
13	OEM Should have Toll-Free number and local Service Center for product support.		
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.15	**24U Floor Mount Racks**		
	Make		
	Model		
1	Size Rack	The Rack should be Wall Mount 24U	
2	Rack Standard	Conforms to DIN 41494 or equivalent standard	
3	Construction	Welded or CKD (knockdown)	
4	Front Door	Lockable Double Toughended Glass Door or Perforated	
5	Basic Frame	Steel	
6	Equipment Mounting	DIN Standard 10mm Sq. Slots / Direct M6 Tap	
7	Mounting Angle	19" Mounting angle made of formed steel	
8	Standard Finish	Powder Coated	
9	Top and Bottom Cover	Welded to Frame, Vented and Cable entry/exit cut outs from Top & Bottom	
10	Standard Mounting	Option Castor wheels (Front 2 wheels with Break and rear without break) Or Levelers	
11	Standard Color	Grey or Black	
12	Static Load 7	50 kgs with Casters 1250 kgs with Levelers/Plinth	
13	OEM should have ISO 9001:2008 and ISO 14001:2004		
14	OEM Should have Toll-Free number and local Service Center for product support.		
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.16	**1 KVA Online UPS System with 30 minutes battery back-up**		
	Make		
	Model		
1	Capacity	1KVA	
2	DC VOLTAGE SYSTEM	36VDC	
3	INPUT		
4	VOLTAGE RANGE	110VAC + 5 % - 300VAC + 5 %	
5	FREQUENCY RANGE	40Hz - 70H z	
6	PHASE	SINGLE PHASE WITH GROUND	
7	POWER FACTOR	$\geq$ 0.99 @ FULL LOAD	
8	OUTPUT		
9	OUTPUT VOLTAGE	200/ 208/ 220/ 230/ 240VAC	
10	AC VOLTAGE REGULATION	+1%(Battery Mode)	
11	FREQUENCY RANGE (BATTERY MODE)	50 Hz + 0.25 H z OR 60Hz 0.3 Hz	
12	CURRENT CREST RATIO	3:1	
13	HARMONIC DISTORTION	$\leq$ 2% THD (Linear Load) ; 4% THD (N on-LinearLoad)	
14	OVERLOAD CAPABILITY	105%-110%: UPS SHUTS DOWN AFTER 10 MINUTES AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL. 110%-130%: UPS SHUTS DOWN AFTER 1 MINUTE AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL. >130%: UPS SHUTS DOWN AFTER 3 SECONDS AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL.	
15	TRANSFER TIME	AC MODE TO BATTERY MODE: 0/ INVERTER TO BYPASS: <4 ms(Typical 2.5ms)	

16	WAVEFORM (BATTERY MODE)	PURE SINEWAVE	
17	EFFICIENCY		
18	EFFICIENCY (AC MODE/ BATT. MODE)	88%/ 83%	
19	BATTERY & CHARGER		
20	BATTERY TYPE/ BATTERY NUMBERS	SMF/ 3 Nos.	
21	CHARGING CURRENT	0.7A-6A [2A/4A/6A(MAX.) SELECTABLE VIA JUMPER SETTINGS	
22	Backup Require	30 minutes	
23	ENVIRONMENT		
24	OPERATING HUMIDITY/ TEMP.	20-95% RH @ 0-40°C (N on-Condensing)	
25	NOISE LEVEL	LESS THAN 50 dBA @ 1 METER (WITH FAN SPEED CONTROL)	
26	STATUS INDICATIONS		
27	LED/LCD	LCD DISPLAY INDICATIONS	
28	MANAGEMENT		
29	SNMP (OPTIONAL)	POWER MANAGEMENT FROM SNMP MANAGER AND WEB BROWSER	
30	Additional Requirement		
31	STATIC BYPASS	Required	
32	HOT STANDBY FEATURE	Required	
33	Surge Protection & OVCD	Required	
34	EMI Noise Filter	Required	
35	Manufacturer Certification	ISO 9001, ISO14001 & OHSAS 18001 & TL 9000 & BIS, CE, ROHS Certified	
36	Service Support	PAN INDIA Service Center availability	
S. No.	Technical Specifications	Description	Compliance (Yes/No)
A.17	**25mm PVC Conduit**		
	Make		
	Model		
1	PVC conduit pipe 25mm medium class ISI marked, i/c all other required items		
Sr. No	Description	Specifications	Compliance Yes/ No
A.18	**Armoured Power Cable**		
	Make		
	Model		
1	3 Core Power Cable, Conductor size: 2.5 sq mm, multi strand with standard annealed electrolytic copper conductor suitable for single phase 230V AC Supply/ DC Supply		
Sr. No	Description	Specifications	Compliance Yes/ No
A.19	**HDPE Pipe**		
	Make		
	Model		
1	32mm Dia HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. in the existing trench/surface of wall, complete as required.		
Sr. No	Technical Specifications	Specifications	Compliance Yes/ No
A.20	**Workstation with 21.5" display**		
	Make		
	Model		
1	Processor	Intel Core i5 10500 or latest or equivalent	
2	Operating System	Windows 10 Pro, 64bit or better	
3	RAM	Minimum 4 GB DDR3	
4	Storage	500 GB SATA Hard drive	

Sr. No	Technical Specifications	Specifications	Compliance Yes/ No
A.21	**Central Command & Control Management Cloud Server with VMS & HMS**		
	Make		
	Model		
1	Software Architecture	Should have a Client/Server infrastructure.	
2	Supported Device Type	Should support NVR, Network camera, Network Video server, Decoder, DVR, access control, video intercom, attendance management etc.	
3	Max. Register Device	No Limit. Scalable as per future requirements.	
4	Camera Alert Data	Should capture Camera Tampering alert, Power failure alert, Camera non-functioning alert.	
5	Camera Health Data	Should capture Camera Online/Offline Status, Network/Power Failure Status, Camera recording Status	
6	Reporting	Should have extensive reporting available in multiple graphical and tabular formats which can be exported to PDF, HTML, Excel.	
7	Location Grouping	Zone / Area / Street Grouping of camera devices and reporting available for all or per location group	
8	Maintenance Log	The ability to log a fault or maintenance visit, with warnings presented to the operators. Reports to be created to show faulty items of equipment, time taken to fix etc. Automatic emails are generated and distributed to predefined lists.	
9	Notification Matrix	Inbuilt SMS, Email & Mobile App Notification module to send camera and NVR health related alerts to concerned people (minimum 5 persons) based on alert like power failure, HDD failure, vandalism, tempering, network disconnection and panic type and alert location.	
10	Priority Levels	Priority Levels will be set to equipment notifications, alarm inputs and user levels. The level range must be customizable.	
	Video Monitoring Software		
	Make		
	Model		
1	Supported Devices	Should support NVR, Network camera, Network Video server, Decoder etc.	
2	Max. Register Device	256 Devices with up to 20,000 channels	
3	Recording	64 Channels for windows	
4	Device Management	Auto find, Add, delete, device Group, Reboot, setup	
5	Video Source	Local PC, Device itself, PC-NVR	
6	Duration	24h for one search	
7	Search Type	Certain time, Timing, Motion detection, Alarm	
8	Playback Features	Snapshot, E-PTZ, audio, speed 1/8x~8x, synchronization playback	
9	Export	Window version: Export as *.dav or *.avi MAC Version: Export as *.dav	
10	Alarm Signal Monitoring	Schedule Alarm, Setup actions, operate/memo alarm	
11	Alarm Type	External alarm, video loss, Motion detection, Camera masking etc.	
12	Video display split	1/4/6/8/9/16/25/36/64 split	
13	Live Monitoring	Snapshot, record, audio, talk, instant playback, E-PTZ, tour task	
14	Number Of Maps	Map group : Unlimited, sub-map, Layout : 64	
15	Supports Image	JPEG/BMP	
16	Account	User and role management; privileges according to module & device.	
17	Log	Client log, remote device log, operation log, System log, alarm log	

Sr. No	Technical Specifications	Specifications	Compliance Yes/ No
A.22	**Video wall**		
	Make		
	Model		
1	Technology	HD LED Display (5x2)	
2	Screen Size	55 inch	
3	Basel Size	Less than 1mm	
4	Resolution	Full HD (1080p) 16:9 Widescreen	
5	Contrast	1400:1	
6	Brightness of Cube	500 nits	
7	Viewing Angle	178 degree/178 degree (H/V)	
8	Input	HDMI and other inputs as per Video wall solution	
Sr. No	Technical Specifications	Specifications	Compliance Yes/ No
A.23	**16 Port Giga Industrial switch with 2 SFP uplink and 2 SFP+ uplink ports**		
	Make		
	Model		
1	Switch should have 16 x 10/100/1000 Base-T ports & 4 1000Base-X SFP+ ports, RJ-45 (RS-232) Console Port		
2	The Switch should have 2 Relay Outputs with 51-57 VDC Redundant Input with Reverse Polarity Protection		
3	Switch should have 16K MAC Address & 1.2 MB Packet Buffer		
4	Switch should have 112 Gbps		
5	Switch should support IPv4, IPv6 Protocol Support, IGMP v1/v2/v3, MLD v1/v2, TFTP, IEEE 1588 PTP V2, SNMPv1/v2/v3, 802.1x, EAP, DHCP Server/ Relay / Client, LLDP, ARP, GVRP, Syslog, RMON, LACP, NTP, Telnet, Ping6.		
6	The Switch should have support following Redundancy Protocols STP, RSTP, MSTP, ERPS, Ring Protection		
7	The Switch should support VLAN Support i.e. 802.1q VLAN (256 Active VLAN, 4K VID) Protocol based VLAN, IP Subnet Based VLAN, MAC Based VLAN		
8	The Switch should support QoS Support 802.1p, Que Handling: Strict, WRR, DWRR 8 Priority queues		
9	The Switch should support Layer 2 & Layer 3 Access Control List, MAC based Black & White List		
10	The Switch should support HTTP, HTTPS, Telnet, SSH		
11	The Switch should have Operating Temp: -20° to 70° C with IP-30 Housing		
12	The Switch should certified for NEMA TS2 and all IEC 61000-4-2 ESD, IEC 61000-4-3 RS, IEC 61000-4-4 EFT, IEC 61000-4-5 Surge, IEC 61000-4-6 CS, IEC 61000-4-8, IEC 61000-4-11 DIP, Shock: IEC 60068-2-27, Freefall: IEC 60068-2-32, Vibration: IEC 60068-2-6, CE, FCC, ROHS		
Sr. No.	Technical Specifications	Description	Compliance (Yes/No)
A.24	**10KVA Online UPS with 60mins Backup**		
	Make		
	Model		
1	CAPACITY	10 KVA	
2	DC VOLTAGE	DEFAULT = 192VDC, ADJUSTABLE = 216VDC & 240VDC	
3	PHASE	1 PHASE IN - 1 PHASE OUT	
4	INPUT		
5	NOMINAL VOLTAGE	208/220/230/240 VAC	
6	VOLTAGE RANGE	110-300VAC +/- 3 % at 50% Load / 176-300VAC +/- 3 % at 100% Load	
7	FREQUENCY RANGE	46-54 Hz	
8	POWER FACTOR	≥ 0.99 @ 100% Load	

9	TOTAL HARMONIC DISTORTION THD(i)	<4% @100% Load, <6% @50% Load	
10	OUTPUT		
11	OUTPUT POWER FACTOR	DEFAULT = 0.8, Optional 0.9 & 1 UPS Should have feature of upgradation to Unity Power Factor.	
12	NOMINAL VOLTAGE	208/220/230/240 VAC	
13	AC VOLTAGE REGULATION	+/- 1%(Battery Mode)	
14	FREQUENCY RANGE	46-54Hz (Synchronized Range) 50 Hz +/- 0.1 Hz (Battery Mode)	
15	CURRENT CREST RATIO	3:1 (Max)	
16	HARMONIC DISTORTION	≤ 1% THD (Linear Load) ; ≤ 4% THD (Non-Linear Load)	
17	OVERLOAD CAPABILITY	AC Mode: 100%-110%: 10min ; 110%-130%: 1min ; >130% : 1sec Battery Mode: 100%-110%: 30sec ; 110%-130%: 10sec ; >130% : 1sec	
18	TRANSFER TIME		
19	AC MODE TO BATTERY MODE	Zero	
20	INVERTER TO BYPASS	Zero	
21	WAVEFORM (BATTERY MODE)	Pure Sine Wave	
22	EFFICIENCY	AC Mode: 94% / BATTERY Mode: 91%	
23	BATTERY		
24	BATTERY TYPE	VRLA / SMF	
25	NUMBER OF BATTERIES	16-20 Nos,	
26	CHARGING CURRENT (Max.)	4.0A	
27	CHARGING VOLTAGE	(13.65VDC x Battery Number) + 1%	
28	Backup Require	1 Hour	
29	ENVIRONMENT		
30	OPERATING HUMIDITY / TEMP.	20-90%RH and Non-Condersing / 0-40°C	
31	NOISE LEVEL	Less than 55dB @ 1 Meter	
32	LCD INDICATION	UPS Status, Load Level, Battery Level, Input/Output Voltage, Input/Output Freq. / Discharge Timer / Fault Status	
33	MANAGEMENT		
34	SMART RS-232 OR USB	Supports Windows@ 2000/2003/XP/Vista/2008/7/8, Linux and MAC	
35	OPTIONAL SNMP	Power Management from SNMP Manager and Web Browser	
36	Additional Requirment		
37	MAINTENANCE & STATIC BYPASS	Required	
38	PARALLEL REDUNDANCY	Upto 3 Units	
39	EMERGENCT POWER OFF FUNCTION	Required	
40	Inbuilt Surge Protection & OVCD	Required	
41	Manufacturer Certification	ISO 9001, ISO14001 & OHSAS 18001 & TL 9000 & BIS, CE, ROHS Certified	
42	Service Support	PAN INDIA Service Center availability	

- CCTV data storage of 30 days at 1080P resolution to be maintained at local level through NVR.
- Storage capacity shall be provisioned to meet the requirement as mentioned in this RFP.
- Above mentioned specifications are the indicative minimum specifications for vendor to propose the solution.
- Bidder has to make arrangement if any other item is required to complete the solution.

Name & Signature of authorized signatory

Seal of Company

Annexure E

Technical Solution and Approach & Methodology (Provide relevant documents)		
Description	**System/Procedure**	**Supporting Documents**
Compliance with the technical specifications of the systems / equipment / solution defined in this RFP. Non- Compliance with the minimum specifications will lead to rejection of bids.	a) Video surveillance system b) Integrated Command Control System at HQ	Adherence to Specification details mentioned in subsequent tables of the document.
Technical Architecture of the proposed Solution	Criteria: a) Redundancy & Design of solution b) Scalability of the solution c) Security of Network d) Storage and Retrieval Technology	Technical Architecture Document
The approach and methodology defined by the bidder in the technical proposal	Criteria: a) Operations and Maintenance Mechanism b) Monitoring Procedures c) Repair and Replacement Procedure d) Facility/Procedure for reporting of Issue by the branch e) Defined Escalation protocol	Approach & Methodology Document. Details should be given for each parameter.

Monitoring Station Alert Handling Service Requirement (Scope)

Station Service Requirement	Mandatory Compliance (Yes)
The bidder is required to establish a Central Monitoring System to monitor the health of all equipment deployed at sites on 24 X 7 basis. CCTV recording backup of 30 days at 1080P resolution to be maintained at local level through NVR. All the complaints will be reported to the bidder and the Bidder should coordinate with their local representatives/ technicians to attend all the complaints. On-demand recording facility should be made available at ICCC. Adequate Internet facility to be provided by the Bidder at ICCC and other Centres spread out in PAN India.	

Annexure F

Bidder Details

Details of the Bidder

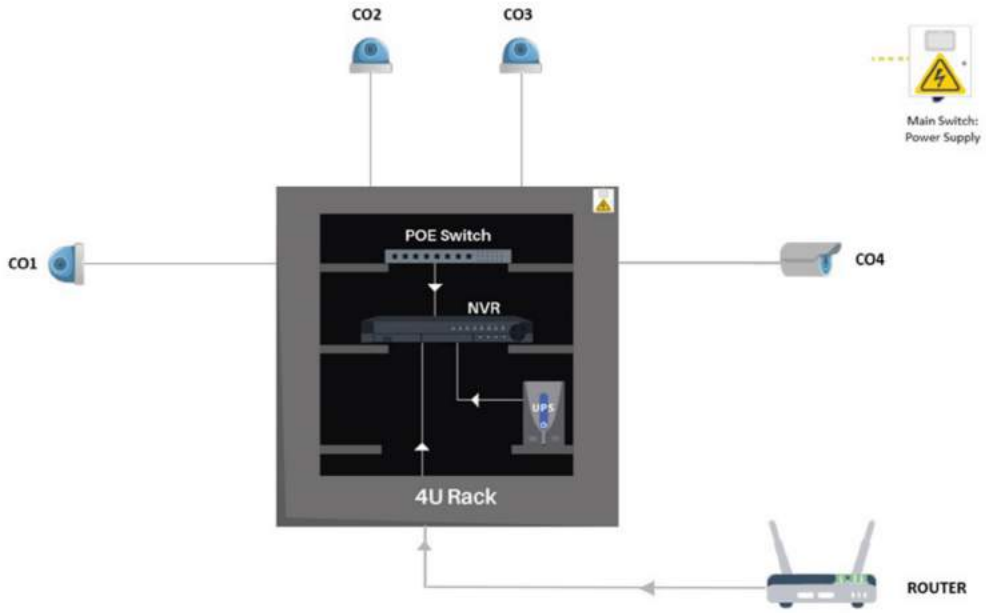
S. No.	Particulars	Details
1.	Name	
2.	Date of Incorporation and / or commencement of business	
3.	Certificate of incorporation	
4.	Brief description of the Bidder including details of its main line of business	
5.	Company website URL	
6.	Company Pan Number	
7.	Company GSTIN Number	
8.	Particulars of the Authorized Signatory of the Bidder a) Name b) Designation c) Address d) Phone Number (Landline) e) Mobile Number f) Fax Number g) Email Address	

Name & Signature of authorized signatory

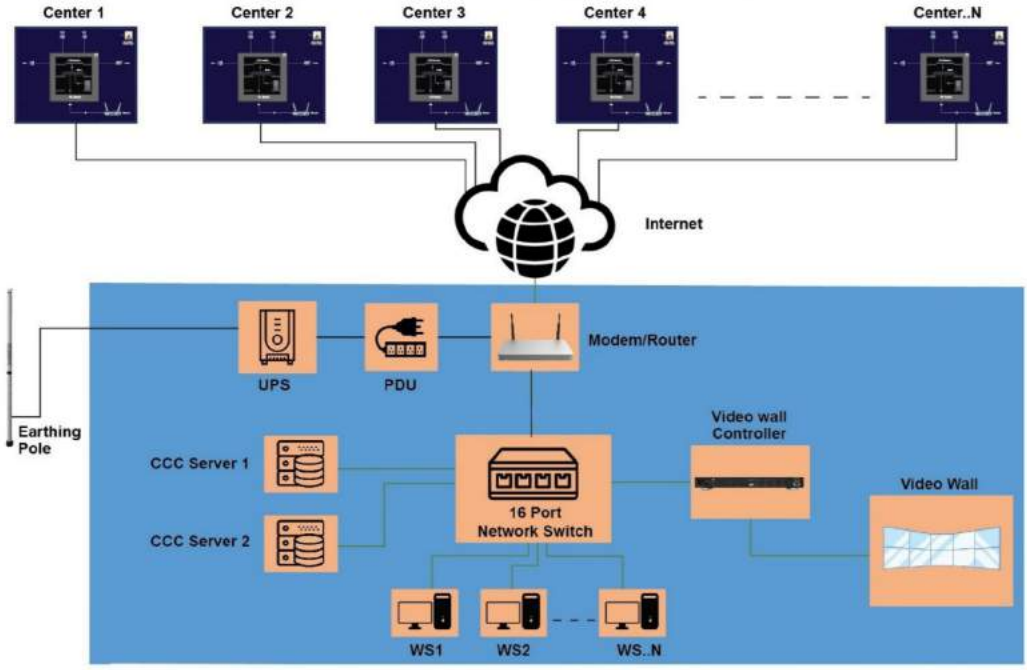
Seal of Company

Annexure G

Tentative Network Architecture of each centre:



Tentative Network Architecture of ICCC at HQ:



Annexure H

Scope of Work and Additional Terms & Conditions

Sr. No.	Requirement
SCOPE OF WORK – (All bidders must give undertaking on Company's letter head that they shall provide each and every service as mentioned in the Scope of Work .	
A	**Event based e-Surveillance system at all sites (24X7)**
1.	IP CCTV Cameras for e-Surveillance.
2.	The Successful Bidder carrying out the job shall make the system entirely operational for its intended use, by addition of components specific to its make/model even if not specifically mentioned in this RFP. Latest versions of software and applications shall be provided by the successful Bidder, as applicable at the time of execution and commissioning.
3.	➢ At the begin of installation work, successful bidder shall make a joint survey of all the designated sites along with the Department's Official and mark the locations of the cameras on a signed survey report. ➢ Complete installation work should be performed as per the signed survey report. ➢ Survey report duly signed by Department's Official & the successful bidder or its representative shall be submitted along with the invoice for claiming the payment.
4.	There would be sites where CCTV system would be already installed. It would be the responsibility of the Successful Bidder to take care of those systems as well. And in case any of the current installed system is found defective/faulty, Successful Bidder has to replace them of its own. It would be the responsibility of the Successful Bidder to make current CCTV infrastructure integrated with CSSU setup as part of this project.
5.	CCTV camera should be provided in all locations (as suggested by Department during Site survey). All Cameras should be of High Resolution and should be able to record clear images and video in the scenario of dull light at site or the bright light from the background. While viewing the site in real time through CCTV surveillance from Command center, there should be no Interruptions due to any related issues.
6.	Storing of Video at 1080P resolution for Verification (30 days). Images and Video footages related to any incident detected/deterred should be stored till 90 days on Department's request. (Should be able to store for higher period in case of future administrative/regulatory requirements).
7.	To provide images and video footages on demand of the Department. As soon as CCTV images/videos request is received by e-Surveillance vendor, they have to mark it as disputed and shall retain till the closure of the case. Every month, vendors will inform the Department about ID wise images/videos retained beyond 90 days and deleted thereof.
8.	The time stamping should be available on all images and video footages.
9.	The Centrally Monitored e-Surveillance System/ Solution vendor will be solely responsible to provide such information or footage or image or reports to the Department.
10.	The offered system should have various reporting capabilities such as Centrally Monitored e-Surveillance System/Solution down Report, wise Ticket generation reports, and connectivity/Link uptime report etc.
11.	All functionalities given in functional specification to be provided. Technical/ Functional Specification of the Centrally Monitored e- Surveillance Solution.
12.	To implement the offered System as per the technical/ functional specifications given in this document.
13.	To provide the access to real-time dashboard:
14.	To provide the live (real-time) view of the sites to the dedicated users as by their ID mapping and location.
15.	To access the dashboard through smart phone apps as well as web view.
16.	To know the status of offline/online sites. User should be able to download details of such sites in the excel file.
17.	To download the reports in mutually agreed formats. However formats for new reports, as and when required by the Department, at any stage during the term of the contract, shall be advised to the selected vendors for development and submission at the prescribed intervals.

18.	To be able to provide the related data, such as ID, Location, Address, Contact details, etc. in the downloadable format as advised by the Department.
19.	To monitor the site live from any of the device as authorized to the Department Official.
20.	To show the live location of the site on Google map.
21.	Every data related to sites, should be available on Centralized dashboard.
22.	To maintain the database by mapping the IDs with e-Surveillance site ID. In case of any mismatch, to co-ordinate with the Department authorities for necessary reconciliation.
23.	Continuous connectivity between the Command Centre and the site by implementing the solution of Internet connectivity, with broadband/3G/4G or any higher connectivity wherever available.
24.	All wirings must be concealed and not accessible to an outsider. If any equipment loses its connection with the command center, command center should be able to identify.
25.	To detect any kind of tampering with the equipment installed at site.
26.	Preventive maintenance of all the equipment covered under this scope to be carried out quarterly and submit the PM report to the concerned Department authorities.
27.	Any device/sensor installed at site should not damage the Department's installed system. Any loss arising out of such instances will be recovered from the vendor.
28.	Should have a documented and tested Business Continuity Plan (BCP), a Disaster Recovery site according to Disaster Recovery Plan (DRP) and the documents related to both BCP/DRP should be submitted to the Department.
29.	Capability to instantly detect the disconnection of CCTV from the Command Centre or non-recording of Videos locally at the site or video loss/blacking out/masking the CCTV by any miscreant, and to take appropriate action in case of occurrence of any of the case mentioned as above.
30.	Capability to instantly detect if view of the camera/Camera angles has been deviated as per original installations and to initiate appropriate action.
31.	The Department may require the Command Centre to inform the Department's Switch Centre to cease the operations at a suspected site, in case any suspicious activity is detected by the Command Centre.
32.	A notice prepared elegantly (shall be approved by the Department) to the effect that the site is under electronic surveillance shall be displayed on the front door of the site.

LOCATION DETAILS			
S. No.	Location Type	Number of Sites	Indicative Infrastructure

1	Integrated Command Control centre at Department's HQ	1	• LED Video Wall with minimum size 55" in 5x2 matrix • Operator workstations with 5 display monitors • Cloud Server and its Software application • Online UPS with batteries • On demand recording facility • Network switches etc. • Furniture for System monitoring and management • Adequate Internet Lease line bandwidth
2	PAN India Centre(s)	6000	• General Surveillance system components including IP CCTV cameras • Online UPS with batteries • CCTV recording setup of 30 days • Network switches • Network connectivity • Internet line of 20 Mbps bandwidth

MANPOWER REQUIREMENT

a) The bidder has to ensure that appropriate qualified manpower with requisite skill sets is deputed at the respective locations defined in the below table. The bidder shall depute the resources as per the requirements for carrying out the O&M Activity and maintaining the SLA during contract period.

b) Below mentioned is the minimum indicative list of resource and based on actual requirements, the bidder may deploy any number of resources to meet the SLA. The TENDERER shall not pay any cost for additional resources required to operate, maintain, monitor & manage the SLA. In case support staff is not available or is on leave, the bidder is required to provide the alternative personnel with same or higher technical capabilities of the non-available personnel.

c) The bidder shall be responsible for the deployment, transportation, accommodation, IT infrastructure and other requirements of all its employees required for the execution of the work and for all costs/charges in connection thereof.

d) Tenderer will provide the required sitting space with table, chair, and electricity for day to day activity.

e) The bidder shall maintain backup personnel and shall promptly provide replacement of every person removed pursuant to this section with an equally competent substitute from the pool of backup personnel.

f) In case of change in its team composition owing to attrition, the Successful Bidder shall ensure at least a week of time-overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.

S/N	Locations	Professional Experience	Roles and Responsibilities
1	One Centre In-charge and one Helpdesk operators at Integrated Command Control center should be available between 9 am to 5 pm on Monday to Friday.	**a)** 5+Years of post-Qualification experience for Centre In-charge in ICT, IP CCTV surveillance, LAN/WAN, IT infrastructure projects. **b)** 2+Years of post-Qualification experience for Helpdesk operator in ICT, IP CCTV surveillance, LAN/WAN, IT infrastructure projects.	• Responsible for overall Operations and management of the existing as well as new IT Infrastructure, hardware, peripherals of respective site including LAN/WAN, IP CCTV Surveillance system, MIS Reporting, SLA Management etc. • Managing day-to-day activity and project operations to meet SLA. • Preparation of Report including day to day activity, Call logging, up time, down time, response time of each event & submission of quarterly report to respective officer as a supportive document for O&M activity. • Maintain Call Register. • Deputed manpower shall be responsible to Reporting Concern DO or as decided by Tenderer. This manpower has to attend the call related to all Centres. The cost for the transportation of Engineer's visit to Warehouse site will be borne by the successful agency. • Configuration of camera, NVR, VMS, network switch etc.

			• Troubleshooting of entire system. • Replacement of faulty equipment, demand and supply of required hardware from the spare hardware. • Monitoring complain status, follow up for complain resolution and responsible for resolve complain in time bound manner as decide in the SLA mentioned in this bid. • Deputed manpower shall be responsible to log the complaint related to connectivity, co-ordinate with connectivity vendor, follow up for logged complain related to connectivity and ticket generation for respective event and responsible to inform authority for connectivity complain and its resolution time and maintain the register for connectivity complaint. • Deputed manpower is responsible to follow the instruction received from respective officer related to configure the system as per requirement. • At the time of disaster or any such kind event deputed manpower have to present. • If respective officer wishes extract video clip then, Deputed manpower is responsible to extract the video clip, copy video clip and image in pen drive.

ROLES AND RESPONSIBILITIES OF DEPARTMENT
a) Provide access to selected agency for execution of Project. b) Provide space, raw power and approval to smoothly execute Project. c) Provide approval & facilitate agency for deciding location of camera in consultation with selected agency. d) Provide the siting space to technical manpower at respective location of department. e) Monitor the project by logging complaint in time limit and monitoring and tracking of complaint resolution in time limit f) Maintaining & checking all register and calculation of downtime. g) Provide access to Air conditioned space at ICCC at HQ to the selected agency.

PROJECT IMPLEMENTATION TIMELINES		
S/N	**Deliverables**	**Timeline**
a	Kick-off Meeting: (Submission of Detailed implementation plan/roadmap, Signing of contract agreement and submission of performance Bank Guarantee)	Within 15 Days from date of issuance of work order
b	Site survey: Initial site survey of 1216 Centres out of total of 6000 Centres to ascertain the CCTV locations of each site and submission of site survey report to designated Official. Designated Official has to revert with his Remarks (Accept/Reject) within a period of 2 days from the date of submission of site survey report. Note: ➢ This survey report duly signed by designated official & the bidder or its representative shall be submitted along with the invoice for claiming payment.	T1 = T+ 45 days
c	Items Delivery: Delivery of the items as per the Site survey report at designated Centre site.	T1 + 60 days

d	Installation & Commissioning: The successful bidder shall complete the Installation of CCTV camera and related accessories as per approved Site survey report at each designated Centre site throughout PAN India.	T1+ 90 days

Note: T = Kick off meeting *Days = Calendar days*

PROJECT SCHEDULE		
S. No.	**Activity**	**Requirement**
1	Term of the Project	Project will be valid for a minimum period of 5 years from the date of execution of Agreement between Department and the Successful bidder. Project term could be extended for a period of another 3 years in case mutual agreement between both the parties.
2	Delivery locations	➢ Sites as per PO issued for installation of solution. ➢ Tentative total centre count would be 6000 and can increase during the course of project term by more than 100%. ➢ Initially, to start with, CSSU project would be deployed in 1,216 centres and rest of the centres would be completed in next 1 year duration. ➢ Minimum 4 CCTV's would be initially commissioned per Centre and can increase by more than 100% during the Project term.
3	Project Schedule and milestones	Delivery timelines will be counted from Date of Work Order issued to selected bidder.
4	Theft and Insurance	It will come under the scope of Department to get the Insurance of all the IT and non-IT equipment's supplied as part of this contract, in case of, theft, thunderstorm, vandalism, earthquake or any other unforeseen circumstances.

PAYMENT SCHEDULE		
S. No.	**Activity**	**Details**
1	Advance Payment against Bank Guarantee	➢ Successful bidder can claim an amount of up to 50% of total project value against submission of same amount of Bank Guarantee valid for a period of 5 years; apart from PBG.
2	Mobilization Fund	➢ 20% of the total value of work order will be done in advance to the successful bidder for mobilization of resources along with placement of work order.
3	Quarterly Payment	➢ Rest of the payment will be paid on quarterly basis. ➢ Quarterly Payment will be done in advance at the start of every quarter and so on. ➢ System Integrator has to submit Tax Invoice copy at the start of every quarter along with the Approved I&C report signed by Centre In-charge. ➢ Payment will be done within a period of 15 days from the day of Tax Invoice. ➢ Payment shall be made in Indian Rupees only. While making payment, necessary TDS/ income tax deductions will be made. ➢ Any deductions due to Penalty for delay, Operational penalties or SLAs not meeting will be done in next quarter.
4	NOTE:	➢ Formula for Invoice derivation would be: *(No. of CCTV Cameras x Per camera Per month rate)* ➢ Payment will be based upon total number of Cameras managed by the Bidder at each site, irrespective of CCTV setup was already available at site or made available by the Bidder.

SERVICE LEVEL AGREEMENT (SLA)		
S/N	SLA Terms	Description
1	Network Backbone	'Network Backbone' refers to Internet Protocol (IP) based routing infrastructure at which, successful bidder has installed network devices for this project.

<table>
<tr><td>2</td><td>Latency</td><td>'Latency' refers to the average time required for round-trip packet transfers between Selected locations and the respective control center on the selected portions of the network Backbone.</td></tr>
<tr><td>3</td><td>Packet Loss</td><td>'Packet Loss' refers to the average percentage of IP packets transmitted between Selected Junctions/locations and the respective control center that are not successfully delivered.</td></tr>
<tr><td>4</td><td>Planned Network Outage</td><td>'Planned Network Outage' refers to unavailability of network services due to infrastructure maintenance activities such as configuration changes, up-gradation or changes to any supporting infrastructure. Details related to such planned outage shall be approved by the TENDERER or authorized authority and shall be notified to all the concerned stakeholder in advance (at least five working days). It is desirable that such outage shall be taken on Sundays or other Government holidays to the extent possible.</td></tr>
<tr><td>5</td><td>Unplanned Network Outage</td><td>'Unplanned Network Outage' refers to an instance in which no traffic can pass in or out through which devices are connects to the network Backbone</td></tr>
<tr><td>6</td><td>Time Line for Retrieval of video feeds from the Storage</td><td>a.) Retrieval of Event Related (Flagged/marked by the Tenderer or its user department) video feeds from the Local storage: Maximum Retrieval time 60 minutes during operational hours.
b.) Retrieval of Non-Event (Anything which is not flagged/marked) related video feeds from Local Storage: Maximum retrieval time 60 minutes during operational hours.
c.) Retrieval of Event related video feeds stored in removable/External disk/drives: Maximum retrieval time 60 Minutes during operational hours.</td></tr>
<tr><td>7</td><td>Not keeping man-power</td><td>If successful bidder does not deploy the required specified quantity & quality of manpower as per RFP or a person deployed is not reporting to the duty, there would be a penalty per person per day as defined in below table and will be deducted from the quarterly payment.</td></tr>
<tr><td>8</td><td>Incidence Resolution (Network)</td><td>The network outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services. Resolution of incidence as per below priority Levels:
L1 Level Severity: impacting 1 or more warehouse site
L2 Level Severity: Impacting 10 or more warehouse site
L3 Level Severity: Impacting 25 or more warehouse site
<table>
<tr><th>#</th><th>Severity</th><th>Initial Response Time</th><th>Issue Resolution Time</th></tr>
<tr><td>1</td><td>Level 1</td><td>60 Mins</td><td>7 Days</td></tr>
<tr><td>2</td><td>Level 2</td><td>120 Mins</td><td>10 Days</td></tr>
<tr><td>3</td><td>Level 3</td><td>120 Mins</td><td>15 Days</td></tr>
</table></td></tr>
</table>

<table>
<tr><th colspan="4">PENALTY FOR DELAY</th></tr>
<tr><th>S/n</th><th>Activity</th><th>Timeline</th><th>Penalty</th></tr>
<tr><td>1</td><td>Delay in Delivery/ Supply of Hardware</td><td rowspan="2">Site survey job:
Within 45 days of signing of agreement.
Delivery/Supply of Hardware:
Within 60 days from the date of approval of Site survey report by Tenderer.
I&C job including training:
Within 90 days from the date of approval of survey report by Tenderer.</td><td>• 0.10% of Contract value of delayed item per week or part thereof for delay in delivery</td></tr>
<tr><td>2</td><td>Delay in Installation / Implementation</td><td>• 0.15% of Contract value of delayed item per week or part thereof for delay in Implementation</td></tr>
</table>

Note:

- Maximum Penalty cap for penalty for delay is 10% of contract value for the ordered item.
- If TENDERER fails to provide space and related clearances to carry out the job as per the agreement terms, as a result of which the installation of the equipment is delayed and the selected agency is not able to adhere to the schedule for

completing the Acceptance Tests. Delay solely on account on above will not be accounted while ascertaining actual delay and penalties thereof.

- For calculation of delay any dependencies from Tenderer will be excluded.

OPERATIONAL PENALTIES			
S/N	SLA	Target	Penalties
1.	Time Line for Retrieval of video feeds from the Storage	As per SLA	• Rs. 500 for every instance of late retrieval as per the SLA • Note: Data Retrieval Request through a request Log mechanism
2.	***Uptime** of all IT components installed at site	95.00% (at each individual component level)	For each component • 95.00 - 94.50% - 0.25% of QP • 94.50 - 94.00% - 0.5% of QP • 93.99 - 93.00% - 1.0% of QP • 92.99 - 92.00% - 1.5% of QP • Less than 92.00% - 2% of the QP
*Uptime mentioned here is required to achieve for each site IT components			

COMPLAINT RESOLUTION

The bidder shall be responsible for maintaining the desired performance and availability of the Network devices supplied under the scope of work of this RFP. The bidder should ensure the prompt service support during Contract period.

Resolution Time: Defined as time taken to resolve a problem. The resolution time will be considered with respect to clock hours. If the successful bidder fails to attend the uptime and complaint resolution as specified above, the operational penalty will be imposed as specified above which will be recovered from quarterly payment.

Exceptions: Downtime planned for prescheduled changes / Maintenance activities and the same shall be intimated in advance to the Tenderer for prior approval and downtime in such cases shall not be more than 12 hours in quarter. Force Majeure conditions as mentioned in the RFP.

Note:

In case, there is delay attributable to granting access to the equipment to be restored on the part of TENDERER or on part of end user, such delays shall be reduced from the time taken for call completion after due consideration by the TENDERER.

Site/Location	Penalty for delay in resolution of complaints beyond 'Issue Resolution Time'
All Sites	Rs. 500/- per complaint per day or part thereof

MANPOWER PENALTIES DURING THE CONTRACT		
S/N	Penalty Clause	Penalty
1	Successful bidder has to ensure the deployment of minimum number of personnel required as specified in the scope. The successful bidder shall ensure that alternate arrangements are made and leave for a staff is pre-sanctioned by TENDERER. If not, the penalties described in the next column shall apply.	Rs.500/- per person per day of unsanctioned leave or non -reporting or non-deployment. Note: 6 days of sanctioned leave Per quarter will be applicable to each resource.

PENALTY FOR DELAY IN REPAIR / REPLACEMENT OF FAULTY MATERIAL

The Successful Bidder shall be responsible for repair/ replace all faulty material within the shortest possible time thus ensuring minimum downtime.

- The Successful Bidder shall be responsible for maintaining the desired performance and availability of the system/services. Successful Bidder should ensure the prompt service support for the entire project duration. If any complain is made or auto alarm/instances is generated by the system for non-availability of the items, then it has to resolved within 7 days from the time of complaint raised/auto alarm.
- If Successful Bidder fails to resolve the issue as specified above, the following penalty will be imposed on each delayed day, which will be recovered against the quarterly payment invoice submitted by the successful bidder:

Site/Location	Penalty for each delay in resolution of issues within stipulated time
All Sites	Rs. 100/- per site for every 24 hours of delay or part thereof

Annexure I

Indicative Price Bid

The commercial Bid needs to contain the information in a sealed envelope bearing the identification – "**Commercial Bid for Comprehensive Centrally Smart Surveillance Unit (CSSU) setup of Department of Social Justice & Empowerment on BOO model"**.

To

The Secretary
Department of Social Justice and Empowerment
Ministry of Social Justice and Empowerment
Govt. of India
New Delhi

Ref.: RFP No.: _____ Dated: _____

Subject: Commercial bid for setup of Comprehensive Centrally Smart Surveillance Unit (CSSU) for Department of Social Justice & Empowerment, New Delhi on Build, Own, Operate (BOO) model

Respected Sir,

We, _____(*Bidder Name)*_____, hereby has gone through the complete RFP document and acknowledge the below set of brief requirement:

1. Active components (Min. 4 CCTV's, NVR, Switch, UPS with 30 minutes back-up facility)
2. Adequate Hard Disk for 30 days recording at local level.
3. Passive components (Power cable, IT networking, Patch cords, CAT6, PVC etc.)
4. Single location of ICCC at HQ for 24x7 Live Viewing facility
5. Workstations, Video wall, Switch, Controller, UPS, VMS software at ICCC
6. On-demand recording facility at ICCC
7. Adeqaute Internet bandwidth at Local Centre and ICCC for smooth operations
8. CCTV feed data will travel through secured VPN Tunnel
9. Technical support Manpower for smooth PAN India operations
10. Project management of whole system for SLA management

We hereby comply by all set of terms & conditions of this RFP and have shared our Financial quote below for your kind consideration:

A1	CSSU setup at all the institutions along with ICCC at HQ	1000 to 2000	₹ _____	*(Per camera Per month)*	___ %	₹ _____ *(U.P. x 4 cctv)*	₹ _____ *(U.P. x 4 cctv x 12 months)*
A2	CSSU setup at all the institutions along with ICCC at HQ	2000 to 3000	₹ _____	*(Per camera Per month)*	___ %	₹ _____ *(U.P. x 4 cctv)*	₹ _____ *(U.P. x 4 cctv x 12 months)*
A3	CSSU setup at all the institutions	3000 to 4000	₹ _____	*(Per camera Per month)*	___ %	₹ _____	₹ _____

	along with ICCC at HQ					*(U.P. x 4 cctv)*	*(U.P. x 4 cctv x 12 months)*
A4	CSSU setup at all the institutions along with ICCC at HQ	4000 to 5000	₹ _____	*(Per camera Per month)*	___ %	₹ _____ *(U.P. x 4 cctv)*	₹ _____ *(U.P. x 4 cctv x 12 months)*
A5	CSSU setup at all the institutions along with ICCC at HQ	More than 5000	₹ _____	*(Per camera Per month)*	___ %	₹ _____ *(U.P. x 4 cctv)*	₹ _____ *(U.P. x 4 cctv x 12 months)*
SUM AVERAGE OF (A1, A2, A3, A4, A5)						₹ _____	₹ _____

NOTE:

- Minimum commitment for BOO Model will be for a period of 5 years only.
- Price should be quoted in INR currency only.
- Unit price shall be quoted as Exclusive of GST, however, Tax percentage applicable on each Line item should be mentioned under its respective column.
- 'Sum Average of (A1, A2, A3, A4, A5)' will be considered to calculate the Lowest Price score (L1) of Bidder.
- The Bidder with lowest price quote L1 will be awarded work.
- GST will be applicable as per Central / State Govt. rules / regulation.
- This Rate contract would remain valid for an initial period of 5 years and subsequent year rate would be finalized after mutual discussion between successful bidder and Department.

Yours faithfully,

Name of the Organization: _____
Seal of the Organization: _____
Authorized Signatory Name & Sign: _____
Date: _____
Place: _____

Annexure J

Certificate of Local Content

<Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content, on their letter head with Registration Number with seal.>

Date:

To,

Dear Sir,

Ref.: RFP No.:_____Dated:_____

This is to certify that proposed_____<services as per scope of work mentioned in the indicative commercial bid> is having the local content of __ % as defined in the above-mentioned RFP and amended thereto.

2. This certificate is submitted in reference to the Public Procurement (Preference to Make in India), Order 2017 – Revision vide order No. P-45021/2/2017-PP (BE-II) dated 4th June 2020.

Signature of Statutory Auditor/Cost
Auditor Registration Number:
Seal

Counter-signed:

Bidder