National Film Archive of India Ministry of Information and Broadcasting Government of India

Corrigendum - 3 to RFP for "IP BASED CCTV Surveillance System at National Film Archive of India"

Attention is invited to the Advertisement on All India basis inviting response to the Request for Proposal for IP BASED CCTV Surveillance System at National Film Archive of India. The said RFP was also uploaded on the NFAI's website (www.nfai.gov.in) and Procurement website of Government of India (https://eprocure.gov.in/cppp/)

This Corrigendum shall be construed as a part of the RFP and it shall be the responsibility of the Bidder to read carefully and understand the changes / additions mentioned in this Corrigendum.

The rest of the content as mentioned in the RFP shall remain unchanged.

Sd/-

Shri. Santosh Ajmera,

Officer on Special Duty, NFHM

The table below mentions the revised dates related to the RFP.

S.No	Information	Details
1	Last date (deadline) for submission of bids	6 th December 2016 till 03.00 pm National Film Archive of India (NFAI) Law College Road Pune 411 004
2	Technical Bid opening date	6 th December 2016 at 04.00 pm National Film Archive of India (NFAI) Law College Road Pune 411 004

2.19.2 Pre-Qualification Criteria

The Bidder shall fulfil all of the following eligibility criteria independently on date of submission of bid:

Sr. No	Eligibility Criteria	Document Proof
1	The bidder / consortium should be a Company Registered under Indian Companies Act, 1956 OR A partnership firm registered under Indian Partnership Act, 1932. Note: Consortium of maximum 2 members are allowed to participate in the bid.	 Copy of the Memorandum and Article of Association OR Copy of the registered Partnership Deed OR Copy of the Certificate of Incorporation
2	 During last 5 years: The Bidder / Any member of the consortium should have satisfactorily executed / completed at least 1 project of value 25 Lakh and of "Supply, Installation, Implementation, Testing, Commissioning and Maintenance of CCTV surveillance system" using same/similar products from the same OEM, in Government of India / State Government or in Private 	 Work Order / Project completion certificate clearly mentioning nature of the work carried out by the Bidder and the value of the project AND Project citation format as per Annexure 7
	• The Bidder / Any member of the consortium should have satisfactorily executed / completed at least 2 projects of value 1 Crore each using same/similar products from the same OEM and of "IT infrastructure" in Government of India / State Government	Note: The date on Project work order / completion certificate shall be in the 5 preceding years

Sr. No	Eligibility Criteria	Document Proof
	Note: 5 years will be counted backwards from the month of release of this RFP. E.g. If date of release is 15 th October 2016, then 5 years that shall be counted will be October 2011 to September 2012, October 2012 to September 2013, October 2013 to September 2014, October 2014 to September 2015 and October 2015 to September 2016	
3	The Bidder/Any member of the consortium must have an average annual turnover of INR 1.5 crore (Rupees One Crore Fifty Lakh) in the last three financial years i.e. FY 2013-14, FY 2014-15 and FY 2015-16.	A duly signed and stamped certificate from the Chartered Accountant mentioning the average annual turnover details of the last three financial years i.e. FY 2013-14, FY 2014-15 and FY 2015-16. OR Audited P&L Statement in last three financial years i.e. FY 2013-14, FY 2014-15 and FY 2015-16.
4	The Bidder/Any member of the consortium must possess an ISO 9001:2008 Certification.	Copy of the valid Certificate
5	Manufacturer Authorization Form (MAF) from the Original Equipment Manufacturer (OEM) on their original letterhead for all Products (active components) mentioned in BOQ (excluding 9U network rack) Note: The MAF shall be for this project and should specifically mention that	MAF shall be strictly as per the format enclosed in Annexure 3
6	The Bidder/Any member of the consortium should not be blacklisted by PSU / Government of India / State Government Departments as on date of submission of bid	A duly signed and stamped undertaking on the letter head of the Bidder should be provided

2.19.4 Technical Evaluation

The Bidder with 75 or above score in the technical evaluation will be qualified for the financial bid evaluation. The proposals from Bidder will be evaluated based on evaluation parameters mentioned below.

Sr. No.	Criteria	Description	Maximum Marks
1	Profile of the Bidder: • Financial • Experience (Additional weightage to be given for similar work performed in the Government sector.)	Qualitative assessment based on supporting documentation and demonstration provided by the Bidder	20
2	Technical Compliance to all the tables mentioned in Annexure 5	The bidder has to comply with technical specifications mentioned in the RFP and marks to be evaluated as per compliance to the technicalities.	20
3	Quality of the Equipment's and products in the solution	Qualitative assessment based on equipments'/ products' brand/make/usage/past installation/ supporting documentation and demonstration provided by the Bidder;	20
4	Presentation on the Proposed Solution, Approach and Methodology	Overall Solution Architecture • Equipments/Products proposed and their utility • Network Design Approach • Implementation Approach • Control Centre Approach Implementation team proposed Implementation Timelines	40
	Grand Total		100

5. Detailed Item-Wise Specifications

Following are the minimum specifications required for each of the components under Section 5.

5.1 IP –Network PTZ Camera (IR- 50 Mtr)

Sr. No.	Feature	Parameter		
1	Image Sensor	1/3 type 2 Megapixel sensor		
2	Scanning	Progressive scan		
3	Minimum Illumination	Color: 0.56 lx, B/W: 0.07 lx at F1.4 or better		
4	Image Resolution	1920X1080 or better, 30 fps		
5	Compression	Multiple H.264 high profile, JPEG		
6	No of streams	Minimum 3 streams at different resolution and bit rate		
7	Day/Night	True Day/Night with IR cut filter		
8	Focal Length	4.5 mm - 128 mm or better, 30X optical zoom		
9	Digital zoom	Minimum 10X		
10	Inter-operability	ONVIF profile S, G Compliant		
11	Wide Dynamic range	WDR 80 dB or more, True WDR would be preferred		
12	Intelligent Compression	50% reduction in bandwidth during zero motion with same		
		fps and resolution.		
13	Anti-corrosive Body	Camera shall be protected from salty environment.		
		Suitable body shall be provided		
14	Pan Tilt Motor	Gear based drive preferred instead of belt drive		
15	AGC	Shall be available		
16	Digital Noise Reduction	3 D noise reduction preferred		
17	VMD	Minimum 3 areas with different sensitivity levels		
18	Image Stabilization	Shall be available		
19	Panning	360° endless		
20	Tilt	Min. 180° tilting is required		
21	Image Stabilization	Camera shall have sufficient hardware as well as software		
		design to withstand wind speed of 200 Km/hr and give stable		
		image		
22	IR Range	Adaptive / Smart IR minimum 20 mtrs		
23	Humidity	Inbuilt mechanism to remove humidity in the camera body		
24	Camera Rating	IP66 required		
25	Impact Protection	IK10 rated required		
26	Power	External power as specified by OEM		
27	Alarm	3 Terminal inputs, VMD Alarm Action: SD memory		
		recording, E-mail notification, Camera positioning, FTP		
		image transfer, Terminal output, Auto tracking		
28	Certification	UL, CE		
29	Mount	Both vertically upward as well as downward shall be possible		

5.2 Dome camera Specification (IR-30 Mtr)

Sr. No.	Feature	Parameter			
1	Sensor	Image Sensor 1/3 type CCD/CMOS/MOS Sensor			
2	Scanning	Progressive scan			
3	Minimum Illumination	Color 0.5 lux and B/W: 0.02 lux F1.4 or better			
4	White Balance	Shall be available			
5	Light Control	indoor/outdoor mode selection, High light compensation to reduce vehicle head light impact			
6	Shutter Speed	min. 1/30 - 1/10000			
7	Dynamic Range	80 dB or more, True WDR would be preferred			
8	Intelligent Compression	50% reduction in bandwidth during zero motion with same fps and resolution.			
9	IR illumination	Integrated IR Illumination for atleast 30 mtrs			
10	AGC	Shall be available			
11	No. Of Streams	Min. 3 streams or more at H.264 high profile with 1 JPEG. Total 4 streams			
12	Alarms	Minimum 2 terminals			
13	Audio	2 Way Audio			
14	Back focus Adjustment	automatic with hardware button and web based control			
15	Certification	CE, UL			
16	Firmware upgrade	Free for next 5 years			
17	SDXC memory card slot	SDXC slot, Preferably SD card shall be locked with password and recorded video shall have alteration detection			
18	Supported Image Resolution	H.264: 2,048 x 1,536 @ 30 fps and 1920 x 1080 resolution should support 60 fps			
19	Network	RJ45, IPv4 & IPv6 compliant			
20	Interoperability	ONVIF profile S compliant			
21	Remote view	shall be possible to view on mobile / Remote PC			
22	Outdoor Installation	Auto IRIS or Auto ELC			
23	Power	РоЕ			
24	Lens	3-9 mm or better, motorised			
25	Temperature	-10 to + 50 deg C			
26	Motion Detection	Minimum 3 programmable areas with at least 10 sensitivity levels			
27	Outdoor Housing	Integrated IP66 with mount, IK10 rated, inbuilt dehumidification			

5.3 Specification of Bullet Camera (30 Mtr)

Sr. No.	Feature	Parameter			
1	Sensor	Image Sensor 1/3 type CCD/CMOS/MOS Sensor			
2	Scanning	Progressive scan			
3	Minimum Illumination	Color 0.5 lux and B/W: 0.02 lux F1.4 or better			
4	White Balance	Shall be available			
5	Light Control	indoor/outdoor mode selection, High light			
		compensation to reduce vehicle head light impact			
6	Shutter Speed	min. 1/30 - 1/10000			
7	Dynamic Range	80 dB or more, True WDR would be preferred			
8	Intelligent	50% reduction in bandwidth during zero motion with same			
	Compression	fps and resolution.			
9	IR illumination	Integrated IR Illumination for at least 30 mtrs			
10	AGC	Shall be available			
11	No. Of Streams	Min. 3 streams or more at H.264 high profile with 1			
		JPEG. Total 4 streams			
12	Alarms	Minimum 2 terminals			
13	Audio	2 Way Audio			
14	Back focus	automatic with hardware button and web based			
	adjustment	control			
15	Certification	CE, UL			
16	Firmware upgrade	Free for next 5 years			
17	SDXC memory card	SDXC slot, Preferably SD card shall be locked with			
	slot	password and recorded video shall have alteration			
		detection			
18	Supported Image	H.264: 2,048 x 1,536 and 1920X1080 resolution should			
	Resolution	support 30 fps			
19	Network	RJ45, IPv4 & Ipv6 compliant			
20	Interoperability	ONVIF profile S compliant, should be listed on ONVIF			
		site			
21	Remote view	shall be possible to view on mobile / Remote PC			
22	Outdoor Installation	Auto IRIS or Auto ELC			
23	Power	РоЕ			
24	Lens	3-9 mm			
25	Temperature	-10 to + 50 deg C			
26	Motion Detection	Minimum 3 programmable areas with at least 10			
		sensitivity levels			
27	Outdoor Housing	Integrated IP66 with mount			

5.4 Specification of Box Camera (50 Mtr)

Sr.No.	Feature	Parameter	
1	Sensor	Image Sensor 1/3 type CCD/CMOS/MOS Sensor	
2	Scanning	Progressive scan	
3	Minimum Illumination	Color 0.5 lux and B/W: 0.02 lux F1.4 or better	
4	White Balance	Shall be available	
5	Light Control	indoor/outdoor mode selection, High light compensation to reduce vehicle head light impact	
6	Shutter Speed	min. 1/30 - 1/10000	
7	Dynamic Range	80 dB or more, True WDR would be preferred	
8	Intelligent Compression	50% reduction in bandwidth during zero motion with same fps and resolution.	
9	IR illumination	Integrated IR Illumination for at least 30 mtrs	
10	AGC	Shall be available	
11	No. Of Streams	Min. 3 streams or more at H.264 high profile with 1 JPEG. Total	
11	No. Of Streams	4 streams	
12	Alarms	Minimum 2 terminals	
13	Audio	2 Way Audio	
14	Back focus adjustment	automatic with hardware button and web based control	
15	Certification	CE, UL, FCC	
16	Firmware upgrade	Free for next 5 yeas	
17	SDXC memory card slot	SDXC slot, Preferably SD card shall be locked with password and recorded video shall have alteration detection	
18	Supported Image Resolution	H.264: 2048X1536 @ 30 fps and 1920X1080 resolution should support 60 fps	
19	Network	RJ45, IPv4 & Ipv6 compliant	
20	Interoperability	ONVIF profile S compliant, should be listed on ONVIF site	
21	Remote view	shall be possible to view on mobile / Remote PC	
22	Outdoor Installation	Auto IRIS or Auto ELC	
23	Power	PoE,	
24	Lens	3MP Lens 3-8/8-40mm or better of OEM/Tamaron/Fujinon make	
25	Temperature	-10 to + 50 deg C	
26	Motion Detection	Min. 3 programmable areas with at least 10 sensitivity levels	
27	Outdoor Housing	IP66, IK10 rated with mount	

11. Payment Terms

Sr.	Milestone	Payment in % terms
No		(excluding AMC charges)
1	Mobilization Advance	10%
	At the time of Issuance of Work Order / Contract signing	
2	After receipt of deliveries of Materials as per BOQ at destination	30%
	within 30 days from LOI/Work Order and its acceptance by	
	NFAI (in writing).	
3	On successful laying and commissioning of the OFC cables	40%
	within the premises of Phase 1 and Phase 2 for connectivity	
	and after conducting a successful trial run of the entire system	
	for a period of 10 days and to the satisfaction level of NFAI	
4	After successful installation and commissioning of System	15%
	as per Contract Agreement and Successful Final Acceptance	
	Test (FAT) by NFAI officials	
5	After successful completion of Warranty period as specified in	5%
	clause Warranty Terms	
6	Annual Maintenance Contract	Distributed equally in 20
	Annual Maintenance Contract charges to be as per table 4.	quarters and payable at the
	Note: This shall be the "C" of Table 4 as mentioned in Annexure-4	end of each quarter
	Template for financial proposal	

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15.4 Template for financial proposal

Section A. Letter Format for Financial Proposal

(To be submitted on the Letterhead of the bidder) [Location, Date]

To Officer on Special Duty, National Film Heritage Mission, National Film Archive of India, Law College Road, Pune – 411 004

Ref: RFP Notification no <<>>>

Subject: Submission of Financial proposal in response to the RFP for "IP BASED CCTV Surveillance System at National Film Archive of India"

Dear Sir,

- 1. We, the undersigned, having read and examined in detail all the bidding documents in respect to IP BASED CCTV Surveillance System at National Film Archive of India, do hereby propose to provide our services as specified in the RFP.
- 2. **Price and Validity:** All the prices mentioned in our bid are in accordance with the terms as specified in the bidding documents. All the prices and other terms and conditions of this bid are valid for the entire duration of the contract.
- 3. **Taxes:** We have studied the clause relating to Indian Income Tax and hereby declare that if any applicable direct or indirect taxes (Foreign, Central or State or Local), rates, duties, charges and levies (Foreign, Central or State or Local), inclusive of Service tax is altered under the law, we shall pay the same. If applicable, all taxes, duties, levies and charges which are to be paid for the delivery of services have been paid by the Bidders in their respective countries.
- 4. **Deviations:** We hereby declare that all terms and conditions mentioned in RFP (all volumes, Annexures and Corrigendum) are acceptable to us without any deviation and all the services shall be performed strictly in accordance with the bid documents.
- 5. **Unit Rates:** We have indicated in the relevant schedules enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

6. **Qualifying Data:** We confirm having submitted the information as required by you in your

Instruction to Bidders. In case you require any other further information/documentary proof in this

regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

7. **Contract Performance Guarantee:** We hereby declare that in case the contract is awarded to

us, we shall submit the contract performance guarantee bond as prescribed in 15.2 annexure 2.

8. **Bid Prices:** We offer to provide the services for [Insert title of assignment] in accordance with

your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial

Proposal is for the sum of [Insert amount(s) in words and figures]. We are aware that any conditional

financial offer will be outright rejected by NFAI. This amount is inclusive of all taxes as listed at

(Summary) attached.

9. We hereby declare that our bid is made in good faith, without collusion or fraud and the

information contained in the bid is true and correct to the best of our knowledge and belief.

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

receive. We confirm that all the members of Consortium, if any are jointly and severally responsible

for this commercial offer.

We are aware that NFAI reserves the right to accept or reject any or all bids without assigning any

reasons thereof. We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Date and Stamp of the signatory

Name of Firm:

Section B

Table 1 – Summary

Sr.	Item-wise Amounts	Total Amount
No.	(Inclusive of all applicable Taxes)	(Rs.)
A	Cost of equipment and accessories as per Table – 2	
В	Implementation Cost as per Table – 3	
С	Maintenance and support (AMC) as per Table – 4	
	d Total in words (A+B+C): figure shall be used for evaluation of financial proposals).	<u>"GT"</u>

Table 2: Cost of equipment and accessories

(Inclusive of all Applicable Taxes)

S.No	Description	Qty	UoM	Make / Model	Unit Price Rs.	Total Price (Rs.)
A	В	С	D	E	F	G = C X F
1	40m. PTZ Camera (Ref. 5.1)	4	Nos			
2	30m DOME Camera (Ref. 5.2)	40	Nos			
3	50m Box Camera (Ref 5.2)	6	Nos			
4	30m Bullet Camera (Ref. 5.3)	9	Nos			
5	24 Port POE + Switch with minimum 2 SFP Port	10	Nos			
6	1G SFP Modules Multi-mode	4	Nos			
7	Cat 6 Cable	11	Box			
8	Cat 5e STP Cable	6	Box			
9	Cat 6 24 Port Loaded Patch Panel	3	Nos.			
10	Cat 6 1 mtr Patch chord	90	Nos.			
11	9 U Rack	6	Nos			
12	1KVA Rack Mountable Ups with min 10 Minutes backup	6	Nos.			
13	12 port Loaded LIU multimode	4	Nos			

S.No	Description	Qty	UoM	Make / Model	Unit Price Rs.	Total Price (Rs.)
A	В	C	D	E	F	G = C X F
14	6 core OFC Multimode	450	Mtrs			
15	SC-SC Patch Cord	4	Nos			
16	25 mm HDPE Pipe	300	Mtr			
17	GI Pipe 2" Inch	20	Mtr			
18	Casing Patti 1"	1	Nos			
19	Casing Patti 2"	1	Nos			
20	PVC Pipe 1 "	1	Nos			
21	Tape Library	1	Nos			
22	SAN Switch	1	Nos			
23	Backup Solution	1	Nos			
24	LTO 7	6	Nos			
25	Software (Provide details e.g. No. of licenses, components, VMS)	Pleas	e specify			
26	Server	2	Nos			
Grand Total in words - (This figure shall be used for evaluation of financial proposals).					<u>"A"</u>	

Table 3 – Implementation Cost

(Inclusive of all Applicable Taxes)

Sr.	Item-wise Amounts	Total Amount	
No.		(Rs.)	
1	Charges of the services related design, installations, commissioning and		
1	implementation of the CCTV network at NFAI.		
Gran	Grand Total in words -		
(This	figure shall be used for evaluation of financial proposals).	<u>"B"</u>	

Table 4 – Maintenance & Supports

(Inclusive of all Applicable Taxes)

Sr. No.	Item-wise Amounts	Year (1) Amount (Rs.)	Year (2) Amount (Rs.)	Year (3) Amount (Rs.)	Year (4) Amount (Rs.)	Year (5) Amount (Rs.)	Total Amount (Rs.)
Cost	of the maintena	= Y1+Y2+Y3+Y4+Y5					
1	Equipments						
2	Software						
3	Helpdesk Support						
	nd Total in wor	<u>"C"</u>					

Note:

- * "GT" shall be used for arriving at the lowest Financial Bidder, where "GT" = "A"+"B"+"C" in tables 1, 2, 3 and 4 above
- * In case of discrepancy in values in figures and word, the value in words shall be considered as final and will be used for financial calculations of Bidder
- * Prices quoted should be inclusive of all applicable taxes
- * NFAI reserves the right to increase/decrease the quantum of procurement as quoted in the BoQ and price per unit shall be used to arrive at the final applicable payments.
- * The prices quoted shall remain effective and same till 1 year from the signing of contract.
- * The payment to the Bidder shall be made on the actual work performed by the Selected Bidder as per the quoted unit rates.

15.5 Annexure 5 – Technical Compliance Sheets

15.5.1 IP –Compliance to Network PTZ Camera (IR- 50 Mtr)

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
1	Image	1/3 type 2 Megapixel		
	Sensor	sensor		
2	Scanning	Progressive scan		
3	Minimum	Color: 0.56 lx, B/W:		
	Illumination	0.07 lx at F1.4 or better		
4	Image	1920X1080 or better,		
	Resolution	30 fps		
5	Compression	Multiple H.264 high profile, JPEG		
6	No of	Minimum 3 streams at		
	streams	different resolution and		
		bit rate		
7	Day/Night	True Day/Night with IR cut filter		
8	Focal	4.5 mm - 128 mm or		
	Length	better, 30X optical		
	C	zoom		
9	Digital zoom	Minimum 10X		
10	Inter-	ONVIF profile S, G		
	operability	Compliant		
11	Wide	WDR 80 dB or more,		
	Dynamic	True WDR would be		
	range	preferred		
12	Intelligent	50% reduction in		
	Compression	bandwidth during zero		
		motion with same fps		
		and resolution.		
13	Anti-	Camera shall be		
	corrosive	protected from salty		
	Body	environment.		
		Suitable body shall be		
		provided		
14	Pan Tilt	Gear based drive		
	Motor	preferred instead of belt		
		drive		
15	AGC	Shall be available		
16	Digital	3 D noise reduction		
	Noise	preferred		
	Reduction			

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
17	VMD	Minimum 3 areas with different sensitivity levels		
18	Image Stabilization	Shall be available		
19	Panning	360° endless		
20	Tilt	Min. 180° tilting is required		
21	Image Stabilization	Camera shall have sufficient hardware as well as software design to withstand wind speed of 200 Km/hr and give stable image		
22	IR Range	Adaptive / Smart IR minimum 20 mtrs		
23	Humidity	Inbuilt mechanism to remove humidity in the camera body		
24	Camera Rating	IP66 required		
25	Impact Protection	IK10 rated required		
26	Power	External power as specified by OEM		
27	Alarm	3 Terminal inputs, VMD Alarm Action: SD memory recording, E-mail notification, Camera positioning, FTP image transfer, Terminal output, Auto tracking		
28	Certification	UL, CE		
29	Mount	Both vertically upward as well as downward shall be possible		

15.5.2 Compliance to Dome camera Specification (IR-30 Mtr)

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
1	Sensor	Image Sensor 1/3		
		type		
		CCD/CMOS/MOS Sensor		
2	Scanning	Progressive scan		
3	Minimum	Color 0.5 lux		
	Illumination	and B/W: 0.02		
		lux F1.4 or		
1	White Balance	better Shall be available		
5		indoor/outdoor		
3	Light Control	mode selection,		
		High light		
		compensation to		
		reduce vehicle head		
		light impact		
6	Shutter Speed	min. 1/30 - 1/10000		
7	Dynamic Range	80 dB or more, True		
	_ jg-	WDR would be		
		preferred		
8	Intelligent	50% reduction in		
	Compression	bandwidth during		
		zero motion with		
		same fps and		
		resolution.		
9	IR illumination	Integrated IR		
		Illumination for		
		atleast 30 mtrs		
10	AGC	Shall be available		
11	No. Of Streams	Min. 3 streams or		
		more at H.264 high		
		profile with 1		
		JPEG. Total 4 streams		
12	Alarms	Minimum 2 terminals		
13	Audio	2 Way Audio		
14	Back focus	automatic with		
1 4	Adjustment	hardware button		
	1 Idjustinoitt	and web based		
		control		
15	Certification	CE, UL		

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
16	Firmware	Free for next 5 years		
	upgrade			
17	SDXC memory	SDXC slot,		
	card slot	Preferably SD		
		card shall be		
		locked with		
		password and		
		recorded video		
		shall have		
		alteration		
		detection		
18	Supported	H.264: 2,048 x 1,536		
	Image	@ 30 fps and 1920 x		
	Resolution	1080 resolution		
		should support 60 fps		
19	Network	RJ45, IPv4 & IPv6		
		compliant		
20	Interoperability	ONVIF profile S		
		compliant		
21	Remote view	shall be possible to		
		view on mobile /		
		Remote PC		
22	Outdoor	Auto IRIS or Auto		
	Installation	ELC		
23	Power	PoE		
24	Lens	3-9 mm or better,		
		motorised		
25	Temperature	-10 to + 50 deg C		
26	Motion	Minimum 3		
	Detection	programmable		
		areas with at		
		least 10		
		sensitivity		
		levels		
27	Outdoor	Integrated IP66		
	Housing	with mount,		
		IK10 rated,		
		inbuilt de-		
		humidification		

15.5.3 Specification of Bullet Camera (30 Mtr)

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
1	Sensor	Image Sensor 1/3 type CCD/CMOS/MOS Sensor		
2	Scanning	Progressive scan		
3	Minimum Illumination	Color 0.5 lux and B/W: 0.02 lux F1.4 or better		
4	White Balance	Shall be available		
5	Light Control	indoor/outdoor mode selection, High light compensation to reduce vehicle head light impact		
6	Shutter Speed	min. 1/30 - 1/10000		
7	Dynamic Range	80 dB or more, True WDR would be preferred		
8	Intelligent Compression	50% reduction in bandwidth during zero motion with same fps and resolution.		
9	IR illumination	Integrated IR Illumination for at least 30 mtrs		
10	AGC	Shall be available		
11	No. Of Streams	Min. 3 streams or more at H.264 high profile with 1 JPEG. Total 4 streams		
12	Alarms	Minimum 2 terminals		_
13	Audio	2 Way Audio		
14	Back focus adjustment	automatic with hardware button and		

Sr. No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
		web based		
		control		
15	Certification	CE, UL		
16	Firmware upgrade	Free for next 5 years		
17	SDXC memory	SDXC slot,		
	card slot	Preferably		
		SD card shall		
		be locked		
		with		
		password and		
		recorded		
		video shall		
		have		
		alteration		
		detection		
18	Supported	H.264: 2,048 x 1,536		
	Image	and 1920X1080		
	Resolution	resolution should		
		support 30 fps		
19	Network	RJ45, IPv4 & Ipv6		
		compliant		
20	Interoperability	ONVIF profile S		
		compliant,		
		should be listed		
		on ONVIF site		
21	Remote view	shall be possible to		
		view on mobile /		
		Remote PC		
22	Outdoor	Auto IRIS or Auto		
	Installation	ELC		
23	Power	PoE		
24	Lens	3-9 mm		
25	Temperature	-10 to + 50 deg C		
26	Motion	Minimum 3		
	Detection	programmable		
		areas with at least		
		10 sensitivity		
		levels		
27	Outdoor	Integrated IP66 with		
	Housing	mount		

15.5.4 Compliance to Specification of Box Camera (50 Mtr)

Sr.No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
1	Sensor	Image Sensor 1/3 type CCD/CMOS/MOS Sensor		
2	Scanning	Progressive scan		
3	Minimum	Color 0.5 lux and B/W:		
	Illumination	0.02 lux F1.4 or better		
4	White Balance	Shall be available		
5	Light Control	indoor/outdoor mode selection, High light compensation to reduce vehicle head light impact		
6	Shutter Speed	min. 1/30 - 1/10000		
7	Dynamic Range	80 dB or more, True WDR would be preferred		
8	Intelligent Compression	50% reduction in bandwidth during zero motion with same fps and resolution.		
9	IR illumination	Integrated IR Illumination for at least 30 mtrs		
10	AGC	Shall be available		
11	No. Of Streams	Min. 3 streams or more at H.264 high profile with 1 JPEG. Total 4 streams		
12	Alarms	Minimum 2 terminals		
13	Audio	2 Way Audio		
14	Back focus adjustment	automatic with hardware button and web based control		
15	Certification	CE, UL, FCC		
16	Firmware upgrade	Free for next 5 yeas		
17	SDXC memory card slot	SDXC slot, Preferably SD card shall be locked with password and recorded video shall have alteration detection		

Sr.No.	Feature	Parameter	Make / Model	Compliance / Deviation Please specify in detail
18	Supported Image Resolution	H.264: 2048X1536 @ 30 fps and 1920X1080 resolution should support 60 fps		
19	Network	RJ45, IPv4 & Ipv6 compliant		
20	Interoperability	ONVIF profile S compliant, should be listed on ONVIF site		
21	Remote view	shall be possible to view on mobile / Remote PC		
22	Outdoor Installation	Auto IRIS or Auto ELC		
23	Power	PoE,		
24	Lens	3MP Lens 3-8/8-40mm or better of OEM/Tamaron/Fujinon make		
25	Temperature	-10 to + 50 deg C		
26	Motion Detection	Min. 3 programmable areas with at least 10 sensitivity levels		
27	Outdoor Housing	IP66, IK10 rated with mount		