

**REPLY TO CLARIFICATIONS & SUGGESTIONS RECEIVED IN PRE NIT MEETING FOR CCTV SURVEILLANCE SYSTEM OF MCL HELD ON 20.10.2020 VIDE NOTICE NO. MCL/HQ/E&T/20/873 Dated 12.10.2020.**

S. No	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS					DISCUSSIONS AND RESULTS		
	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
1	1	2	Timelines	1. Supply, installation, testing, trial run and commissioning :180 days	The timeline for this quantum of work should be reconsidered by MCL	Due to current Covid-19 situation, availability of manpower has been affected with restriction of working hours, achieving the project timeline is a challenge.	It was discussed that by the time of the Pre-NIT itself, the lockdowns have ended and with appropriate resources according to the value of work, the work can be completed in the specified time.	No change in the NIT
2	2	45	Works related to foundation	For the purpose of operation, the following works shall be treated as works related to foundation, unless otherwise defined in the contract. a) For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower. b) For abutments, piers and well steining: All works up to 1.2m above the bed level. c) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs / tanks and other elevated structures: all works up to 1.2 metres above the ground level. d) For reservoirs / tanks (other than overhead reservoirs / tanks): All works up to 1.2 metres above the ground level. e) For basement: all works up to 1.2m above ground level or up to floor 1 level whichever is lower. For Roads, all items of excavation and filling including	Need more Clarity on this clause.		As the clause suggests, this clause is applicable to any Civil Constructions, if required, to be carried out by the bidder.	No change in the NIT
3	3	50	Electricity Charges	7.12 The contractor shall arrange necessary electricity at his own cost for the installation/ fabrication part of the work and his own establishment. However, if available and feasible the company may arrange electricity for installation/ fabrication and his own establishment at one point near the work site and necessary recovery of cost of energy consumed for installation/ fabrication and his own establishment will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.	All electricity requirements and charges should be in the scope of MCL		Electricity used for fabrication of towers, installation etc., shall be provided by the bidder as per the referred clause. This is as per the standard NIT of CIL. As Mentioned in the NIT, the electricity consumed for testing, trial run and operation of the equipments shall be provided by MCL.	No change in the NIT

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4	4	51	Water Charges	<p>7.13 The contractor shall arrange necessary water for the work and his own establishment and nothing extra will be paid for the same. Such water used by the contractor shall be fit for construction purposes. However, if available and feasible the company may arrange water, at the written request of the contractor, to the extent possible, at one point near the work site for which recovery @ 1% of the contract value of work done will be made from the contractor's bills. The contractor shall make his own arrangement of water connection and laying of pipe lines from main source of supply. Department do not guarantee to maintain uninterrupted supply of water. No claim of damage or refund of water charges will be entertained on account of such break down.</p>	All water requirement and charges should be in the scope of MCL		This is also as per the standard NI of CIL,, and the water required for construction, fabrication, if any, shall have to be provided by the successful bidder.	No change in the NIT
5	5	52	Material Inspection	<p>Samples are to be supplied by the contractor at his own cost. The cost involved in tests shall be borne by the contractor. If any test is ordered by the Engineer-in-Charge which is to be carried out by any independent person or agency at any place other than the site even then the cost of materials and testing charge etc. shall be borne by the contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site at contractors' cost.</p>	Request you to kindly specify the type of testing that might be asked by MCL for inspection .		MCL may ask for any type of test to check the conformity of the material/ equipment with their specifications.	No change in the NIT

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6	6	54	Storage of Materials:	8.15 Storage of Materials: Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Engineer-in charge, they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground. Materials shall be placed under cover when so directed and the contractor shall erect and maintain at his own cost temporary weather-proof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.	As per the tender clause we are assuming that MCL will provide us the storage space as per the requirement.		MCL shall only provide the space for construction of storage sheds, etc., subject to feasibility. The security of the material to be stored, if any, shall be the responsibility of the successful bidder.	No change in the NIT
7	7	56	Payment Terms	For Supply, Installation, Testing and Commissioning: Payment for 80% of the total value of the work executed at a particular Area including all Projects under the Area) will be made after Supply, Installation, testing and successful trial run of the complete system and issue of System Acceptance Certificate by the concerned Engineer-in charge/ Site in-charge of the complete system for that particular Area. Balance 20% payment will be made after successful commissioning & acceptance by the concerned engineer-in-charge/ site in-charge, subject to Supply, installation, Testing, Trial run and commissioning, of the complete system at all the Areas as mentioned in the work order and issue of a combined (for all the Areas) final Installation & Commissioning certificate by the GM(E&T), MCL HQ.	The Payment Term for this quantum of work should be reconsidered by MCL for smooth and uninterrupted work flow.	80% of the hardware value should be paid against delivery of all items. For Supply, Installation, Testing and Commissioning: Payment for 20% of the total hardware will be made after Installation, Testing and successful trial run of the complete system and issue of System Acceptance Certificate by the concerned Engineer-in-charge/ Site in-charge of the complete system for that particular Area. Balance 100% of installation (services) charges will be made after successful commissioning & acceptance by the concerned engineer-in-charge/ site in charge, subject to Supply, Installation, Testing, Trial run and commissioning, of the complete system at all the Areas as	This being a works contract, MCL shall not accept the delivery of the material, but only the completed system at any particular Area, for which a System Acceptance Certificate shall be issued by the concerned Incharge as per the referred clause. Therefore, no payment can be made against delivery.	No change in the NIT
8	8	Page no 81	d) BANDWIDTH: ii)	From Project Office to Area Office, LAN/ WAN or MPLS Bandwidth shall be provided by MCL.	It is understood that MCL will also provide required Hardware such as router for WAN/ MPLS termination to bidder. Kindly confirm.		WAN/ MPLS Routers exist in MCL. The same shall be used for connectivity between Project, Area and MCL HQ.	No change in the NIT
9	9	Page no 81	d) BANDWIDTH: iii)	From Area Office or MCL Bhubaneswar to MCL HQ, LAN/ WAN or MPLS Bandwidth shall be provided by MCL	It is understood that MCL will also provide required Hardware such as router for WAN/ MPLS termination to bidder. Kindly confirm.		WAN/ MPLS Routers exist in MCL. The same shall be used for connectivity between Project, Area and MCL HQ.	No change in the NIT

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10	10	Page no 82	f) STORAGE: iv)	Wherever required, MCL may ask for ANPR feature to be used in the NVR. The NVR should recognize the number plates of vehicles with accuracy rate greater than 90%, subject to visibility of the number plates, and save the results along with the image in the NVR	Kindly clarify how many cameras should be capable of ANPR functionality at each unit locations and how long data to be retained in NVR.		Irrespective of the number of cameras, all NVRs should have ANPR Capabilities. Typically, no more than 20 cameras in any project/ unit shall be used for ANPR. This figure may, however, change depending upon the location. The data retention for ANPR shall be same as that of the video feed as mentioned in clause no. 2.f of the Special terms and Conditions of the contract.	The following shall be added to Clause No. 2.f.iv of the STC:  The ANPR Results could also be stored in the NVR for a minimum period of 1 month or 1 year, depending upon the camera on whose feed the ANPR is to be applied, as per clause no. 2.f.i or 2.f.ii of the STC.
11	11	Page no 83	Pt 9	The entire IP CCTV system should be equipped for viewing the live video feed from central/ remote locations through internet cloud as well as through LAN/ WAN network of MCL. For this, there should be provision of connecting multiple networks in the NVR and Servers. The internet bandwidth for the NVR to be viewed over internet shall be provided by MCL. The NVRs and Servers should be suitably configured to be viewable over Internet as well as Private Network of MCL. For viewing the cameras over internet in Smartphones, a Mobile Application (Android and iOS Compatible) should also be available in the respective Application Libraries of the Mobile OS.	As monitoring will be through internet cloud , it is recommended to consider UTM/Next generation firewall for each Unit/Area locations in redundancy. Request you to change this clause as " The entire IP CCTV system should be equipped for viewing the live video feed from central/ remote locations through internet cloud as well as through LAN/ WAN network of MCL. For this, there should be provision of connecting multiple networks in the NVR and Servers. The internet bandwidth for the NVR to be viewed over internet shall be provided by MCL. The NVRs and Servers should be suitably configured to be viewable over Internet as well as Private Network of MCL. For viewing the cameras over internet in Smartphones, a Mobile Application (Android and iOS Compatible) should also be available in the respective application Libraries of the Mobile OS. Bidder need to consider Next Generation Firewall at each unit location in redundancy"	As we all know internet is most untrusted zone of network and with evolving cyber threats , protecting critical data such as surveillance is very critical. We need to implement solution such as Next Generation firewall to protect the data from cyber threats.	After detailed discussion in the meeting, it was concluded that the internet access to the network shall be provided at respective Areas or at MCL HQ. It was also discussed in the meeting that the Firewalls are very expensive items and are not a part of the BoQ, so it will escalate the overall cost of the project. Since the specifications of firewall are not specified in the tender document, different bidders may quote according to different specifications and therefore it shall not be fair to the bidders who have quoted according to firewall of higher specifications. Also, all the Areas and MCL HQ shall be equipped with Firewall after upcoming Network Procurement. Therefore, the scope of bidder for protection against cyber threats should be removed.	The referred clause regarding protection from cyber threats is removed.
12	12	Page no 83	Pt 10	The entire CCTV Surveillance Network should be Secure from Cyber Threats with proper cyber security using Anti Virus at the NVR/ Video Management Server level or through a separate firewall at each Unit of MCL, where the CCTV Network is connected to the internet or to the Private Network of MCL.	Request you to change this clause as " The entire CCTV Surveillance Network should be Secure from Cyber Threats with proper cyber security using Next Generation firewall at each Unit of MCL, where the CCTV Network is connected to the internet or to the Private Network of MCL. Server should be loaded with antivirus"	Antivirus at NVR or at Video Management server is insufficient to protect the data from Cyber threats. It is recommended to consider Next generation firewall at each unit of MCL & Video Management server should be supplied with Antivirus .	As stated at S. No. 11 above, this clause shall be removed.	

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13	13	Page no 85	Pt 13	The successful bidder has to ensure that ANPR/ ALPR (Automatic Number/ License Plate Recognition) as well as other Analytics, as per the TPS of NVR and Video Management Software, are available for use as and when required. The NVR should recognize the number plates of vehicles with accuracy rate greater than 90%, subject to visibility of the number plates, of vehicles going through the Area of Interest defined by MCL, if any, covered with the CCTV Cameras. The ANPR/ ALPR results should be saved in the NVR and should be accessible as a report within the NVR. This feature should also be accessible over remote connection to the NVR	Kindly clarify how many cameras should be capable of ANPR functionality at each unit locations and how long data will be retained in NVR.		clarified at S. No. 10 above	No change in the NIT
14	14	87	Power Supply:	<p>26. Power Supply:</p> <p>a) Unregulated Power Supply (nominal 230 +/- 10% V AC), will be provided by MCL at/near Viewing Points, Server room, Switches and any other place required for the installation. However, the successful bidder will arrange for any additional power wiring/ distribution, and also for regulation/stabilization of voltage required. All such works must be technically and aesthetically sound and standard based, wherever applicable.</p> <p>b) The successful bidder will ensure that protections provided in the equipment work properly in case of any abnormal electrical condition. MCL will make best efforts to ensure a healthy power supply, however in case of any damage to the equipment due to abnormal power supply or any other electrical disturbance, the damage has to be rectified by the vendor without any additional cost to MCL.</p> <p>c) The bidder will ensure to provide</p>	Any Damages due to unregulated power surge, should be born by the MCL as OEM doesn't consider burnt devices under warranty.		The referred clause is very clear and the responsibility of damage of equipment due to unregulated power, lightning etc. lies with the successful bidder. Multiple protection equipment is provided in the BoQ and bidder is free to add more such equipment if deemed fit by them. Therefore this recommendation/ suggestion is not agreed to.	No change in the NIT.

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15	15	95	Excavation and Trenching:	Excavation and Trenching: All trenches 1.2 m (4ft) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof. Ladder shall extend from bottom of the trench to at least 90 cm (3ft) above the surface of the ground. The side of the trenches which are 1.5 m (5ft) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m (5ft) of the edges of the trench or half of the	Need more Clarity on this clause.		This clause provides for safety provisions for trenches of specified depths.	No change in the NIT.
16	16	Page no 135	Price Schedule	Additional		As ICT infrastructure consists of IP based cameras (approx 2500 nos) , network switches (approx 800) , Servers & NVRs , it is recommended to have tools such as Network management (NMS/EMS) at HQ for effective operation and management of systems. NMS/EMS tools offers services such as device health monitoring , device fault monitoring , device configuration management etc which is very essential for daily operations & maintenance of such a	This is not a part of the present contract, and shall be dealt with separately. However, the suggestion is duly noted and it shall be added the switches etc. should be configurable through NMS/ EMS also.	For all switches and radios: Management through EMS/ NMS: Yes
17	17	Page no 136	Price Schedule/ Sr no 34	Ethernet Surge Protector for Cameras and Radios-- Qnty 2625	Total qnty of Ethernet Surge Protector for Cameras and Radios should be atleast 2688 (Camera- 2469+ PtP&PtPM Radios- 199). Kindly confirm the quantity.		The quantity given in the BoQ is correct.	No change in the NIT
18	18	Page no 136	Price Schedule/ Sr no 35	Surge Protection Device for UPS- Qnty asked is 620	As per our understanding , Total qnty of Surge Protection Device for UPS should be 623 qnty as there are total 263 UPS in BoQ i.e. 1kva - 392 nos + 2kva - 5 nos + 3kva - 33 nos, 5kva - 9 nos & 650va - 184 numbers). Kindly confirm the quantity.		The quantity given in the BoQ is correct.	No change in the NIT
19	19	Page no 136	Price Schedule/ Sr no 44	Singlemode Unarmoured 24 Core Optical Fiber Cable	Fiber cable type should be armoured cable as the deployment of fiber will be an outdoor. Request you to kindly amend this as " Singlemode Armoured 24 Core Optical Fiber Cable"	Armoured cables protects from physical damage & is always recommended for outdoor deployment scenarios.	The Armoured cables are more prone to damage by lightning due to metallic armour. In our operational areas, lightning strikes are frequent and intense. To reduce the OFC damage in lightning, unarmoured cables have been considered in the BoQ.	No change in the NIT
20	20	Page no 136	Price Schedule/ Sr no 45	Singlemode Unarmoured 12 Core Optical Fiber Cable	Fiber cable type should be armoured cable as the deployment of fiber will be an outdoor. Request you to kindly amend this as " Singlemode Armoured 12 Core Optical Fiber Cable"	Armoured cables protects from physical damage & is always recommended for outdoor deployment scenarios.		
21	21	Page no 136	Price Schedule/ Sr no 46	Singlemode Unarmoured 6 Core Optical Fiber Cable	Fiber cable type should be armoured cable as the deployment of fiber will be an outdoor. Request you to kindly amend this as " Singlemode Armoured 6 Core Optical Fiber Cable"	Armoured cables protects from physical damage & is always recommended for outdoor deployment scenarios.		

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22	22	Page no 137	LOCATION WISE LIST OF EQUIPMENT - JAGANNATH OCP, JAGANNATH AREA		Asked NVR (8 Ch NVR - 3 qty= Total 24 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 59 cameras (Dome -14 no , Bullet- 43 no & PTZ- 2 nos). 59 Cameras will require a min of 59 channel NVR ports whereas there are only 24Ch available across 3 nos of NVR (i.e. 8 Ch NVR - 3 qty= Total 24 Ch for cameras) . Request you to consider additional NVR's to meet the requirement	Request you to consider additional NVR's to meet the requirement	Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
23	23	Page no 137	Sr no 26 , Point to Point Radios		As we understand ,there will be point to point link established between Jagannath PO & Field MTK . Request you to kindly provide the approx distance between these two locations along with latitude & longitude. Also, please clarify is there any obstruction in between locations. This is to ensure that proper provisioning of components such for line of sight .		The approx distance between the Jagannath PO and Field MTK is 4 kms. Also, kindly refer to Clause No. 17 of the NIT Document. Bidders are encouraged to visit the site before submitting their bid.	No change in the NIT
24	24	138	Excavation of trenches	BOQ. S/N 63: Excavation of trenches, laying of HDPE pipe, including supply of HDPE Pipe, laying of OFC/Cat-6/ Power cable through HDPE pipe and backfilling the trenches , all kinds of soil, trench depth 1.05 mtr.	With All kind of soil, trench depth requirement is 1.05 mtr, this clause should be reconsider.		Not agreed. Bidders may refer to Clause No. 20 of the STC.	No change in the NIT
25	25	Page no 140	LOCATION WISE LIST OF EQUIPMENT - BHUBANESWARI OCP, JAGANNATH AREA		Asked NVR (8 Ch NVR - 5 qty= Total 40 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 102 cameras (Dome -31 no , Bullet- 70 no & PTZ- 1 nos). 102 Cameras will require a min of 102 channel NVR ports whereas there are only 40 Ch available across 5 nos of NVR (i.e. 8 Ch NVR - 5 qty= Total 40 Ch for cameras) . Request you to consider additional NVR's to meet the requirement	Request you to consider additional NVR's to meet the requirement	Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
26	26	Page no 143	LOCATION WISE LIST OF EQUIPMENT - ANANTA OCP, JAGANNATH AREA		Asked NVR (8 Ch NVR - 5 qty= Total 40 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 83 cameras (Dome -26 no , Bullet- 53 no & PTZ- 4 nos). 83 Cameras will require a min of 83 channel NVR ports whereas there are only 40 Ch available across 5 nos of NVR (i.e. 8 Ch NVR - 5 qty= Total 40 Ch for cameras) . Request you to consider additional NVR's to meet the requirement	Request you to consider additional NVR's to meet the requirement	Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT

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27	27	Page no 149	LOCATION WISE LIST OF EQUIPMENT - JAGANNATH AREA TOTAL		Asked NVR (8 Ch NVR - 17 qnty= Total 136 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 257 cameras (Dome -71 no , Bullet- 178 no & PTZ- 8 nos). 257 Cameras will require a min of 257 channel NVR ports whereas there are only 136 Ch available across 17 nos of NVR (i.e. 8 Ch NVR - 17 qnty= Total 136 Ch for cameras) . Request you to consider additional NVR's to meet the requirement		Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
28	28	Page no 159	LOCATION WISE LIST OF EQUIPMENT - LINGARAJ OCP, LINGARAJ AREA		Asked NVR (8 Ch NVR - 7 qnty= Total 56 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 121 cameras (Dome -36 no , Bullet- 73 no & PTZ- 12 nos). 121 Cameras will require a min of 121 channel NVR ports whereas there are only 56 Ch available across 7 nos of NVR (i.e. 8 Ch NVR - 7 qnty= Total 56 Ch for cameras) . Request you to consider additional NVR's to meet the requirement		128 Channel NVRs have been considered in the BoQ to cater to the camera feeds.	No change in the NIT
29	29	Page no 168	LOCATION WISE LIST OF EQUIPMENT - HINGULA OCP, HINGULA AREA		There are a total of 101 camera but NO NVR in BoQ. Request you to consider NVR's in BoQ as per the site requirement.		Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
30	30	Page no 170	LOCATION WISE LIST OF EQUIPMENT - BALRAM OCP, HINGULA AREA		Asked NVR (8 Ch NVR - 2 qnty= Total 16 Ch for cameras ) is not sufficient to meet the number of channels required for camera. There are a total of 122 cameras .122 Cameras will require a min of 121 channel NVR ports whereas there are only 16 Ch available . Request you to consider additional NVR's to meet the requirement		Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
31	31	Page no 170	LOCATION WISE LIST OF EQUIPMENT - GM UNIT, HINGULA AREA		There are a total of 50 camera but NO NVR in BoQ. Request you to consider NVR's in BoQ as per the site requirement.		Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
32	32	Page no 170	LOCATION WISE LIST OF EQUIPMENT - MCL BHUBANESWAR CAMPUS		There are a total of 61 camera but NO NVR in BoQ. Request you to consider NVR's in BoQ as per the site requirement.		Video Management Server and software has been considered in the BoQ to cater to the camera feeds	No change in the NIT
33	33	246	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2 MP IP Camera, Bullet Type, min. 150 m IR: Simultaneous Connections:20 or more	Kindly amend this clause as " Simultaneous Connections: upto 6 connections "	For Bullet camera the Standard Simultaneous connections are Max 5 or 6 as per the Standard OEM offering and testing.If viewing of camera is more than 6 connections then there will be load on the Camera hardware by thus resulting in performance deterioration & hardware life.	The camera may be directly viewed by more than 6 persons simultaneously, and therefore it is not possible to reduce this number to 6. However, this number can be reduced to 10.	2 MP IP Camera, Bullet Type, min. 50 m IR: Simultaneous Connections: 10 or more
34	34	247	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : Focal Length(mm): 4.5 to 162	Kindly amend this clause as " Focal Length(mm): 5.7mm to 205.2mm."	For PTZ camera for 36X optical zoom the higher side of the lens should be upto 205 mm for better details and longer coverage Hence we request you to kindly amend the Clause from 4.5 to 162mm to 5.7 mm to 205.2 mm	All ranges of focal length with lower side being between 4 to 7 mm can satisfy the 36x Optical Zoom Criteria. Therefore, all ranges of focal lengths can be allowed in the tender.	Item No. 3 - 2MP IP Camera, PTZ Type, min. 150 m IR: Focal Length(mm): Lower End of Range - Between 4 to 7 mm Upper End of Range - Min 36 x Lower Range



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35	35	247	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : IR illumination Range(mtr): 150	Kindly amend this clause as " IR illumination Range(mtr): min 200 mtrs "	For 36X PTZ camera the Standard coverage IR distance should be minimum 200 Mtrs as 150 Mtrs will be covered by 30X optical zoom lens camera as a Standard. Hence we request you to kindly amend the Clause from IR illumination Range(mtr): 150 to IR illumination Range min. 200 Mtrs.	A 36x Optical Zoom can cover much more than 200 Mtrs but IR illumination is not required for such long distances. The bidder is free to supply products having higher (better) specifications of any parameter in any product. Suggestion is not agreed to.	No change in the NIT
36	36	248	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : Power Input: POE	Kindly amend this clause as " Power Input: 24VAC or HI POE "	PTZ cameras generally works on 24VAC or HI-POE as they require higher Power due to it motor operation as compared to Normal Bullet or Dome which generally works on POE. Hence request you to kindly amend the Clause of Power Input : POE to Power Input: 24VAC or HI-POE	Accepted. Along with PoE, AC power and PoE+ shall also be allowed	Item No. 3 - 2MP IP Camera, PTZ Type, min. 150 m IR : Power Input: POE, PoE+, AC or DC (Additional connectors, adapters, sockets, etc. as required for AC/ DC power shall be provided by the successful bidder)
37	37	249	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion in not agreed to.	No change in the NIT
38	38	249	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	Kindly amend this clause as "Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL) " .	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL).	It has been checked and the suggestion has been accepted. As the NVRs being used are Wired NVRs only, the WPA, WPA2 and TKIP Encryptions are not required.	Item No. 4 - NVR 128 Channel with inbuilt 128 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL)
39	39	250	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and keeping in mind the large number of Cameras on a 128 Channel NVR, it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in NIT.
40	40	250	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded :Camera Notification : Spot (POP up Window) on Event, E mail, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event, SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	Item No. 4 - NVR 128 Channel with inbuilt 128 TB Storage fully loaded :Camera Notification : Spot (POP up Window) on Event, E-mail
41	41	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 4	Request you to amend this clause as "No of USB Ports: min 3 " .	Generally for 64 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function Hence we request you to kindly amend the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Agreed to the suggestion. The change in number of USB Ports from 4 to 3 does not change the functionality of the equipment and enhances competition in bidding.	NVR 64 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 3

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S. No	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS						DISCUSSIONS AND RESULTS	
	Query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
42	42	252	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion is not agreed to.	No change in the NIT
43	43	252	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP	Kindly amend this clause as "Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL) "	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	It has been checked and the suggestion has been accepted. As the NVRs being used are Wired NVRs only, the WPA, WPA2 and TKIP Encryptions are not required.	Item No. 5 - NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL)
44	44	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and keeping in mind the large number of Cameras on a 64 Channel NVR, it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in NIT.
45	45	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Camera Notification: Spot (POP up Window) on Event, Email, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event, SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	Item No. 5 - NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Camera Notification : Spot (POP up Window) on Event, E-mail
46	46	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 4	Request you to amend this clause as " No of USB Ports: min 3 " .	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Agreed to the suggestion. The change in number of USB Ports from 4 to 3 does not change the functionality of the equipment and enhances competition in bidding.	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 3
47	47	255	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion is not agreed to.	No change in the NIT

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S. No	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS						DISCUSSIONS AND RESULTS	
	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
48	48	255	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	Kindly amend this clause as " Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL) " .	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA,WPA2,TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)	It has been checked and the suggestion has been accepted. As the NVRs being used are Wired NVRs only, the WPA, WPA2 and TKIP Encryptions are not required.	NVR 32 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL)
49	49	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and keeping in mind the large number of Cameras on a 32 Channel NVR, it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in NIT.
50	50	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, Email, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	Item No. 6 - NVR 32 Channel with inbuilt 64 TB Storage fully loaded :Camera Notification : Spot (POP up Window) on Event, E-mail
51	51	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: No of USB Ports: 4	Kindly amend this clause as " No of USB Ports: min 3 " .	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Agreed to the suggestion. The change in number of USB Ports from 4 to 3 does not change the functionality of the equipment and enhances competition in bidding.	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: No of USB Ports: 3
52	52	258	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition,Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion is not agreed to.	No change in the NIT
53	53	258	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	Kindly amend this clause as "Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL) " .	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL).	Agreed to the suggestion. WPA, WPA2 and TKIP are wireless standards and not required in NVR with wired connectivity.	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)
54	54	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and keeping in mind the large number of Cameras on a 32 Channel NVR, it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in NIT.

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
55	55	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, Email, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	NVR 32 Channel with inbuilt 32 TB Storage fully loaded :Camera Notification : Spot (POP up Window) on Event, E-mail
56	56	261	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition,Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we request you to kindly remove the clause of VCA for Face recognition,Object counting,Number Plate recognition at NVR end.	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion in not agreed to.	No change in the NIT
57	57	261	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	Kindly amend this clause as "Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL) " .	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA,WPA2,TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)	Agreed to the suggestion. WPA, WPA2 and TKIP are wireless standards and not required in NVR with wired connectivity.	NVR 16 Channel with inbuilt 16 TB Storage fully loaded: Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)
58	58	262	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in NIT.
59	59	262	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E mail, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	NVR 16 Channel with inbuilt 16 TB Storage fully loaded : Camera Notification : Spot (POP up Window) on Event, E-mail
60	60	264	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	Kindly remove this clause	There are separate cameras for Face recognition,Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the	Bandwidth from Cameras to NVR has mostly been considered by CAT-6 or OFC. Wherever radios are considered, the successful bidder should provide such radios which can cater to this bandwidth requirement. The Analytics at NVR Level reduce surplus expenditure and variety of cameras, and therefore the suggestion in not agreed to.	No change in the NIT

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	Query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
61	61	264	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	Kindly amend this clause as " Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)" .	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)	Agreed to the suggestion. WPA, WPA2 and TKIP are wireless standards and not required in NVR with wired connectivity.	NVR 8 Channel with inbuilt 16 TB Storage fully loaded: Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)
62	62	265	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded: Page Preview: Electronic Map	Kindly remove this clause	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Electronic Map is also available in a number of NVRs, as VMS is built into the NVR itself, and it is a very useful feature that helps the operator to view areas of interest. Therefore suggestion is not agreed to	No change in the NIT
63	63	265	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E mail, SMS	Kindly remove this clause	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Pop up Window on Event is also available in a number of NVRs, as VMS is built into the NVR itself. However, SMS functionality may be removed.	NVR 8 Channel with inbuilt 16 TB Storage fully loaded : Camera Notification : Spot (POP up Window) on Event, E-mail
64	64	278	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 192 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Kindly amend this clause as " RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)" .	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box.Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB(installed)/ 64GB(supported).	Agreed to the suggestion. After checking the online available data, it has been found that NAS boxes usually come with RAM Starting from 8 GB installed/ 32 GB supported, and for our requirement, RAM of 16 GB Installed and 64 GB Supported shall be sufficient.	Network Attached Storage (NAS) - 192 TB : RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)
65	65	278	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 192 TB : Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web DAV)	Kindly amend this clause as "Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)" .	FTP,HTTP,HTTPS,Network File System(NFS),Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web-DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so we would request you to kindly amend the clause of DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based	Agreed to the suggestion. It has been checked and found that Web-DAV is not standard in many NAS Boxes, therefore accepted.	Network Attached Storage (NAS) - 192 TB : Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)
66	66	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Kindly amend this clause as "RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)" .	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box.Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB(installed)/ 64GB(supported)	Agreed to the suggestion. After checking the online available data, it has been found that NAS boxes usually come with RAM Starting from 8 GB installed/ 32 GB supported, and for our requirement, RAM of 16 GB Installed and 64 GB Supported shall be sufficient.	Network Attached Storage (NAS) - 120 TB : RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)

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S. No	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS				DISCUSSIONS AND RESULTS			
	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
67	67	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web DAV)	Kindly amend this clause as " <b>Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)</b> " .	FTP,HTTP,HTTPS,Network File System(NFS), Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web-DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so <b>we would request you to kindly amend the clause of DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based</b>	Agreed to the suggestion. It has been checked and found that Web-DAV is not standard in many NAS Boxes, therefore accepted.	Network Attached Storage (NAS) - 120 TB : Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)
68	68	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : Data Link Protocol: Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet	Kindly amend this clause as " <b>Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet</b> "	10 Gig Ethernet is not mandatory for NAS Box as 1 Gig Ethernet is fairly sufficient for Data Storage or Management with smooth operation & Also using 10G port will increase unnecessary cost for Project . <b>Hence we request you to kindly amend the clause from Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet to Ethernet, Fast Ethernet, Gigabit Ethernet.</b>	Agreed to the suggestion. The total data coming to any NAS shall not exceed 1 Gbps as with H.265+ compression, even a 2 MP Video Stream at 30 fps takes around 2 Mbps bandwidth. So interface of 1 Gbps is sufficient for around 500 cameras also, whereas no more than 100 cameras are connected to a single NAS.	Network Attached Storage (NAS) - 120 TB : Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet
69	69	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Kindly amend this clause as " <b>RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)</b> " .	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box. <b>Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB(installed)/64GB(supported)</b>	Agreed to the suggestion. After checking the online available data, it has been found that NAS boxes usually come with RAM Starting from 8 GB installed/ 32 GB supported, and for our requirement, RAM of 16 GB Installed and 64 GB Supported shall be sufficient.	Network Attached Storage (NAS) - 48 TB : RAM Installed: DRAM 16 GB (installed) / 64 GB (supported)
70	70	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV)	Kindly amend this clause as " <b>Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)</b> " .	FTP,HTTP,HTTPS,Network File System(NFS),Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web-DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so <b>we would request you to kindly amend the clause of DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based</b>	Agreed to the suggestion. It has been checked and found that Web-DAV is not standard in many NAS Boxes, therefore accepted.	Network Attached Storage (NAS) - 48 TB : Network Services Compatibility: DHCP, DNS, FTP, FTSP, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)
71	71	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : Data Link Protocol: Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet	Kindly amend this clause as " Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet " .	10 Gig Ethernet is not mandatory for NAS Box as 1 Gig Ethernet is fairly sufficient for Data Storage or Management with smooth operation & Also using 10G port will increase unnecessary cost for Project . <b>Hence we request you to kindly amend the clause from Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet to Ethernet, Fast Ethernet, Gigabit Ethernet.</b>	Agreed to the suggestion. The total data coming to any NAS shall not exceed 1 Gbps as with H.265+ compression, even a 2 MP Video Stream at 30 fps takes around 2 Mbps bandwidth. So interface of 1 Gbps is sufficient for around 500 cameras also, whereas no more than 100 cameras are connected to a single NAS.	Network Attached Storage (NAS) - 48 TB : Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet
72	72	46	Liquidity Damage/ 6.2	If the contractor fails to complete the work and clear the site on or before the date of completion or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages):	Request you to kindly amend this clause as "If the contractor fails to complete the work and clear the site on or before the date of completion or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages). However , MCL may consider to waive off the delay in case of genuine reason for delay in project."	As Outdoor fiber laying work & mast/tower work may get delayed beyond the specified timeline due to whether condition or any other unforeseen scenario. Under such scenario , MCL should consider waving off the liquidity damage with genuine reason & explanation submitted by Bidder.	The Clauses No. 6.4 and 6.4.1 itself has provisions for such delays which are beyond the control of the contractor. All bidders are requested to go through the same. As such, the suggestion is not agreed to.	No change in the NIT

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73	73	84	Group 7	Additional	Keeping power supply in view at all remote location (like, Railway & Road Bridge etc.) industrial grade UPS needs to be considered.	Considering the deployment will be an outdoor type , Industrial grade UPS provide better stability & performance.	The successful bidder has to provide such equipment which can work in the conditions prevalent in the locations specified in Annexure A. The specifications given are minimum specifications and the bidders are free to quote items with better specifications or quality.	No change in the NIT
	S.No	Page No.	Clause No.	Existing Specification/ Clause	Query/Suggestion	Request to Amend to		
74	1	245	Item No. 2: 2 MP IP Camera, Bullet Type, min. 50 m IR	Optical Zoom: 12X	Technically wrong, as per 2.8-12mm lens this should be 4.3X Zoom.	Optical Zoom: 4.2X Zoom or better	Agreed to the suggestion. Since with Optical Zoom, the field of view reduces, and the bullet camera cannot Pan or Tilt, a very high zoom is of no use, and an optical zoom of 4x or above shall be sufficient for enlarging the center point of Area of Interest.	Item No. 2: Optical Zoom: 4X
75	2	247	Item No. 3: 2MP IP Camera, PTZ Type, min. 150 m IR	Focal Length(mm): 4.5 - 162	Every OEM have its standard lens for 36X PTZ Dome Camera so we request you to kindly amend this as lens should be 36X Optical Zoom or define a range lower range 4.3 to 4.5 to upper range 162-158 mm lens.	4. Optical ZOOM: Lens should be 36X 4.3-4.5 to 162-158.	Discussed at S. No. 34.	Mentioned at S. No. 34.
76	3	249-264	Item No. 4 to Item No. 9	Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA, WPA2,TKIP	Seems like a typing error as WPA, WPA2, TKIP is required for Wi Fi Security we request you to kindly amend this with HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption.	Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)	Agreed to the suggestion. WPA, WPA2 and TKIP are wireless standards and not required in NVR with wired connectivity.	For Item No. 4 to Item No. 9: Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL)
77	4	249-264	Item No. 4 to Item No. 7	Number of USB Ports: 4	Specs. seems to favour specific OEM, most of the OEM have	Number of USB Ports: 3	Agreed to the suggestion. The change in number of USB Ports from 4 to 3 does not change the functionality of the equipment and enhances competition in bidding.	For Item No. 4 to Item No. 7: No. of USB Ports: 3
78	5	261-264	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Alarm Input: 16 Alarm Output: 4	Restrictive conditions for Indian OEMs, Specs seems to favour foreign OEMs, 8 and 16 Ch NVR are entry level NVR and most of the OEM have 4 Alarm in and 1 Alarm out with 8 & 16 Ch 2 SATA NVR and this will also enable a healthy competition.	Alarm Input: 4 Alarm Output: 1	Agreed to the suggestion. Since no Alarm devices are being procured in this tender, there is no need to have such a high provision. Also this shall increase the competition in tender.	For Item No. 8 and 9: Alarm Input: 4 Alarm Output: 1
79	6	261-264	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Number of Ethernet Ports: 2 (With capability to connect on Public and Private Network simultaneously)	Restrictive conditions for Indian OEMs, Specs. seems to favour foreign OEMs, 8 and 16 Ch NVR are entry level NVR and most of the OEM have 1 Ethernet Port and this will also enable a healthy competition.	Number of Ethernet Ports: 1	Agreed to the suggestion. On checking, it has been found that 16 and 8 channel NVRs do not have this utility. Also, since Internet will be given at a single point and then distributed through local network, the same port can be used for accessing over internet using Port Forwarding.	Number of Ethernet Ports : 1
80	7	261-264	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Number of HDMI Ports: 2	Restrictive clause against Indian OEMs , we request you to kindly amend this with 1 HDMI Port in 8 & 16 CH NVR.	Number of HDMI Ports: 1	Having low number of cameras, these NVRs shall be connected to only 1 monitor locally which can easily accommodate 16 or 8 cameras. This will also enhance the competition. Therefore suggestion is accepted.	For Item No. 8 and 9: Number of HDMI Ports: 1

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
81	8	261 264	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Redundancy Option: RAID 10	Technically not feasible, RAID can be configure with more than 3 SATA ports and 8 & 16 CH NVR are entry level NVRs and we request you to kindly remove this feature from 8 & 16 CH NVR.	Redundancy Option: Not Applicable	Partially agreed to the suggestion. Even though Raid 10 requires min. 4 Hard Drives, Raid 1 can be configured with two hard disks only, which is possible in case of 8 Channel and 16 Channel NVRs.	For Item No. 8 and 9: Redundancy Option: Raid 1
82	9	261 264	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Redundant Power Supply: Yes	Restrictive clause against Indian OEMs we request you to remove this feature from 8 & 16 CH NVR.	Redundant Power Supply: Not Applicable	Agreed to the suggestion. Being low channel NVRs, there are not many OEMs which produce redundant power supplies with these NVRs. Also, to enhance competition, this relaxation is given.	For Item No. 8 and 9: Redundant Power Supply: Not Applicable
83	10	249	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded	Alarm Input: 16 Alarm Output: 4	Restrictive clause against Indian OEMs, kindly allow 8 Alarm In and 4 Alarm Out so that Indian OEM can participate.	Alarm Input: 8 Alarm Output: 4	Discussed at S. No. 78 above	Mentioned at S. No. 78 above
	<b>S.No</b>	<b>Page No.</b>	<b>Clause No.</b>	<b>Existing Specification/ Clause</b>	<b>Query/Suggestion</b>	<b>Request to Amend to</b>		
84	1	243-264	Item No. 1 to Item 9	ONVIF Support: Yes	The quoted model must be published on Onvif Website and profile S,G,Q & T Complied.	Onvif Profile S,G,Q,T and Model Should be listed on Onvif Site.	Agreed to the suggestion. The successful bidder shall provide ONVIF Certificates for Onvif Profile S, G, Q and T or ONVIF Site Screenshots of all the quoted models from S. No. 1 to 9 in the NIT.	Agreed to the suggestion. The successful bidder shall provide ONVIF Certificates for Onvif Profile S, G, Q and T or ONVIF Site Screenshots of all the quoted models from S. No. 1 to 9 in the NIT.
85	2	249	Item No. 4: NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Number of Hard Disks (inclusive in the scope of supply): 16	We request you to kindly consider 24 SATA Slots for more storage with RAID feature.	Number of Hard Disks (inclusive in the scope of supply): 24	Partially agreed. The bidder shall be free to choose the number of Hard Disks and their capacity to achieve the storage capacity of the NVR and necessary RAID Configurations for all NVRs.	Number of Hard Disks (inclusive in the scope of supply): The bidder has to supply all hard disks to achieve the storage capacity of the NVR and necessary RAID Configurations.
86	3	243-264	Item No. 1 to Item 9	MAC address of camera should be registered in the name of OEM supplying the cameras.	To ensure only genuine OEMs participate and not traders or flyby operators.		Agreed to the suggestion. MAC address of camera should be registered in the name of OEM supplying the cameras.	MAC address of cameras should be registered in the name of OEM of the cameras. OEM shall give an undertaking in this regard in the Technical Compliance Sheet.
87	4	243-264	Item No. 1 to Item 9	OEM should not be blacklisted globally or in India for security Concerns	To ensure only genuine OEMs participate and not traders or flyby operators.		Not agreed. The participation in the Tender shall be as per the CIL Approved NIT.	No change in the NIT
88	5	243-264	Item No. 1 to Item 9	OEM/Bidder should have CMMI level 3.	To ensure participation of a reputed OEM/ Bidder.		Not agreed. The participation in the Tender shall be as per the CIL Approved NIT.	No change in the NIT
89	6	249 - 264	Item No. 4 to Item No. 9	All NVR should support ANR.	To get the recording autosink while reconnecting with the network at the time of network failure.	All NVR should support ANR.	It has been checked and found that ANR helps sync the recorded footage in SD Card with that of NVR after re-connection of network. Agreed to the suggestion	All NVR should support ANR (Automatic Network Replenishment) function
	<b>Sl. No.</b>	<b>RFP Page No.</b>	<b>RFP Clause No.</b>	<b>Original RFP Clause</b>	<b>Query sought/Suggestions of the Bidder</b>			
90	1	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	Type of Switch - Managed - Industrial Grade	The specification given in the RFP is of enterprise-class only there is no Industrial Grade switching protocol and functionality asked in the specification, hence requesting to consider enterprise-class as well and amend the clause as below - "Type of Switch - Managed - enterprise-class/Industrial Grade"		Not agreed. The Industrial Grade features are the temperature and humidity range in which the switch has to work, which have been clearly specified in the TPS.	No change in the NIT



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91	2	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	Throughput (MPPS) 24 or higher	If the Switch bandwidth is 10Gbps then throughput should be 14.88 Mpps as per mathematical calculation, (10 x 1.488 = 14.88 Mpps) hence kindly amend the clause as below - "Throughput (MPPS) 14.88 or higher"		The switching capacity of the switch shall be revised to 20 Gbps, and the throughput shall be changed to 14.88 Mpps.	Item No. 15: Switching Capacity - 20 Gbps Throughput: 14.88 Mpps
92	3	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	VLAN - Port Based VLAN, 802.1Q tag VLAN, GVRP dynamic	GVRP and dynamic VLAN is equivalent term hence change the clause as below - "Port Based VLAN, 802.1Q tag VLAN, VLAN/GVRP dynamic"		Not agreed. GVRP is a method of facilitating dynamic VLAN propagation across a network.	No change in the NIT
93	4	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	Security Feature - VLAN ACL, Head of Line (HOL) blocking prevention mechanism	VLAN ACL generally used in L3 switches hence request to remove this HOL generally asked in SMB segment switches and not Industrial segment switches this is not relevant in Industrial Switches hence Kindly remove HOL		Partially Agreed. VLAN ACL shall be removed, but HOL Blocking prevention shall remain as HOL is relevant in alk switches.	Item No. 15: Security Feature - Head of Line (HOL) blocking prevention mechanism
94	5	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	QoS - First Come First Serve, RTS, Best effort Service,	Kindly remove First Come First Serve, RTS, Best effort Service First Come First Serve & Best effort Service - these are not QoS techniques RTS - RTS/CTS generally used in Wireless networking Request To Send / Clear To Send		Agreed to the suggestion. Some of the techniques mentioned are not QoS techniques.	Item No. 15: QoS: Strict Priority, Weighted Round Robin, Priority Mapping, DiffServ Marking/ classification, Static IEEE 802.1p QoS/ CoS/ ToS/ DSCP priority queuing, Port Mirroring, LLDP
95	6	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	Operating Temperature Range (Degree C) - 0 to 60 C	50 degree C will be sufficient for a 8 port switch, hence kindly relax the clause as below - "Operating Temperature Range (Degree C) - 0 to 50 C"		The switches are to be used in outdoor environments with temperatures reaching very close to 50 deg. C. The switches own heat may increase the temp beyond 50 deg. C also. Therefore the suggestion is not accepted	No change in the NIT
96	7	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	IPv6 Ready from day one and duly certified - Yes	Request to Relax the clause and please change this clause to "IPv6 Ready from day one" - Yes		Agreed to the suggestion. It was discussed in the meeting and agreed that certification is not necessary for IPv6 working, and is very limited.	Item No. 15: IPv6 Ready from day one - Yes
97	8	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	PoE Power Budget ( Watt ) - 130 or higher	Since the requirement is 8 port PoE switch and as we know for PoE power requirement is 15W per port, hence 8 x 15 = 120 so, 120W is ideal. Request to kindly amend the clause as below - "PoE Power Budget of 120W"		The switch is PoE+ which means that the ports should be able to provide 25.5 watts of power. It is understood that not all the equipment will use PoE+ and all the ports shall not be used at the same time. Therefore Power Budget has been kept at 130 Watts. Therefore the suggestion is not accepted. However, during discussion in the Pre-NIT Meeting, it was discussed that the switch PoE budget should be increased to atleast 150 Watts considering only 2 devices with PoE+ and 6 devices with PoE work on the switch simultaneously.	PoE Power Budget ( Watt ) - 150 or higher
98	9	281, Item No. 15	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	Addition	Request to add this clause which allow switches to store and send most recent status/events just before power outage. "Switch should support Last gasp / Dying gasp feature"		Not agreed to the suggestion. This is not required and shall unnecessarily reduce competition.	No change in the NIT
99	10	282, Item No. 16	Layer 3 Managed Switch with 24 Port SFP + 4 x 10/100/1000 BaseT Ports	Operating Temperature Range (Degree C) - 0oC to +50oC (or better)	45 degree C is a industry standard operating temperature for Enterprise class switches and mentioned clause is favouring few OEM's, hence kindly amend the clause as below - "Operating Temperature Range (Degree C) - 0oC to +45oC (or better)"		Not agreed to the suggestion. The environmental conditions as per operational areas have been mentioned.	No change in the NIT
100	11	282, Item No. 16	Layer 3 Managed Switch with 24 Port SFP + 4 x 10/100/1000 BaseT Ports	Stacking bandwidth - 40 Gbps or better	Stacking is the backbone of 2 switches installed in the core in high availability mode and their bandwidth is very critical hence requesting to consider higher stacking bandwidth as mentioned below - "Stacking bandwidth - 480 Gbps or better"		The design is not for stacking mode in High Availability Mode. Therefore suggestion is not accepted.	No change in the NIT
101	12	284, Item No. 17	Layer 3 Managed Switch with 24 x 10/100/1000 BaseT Ports and 4 SFP Ports	Operating Temperature Range (Degree C) - 0oC to +50oC (or better)	45 degree C is a industry standard operating temperature for Enterprise class switches and mentioned clause is favouring few OEM's, hence kindly amend the clause as below - "Operating Temperature Range (Degree C) - 0oC to +45oC (or better)"		The switches shall be installed in controlled environments, but in case of power outages, etc., the temperatures may go beyond 45 deg. Celsius. Therefore this suggestion is not accepted.	No change in the NIT

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
102	13	286, Item No. 18	Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports	Operating Temperature Range (Degree C) - 0oC to +50oC (or better)	45 degree C is a industry standard operating temperature for Enterprise class switches and mentioned clause is favouring few OEM's, hence kindly amend the clause as below - "Operating Temperature Range (Degree C) - 0oC to +45oC (or better)"		The switches shall be installed in controlled environments, but incase of power outages, etc., the temperatures may go beyond 45 deg. Celsius. Therefore this suggestion is not accepted.	No change in the NIT
103	14	286, Item No. 18	Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports	Redundant Power supply from Day one - Available	Single power supply will suffice the requirement of power budget for the PoE switch & at the same time it will incur cost, hence requesting the relax the clause as below - Redundant Power supply from Day one - Available / Optional		Redundancy is required incase of failure of Power Supply. Therefore suggestion is not accepted.	No change in the NIT
104	15	288, Item No. 19	SFP Modules	Ports - 1 x SC/LC	Industry standard mentioned below, need to change Ports - 1 x SC/LC or Dual LC/PC		Agreed to the suggestion. The patch cord should be compatible with LIU and SFP Modules/ Media Converters.	1 x SC/LC or as per requirement for connectivity with patch cords.
105	16	288, Item No. 19	SFP Modules	Transmit Power - 3 to 7 dBm	Industry standard mentioned below, need to change Transmit Power - 3 to 7 dBm / +3 to -1 dBm		Agreed to the suggestion. This has been checked and verified online.	Transmit Power: -1 to 3 dBm
106	17	288, Item No. 19	SFP Modules	Receive Power - -30 to 12 dBm	Industry standard mentioned below, need to change Receive Power --30 to 12 dBm / +1 to -22 dBm		Agreed to the suggestion. This has been checked and verified online.	Receive Power: -22 to 1 dBm
107	18	288, Item No. 19	SFP Modules	Data Rate - 2.5 Gb/s	Industry standard mentioned below, need to change Data Rate - 1 / 2.5 Gb/s		Agreed to the suggestion. The switch ports are 1 Gbps (max) and therefore 2.5 Gbps is not required.	Data Rate - 1 Gb/s duplex
108	19	288, Item No. 19	SFP Modules	Cable Distance Supported - Minimum 20 kms.	10km in single mode is industry standard and used by leading OEM's but certain types of optics are available in gray market, hence suggesting to consider 10km optics "Cable Distance Supported - Minimum 10/20 kms."		Cable distances are more than 10 kms in some places, therefore suggestion is not accepted.	No change in the NIT
	<b>Sl. No</b>	<b>Item S. No</b>	<b>Item</b>	<b>Specification</b>	<b>Request to Change</b>			
109	1	Item No. 2	2 MP IP Camera, Bullet Type, min. 50 m IR	Optical Zoom	12X	As lens has been asked is 2.8~12mm for which 4x optical zoom is possible.It may be a Typing error. So requested to amend the same.	Discussed at S. No. 74 above	Mentioned at Point No. 74
110	2	Item No. 4	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Maximum Number of cameras to be viewed on a single display	64	We can get 64 Camera in single Display with DSS with the help of Workstation(they have already asked for Workstation in BOQ)	Agreed to the suggestion and it is also not possible to monitor 64 cameras in one screen. Maximum Number of cameras to be viewed on a single display shall be changed to 32	Maximum Number of cameras to be viewed on a single display: 32
111	3			Minimum Throughput (Mbps)	1024	The 1024 Mbit/s is proprietary and not available with major OEM's.Please change to bandwidth of 700 Mbit/s or better which is generally available with major global OEM's.	Agreed to the suggestion. The Throughput shall be modified to 512 Mbps or higher as it is avilable with multiple OEMs as verified online, but with the condition that the throughput should not be a limiting factor on the performance of the NVR ith 128 Cameras recording over it.	Minimum Throughput (Mbps): 512 Mbps or better as required for proper functioning of the NVR with full load (128 Cameras).
112	4			Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat	After discussions and checking online, it has been observed that Linux based NVRs are not prone to virus attacks, and that Cyber threats cannot be protected by Antivirus alone. Therefore the parameter is changes as under: ANTIVIRUS: Installed in the NVR (Exempted for Linux/ Ubuntu based NVRs). Inbuilt firewall of NVR's opertaing System should be activated and configured.	ANTIVIRUS: Installed in the NVR (Exempted for Linux/ Ubuntu based NVRs). Inbuilt firewall of NVR's opertaing System should be activated and configured.
113	5			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed as it is no longer relevant or required.	Video Loop Support to be removed from the features.
114	6			Maximum Number of cameras to be viewed on a single display	64	as you have asked for viewing 64ch in Single screen it may be difficult to watch all 64 camera's at time due 64ch split into very small areas.so pls amend this 32ch	Agreed to the suggestion and it is also not possible to monitor 64 cameras in one screen. Maximum Number of cameras to be viewed on a single display shall be changed to 32	Maximum Number of cameras to be viewed on a single display: 32

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S. No	query S. No	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS				DISCUSSIONS AND RESULTS		
		RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
115	7	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat.	Discussed at S. No. 112.	Mentioned at S. No. 112
116	8			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed.	Video Loop Support to be removed from the features.
117	9	Item No. 6	NVR 32 Channel with inbuilt 64 TB Storage fully loaded	Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat	Discussed at S. No. 112.	Mentioned at S. No. 112
118	10			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed.	Video Loop Support to be removed from the features.
119	11			Redundant Power Supply	Yes	All Reputed Brands doesn't have the Provision of Redundant SMPS in 32/16/8 ch NVR's. You may ask for Redundant SMPS in 64/128ch NVR.	As deliberated in Point No. 82, the redundant power supply has been removed from Item No. Item No. 8 and 9. However it shall remain for 32 Channel NVR.	For Item No. 8 and 9: Redundant Power Supply: Not Applicable
120	12	Item No. 7	NVR 32 Channel with inbuilt 32 TB Storage fully loaded	Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat	Discussed at S. No. 112.	Mentioned at S. No. 112
121	13			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed.	Video Loop Support to be removed from the features.
122	14			Redundant Power Supply	Yes	All Reputed Brands doesn't have the Provision of Redundant SMPS in 32/16/8 ch NVR's. You may ask for Redundant SMPS in 64/128ch NVR.	As deliberated in Point No. 82, the redundant power supply has been removed from Item No. Item No. 8 and 9. However it shall remain for 32 Channel NVR.	For Item No. 8 and 9: Redundant Power Supply: Not Applicable
123	15	Item No. 8	NVR 16 Channel with inbuilt 16 TB Storage fully loaded	Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat	Discussed at S. No. 112.	Mentioned at S. No. 112
124	16			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed.	Video Loop Support to be removed from the features.
125	17			Redundant Power Supply	Yes	All Reputed Brands doesn't have the Provision of Redundant SMPS in 32/16/8 ch NVR's. You may ask for Redundant SMPS in 64/128ch NVR.	As deliberated in Point No. 82, the redundant power supply has been removed from Item No. Item No. 8 and 9. However it shall remain for 32 Channel NVR.	For Item No. 8 and 9: Redundant Power Supply: Not Applicable
126	18	Item No. 9	NVR 8 Channel with inbuilt 16 TB Storage fully loaded	Number of Video Input Channels	16	As 8 ch NVR is required but its mentioned 16ch, So requested to amend the same.	Agreed to the suggestion. Typing Error.	Number of Video Input Channels: 8
127	19			Maximum Number of cameras to be viewed on a single display	16	As 8 ch NVR is required but its mentioned 16ch, So requested to amend the same.	Agreed to the suggestion. Typing Error.	Maximum Number of cameras to be viewed on a single display: 8
128	20			Simultaneous Monitoring Connections for All Cameras (Users in Local Network for Client Connection)	16	As 8 ch NVR is required but its mentioned 16ch, So requested to amend the same.	Not agreed to the suggestion as there can be simultaneous 16 views for a 8 Channel NVR Also	No change in the NIT
129	21			Antivirus	Installed in the NVR, with Cyber Threat Protection	As all NVR are Linux Based so it not vulnerable to Virus attack or you may ask for Cybersecurity Certificate from OEM to Protect it from cyber threat	Discussed at S. No. 112.	Mentioned at S. No. 112
130	22			Number of Ethernet Ports	2 (With capability to connect on Public and Private Network simultaneously)	Majority of OEM have only 1 Lan Port in 8 CH NVR because network load is very less so 1 LAN port is sufficient for 8CH NVR. So pls amend this to 1 Lan Port.	Discussed at S. No. 79	Mentioned at S. No. 79

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		RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
131	23			Number of HDMI Ports	2	Majority of OEM have provision 1 HDMI Port in 8 CH NVR You may ask for 1 HDMI & 1 VGA Port for viewing	Discussed at S. No. 80.	Mentioned at S. No. 80.
132	24			Video Loop Support	Yes	This feature is not available in majority of OEM as its very old technology normally come in analog DVR. So requested to remove the same.	Agreed to the suggestion. The Video Loop Support shall be removed.	Video Loop Support to be removed from the features.
133	25			Redundancy Option	RAID 10	Normally RAID10 Feature is available in min 16CH NVR in reputed OEM.so pls remove this feature	Discussed at S. No. 80.	Mentioned at S. No. 80.
134	26			Redundant Power Supply	Yes	All Reputed Brands doesn't have the Provision of Redundant SMPS in 32/16/8 ch NVR's.You may ask for Redundant SMPS in 64/128ch NVR.	Discussed at S. No. 80.	Mentioned at Point No. 81
	S. No		RFP Section	Content of RFP requiring clarification	Clarification sought			
135	1	Item No. 2:	2 MP IP Camera, Bullet	Optical Zoom : 12x	The higher optical zoom is normally use in PTZ camera and here based on the given focal length it		Discussed at S. No. 74.	Mentioned at S. No. 74 above
136	2	Item No. 2:	2 MP IP Camera, Bullet Type, min. 50 m IR	Digital Zoom : 16x	The higher digital zoom is normally use in PTZ camera and here based on the given focal length it will not possible 16x, if required 16x zoom then we need little bit flexibility in focal length it achive 16x		Not agreed to the suggestion. Digital zoom is not dependent on focal length.	No change in the NIT
137	3	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Maximum Number of cameras to be viewed on a single display : 64	Based on the NVR specification 64 Channel view means 8 x 8 grid on single display is very hard to view anything on screen will not solve the live monitoring purpose, thus request please help to		Mentioned at S. No. 110 above	Mentioned at S. No. 110 above
138	4	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as above you ask only two Video output and in specification you asked 2HDMI and 1VGA port. Thus please change it with 2 or more		Agreed to the suggestion. The simultaneous local views means the number of viewing stations (Monitors) directly connected to the NVR. As the NVR has only two video outputs, the simultaneous local views shall be restricted to 2 only.	Total number of simultaneous local views : 2
139	5	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Minimum Through put (Mbps) : 1024	Based on tender camera specification the max camera resolution is 2MP and if we are going to do 2MP of 128 camera with H.265 it will consume 256Mbps only and to view 36 to 64 camera in one		Discussed at S. No. 111 above	Mentioned at S. No. 111 above
140	6	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will		Discussed at S. No. 112.	Mentioned at S. No. 112
141	7	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR		Discussed at S. No. 39 above	Mentioned at S. No. 39 above
142	8	Item No. 4:	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR		Not agreed to the suggestion. These functions are also available in the NVR, as VMS is built into the NVR itself.	No change in the NIT
143	9	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Maximum Number of cameras to be viewed on a single display : 64	Based on the NVR specification 64 Channel view means 8 x 8 grid on single display is very hard to view anything on screen will not solve the live monitoring purpose, thus request please help to		Discussed at S. No. 114 above	Mentioned at S. No. 114 above
144	10	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as above you ask only two Video output and in specification you asked 2HDMI and 1VGA port. Thus please change it with 2 or more		Agreed to the suggestion. The simultaneous local views means the number of viewing stations (Monitors) directly connected to the NVR. As the NVR has only two video outputs, the simultaneous local views shall be restricted to 2 only.	Total number of simultaneous local views : 2
145	11	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Minimum Through put (Mbps) : 512	Based on tender camera specification the max camera resolution is 2MP and if we are going to do 2MP of 64 camera with H.265 it will consume max 256Mbps only and to view 36 to 64 camera in one grid will ok with more 64Mbps, they 256 + 64 means 320+ Mbps should be ok in 128 Channel NVR, Thus please change it with 350Mbps or more.		Agreed to the suggestion. The Throughput shall be modified to 320 Mbps or higher, but with the condition that the throughput should not be a limiting factor on the performance of the NVR ith 64 Cameras recording over it.	Minimum Throughput (Mbps): 320 Mbps or better as required for proper functioning of the NVR with full load (64 Cameras).
146	12	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will		Discussed at S. No. 112.	Mentioned at S. No. 112
147	13	Item No. 5:	NVR 64 Channel with inbuilt 64 TB Storage fully loaded	Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR		Discussed at S. No. 39 above	Mentioned at S. No. 39 above

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		RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
148	14	Item No. 5: NVR 64 Channel with inbuilt 64 TB Storage fully loaded		Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR		Discussed at S. No. 142 above	No change in the NIT
149	15	Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded		Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as above you ask only two Video output and in specification you asked 2HDMI and 1VGA port. Thus please change it with 2 or more	Agreed to the suggestion. The simultaneous local views means the number of viewing stations (Monitors) directly connected to the NVR. As the NVR has only two video outputs, the simultaneous local views shall be restricted to 2 only.	Total number of simultaneous local views : 2	
150	16	Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded		Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will	Discussed at S. No. 112.	Mentioned at S. No. 112	
151	17	Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded		Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR	Discussed at S. No. 39 above	No change in the NIT	
152	18	Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded		Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR	Discussed at S. No. 142 above	No change in the NIT	
153	19	Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as above you ask only two Video output and in specification you asked 2HDMI and 1VGA port. Thus please change it with 2 or more	Agreed to the suggestion. The simultaneous local views means the number of viewing stations (Monitors) directly connected to the NVR. As the NVR has only two video outputs, the simultaneous local views shall be restricted to 2 only.	Total number of simultaneous local views : 2	
154	20	Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will	Discussed at S. No. 112.	Mentioned at S. No. 112	
155	21	Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR	Discussed at S. No. 39 above	No change in the NIT	
156	22	Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR	Discussed at S. No. 142 above	No change in the NIT	
157	23	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as its lowerend NVR compare to other specification. Thus please change it with 2 or more	Agreed to the suggestion. The simultaneous local views means the number of viewing stations (Monitors) directly connected to the NVR. As the NVR has only two video outputs, the simultaneous local views shall be restricted to 2 only.	Total number of simultaneous local views : 2	
158	24	Item No. 8: NVR 16 Channel with		Alarm Input : 16	Normally 16 Channel NVR is used with 4 alarm input and this is standard which all the OEMs are	Discussed at S. No. 78 above	Mentioned at S. No. 78 above	
159	25	Item No. 8: NVR 16 Channel with		Alarm Output : 4	Normally 16 Channel NVR is used with 1 alarm output and this is standard which all the OEMs are	Discussed at S. No. 78 above	Mentioned at S. No. 78 above	
160	26	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Video Content Analytics (VCA) : Trip-wire Detection, Motion Detection, Crossing line, Intrusion Detection, Face Recognition, Object counting, Tampering, Object Removal, Number Plate Recognition, Video Loss	Normally ANPR and Facial recognition not used in lower level NVR, thus please remove ANPR and Facial recognition from the specification	Not agreed to the suggestion. These functionalities are required and bidder has to quote accordingly.	No change in the NIT	
161	27	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will	Discussed at S. No. 112.	Mentioned at S. No. 112	
162	28	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Number of Ethernet Ports : 2 (With capability to connect on Public and Private Network simultaneously)	Normally all the OEM with 16Channel NVR supports one network interface and it is more than sufficient if it one number as one Gbps network port is available, thus required please change it with 1 X 1Gbps	Discussed at S. No. 79 above	Mentioned at S. No. 79 above	
163	29	Item No. 8: NVR 16 Channel with		Number of HDMI Ports : 2	Normally all the OEM with 16Channel NVR supports one HDMI is enough and it is more than	Discussed at S. No. 80 above	Mentioned at S. No. 80 above	
164	30	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Number of USB Ports : 4	Normally all the OEM with 16Channel NVR supports two USB is ok and it is sufficient if it two USB port are available, thus required please change it with two USB port	Agreed to the suggestion. 02 Nos. USB Ports are sufficient in 16 and 8 channel NVRs.	Number of USB Ports: 2	

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		RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
165	31	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR		Discussed at S. No. 39 above	No change in the NIT
166	32	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR		Discussed at S. No. 142 above	No change in the NIT
167	33	Item No. 8: NVR 16 Channel with		Redundancy Option : RAID10	As per standard RAID 10 required min 4 nos of hdd and with the two hdd raid 10 is not possible,		Mentioned at S. No. 81 above	Mentioned at S. No. 81 above
168	34	Item No. 8: NVR 16 Channel with		Redundant Power Supply : Yes	Redundant Power Supply is mainly come in 32/64/128 Channel NVR and all the other OEM are also		Mentioned at S. No. 82 above	Mentioned at S. No. 82 above
169	35	Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded		Number of Video Input Channels : 16	As this we feel typing mistake, as specification required for 8channel and input required 16 channel is not possible, thus please change it to 8channel		Mentioned at S. No. 126 above	Mentioned at S. No. 126 above
170	36	Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded		Maximum Number of cameras to be viewed on a single display : 16	As this we feel typing mistake, as specification required for 8channel and input required 16 channel is not possible, thus please change it to 8channel		Mentioned at S. No. 127 above	Mentioned at S. No. 127 above
171	37	Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded		Total number of simultaneous local views : 4	Please help to clarify the local view means, if there will be 4 local person will view over workstation on latest IE browser then its ok but local connection with NVR is not possible as its lowend NVR compare to other specification. Thus please change it with 2 or more		Agreed to the suggestion. Since there are only 2 HDMI Ports, therefore only two simultaneous local views are possible.	Total number of simultaneous local views : 2
172	38	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Video Content Analytics (VCA) : Trip-wire Detection, Motion Detection, Crossing line, Intrusion Detection, Face Recognition, Object counting, Tampering, Object Removal, Number Plate Recognition, Video Loss	Normally ANPR and Facial recognition not used in lower level NVR, thus please remove ANPR and Facial recognition from the specification		Not agreed to the suggestion. These functionalities are required and bidder has to quote accordingly.	No change in the NIT
173	39	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Antivirus : Installed in the NVR, with Cyber Threat Protection	Antivirus is mainly used in PC based NVR where multiple other operation are going which possibly affect the performance and stability, pure hardware NVR mainly not required antivirus as it will		Discussed at S. No. 112.	Mentioned at S. No. 112
174	40	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Number of Ethernet Ports : 2 (With capability to connect on Public and Private Network simultaneously)	Normally all the OEM with 16Channel NVR supports one network interface and it is more than sufficient if it one number as one Gbps network port is available, thus required please change it with 1 X 1Gbps		Discussed at S. No. 79	Mentioned at S. No. 79
175	41	Item No. 8: NVR 16 Channel with		Number of HDMI Ports : 2	Normally all the OEM with 16Channel NVR supports one HDMI is enough and it is more than		Discussed at S. No. 80 above	Mentioned at S. No. 80 above
176	42	Item No. 8: NVR 16 Channel with		Number of USB Ports : 4	Normally all the OEM with 16Channel NVR supports two USB is ok and it is sufficient if it two USB		Discussed at S. No. 164 above	Mentioned at S. No. 164 above
177	43	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Page preview : Multi Monitor Support, Video Window, Electronic Map on two separate monitors	In the NVR we can not so any add-on or anything addition or any MAP functionality possible and electronic MAP function is mainly used in VMS and it is part of VMS only, thus please remove this electronic MAP function from NVR		Discussed at S. No. 39 above	No change in the NIT
178	44	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Total Management : Group add, Delete, Group management, Remote Data Export	Group ADD, Delete, management and remote data export is also part of VMS and it is used in VMS only, thus please remove this part from NVR		Discussed at S. No. 142 above	No change in the NIT
179	45	Item No. 8: NVR 16 Channel with		Redundancy Option : RAID10	As per standard RAID 10 required min 4 nos of hdd and with the two hdd raid 10 is not possible,		Discussed at S. No. 81 above	Mentioned at S. No. 81 above
180	46	Item No. 8: NVR 16 Channel with		Redundant Power Supply : Yes	Redundant Power Supply is mainly come in 32/64/128 Channel NVR and all the other OEM are also		Discussed at S. No. 82 above	Mentioned at S. No. 82 above
181	47	Item No. 11: Centralized Network Video Management software		Number of monitor for displaying live video with one server /workstation : 16	This much of screen is not possible without the videowall directly on server, thus please remove it and mentioned 2 or better		This clause relates to Video Wall only. It shall be modified for clarity.	Number of monitor for displaying live video with one server /workstation : 16 (on a video wall) or 2 directly.
182	48	Item No. 11: Centralized Network Video Management software		Number of level of users and alarm prioritization supported by the offered product	As this point is belong to some specific OEM, mainly there are three level available admin, user & guest. thus please remove this point from specification		Not agreed. There can be two degrees of Admins as well as users. So this suggestion is not accepted.	No change in the NIT
183	49	Item No. 11: Centralized Network Video Management software		7. Scalable licensing model supporting unlimited cameras per server based on the available hardware configuration	Unlimited license is not support as every software is support max limit of devices and accordingly license they can use, thus please remove this and mentioned 1000 license minimum support		Agreed to the suggestion. The maximum number of cameras to be used on a single server shall not exceed 200. Therefore scalability upto 1000 is more than sufficient.	7. Scalable licensing model supporting minimum 1000 cameras per server based on the available hardware configuration.
184	50	Item No. 11: Centralized Network Video Management software		VMS Throughput : 1200 Mbps or better	One server with 12Mbps is not possible but most of OEMs, Thus please change it with 500Mbps or better		Since in the previous clarification only, it has been mentioned that a server can support upto Minimum 1000 cameras, therefore a throughput capability of 1200 Mbps seems reasonable. Therefore the suggestion is not agreed to.	No change in the NIT
185	51	Item No. 11: Centralized Network Video Management software		No Of video tiles enable on a single digital monitor : 100	Based on the specification 100 tiles means more than 8 x 8 grid on single display is very hard to view anything on screen and it will not solve the live monitoring purpose, thus request please help to modify it with max upto 36 or more,		Partially agreed to the suggestion. The total number of cameras to be displayed on one monitor shall be limited to 64 as it is available in all major softwares.	No Of video tiles enable on a single digital monitor : 64

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
186	52	Item No. 11: Centralized Network Video Management software		1. GIS supported with vector files, open street Maps and Google Maps,	GIS and google map support by most of the OEMs, thus please change it to GIS or google map support		Not agreed to the suggestion. The functionality required has to be provided.	No change in the NIT
187	53	Item No. 11: Centralized Network Video Management software		6. Ability to send SNMP traps messages on events	Most of OEMs has ability to give live alert via popping window on screen, this please remove this point from specification.		Pop-Up Alerts on Screen are a result of SMNP Messages sent by the Camera to the VMS. At the same time, the VMS should also have the functionality to send SMNP Messages to a central command centres, whenever configured. Therefore the suggestion is not agreed to.	No change in the NIT
188	54	Item No. 15: 8 Port Managed Industrial		Throughput (MPPS) : 24 or higher	normally 8 port poe switch will give 14.88 and it is industries standard as well. Thus please change		Discussed at S. No. 91.	Mentioned at S. No. 91.
189	55	Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports		Type of Switch : IPV4 & Dual Stack configurable.	as in the specification stacking details not mentioned and this project is basically for deployment on different location, thus please remove stack configuration details		The stacking bandwidth is required incase stacking is done in the future. Therefore the suggestion is not accepted.	No change in the NIT
190	56	Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT		Redundant Power supply from Day one : Available	Every OEM not support Redundant power supply, thus please remove this part from specification		Discussed at S. No. 103.	Mentioned at S. No. 103.
191	57	Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT		c) Supports at least 8 Spanning Tree Groups/Instances.	most of OEMs supports spanning tree protocol and this specification looks like belong to specs particular OEM thus please remove this part.		Not agreed to the suggestion. This is not OEM Specific.	No change in the NIT
192	58	Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports		g) USB Port / SD Memory card Socket.	USB and memory card slot not normal in switches thus please remove this part from specification.		Agreed to the suggestion. This is not a common feature in switches which can be accessed through LAN or Serial Ports.	g) USB Port / SD Memory card Socket. - Removed from TPS of all Switches.
193	59	Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports		i) Industry Standard CLI with built in Scripting tool.	normally switch will configure via different commands and scripitiong will violate some configuration part this please remove this part.		Not agreed to the suggestion. There can be multiple methods to configure switch.	No change in the NIT
194	60	Item No. 22: 55 inch LED Displays		Speakers : minm. 10W x 2	Normally 5 to 8W of two speakers is sufficient, thus please change it with 5 to 8W of two speakers or more		Not agreed to the suggestion. 10 W x 2 speakers are usually found in such displays.	No change in the NIT
195	61	Item No. 23: 24 inch LED Displays		Speakers : minm. 5W x 2	Normally 2 to 3W of two speakers is sufficient, thus please change it with 2 to 3W of two speakers or more		Not agreed to the suggestion. 5 W x 2 speakers are usually found in such displays.	No change in the NIT
	<b>S. No.</b>	<b>Page No.</b>	<b>Item No.</b>	<b>Description</b>	<b>Remarks</b>	<b>Suggestion</b>		
196	1	Page 314	Item No. 43	CAT6 STP Cable	Would the cable be used in Indoor application or outdoor application.	Since its in a enviroment in Outdoor the Cable required should be outdoor rated	Agreed to the suggestion. For making it more robust in outdoor environment, the outer sheath shall be HDPE/ LDPE and the inner sheat will be PVC/ LZSH	Outer Sheath: HDPE/ LDPE Inner Sheath: PVC/ LZSH
197	2	Page 314 & 315	Item No. 44, 45 and 46	Singlemode Unarmoured 24, 12 and 6 Core Optical Fiber Cable	Would the cable be used in Indoor or Outdoor. In addition would the cable be installed on the Wall or be laid in the ground.		Discussed at S. No. 19.	Mentioned at S. No. 19.
198	3	Page 314 & 315	Item No. 44, 45 and 46	Singlemode Unarmoured 24, 12 and 6 Core Optical Fiber Cable	Item No. 43 is asked for a shielded cable however the OFC required is Unarmoured any particular reason or location or pathway	The Cable should also be Outdoor Rated and Armoured Type	Discussed at S. No. 19.	Mentioned at S. No. 19.
199	4	Page 319 & 320	Item No. 51 and 52	Termination Type / Connection Type – Insulation Piercing Connection (IPC)		Termination as per TIA/EIA or ISO/IEC can be either IDC or IPC Type as long as it adhere to the Standards	IDC is also known as IPC Termination.	No change in the NIT.
200	5	Page 314 to 320	Item No 43, 44,45,46 etc.			Since the CCTV Camera network would be used to monitor both Indoor and Outdoor therefore the Operating Temperature minimum should be -10°C and the maximum be +60°C as the cable should be higher in temperature that the environment that the same needed to be installed	The operating temperature of the equipment is based on the environment in which the equipment operates, and the term relates to the environmental temperatuer only, which has been kept on the higher side for safety. Therefore the suggestion is not accepted.	No change in the NIT.
201	6	Page 319 & 320	Item No. 52,53 and 54	Aluminium base material for light mounting.		the Fiber panel material is Aluminium however the Copper panel is SPCC (Steel). There either both should be of aluminium or it should be optional to use ether Steel or Aluminium.	Agreed to the suggestion. There shall be option for using steel or Aluminum for base material.	Aluminum or Steel Base Material.

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202	7	Page 314 & 315	Item No. 43			CAT6 STP Cable has components like Item No. 49, (Patch Panel) Item No. 51&52 (Patch Cord) however the connectivity material like a certified Field Terminated Plug or a Gang Box, Face Plate and Information Out missing in the BoQ which needs to be used so that the entire passive link be Tested, Verified and Certified for performance to support the longevity of the Infrastructure.	If required during installation, the said materials shall be provided by the successful bidder without any additional cost to MCL.	No change in the NIT.
203	8	Page 319 & 320	Certificaion from OEM			Further, nowhere mentioned that the products needs to be certified by any global standard by testing lab like ETL, UL and RoHS etc. Putting these standards would assist that the right product be installed and certified.	BIS Certifications and other indian certifications are required in the tender document. Foreign certifications are discouraged in tenders unless absolutely essential.	No change in the NIT.
204	9	Page 319 & 320	PMI			In addition would any preference be given to OEM who are Make in India or registered in Startup India and MSME program.	The preferences to local suppliers are mentioned in the NIT.	No change in the NIT.
	<b>S. No.</b>	<b>Item No and Name</b>		<b>Parameter</b>	<b>Existing</b>	<b>Suggested</b>		
205		Item No. 1: 2 MP IP Camera, Dome Type, minm. 30 m IR		Focus Mode	Auto, Manual ( <b>Zooming</b> )	Auto, Zooming	Zoom is not required in Dome Camera, and is not existing.	No change in the NIT
206				Mounting bracket	Ceiling, Wall, Pole Mounted	Ceiling	Mounting shall have to be provided by the successful bidder as per the site conditions.	No change in the NIT
207		Item No. 2: 2 MP IP Camera, Bullet Type, min. 50 m IR		Optical Zoom	12X	For 2.8-12mm lens Optical zoom can't be 12X	Discussed at S. No. 74.	Mentioned at S. No. 74.
208				Mounting bracket	Pole Mounted, Wall Mounted	any one should be specified	Mounting shall have to be provided by the successful bidder as per the site conditions.	No change in the NIT
209		Item No. 3: 2MP IP Camera, PTZ Type, min. 150 m IR		Focal Length(mm)	4.5 – 162	4.8-153 or better	Discussed at S. No. 34.	Mentioned at S. No. 34.
210				Optical Zoom	36X	32X or better	The zoom range is defined as per our requirement and the same is available in multiple brands. Therefore the suggestion is not accepted.	No change in the NIT
211		Item No. 4: NVR 128 Channel with inbuilt 128 TB Storage fully loaded		Recording Resolution	Full HD (1920 x 1080 Pixel) or higher	Full HD (1920 x 1080 Pixel), 4K or higher	All cameras are 2 MP so 4K recording is not required. Therefore the suggestion is not agreed to.	No change in the NIT
212				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT
213				Storage Capacity of each Hard Disk (TB)	8	10	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
214				Redundant Power Supply	Yes	Should be removed	Redundancy is required incase of failure of Power Supply. Therefore suggestion is not accepted.	No change in the NIT
215		Item No. 5: NVR 64 Channel with inbuilt 64 TB Storage fully loaded		Antivirus	Installed in the NVR, with Cyber Threat Protection	Embedded Linux based NVR does have security feature by default	Discussed at S. No. 112.	Mentioned at S. No. 112
216				Number of USB Ports	4	3 or more	Discussed at S. No. 41.	Mentioned at S. No. 41.
217				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT
218				Number of Video Input Channels	32	32/40	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT



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219		Item No. 6: NVR 32Channel with inbuilt 64 TB Storage fully loaded		Maximum Number of cameras to be viewed on a single display	32	32/40	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
220				Minimum Through put (Mbps)	256	512 or better	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
221				Antivirus	Installed in the NVR, with Cyber Threat Protection	Embedded Linux based NVR does have security feature by default	Discussed at S. No. 112.	Mentioned at S. No. 112
222				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT
223				Total Storage Capacity(TB)	64	80	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT
224				Redundant Power Supply	Yes	Not applicable for this type of NVR	Discussed at S. No. 119.	Mentioned at S. No. 119.
225		Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		Number of Video Input Channels	32	32/40	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
226				Maximum Number of cameras to be viewed on a single display	32	32/40	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
227				Minimum Through put (Mbps)	256	512 or better	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
228				Antivirus	Installed in the NVR, with Cyber Threat Protection	Embedded Linux based NVR does have security feature by default	Discussed at S. No. 112.	Mentioned at S. No. 112
229				Number of HDMI Ports	2	1	Not agreed to the suggestion. Multiple 32 Chanel NVRs are available with 2 HDMI Ports	No change in the NIT
230				Number of USB Ports	4	3 or more	Discussed at S. No. 77.	Mentioned at S. No. 77.
231				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT
232				Total Storage Capacity(TB)	32	40	Suggestion is not accepted. However, the successful bidder can provide items of higher specifications if overall functionality and objective of the system is achieved.	No change in the NIT
233				Redundancy Option	RAID 10	with 4 HDD, RAID 10 can not be configured	Incorrect comment. RAID 10 can be configured with 4 hard disks	No change in the NIT
234				Redundant Power Supply	Yes	Not applicable for this type of NVR	Discussed at S. No. 122.	Mentioned at S. No. 122.
235		Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		Antivirus	Installed in the NVR, with Cyber Threat Protection	Embedded Linux based NVR does have security feature by default	Discussed at S. No. 112.	Mentioned at S. No. 112
236				Number of Ethernet Ports	2 (With capability to connect on Public and Private Network simultaneously)	16 CH NVR does not usually have this parameter. Requested to change this to 1.	Discussed at S. No. 79.	Mentioned at S. No. 79.
237				Number of HDMI Ports	2	1	Discussed at S. No. 80.	Mentioned at S. No. 80.
238				Number of Serial Ports	1	16 CH NVR does not usually have this parameter. Requested to omit this point.	Discussed at S. No. 459.	Mentioned at S. No. 459

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239				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT	
240				Redundancy Option	RAID 10	with 2 HDD, RAID 10 can not be configured	Discussed at S. No. 81 above	Mentioned at S. No. 81 above	
241				Redundant Power Supply	Yes	Not applicable for this type of NVR	Discussed at S. No. 82 above	Mentioned at S. No. 82 above	
242				Number of Video Input Channels	16	Please change this to 8 or 10	Discussed at S. No. 126 above	Mentioned at S. No. 126 above	
243			<b>Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded</b>	Maximum Number of cameras to be viewed on a single display	16	8 Ch NVR can not show 16 cameras at a single display	Discussed at S. No. 127 above	Mentioned at S. No. 127 above	
244				Antivirus	Installed in the NVR, with Cyber Threat Protection	Embedded Linux based NVR does have security feature by default	Discussed at S. No. 112.	Mentioned at S. No. 112	
245				Number of Ethernet Ports	2 (With capability to connect on Public and Private Network simultaneously)	8 CH NVR does not usually have this parameter. Requested to change this to 1.	Discussed at S. No. 79	Mentioned at S. No. 79	
246				Number of HDMI Ports	2	1	Discussed at S. No. 80.	Mentioned at S. No. 80.	
247				Number of Serial Ports	1	8 CH NVR does not usually have this parameter. Requested to omit this point.	Discussed at S. No. 463	Mentioned at S. No. 463	
248				Video Recorder supports recording on NAS Directly	Yes	Should be removed	This provision is necessary if we want to increase the storage duration in the future. Therefore the suggestion is not agreed to.	No change in the NIT	
249				Redundancy Option	RAID 10	with 2 HDD, RAID 10 can not be configured	Discussed at S. No. 81 above	Mentioned at S. No. 81 above	
250				Redundant Power Supply	Yes	Not applicable for this type of NVR	Discussed at S. No. 82 above	Mentioned at S. No. 82 above	
251				<b>Item No. 20: Single Mode Media Converter</b>	Ports	2 x 1000M SC/UPC port	Please change this point to 1 X 1000M SC Type Duplex (Tx/Rx) port	Agreed to the suggestion. To remove any confusion, it shall be changed to 1000M SC Type Duplex Port (Tx and Rx) for termination of two fiber cores.	1 x 1000M SC Type Duplex Port for Termination of Two Optical Fiber Cores.
252				<b>Item No. 26: Point to Point Radios</b>	Frequency band	4.9-6.0 GHz /3.4-3.8 GHz	5.150-5.250GHz	Partially agreed to the suggestion. Unlicensed frequency bands should be used.	Frequency Band: Unlicensed 5 Ghz.
253			Adaptive Modulation & Coding		BPSK to 256QAM	OEM specific term used. Requested to omit this point	Modulation from BPSK to 256 QAM is a technology and not an OEM Specific Term. Not agreed to the suggestion.	No change in the NIT	
254			Radio Access Scheme		MIMO 2 x 2 – OFDM	OEM specific term used. Requested to omit this point	Multiple-input, multiple-output orthogonal frequency-division multiplexing (MIMO-OFDM) is an access mode for wireless communications, and not OEM Specific. Therefore not agreed to the suggestion.	No change in the NIT	
255			Duplex Technology		TDD	OEM specific term used. Requested to omit this point	TDD is Time Division Duplexing, which is a Technology and not an OEM Specific Term, therefore the suggestion is not agreed to.	No change in the NIT	
256			Asymmetric TDD		Configurable	OEM specific term used. Requested to omit this point	Asymmetric TDD Configurable is not OEM Specific Term, but a technology. Therefore the suggestions is not agreed to.	No change in the NIT	
257			Equipment Manager System (EMS)		Yes	OEM specific term used. Requested to omit this point	Equipment Management System (EMS) is not OEM Specific Term. Therefore the suggestions is not agreed to.	No change in the NIT	
258			Number of Subscriber Units		10 or more	Requested to change this point to 5 or more	Not agreed to the suggestion.	No change in the NIT	
259			<b>Item No. 27: Point to Multi Point Radios</b>	Frequency band	4.9-6.0 GHz /3.4-3.8 GHz	5.150-5.250GHz	Partially agreed to the suggestion. Unlicensed frequency bands should be used.	Frequency Band: Unlicensed 5 Ghz.	
260				SLA management	CIR, MIR, Best-Effort	OEM specific term used. Requested to omit this point	These are not OEM Specific Terms. Therefore the suggestion is not agreed to.	No change in the NIT	
261				Radio Access Scheme	MIMO 2x2, OFDM, Diversity per Subscriber Unit	OEM specific term used. Requested to omit this point	These are not OEM Specific Terms. Therefore the suggestion is not agreed to.	No change in the NIT	
262				Radio Access Scheme	MIMO 2x2, OFDM, Diversity per Subscriber Unit	OEM specific term used. Requested to omit this point	These are not OEM Specific Terms. Therefore the suggestion is not agreed to.	No change in the NIT	

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263				Intra-site and inter-site TDD Synchronization using GPS	Supported	Should be removed	Not agreed to the suggestion. This is a standard specification and not OEM Specific	No change in the NIT
				<b>Parameter</b>	<b>Existing</b>	<b>Suggested/ Clarification</b>		
264		Item No. 26: Point to Point Radios		Frequency band	4.9-6.0 GHz /3.4-3.8 GHz	Clarify on the frequency band required - is the requirement is for Licensed or Unlicensed Frequency band - if it is unlicensed, pls amend it as - Support 2.4 GHz or 5 GHz unlicensed frequency band approved by WPC	Discussed at S. No. 252.	Mentioned at S. No. 252.
265				Channel Bandwidth	10/20/40/80 MHz	10 MHz is not useful as the required bandwidth is 500 Mbps and near Line of Sight deployments consume more throughput; can be amended to 20/40/80 MHz	Agreed to the suggestion. 10 Mhz channel bandwidth is not usable for such high data applications.	Channel Bandwidth: 20/40/80 Mhz
266				Asymmetric TDD	Configurable	Request to mention the ratio of Uplink/Downlink 70%:30%, so that it'll be helpful in utilizing the available throughput in a better way as the application is Video Surveillance	The ratio of Uplink to Downlink has to be configurable.	No change in the NIT
267				Dynamic Channel BW Selection	20/40/80 MHz or 20/40 MHz	Favoring particular OEM; Can be deleted - Dynamically changing channel bandwidth will destabilize the network causing more down time	Agreed to the suggestion. Dynamic Channel Bandwidth may bring inconsistent performances in the network.	Dynamic Channel BW Selection - Deleted
268				DFS / ACS	Supported	DFS not applicable in India; request to delete this row	Agreed to the suggestion. DFS is not applicable in India as verified online	ACS - Supported
269				QoS	4 levels supported, Strict priority, TTL	Request to amend VLAN & QoS as per the standards 802.1Q with 802.1p priority	Agreed to the suggestion. 802.1Q with 802.1p Priority is standard. This will increase competition without compromising functionality.	QoS: 802.1Q with 802.1p priority
270				Maximum Frame Size	2048 bytes	Seems to be favoring particular OEM; Request to amend to 1600 bytes as the Maximum Transmission Unit for Ethernet size is 1500 bytes	Agreed to the suggestion. Verified the ethernet packet maximum size as 1500 bytes.	Maximum Frame Size: 1600 bytes
271				Protocol	SNMPv1, SNMPv3, Telnet and HTTP/HTTPS	SNMPv1 is very old; can be amended as SNMPv2	Agreed to the suggestion. SNMPv2 has replaced SMNPv1	Protocol: SNMPv2, SNMPv3, Telnet and HTTP/HTTPS
272				Humidity	100% condensing, IP67	Request to amend humidity to 95% condensing with IP67, external IP67 enclosure is not approved	Agreed to the suggestion. Considering the environmental conditions at Odisha, this is sufficient.	95% non-condensing, IP67
273						Request to add one more feature: "Radio device should be capable to work as Point-to-Point and Subscriber Module in Point-to-Multipoint topology"	Agreed to the suggestion. This will increase flexibility of installation.	"Radio device should be capable to work as Point-to-Point Unit in P2P Topology as well as Subscriber Module in Point-to-Multipoint topology"
274				Throughput	750 Mbps or better	Request to amend throughput as 600 Mbps or better as the Point-to-Point radio is working with 500 Mbps or better. Even this Base station has to be backhauled to central site using Point-to-Point, it'll be compatible to transport the aggregated data from Base Station site	Not agreed to the suggestion, as the PTMP Radio shall be used as a base radio in most deployment scenarios. It shall be connected to the switches using Ethernet Cable.	No change in the NIT
275				Frequency band	4.9-6.0 GHz /3.4-3.8 GHz	Clarify on the frequency band required - is the requirement is for Licensed or Unlicensed Frequency band - if it is unlicensed, pls amend it as - Support 2.4 GHz or 5 GHz unlicensed frequency band approved by WPC	Discussed at S. No. 253.	Mentioned at S. No. 253.
276				Channel Bandwidth	10/20/40/80 MHz	10 MHz is not useful as the required bandwidth is more than 600 Mbps and near Line of Sight deployments consume more throughput; can be amended to 20/40/80 MHz	Agreed to the suggestion.	Channel Bandwidth: 20/40/80 Mhz
277			Adaptive Modulation & Coding	BPSK/QPSK / QAM16 / QAM64 / QAM256	Request to amend as "Modulation support of 256QAM or better with Forward Error Correction"	Partially agreed to the suggestion. Lower modulation techniques are also required.	BPSK, QPSK, QAM16, QAM64, QAM256 with Forward Error Correction for both types of radios	

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278		Item No. 27: Point to Multi Point Radios		Duplex Technology	TDD, Configurable Uplink / Downlink ratio	Request to mention the ratio of Uplink/Downlink 70%:30%, so that it'll be helpful in utilizing the available throughput in a better way as the application is Video Surveillance	Not agreed. The ratio of Uplink to Downlink has to be configurable.	No change in the NIT
279				Dynamic Channel BW Selection	20/40/80MHz or 20/40MHz	Favoring particular OEM; Can be deleted - Dynamically changing channel bandwidth will destabilize the network causing more down time	Agreed to the suggestion.	Dynamic Channel BW Selection - Deleted
280				DFS (FCC&ETSI)	Supported	DFS not applicable in India; request to delete this row	Agreed to the suggestion.	DFS - Not applicable
281				QoS	4 levels supported, Strict priority, TTL	Request to amend VLAN & QoS as per the standards 802.1Q with 802.1p priority	Agreed to the suggestion. 802.1Q with 802.1p Priority is standard. This will increase competition without compromising functionality.	QoS: 802.1Q with 802.1p priority
282				Maximum Frame Size	2048 bytes	Seems to be favoring particular OEM, can be amended to 1600 bytes as the Maximum Transmission Unit for Ethernet size is 1500 bytes	Agreed to the suggestion.	Maximum Frame Size: 1600 bytes
283				Protocol	SNMPv1, SNMPv3, Telnet and HTTP/HTTPS	SNMPv1 is very old; can be amended as SNMPv2	Agreed to the suggestion.	Protocol: SNMPv2, SNMPv3, Telnet and HTTP/HTTPS
284				Max Power Consumption	<20W	Base station requires more power, can be amended to 30W	Partially agreed to the suggestion. Max Power consumption can be increased to 23.4 Watts as it shall be connected to PoE+ Switch.	Max Power Consumption < 23.4 Watts
285				Humidity	100% condensing, IP67	Request to amend humidity to 95% condensing with IP67, external IP67 enclosure is not approved	Agreed to the suggestion.	95% non-condensing, IP67
286						Request to add one more feature: "Subscriber Unit Radio device should be capable to work as Subscriber Module in Point-to-Multipoint & Point-to-Point topology and specification of Point-to-Point will be applicable for Subscriber Unit radio"	Not agreed to the suggestion. PTMP Radio shall be used as a base station only.	No change in the NIT
287	Sl. No.		RFP Document Reference(s) (Section & Page No(s))	Content of RFP requiring Clarification(s)		Points of Clarification/Amendment		
288	1	Page no 6	The definition of Similar work shall be as follows SUPPLY AND INSTALLATION/ COMMISSIONING OF IP CCTV SYSTEM OR SUPPLY, INSTALLATION/ COMMISSIONING AND MAINTENANCE OF IP CCTV SYSTEM		Please Amend: The definition of Similar work shall be as follows SUPPLY AND INSTALLATION/ COMMISSIONING OF IP CCTV SYSTEM OR SUPPLY, INSTALLATION/ COMMISSIONING AND MAINTENANCE OF Computer,Server,Networking items		Not agreed to the suggestion. The bidder should have work experience of CCTV Systems as defined in the NIT.	No change in the NIT
289	1	MAC address of the IP Camera should be registered in the name of offered brand .					Discussed at S. No. 86.	Mentioned at S. No. 86.
290	2	Country of origin should not be from China .					Not agreed to the suggestion. All relevant guidelines of Govt. of India have been incorporated in the Tender Document.	No change in the NIT.
291	3	If any one claims make in india products ( its should be intellectual technology transfer and offered product should be manufactured in india since last three years which shows the cr					Not agreed to the suggestion. All relevant guidelines of Govt. of India have been incorporated in the Tender Document.	No change in the NIT.
292	4	Bullet camera should be minimum 30 mtrs IR. Bullet camera with 50 mtrs IR is brand specific and favour to some Chinese oems. So please consider 30 mtrs IR in bullet camera					Not agreed to the suggestion. 50 Mtrs IR Range is as per MCL requirement. Cannot be modified.	No change in the NIT.
293	5	PTZ camera IR should be minimum 200 mtrs as this is industry standards and future requirement and wider night vision coverage .					Discussed at S. No. 35.	Mentioned at S. No. 35.
294	6	Storage calculation of HDD will be scope of bidder to consider their offered technology accordingly as Mcl has already given the no of days required and frame rate and mega pixel. We request to removed the storage TB in NVR asked in preNIT .					Not agreed to the suggestion. The minimum requirement of storage has to be fulfilled by the successful bidder.	No change in the NIT.

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
295	7			Bidder should be free to choose the difference oem based on their solution . Bidder should not be bound to take only one OEM for one group . Please remove this Clause to make bidder open to select many oem to make their bid more competitive and save cost which is interest of government of india .			The "Single OEM per group" clause has been kept in the NIT for easy interfacing, similar configurations and to ensure smooth services after commissioning and to reduce the number of variables in the maintenance process.	No change in the NIT.
	<b>Sr.No.</b>	<b>Pdf Page No.</b>	<b>Section/Clause</b>	<b>NIT Statement</b>	<b>Clarification Request / Change Request</b>			
296	1	3	2. Time Schedule of Tender:	The difference between Tender e-Publication date and Bid Submission end date is about 7 days.	We request you to kindly make the difference of dates by at least 21 days considering volume of Tender and minimum time period required to get all necessary documents for submission by bidder.		The date was only for the Pre-NIT Meeting. Actual tender shall have suitable time for bidders to prepare and submit their bids.	No change in the NIT
297	2	4	8. Eligibility Criteria: A. Work Experience:	If the referred work includes construction as well as maintenance after construction, the experience of such work may be considered as 'acceptable' if the construction part is completed as on the last date of 'eligibility period', even if maintenance work is ongoing, and the certificate issued clearly stipulates the same .	Kindly confirm that " <b>Final Acceptance Test"(FAT) Certificate</b> issued by <b>Head of Govt. Organisation</b> is acceptable in a project where construction as well as maintenance is involved in a similar job. Kindly confirm that a letter/FAT issued by Head of Govt. Organisation will be taken into consideration for qualification as a prospective bidder meeting all pre-qualification terms of NIT as an experienced bidder.		The certificate should certify that the work is completed, along with confirmation of all the information submitted online, as given in the NIT. Clause No. 8 and 9 of the NIT may please be referred to in this regard.	No change in the NIT
298	3	8	b. Confirmatory Documents Work Experience (Ref. Clause No.8(A) of NIT)	Satisfactory Work Completion Certificate issued by the employer against the experience of similar work containing all the information furnished by bidder on-line. In case of Sub-contractor suitable document as per provision of eligibility, if applicable. Work order, BOQ and/or TDS may be sought during clarification or along with deficient documents as per clause 13(B)	Kindly confirm that <b>Purchase Order / LOA and "Final Acceptance Test"(FAT) Certificate</b> issued by <b>Head of Govt. Organisation</b> is acceptable in a project where construction as well as maintenance is involved in a similar job. Kindly confirm that a letter/FAT issued by Head of Govt. Organisation will be taken into consideration for qualification as a prospective bidder meeting all pre-qualification terms of NIT as an experienced bidder.		Discussed at S. No. 297.	Mentioned at S. No. 297.
299	4	8	E. Purchase Preference under 'Make in India' Policy for "Local supplier".	In terms with the above said policy, Class-I local suppliers and Class-II local suppliers shall be eligible to bid.	Kindly consider the fact that there are many items which are mentioned in BoQ are not being manufactured in India such as Large Format Displays, Servers, NAS, Wireless equipment etc. Hence, provisions may be considered so that Indian manufactured products are accommodated as much as possible to meet requirements as Class-I Bidder.		Necessary guidelines are incorporated in the NIT.	No change in the NIT
300	5	8	E. Purchase Preference under 'Make in India' Policy for "Local supplier".	In terms with the above said policy, Class-I local suppliers and Class-II local suppliers shall be eligible to bid.	For Camera/NVR/NAS or Storage, we request you to kindly consider following requirements for genuine quality of products :- (1) OEM should have own factory in INDIA with ISO 9001:2008 and ISO 14001:2004 and ISO 45000 for manufacturing process. Documents need to be attached along with the bid. CCTV OEM should produce own INDIA factory license that prove OEM. (2) For camera : Quoted OEM should be member of ONVIF and same will cross check online in ONVIF website. (3)		Partially agreed to the suggestion. Please refer S. No 84.	Mentioned at S. No. 84.
301	6	81	SPECIAL TERMS AND CONDITIONS OF CONTRACT	ii. From Project Office to Area Office, LAN/ WAN or MPLS Bandwidth shall be provided by MCL. The system should be suitable configured to be accessible over this network. For the cameras installed in Projects, the monitoring at Area Office shall be done keeping in view the bandwidth limits.	Kindly mention available Bandwidth as the same will play very important role in getting proper result.		The bandwidth will be provided by MCL, and the monitoring at Area or MCL HQ shall be done with consideration to the bandwidth provided.	No change in the NIT

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302	7	81	SPECIAL TERMS AND CONDITIONS OF CONTRACT	iii. From Area Office or MCL Bhubaneswar to MCL HQ, LAN/ WAN or MPLS Bandwidth shall be provided by MCL. The system should be suitable configured to be accessible over this network. For the cameras installed in Areas, the monitoring at MCL HQ shall be done keeping in view the bandwidth limits.	Kindly mention available Bandwidth as the same will play very important role in getting proper result.		Discussed at S. No. 302.	Mentioned at S. No. 302.
303	8	82	SPECIAL TERMS AND CONDITIONS OF CONTRACT	Necessary NVR and NAS at each site have been incorporated in the BoQ for this purpose. However, if the storage turns out to be insufficient to meet the above requirement, the successful bidder shall provide additional storage devices to MCL to meet the above storage requirements without any additional cost to MCL.	Supply of additional storage devices to meet the storage requirements will have impact on cost. Kindly clarify that the storage will not have provision for future camera upgradations in the same system.		Incase the number of cameras or the recording resolution of cameras are increased in the future, than those specified in this tender, then additional storage capacity, if required, shall be arranged by MCL.	No change in the NIT
304	9	82	SPECIAL TERMS AND CONDITIONS OF CONTRACT	MCL has considered all equipment in the BoQ for fulfillment of objectives of the system. However, if any items/ equipment/ system are required in addition to BoQ for fulfillment of the aforementioned objectives, the same should be supplied, installed and maintained by the successful bidder without any additional cost to MCL..	Supply of additional items/ equipment/ system are required in addition to BoQ for fulfillment of the objectives will have impact on cost. Kindly clarify that there will be no provision for future camera upgradations in the same system.		The objectives of the system does not provide for additional cameras to be installed without additional cost to MCL. It is specific to the network, storage and monitoring of the surveillance system.	No change in the NIT
305	10	83	SPECIAL TERMS AND CONDITIONS OF CONTRACT	However, any additional item, accessories and related jobs necessary for completion of the installation as per scope of work, will be presumed as included even if not specifically mentioned in BOQ/NIT, and the successful bidder will provide them without any extra cost.	Supply of additional items/ equipment/ system are required in addition to BoQ for fulfillment of the objectives will have impact on cost. Kindly clarify that there will be no provision for future camera upgradations in the same system.		The clause clearly specifies additional item, accessories and related jobs necessary for completion of the system, therefore the question of future camera upgradation doesn't arise.	No change in the NIT
306	11	83 to 84	SPECIAL TERMS AND CONDITIONS OF CONTRACT	The entire CCTV Surveillance Network should be Secure from Cyber Threats with proper cyber security using Anti-Virus at the NVR/ Video Management Server level or through a separate firewall at each Unit of MCL, where the CCTV Network is connected to the internet or to the Private Network of MCL.	Kindly note that existing Anti-Virus or Firewalls are not mentioned in BOQ. When existing Anti-Virus or Firewalls are used, kindly confirm that who will configure security parameters (i.e. MCL or Bidder).		There are no existing Anti-Virus or Firewalls, and therefore this clause has been kept to include the security from cyber threats in the job of the bidder, including the configuration of security parameters.	No change in the NIT

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307	12	85	SPECIAL TERMS AND CONDITIONS OF CONTRACT	The OEM of Cameras and NVR (Same OEM for all cameras and NVR i.e. S. No 1 to 9 of the BoQ), shall confirm that they shall provide necessary spares, hardware, software and support services as required to the bidder during warranty period (one year from the date of commissioning of the entire system) and subsequent six years Comprehensive Annual Maintenance Contract Period.	Kindly ask OEM to include this statement while issuing MAF.		This is a part of the Annexure C of the NIT i.e. Technical Compliance Sheet, which is to be signed by the OEM.	No change in the NIT
308	13	85	SPECIAL TERMS AND CONDITIONS OF CONTRACT	All Fiber Cores (used/Spare), are to be duly terminated on the Fiber patch panels, and all required accessories like adaptors, couplers etc. required to achieve this should be supplied. In case additional pigtailed are required for such termination; they have to be supplied by the successful bidder free of cost to MCL. Wherever additional CAT-6 or OFC Patch Cords are required for connecting the Switch to LIU, or connecting the switch to CAT-6 Patch Panel, the same has to be provided by the Successful bidder without any additional cost to MCL.	Kindly confirm that you require all SFP/UTP ports in data switches to be made available/operative.		All ports in the Switches should be available and operative for use as and when required. However, in many cases all the ports shall not be used in the switch from Day 1.	No change in the NIT
309	14	87	SPECIAL TERMS AND CONDITIONS OF CONTRACT	d) Any damage caused to the equipment/system due to lightning and/or abnormal power supply has to be rectified/repared by the bidder without any extra cost to MCL during warranty and CAMC period.	We request you not to keep this term applicable in cases of Fire, natural calamity, theft and willful physical damage which are beyond Bidder's control.		The referred clause is very clear and descriptive. The entire clause no. 26 of the Special Terms and Conditions may be referred to in this regard.	No change in the NIT
310	15	89	SPECIAL TERMS AND CONDITIONS OF CONTRACT	The Successful bidder will provide onsite training to operational/Technical Personnel of MCL of the respective Areas, (deputed by the concerned engineer-in charge ) and also users during/ on installation and maintenance of the System. In addition, the Party will also arrange a training for up to 20 Technical personnel (in batches) of MCL on the Camera, switches & server/ NAS at Developer/OEM/OEM authorized centre/ premises, free of cost, if desired by MCL. However the same may be decided in consultation with GM(E&T), MCL. The cost of training has to be borne by the bidder, however TA/DA cost and accommodation of MCL personnel will be borne by MCL.	We request you to kindly keep this number within 10 participants for 2 days each OEM. Also, kindly note that the O&M phase of the project is for 7 years and the same will be maintained by support personnel of Bidder.		Not agreed to the suggestion.	No change in the NIT

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311	16	90	SPECIAL TERMS AND CONDITIONS OF CONTRACT	During the warranty and CAMC period, MCL has the right to change the deployment of Service Personnel between Areas with 15 days notice. The successful bidder, at their own cost, can add the number of Service Personnel at any Area of MCL if deemed fit.	Kindly make it 30 days notice period so as to arrange & post new Service Personnel.		The 15 days notice period is for change of place of posting of Service Personnel, and not for additional or new Service Personnel. Therefore the suggestion is not agreed to.	No change in the NIT
312	17	136	Item Rate BoQ Item No.69	Estimated Cost of Comprehensive AMC for six years after one years warranty - Rs.1,27,86,790.94	Kindly re-consider this amount as salary of 28 engineers / technical personnel (ref: Pdf page - 90) would be much higher. Also, services, spares,/stand-by materials, logistics and other costs are needed to be added.		The estimated cost of Rs. 1,27,86,790.94 is that of one year CAMC Cost, and not the entire 6 years duration. The same shall be clarified in the final BoQ	The estimated cost shall be clarified in the BoQ accordingly.
313	18	246	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2 MP IP Camera, Bullet Type, min. 50 m IR: Simultaneous Connections:20 or more	For Bullet camera the Standard Simultaneous connections are Max 5 or 6 as per the Standard OEM offering and testing.If viewing of camera is more than 6 connections then there will be load on the Camera hardware by thus resulting in performance deterioration & hardware life. Hence we request you to kindly amend the clause from Simultaneous connections 20 or more to upto 6 simultaneous connections.		Discussed at S. No. 33.	Mentioned at S. No. 33.
314	19	247	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : Focal Length(mm): 4.5 to 162	For PTZ camera for 36X optical zoom the higher side of the lens should be upto 205 mm for better details and longer coverage Hence we request you to kindly amend the Clause from 4.5 to 162mm to 5.7 mm to 205.2 mm		Discussed at S. No. 34.	Mentioned at S. No. 34.
315	20	247	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : IR illumination Range(mtr): 150	For 36X PTZ camera the Standard coverage IR distance should be minimum 200 Mtrs as 150 Mtrs will be covered by 30X optical zoom lens camera as a Standard. Hence we request you to kindly amend the Clause from IR illumination Range(mtr): 150 to IR illumination Range min. 200 Mtrs.		Discussed at S. No. 35.	Mentioned at S. No. 35.
316	21	248	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	2MP IP Camera, PTZ Type, min. 150 m IR : Power Input: POE	PTZ cameras generally works on 24VAC or Hi-POE as they require higher Power due to it motor operation as compared to Normal Bullet or Dome which Generally works on POE. Hence request you to kindly amend the Clause of Power Input : POE to Power Input: 24VAC or Hi-POE		Discussed at S. No. 36.	Mentioned at S. No. 36.
317	22	249	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	There are separate cameras for Face recognition,Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we		Discussed at S. No. 37.	Mentioned at S. No. 37.
318	23	249	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA,WPA2,TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability Hence we request you to kindly remove the clause from HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)		Discussed at S. No. 38.	Mentioned at S. No. 38.
319	24	250	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded: Page Preview: Electronic Map	Electronic Map or E-map is the feature of VMS Software where opertor can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.		Discussed at S. No. 39.	Mentioned at S. No. 39.
320	25	250	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 128 Channel with inbuilt 128 TB Storage fully loaded :Camera Notification : Spot (POP up Window) on Event, E-mail, SMS	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software		Discussed at S. No. 40.	Mentioned at S. No. 40.
321	26	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 4	Generally for 64 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos		Discussed at S. No. 41.	Mentioned at S. No. 41.



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322	27	252	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Discussed at S. No. 42.	Mentioned at S. No. 42.
323	28	252	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP	Electronic Map or E-map is the feature of VMS Software where opertor can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Discussed at S. No. 43.	Mentioned at S. No. 43.
324	29	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded: Page Preview: Electronic Map	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we	Discussed at S. No. 44.	Mentioned at S. No. 44.
325	30	253	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 64 Channel with inbuilt 64 TB Storage fully loaded : Camera Notification: Spot (POP up Window) on Event, E-mail, SMS	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Electronic Map or E-map is the feature of VMS Software where opertor can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Discussed at S. No. 45.	Mentioned at S. No. 45.
326	31	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: No of USB Ports: 4	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Discussed at S. No. 46.	Mentioned at S. No. 46.
327	32	255	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Electronic Map or E-map is the feature of VMS Software where opertor can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Discussed at S. No. 47.	Mentioned at S. No. 47.
328	33	255	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Discussed at S. No. 48.	Mentioned at S. No. 48.
329	34	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: Page Preview: Electronic Map	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Electronic Map or E-map is the feature of VMS Software where opertor can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.	Discussed at S. No. 49.	Mentioned at S. No. 49.
330	35	256	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 64 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E-mail, SMS	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software	Generally for 32 channel NVR have Standard 3 Nos USB ports: Front panel: 2 x USB 2.0; Rear panel: 1 x USB 3.0 as a standard offering by most of the OEM so 3 Nos. will suffice the requirement of USB function. Hence we request you to kindly remove the Clause of No of USB ports: 4 to No of USB ports required Min.3 Nos	Discussed at S. No. 50.	Mentioned at S. No. 50.
331	36	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: No of USB Ports: 4	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Discussed at S. No. 51.	Mentioned at S. No. 51.
332	37	258	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Discussed at S. No. 52.	Mentioned at S. No. 52.
333	38	258	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL), HTTP (SSL/TSL) encryption standards as WPA, WPA2, TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL), HTTP (SSL/TSL), WPA, WPA2, TKIP to only HTTPS (SSL/TSL), HTTP (SSL/TSL)	Discussed at S. No. 53.	Mentioned at S. No. 53.

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
334	39	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: Page Preview: Electronic Map	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.		Discussed at S. No. 54.	Mentioned at S. No. 54.
335	40	259	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 32 Channel with inbuilt 32 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E-mail, SMS	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software.		Discussed at S. No. 55.	Mentioned at S. No. 55.
336	41	261	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such special camera requirement with these features in the Project. Hence we		Discussed at S. No. 56.	Mentioned at S. No. 56.
337	42	261	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA,WPA2,TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)		Discussed at S. No. 57.	Mentioned at S. No. 57.
338	43	262	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded: Page Preview: Electronic Map	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.		Discussed at S. No. 58.	Mentioned at S. No. 58.
339	44	262	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 16 Channel with inbuilt 16 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E-mail, SMS	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software		Discussed at S. No. 59.	Mentioned at S. No. 59.
340	45	264	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded : Video Content Analytics (VCA): Face Recognition, Object counting, Number Plate Recognition	There are separate cameras for Face recognition, Object counting & Number plate recognition and the Algorithm is inbuilt in these cameras as these cameras can only send structured data to backend by extracting the useful data from incoming streams so bandwidth consumption is less but if you require these functions at NVR end then there will be huge bandwidth consumption from all cameras and then NVR will do the extraction so that will unnecessary increase the Project cost. Also there is no such		Discussed at S. No. 60.	Mentioned at S. No. 60.
341	46	264	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded : Type of Encryption: HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP	For Enterprise level Projects we use Wired NVR which supports HTTPS (SSL/TSL),HTTP (SSL/TSL) encryption standards as WPA,WPA2,TKIP are Wireless Standards which are used by Wireless NVR and they are not recommended for Enterprise projects for better stability. Hence we request you to kindly remove the clause from HTTPS (SSL/TSL),HTTP (SSL/TSL),WPA,WPA2,TKIP to only HTTPS (SSL/TSL),HTTP (SSL/TSL)		Discussed at S. No. 61.	Mentioned at S. No. 61.
342	47	265	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded: Page Preview: Electronic Map	Electronic Map or E-map is the feature of VMS Software where operator can check for All the Cameras on a Map like Graphics and it comes as a Standard feature supported by Most of OEM as a VMS Software function Hence we request you to kindly remove the Clause of Page Preview: Electronic Map from NVR end and include in VMS feature.		Discussed at S. No. 62.	Mentioned at S. No. 62.
343	48	265	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	NVR 8 Channel with inbuilt 16 TB Storage fully loaded: Camera Notification: Spot (POP up Window) on Event, E-mail, SMS	Pop up Window on Event is the function of VMS Software as a standard practise and followed by almost all the OEM's and for SMS feature we will require a separate hardware. Hence we would request you to kindly remove the clause of Spot (POP up Window) on Event ,SMS and include in VMS Software		Discussed at S. No. 63.	Mentioned at S. No. 63.
344	49	278	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 192 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box.Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB(installed)/64GB(supported)		Discussed at S. No. 64.	Mentioned at S. No. 64.

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345	50	278	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 192 TB : Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV)	FTP,HTTP,HTTPS,Network File System(NFS),Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so we would request you to kindly amend the clause of DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV) to Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)	Discussed at S. No. 65.	Mentioned at S. No. 65.	
346	51	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box.Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB(installed)/64GB(supported)	Discussed at S. No. 66.	Mentioned at S. No. 66.	
347	52	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV)	FTP,HTTP,HTTPS,Network File System(NFS),Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so we would request you to kindly amend the clause of DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV) to Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)	Discussed at S. No. 67.	Mentioned at S. No. 67.	
348	53	279	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 120 TB : Data Link Protocol: Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet	10 Gig Ethernet is not mandatory for NAS Box as 1 Gig Ethernet is fairly sufficient for Data Storage or Management with smooth operation & Also using 10G port will increase unnecessary cost for Project . Hence we request you to kindly amend the clause from Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet to Ethernet, Fast Ethernet, Gigabit Ethernet.	Discussed at S. No. 68.	Mentioned at S. No. 68.	
349	54	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : RAM Installed: DRAM 48 GB (installed) / 288 GB (supported)	Such a High Capacity DRAM is not required for NAS operations as 16GB(installed)/ 64GB(supported) is the standard for NAS Boxes and will suffice the requirement for NAS and also it will unnecessarily increase the cost of NAS Box.Hence we request you to kindly amend the clause of DRAM 48 GB (installed) / 288 GB (supported) to 16GB (installed)/ 64GB(supported)	Discussed at S. No. 69.	Mentioned at S. No. 69.	
350	55	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV)	FTP,HTTP,HTTPS,Network File System(NFS),Server Message Block (SMB) are Standard Network Services in Market as the term Web-based Distributed Authoring and Versioning (Web DAV) is not a standard protocol for NAS Boxes and generally not useful when it comes to operational activity so we would request you to kindly amend the clause of DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB), Web-based Distributed Authoring and Versioning (Web-DAV) to Network Services Compatibility: DHCP, DNS, FTP, FTPS, HTTP, HTTPS, Network File System (NFS), Server Message Block (SMB)	Discussed at S. No. 70.	Mentioned at S. No. 70.	
351	56	280	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Network Attached Storage (NAS) - 48 TB : Data Link Protocol: Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet	10 Gig Ethernet is not mandatory for NAS Box as 1 Gig Ethernet is fairly sufficient for Data Storage or Management with smooth operation & Also using 10G port will increase unnecessary cost for Project . Hence we request you to kindly amend the clause from Ethernet, 10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet to Ethernet, Fast Ethernet, Gigabit Ethernet.	Discussed at S. No. 71.	Mentioned at S. No. 71.	
352	57	281	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP				
353	58			1000 Base SFP Port : 2 nos.	Switch generally comes with open SFP slots. Requesting you to clarify whether transceiver models need to be loaded with the switch or not. If Yes, than please specify whether single mode OR multimode transceivers need to be offered.	Open SFP Slots are referred to as SFP Ports only. They are fitted with SFP Modules which have been considered in the BoQ separately.	No change in the NIT	
354	59			Switching Capacity -Non Blocking (Gbps) : 10 Gbps or higher	Total 10Nos. Of 1Gbps ports are required in this switch. So for the non-blocking architecture, in full-duplex mode, the minimum required switching bandwidth is 20Gbps. Therefore requesting you to kindly revise this specification from 10Gbps or higher to 20Gbps or higher	Discussed at S. No. 91.	Mentioned at S. No. 91.	
355	60			Throughput (MPPS) : 24 or higher	As per the total required port density (10nos. Of 1Gbps	Discussed at S. No. 91.	Mentioned at S. No. 91.	

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356	61			Port Trunking : Upto 8 ports per group or better, dynamic LACP or static aggregation	Since this switch is going to be used as access switch connecting cameras to its copper PoE ports. So in the copper PoE ports port trunking will never be configured. For uplink purpose, only two 1G SFP based ports are asked. So maximum 2nos. Of ports can be grouped in LACP. We are requesting you to kindly change the port trunking support to maximum 4 ports per group instead of 8 ports per group.		Not agreed to the suggestion. Although these switches shall be primarily used as access switches, MCL may use them in future to expand internal network and services.	No change in the NIT
357	62			Operating Temperature Range (Degree C): 0 to 60° C	For any standard industrial grade switch, the minimum operating temperature is -20 to +70 Degree C. Therefore requesting you to change it.		The operating temperature has been specified based on the environmental conditions in which the switch shall be subjected to work.	No change in the NIT
358	63			IPv6 Ready from day one and duly certified: Yes	The switch should be IPv6 Ready from day one. But certification is available with few specific OEMs. For maximum OEM participation, we are requesting you to accept the switches with only		Discussed at S. No. 96.	Mentioned at S. No. 96.
359	64			PoE Power Budget ( Watt ) : 130 or higher	There are 8nos. Of Copper ports with PoE+ support is required. As per calculation, total required PoE power budget of the switch should be 8* 30Watt (For PoE+) = 240Watt. Requesting you to		Discussed at S. No. 97.	Mentioned at S. No. 97.
360	65	282	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Item No. 16: Layer 3 Managed Switch with 24 Port SFP + 4 x 10/100/1000 BaseT Ports				
361	66			IPv6 Ready from day 1 and duly certified : Yes	The switch should be IPv6 Ready from day one. But certification is available with few specific OEMs. For maximum OEM participation, we are requesting you to accept the switches with only IPv6 Ready from day one.		Agreed to the suggestion. It was discussed in the meeting and agreed that certification is not necessary for IPv6 working, and is very limited.	Item No. 16: IPv6 Ready from day one - Yes
362	67			Switching capacity: 88 Gbps or better, non blocking	Total 28Nos. Of 1Gbps ports (24nos. of 1G SFP + 4nos. 10/100/1000BaseT ports) & 2nos. of Stacking ports of 40Gbps stacking bandwidth is required in this switch. So for the non-blocking architecture, in full-duplex mode, the minimum required switching bandwidth is 96Gbps (2*24*1Gbps + 2*4*1Gbps + 40Gbps). Therefore requesting you to kindly revise this specification from 88Gbps or		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
363	68			Forwarding performance : 65 Mpps or better	As per the total required port density (28Nos. Of 1Gbps ports & 2nos. of stacking ports (40Gbps)), the minimum required throughput (for 64bytes packet size) for wire-speed performance under fully loaded condition is 71.42Mpps. Therefore requesting you to kindly revise the throughput from 65Mpps to 71.42Mpps		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
364	69	284	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Layer 3 Managed Switch with 24 x 10/100/1000 BaseT Ports and 4 SFP Ports				
365	70			IPv6 Ready from day 1 and duly certified : Yes	The switch should be IPv6 Ready from day one. But certification is available with few specific OEMs. For maximum OEM participation, we are requesting you to accept the switches with only IPv6 Ready from day one.		Agreed to the suggestion. It was discussed in the meeting and agreed that certification is not necessary for IPv6 working, and is very limited.	Item No. 17: IPv6 Ready from day one - Yes
366	71			Switching capacity: 88 Gbps or better, non blocking	Total 28Nos. Of 1Gbps ports (24nos. 10/100/1000BaseT ports + 4nos. SFP slots) & 40Gbps stacking bandwidth is required in this switch. So for the non-blocking architecture, in full-duplex mode, the minimum required switching bandwidth is 96Gbps (2*24*1Gbps + 2*4*1Gbps + 40Gbps). Therefore requesting you to kindly revise this specification from 88Gbps or higher to 96Gbps or higher.		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
368	72			Forwarding performance : 65 Mpps or better	As per the total required port density (28Nos. Of 1Gbps ports & stacking bandwidth of 40Gbps), the minimum required throughput (for 64bytes packet size) for wire-speed performance under fully loaded condition is 71.42Mpps. Therefore requesting you to kindly revise the throughput from 65Mpps to 71.42Mpps		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
369	73	286	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE and 4 SFP Ports				
370	74			Switching capacity: 48 Gbps or better, non blocking	Total 28Nos. Of 1Gbps ports (24nos. 10/100/1000BaseT ports + 4nos. 1000Base-X SFP ) are required in this switch. So for the non-blocking architecture, in full-duplex mode, the minimum required switching bandwidth is 56Gbps (2*24*1Gbps + 2*4*1Gbps). Therefore requesting you to kindly revise this specification from 48Gbps or higher to 56Gbps or higher		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
371	75			Forwarding performance : 36 Mpps or better	As per the total required port density (28Nos. Of 1Gbps ports), the minimum required throughput (for 64bytes packet size) for wire-speed performance under fully loaded condition is 41.66Mpps. Therefore requesting you to kindly revise the throughput from 36Mpps to 41.66Mpps		It is not expected to use all ports of the switch in full capacity at all times, and therefore the suggestion is not agreed to.	No change in the NIT
372	76			IPv6 Ready from day 1 and duly certified : Yes	The switch should be IPv6 Ready from day one. But certification is available with few specific OEMs. For maximum OEM participation, we are requesting you to accept the switches with only IPv6 Ready from day one.		Agreed to the suggestion. It was discussed in the meeting and agreed that certification is not necessary for IPv6 working, and is very limited.	Item No. 18: IPv6 Ready from day one - Yes

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373	77			b. 10/100/1000 BaseT (RJ45): Atleast 24 Nos. with PoE.	24 x 10/100/1000 BaseT Ports with PoE ports are required in this switch. But required PoE power budget of the switch is not mentioned. Requesting you to kindly include the following specification in this switch. Minimum PoE power budget: 370Watt		Agreed to the suggestion. For 24 ports running on PoE with 15.4 watts, 370 W power budget is needed.	Item No. 18: Power Budget - 370 watts
374	78	288	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT					
375	79			Wavelength: 1310 / 1490 nm	Requesting you to also include 1550nm wavelength supported SFP modules		Agreed to the suggestion. Single Mode Fiber works in 1310 and 1550 nm wavelength.	Wavelength: Should be able to work in both 1310nm and 1550 nm
376	80	288	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Single Mode Media Converter				
377	81			Ports : 2 x 1000M SC/UPC port	Please clarify whether 2Nos. Of 1000Mbps SC FO ports are required OR Single Duplex type (Tx+Rx)		Discussed at S. No. 251.	Mentioned at S. No. 251.
378	82			Environment	Operating Temperature: 0 deg C to 60 deg. C is asked. This type of operating temperature is supported in industrial grade media converter. Therefore requesting you to include Industrial Grade Media Converter for this requirement		The operating temperature has been specified based on the environmental conditions in which the switch shall be subjected to work. The Media Converter or any other equipment should be provided according to the specifications whether or not the name of the equipment specifies a particular class.	No change in the NIT
379	83	32,13,22,323	ANNEXURE B: TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	Fiber LIU				
380	84			Removable Rare & Front Cover for better access to interior of LIU	Once the LIU is installed in the rack, it is not possible to remove the Rare cover. Hence, it should be considered removable Rare & Front cover for better access to interior of LIU		Discussed at S. No. 482.	Mentioned at S. No. 482.
	<b>S.No</b>	<b>Section</b>	<b>Point No. &amp; Page No</b>	<b>Content</b>	<b>Clarification Sought</b>	<b>Changes Proposed</b>		
381	1	ANNEXURE B - TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	26-19, Page 296	Latency < 3 ms	Latency depends on various factors like the network latency, distance of the link etc. Hence, typical system latency maintained for UBR is <10ms. Hence request to ask for Latency less than 10ms.	<b>Latency &lt; 10 ms</b>	Agreed to the suggestion. For CCTV application also, 10 ms latency is acceptable. This shall also enhance the competition.	Latency: < 10ms, but should not affect the CCTV Data feed.
382	2		26-27, Page 296	Humidity - 100% condensing	No device can comply with a relative humidity of up to 100%, at most this can be complied to 5 to 95%(non condensing), which would also suffice the given requirements. We would hence request you to kindly amend the clause accordingly.	<b>Humidity - 5 to 95% (non condensing)</b>	Discussed at S. No. 272	Mentioned at S. No. 272
383	3		27-19, Page 297	Latency < 3 ms	Latency depends on various factors like the network latency, distance of the link etc. Hence, typical system latency maintained for UBR is <10ms. Hence request to ask for Latency less than 10ms.	<b>Latency &lt; 10 ms</b>	Agreed to the suggestion. For CCTV application also, 10 ms latency is acceptable. This shall also enhance the competition.	Latency: < 10ms, but should not affect the CCTV Data feed.
384	4		27-27, Page 297	Humidity - 100% condensing	No device can comply with a relative humidity of up to 100%, at most this can be complied to 5 to 95%(non condensing), which would also suffice the given requirements. We would hence request you to kindly amend the clause accordingly.	<b>Humidity - 5 to 95% (non condensing)</b>	Discussed at S. No. 285	Mentioned at S. No. 285

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QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS									DISCUSSIONS AND RESULTS	
S. No	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT		
	S.No	Section	Point No.	Page No.	Content	Clarification Sought				
385	1	Annexure B, TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	15 8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	281	Throughput (MPPS): 24 or higher	8-port Giga Switch Capacity cannot exceed 18 MPPS as per standards. Kindly change it to 18 MPPS	Discussed at S. No. 91.	Mentioned at S. No. 91.		
386	2	Annexure B, TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	15 8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	281	VLAN: Port Based VLAN, 802.1Q tag VLAN, GVRP dynamic	Request to include option for MVRP as GVRP is obsolete as per industry standards and is replaced by MVRP.	Not agreed to the suggestion. Bidders have the option to provide items of higher specifications.	No change in the NIT		
387	3	Annexure B, TECHNICAL SPECIFICATIONS OF ALL EQUIPMENT	15 8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	281	IPv6 Ready from day one and duly certified: Yes	Please allow to submit in-house LAB report of IPv6 for such switches instead of certifications. Such IPv6 ready certification is usually valid for L3 devices and not L2 switches. Request to include the option of providing in-house LAB test report also.	Discussed at S. No. 96.	Mentioned at S. No. 96.		
	Sl no	Page & Clause no	Description			Remarks				
388	1	14 & L	In case the tendered work cannot be split, MSE shall be awarded full work provided their quoted price is			Is this a splittable job	No	No change in the NIT		
389	2	31 & 97 a	Payment for 80% of the total value of the work executed at a particular Area (including all under the Area) will be made after Supply, Installation, Testing and successful trial run of the complete system and issue of System Acceptance Certificate by the concerned Engineer-in-charge/ Site in-charge of the complete system for that particular Area. Balance 20% payment will be made after successful commissioning & acceptance by the concerned engineer-in-charge/ site in-charge, subject to Supply, Installation, Testing, Trial run and commissioning, of the complete system at all the Areas as mentioned in the work order and issue of a combined (for all the Areas) final Installation & Commissioning certificate by the GM(E&T), MCL HQ.			85% against supply on prorata basis, 10% against Installation on prorata basis 5% on Commissioning Credit Period - 7days If installation delays for more than 3months from the schedule due to reasons not attributable to Vendor payment due against installation and commissioning should be released against BG	Discussed at S. No. 7.	Mentioned at S. No. 7.		
390	3	31 & 97 b	For Comprehensive Annual Maintenance Contract: The Payment against CAMC will be made on quarterly basis after successful completion of the quarter, after			Quarterly advance within 7days of bill submission	Not agreed to the suggestion. Payment Terms shall remain same.	No change in the NIT		
391	4	Additional clause proposed - 1	Limitation of Liability: To the extent Permitted by law. The maximum liability of Successful Bidder to MCL arising out of or in connection with this Contract, whether such liability arises from any claim based upon contract, warranty, tort or otherwise, shall in no case exceed the actual amount paid to Honeywell/ Successful				Not agreed to the suggestion. This is not a standard term in CIL NIT.	No change in the NIT		
392	5	Additional clause proposed - 2	COVID-19: Notwithstanding anything to the contrary, in light of the COVID-19 pandemic, the effects of which cannot be foreseen, the parties agree that Successful Bidder shall be entitled to an equitable extension of time to deliver or perform its work and appropriate additional compensation to the extent Successful Bidder's				Please refer Clause No. 6 of the GTC.	No change in the NIT		
393	6	Additional clause proposed - 3	Intellectual Property: Successful Bidder hereby grants to MCL a non-exclusive, non-sub licensable and perpetual license and right to use the deliverables, formats, material and the documentation solely for MCL's own internal business				Not agreed to the suggestion. This is not a standard term in CIL NIT.	No change in the NIT		
394	7	Additional clause proposed - 4	Termination: Successful Bidder may terminate this Contract for cause (including, but not limited to MCL's failure to make payments as agreed herein) after giving MCL written notice of its intent to terminate. If, within seven (7) days following receipt of such notice, MCL fails to make the payments then due, or otherwise fails to				Not agreed to the suggestion. This is not a standard term in CIL NIT.	No change in the NIT		
	Sl no	Page & Clause no	Description		Remarks					
395	1	Page 269. Centralized video management software	Number of cameras to be replayed simultaneously by the offered product - 64nos		Kindly make the Maximum Number of cameras to be replayed simultaneously 22 nos		Not agreed to the suggestion. 64 cameras can be replayed simultaneously.	No change in the NIT		
396	2	Page 269. Centralized video management software	16 Number of monitor for displaying live video with one server /workstation		Kindly Maximum Number of monitor for displaying live video with one server /workstation - 4nos		Discussed at S. No. 181.	Mentioned at S. No. 181.		
397	3	Page 272	16 Number of monitor for displaying live video with one server /workstation		Kindly Maximum Number of monitor for displaying live video with one server /workstation - 4nos		Discussed at S. No. 181.	Mentioned at S. No. 181.		

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
398	4	Page 270		Centralized Network Video Management Cyber-security Parameters	Kindly Remove Cyber-security Parameters NIST		Agreed to the suggestion. NIST Compliance is a US government regulation for Defence related network products, therefore not needed here.	Cyber-security Parameters: 1. HTTPS encryption, 2. SSL/TLS, 3. Complex passwords, 4. HMAC Digital Authentication, 5. user lockout, 6. Digital Watermarking,
399	5	Page 243, 245, 247, 249 and all other pages applicable		Supported Compression Technique H.265+	Kindly revise it to H.265 instead of H.265+		Not agreed	No change in the NIT
400	6	No Of video tiles enable on a single digital monitor		No Of video tiles enable on a single digital monitor - 100	Generally we set the monitor with 9 or 16 in single monitor and its toggles with defined time period like 4/5 sec, kindly make it 16nos max		Discussed at S. No. 185	Mentioned at S. No. 185
401	7	Page 249		Minimum throughput 1024 for 128 channel NVR	Kindly make max Network bandwidth/throughput : 800 Mbps		Discussed at S. No. 111.	Mentioned at S. No. 111.
	<b>S. No</b>	<b>Page no</b>	<b>Point no 11</b>	<b>Suggestion /Queries</b>	<b>Benefits /Remarks</b>			
402	1	84	item (1 to 9)	In Dome, Bullet and PTZ and NVR should have CE, FCC, UL/BIS & Onvif profile S Certification	To get good quality product and Onvif will help for third party integration and interoperability and future scalability.		Partially agreed to the suggestion. Not agreed for CE, FCC, UL Certifications.	Mentioned at S. No. 84.
403	2	243-279	Technical specification Annexure B	Pre NIT specification				
404	3	Item no 1 dome Dome camera	Video Streaming :Triple compressed stream	Video Streaming :Quad compressed stream@ 30fps	This will help further for video analytics processing, future technology advancement , and get true color imaze		Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
405	4	Minimum Illumination for Capturing Color Image:0.01 lux	Minimum Illumination for Capturing Color Image:0.1 lux	This helps for wider participation and fulfill the site conditions			Agreed to the suggestion. For wider participation	Minimum Illumination for Capturing Color Image: 0.1 lux
406	5	SD Card Memory(GB) :128 or higher (To be provided with the Camera)	SD Card Memory(GB): 256 or higher (To be provided with the Camera)				Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
407	6	Item No. 2: 2 MP IP Camera, Bullet Type, min. 50 m IR	2 MP IP Camera, Bullet Type, min. 50 m IR	2 MP IP Camera, Bullet Type, min. 30 m IR	This helps for wider participation and fulfills the site conditions. Industry standard is 30 Mtrs IR. Please amend with 30 Mtrs IR		Discussed at S. No. 292.	Mentioned at S. No. 292.
408	7	Video Streaming :Triple compressed stream	Video Streaming :Quad compressed stream@ 30fps	This will help further for video analytics processing , future technology advancement , and get true color imaze			Not agreed to the suggestion.	No change in the NIT
409	8	Minimum Illumination for Capturing Color Image:0.01 lux	Minimum Illumination for Capturing Color Image:0.1 lux	This helps for wider participation and fulfill the site conditions			Agreed to the suggestion. For wider participation	Minimum Illumination for Capturing Color Image: 0.1 lux
410	9	Item No. 3: 2MP IP Camera, PTZ Type, min. 150 m IR	2MP IP Camera, PTZ Type, min. 150 m IR	2MP IP Camera, PTZ Type, min. 250 m IR	This will help further for more night vision coverage. Future technology advancement and get quality imaze at desired by user Mtrs IR. So buffer we suggest to keep 250 Mtrs IR Range		Discussed at S. No. 35.	Mentioned at S. No. 35.

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411	10	Focal Length(mm) 4.5 - 162	Focal length should be open to meet zoom and IR distance	Each manufacturer having own set of focal length to meet the IR and optical and digital zoom. So please make it open for wider participation			Discussed at S. No. 34.	Mentioned at S. No. 34.
412	11	Video Streaming :Triple compressed stream	Video Streaming :Quad compressed stream@ 30fps	This will help further for video analytics processing, future technology advancement, and get true color imaze			Not agreed to the suggestion.	No change in the NIT
413	12	Item No. 4: NVR 128 Channel with inbuilt 128 TB Storage fully loaded	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Item No. 4: NVR 128 Channel	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to consider their offered technology. This would be fair and bidder responsibility to give appropriate storage .		Discussed at S. No. 294.	Mentioned at S. No. 294.
414	13	Item No. 5: NVR 64 Channel with inbuilt 64 TB Storage fully loaded	NVR 64 Channel with inbuilt 64 TB storage fully loaded with dual redundant power supply and RAID 0,1,5,10 are option should be there	NVR 64 Channel with dual redundant power supply and RAID 0,1,5,10 are option should be there	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to their offered technology. This would be fair and bidder responsibility to give appropriate storage.		Discussed at S. No. 294.	Mentioned at S. No. 294.
415	14	Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded	NVR 32 Channel with inbuilt 64 TB Storage fully loaded	NVR 32 Channel with RAID facility	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to their offered technology. This would be fair and bidder responsibility to give appropriate storage.		Discussed at S. No. 294.	Mentioned at S. No. 294.
416	15	Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded	NVR 32 Channel with inbuilt 32 TB Storage fully loaded	NVR 32 Channel with RAID facility	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to their offered technology. This would be fair and bidder responsibility to give appropriate storage.		Discussed at S. No. 294.	Mentioned at S. No. 294.
417	16	Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded	NVR 16 Channel with inbuilt 16 TB Storage fully loaded	NVR 16 Channel	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to their offered technology. This would be fair and bidder responsibility to give appropriate storage.		Discussed at S. No. 294.	Mentioned at S. No. 294.
418	17	Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded	NVR 8 Channel with inbuilt 16 TB Storage fully loaded	NVR 8 Channel	Storage loading should be optional to calculate by bidder to achieve the requirement .of no of days storage required. It's should be in bidder scope to calculate to their offered technology. This would be fair and bidder responsibility to give appropriate storage.		Discussed at S. No. 294.	Mentioned at S. No. 294.
419	18	Number of HDMI Ports :2	Number of HDMI Ports :1	Global industry standard and wider participation			Discussed at S. No. 80.	Mentioned at S. No. 80.
420	19	Number of USB Ports 4	Number of USB Ports :2	Global industry standard and wider participation			Agreed to the suggestion. For wider participation	No. of USB Ports: 2



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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
	Page No.	S.No.	Parameter	Specifications	Change Amendment requested	Justification		
<b>Item No. 1: 2 MP IP Camera, Dome Type, minm. 30 m IR</b>								
421	243	14	Video Streaming	Triple compressed stream	Quad stream with each stream should support H.265 compression.	The benefit of this multi-streaming is that it saves significant client-side bandwidth and processing power. Camera should be at least equipped with four streams so that local live view, recording and remote viewing can be done seamlessly without much impacting the network bandwidth and processing of machines, each stream should be equipped with H.265 compression to have the maximum benefit of the multiple streaming camera. Kindly consider Quad stream camera with each stream support H.265 compression.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
422	243	30	Electronic Shutter Speed(sec)	1/3 to 1/10000	1/5 s to 1/100000 s	Shutter speed is the length of time your camera shutter is open, exposing light onto the camera sensor, too low shutter speed allows more exposure time because of the moving object appears complete blur which is not recommended for surveillance system . Kindly consider the generic shutter speed and amend it to 1/5~1/100000s.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
423	244	44	ONVIF Support	Yes	ONVIF profile S,G,T	ONVIF is for compatibility across different OEMs , there are different profiles of ONVIF for different level of compatibility . ONVIF profiles S is initial level of compatibility which do not cover the compatibility in terms of SD card storage , since card is asked in the specifications the camera must be ONVIF profile G also to have compatibility in terms of SD card. ONVIF profile T provides integration with H.265 streams. Kindly consider ONVIF profile S , G and T for deep level of integration across OEMs.	Discussed at S. No. 84.	Mentioned at S. No. 84.
424	244	Additional Point	Certification		UL	UL is a global safety certification company. UL Listing means that UL has tested representative samples of a product and determined that the product meets specific, defined requirements as per global safety standards. Kindly consider UL as mandatory certification to meet the global safety standards.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
425	244	Additional Point	Non - Blacklisted		OEM must not be blacklisted nationally or internationally	Kindly consider the product which is not blacklisted nationally or internationally so as to ensure the gity of productood qua	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
<b>2 MP IP Camera, Bullet Type, min. 50 m IR</b>								
426	245	13	Video Streaming	Triple compressed stream	Quad stream with each stream should support H.265 compression.	The benefit of this multi-streaming is that it saves significant client-side bandwidth and processing power. Camera should be at least equipped with four streams so that local live view, recording and remote viewing can be done seamlessly without much impacting the network bandwidth and processing of machines, each stream should be equipped with H.265 compression to have the maximum benefit of the multiple streaming camera. Kindly consider Quad stream camera with each stream support H.265 compression.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
427	245	31	Electronic Shutter Speed(sec)	1/3 to 1/10000	1/5 s to 1/100000 s	Shutter speed is the length of time your camera shutter is open, exposing light onto the camera sensor, too low shutter speed allows more exposure time because of the moving object appears complete blur which is not recommended for surveillance system . Kindly consider the generic shutter speed and amend it to 1/5~1/100000s.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
428	246	44	ONVIF Support	Yes	ONVIF profile S,G,T	ONVIF is for compatibility across different OEMs , there are different profiles of ONVIF for different level of compatibility . ONVIF profiles S is initial level of compatibility which do not cover the combability in terms of SD card storage , since card is asked in the specifications the camera must be ONVIF profile G also to have compatibility in terms of SD card. ONVIF profile T provides integration with H.265 streams Kindly consider ONVIF profile S , G and T for deep level of integration across OEMs.	Discussed at S. No. 84.	Mentioned at S. No. 84.
429	246	52	Simultaneous connections	20	7	Simultaneous connections are required through NVR for , Directly the cameras are acssed for configuration only , kindly consider 7 simultaneous used which is much more than sufficient .	Discussed at S. No. 33.	Mentioned at S. No. 33.
430	246	Additional Point	Certification		UL,CE,FCC	UL is a global safety certification company. UL Listing means that UL has tested representative samples of a product and determined that the product meets specific, defined requirements as per global safety standards. Kindly consider UL as mandatory certification to meet the global safety standards.	Discussed at S. No. 203.	Mentioned at S. No. 203.
431	246	Additional Point	Non - Blacklisted		OEM must not be blacklisted nationally or internationally	Kindly consider the product which is not blacklisted nationally or internationally so as to ensure the gity of productood qua	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
<b>2MP IP Camera, PTZ Type, min. 150 m IR</b>								
432	247	9	Focal length	4.5 to 162	4.3mm to 129mm	4.3mm to 129m is the generic specifications of focal length for CCTV Cameras	Discussed at S. No. 34.	Mentioned at S. No. 34.
433	247	16	Optical zoom	36X or better	30 X	36X optical zoom camera is not available with most of the OEM ,Kindly consider 30X optical zoom camera to have the healthy competition	Discussed at S. No. 210.	Mentioned at S. No. 210.
434	248	40	ONVIF Support	Yes	ONVIF profile S,G,T	ONVIF is for compatibility across different OEMs , there are different profiles of ONVIF for different level of compatibility . ONVIF profiles S is initial level of compatibility which do not cover the combability in terms of SD card storage , since card is asked in the specifications the camera must be ONVIF profile G also to have compatibility in terms of SD card. ONVIF profile T provides integration with H.265 streams Kindly consider ONVIF profile S , G and T for deep level of integration across OEMs.	Discussed at S. No. 84.	Mentioned at S. No. 84.
435	248	55	Power Input	PoE	POE/24VAC/12VDC	PTZ camera require more power for proper functioning of IR , Zoom lens , Motor for PAN & tilt and heater& blower.	Discussed at S. No. 36.	Mentioned at S. No. 36.
<b>NVR 128 Channel with inbuilt 128 TB Storage fully loaded</b>								

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
436	249	NVR Title	NVR Type	NVR 128 Channel with inbuilt 128 TB Storage fully loaded	NVR 128 Channel ( 1 X 128 / 2 X 64 ) with inbuilt 128 TB / 2X 64 TB Storage fully loaded	Most of the OEM provide 8 X SATA slots in 128 channel NVR , so for storage point of view kindly consider 2X64 channel NVR which shall fulfill the requirement with more healthy competition.	Not agreed to the suggestion. This is not required and will restrict competition.	No change in the NIT
437	249	6	Number of Video Input Channels	128	1X128 / 2X64	Most of the OEM provide 8 X SATA slots in 128 channel NVR , so for storage point of view kindly consider 2X64 channel NVR which shall fulfill the requirement with more healthy competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
438	249	29	Supported Interface	Ethernet, HDMI, VGA, USB, RS 232, RS-485	Ethernet, HDMI, VGA, USB, RS-485	Kindly remove RS232 . RS232 is serial connection , it is used for configuring the device , however the NVR can be configured through LAN network or directly connectin the monitor to NVR through HDMI , so RS232 port is not required.	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Ethernet, HDMI, VGA, USB, RS-485
439	250	31	Number of Ethernet Ports	4 (With capability to connect on Public and Private Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used four WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
440	250	32	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
441	250	35	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured through LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
442	250	37	Video Recorder supports recording on NAS Directly	Yes	Kindly remove	Recording can be directly in the HDD installed in NVR and same has ben asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 212.	Mentioned at S. No. 212.
443	250	55	Number of Hard Disks (inclusive in the scope of supply)	16	8	Most of the OEM provide 8 X SATA slots in 128 channel NVR ,So kindly consider 8 SATA slots so that most of the OEM could comply to have the healthier competition.	Discussed at S. No. 85.	Mentioned at S. No. 85.
444	250	58	Total Storage Capacity(TB)	128	( 1 X 128 / 2X 64)	Most of the OEM provide 8 X SATA slots in 128 channel NVR , so for storage point of view kindly consider 2X64 channel NVR which shall fulfill the requirement with more healthy competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
				<b>NVR 64 Channel with inbuilt 64 TB Storage fully loaded</b>				
445	252	32	Number of Ethernet Ports	2 (With capability to connect on Public and Private Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used four WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
446	253	33	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
447	253	36	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured through LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
448	253	38	Video Recorder supports recording on NAS Directly	Yes	Yes	Recording can be directly in the HDD installed in NVR and same has ben asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 217.	Mentioned at S. No. 217.
				<b>NVR 32 Channel with inbuilt 64 TB Storage fully loaded</b>				

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	Query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
449	255	32	Number of Ethernet Ports	2 (With capability to connect on Public and Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used foor WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
450	256	33	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
451	256	36	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured througgh LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
452	256	38	Video Recorder supports recording on NAS Directly	Yes	Yes	Recording can be drectly in the HDD installed in NVR and same has ben asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 222.	Mentioned at S. No. 222.
<b>NVR 32 Channel with inbuilt 32 TB Storage fully loaded</b>								
453	258	32	Number of Ethernet Ports	2 (With capability to connect on Public and Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used foor WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
454	259	33	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Not agreed to the suggestion. This will reduce functionality and harden the management.	No change in the NIT
455	259	36	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured througgh LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
456	259	38	Video Recorder supports recording on NAS Directly	yes	Yes	Recording can be drectly in the HDD installed in NVR and same has ben asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 231.	Mentioned at S. No. 231.
<b>NVR 16 Channel with inbuilt 16 TB Storage fully loaded</b>								
457	261	32	Number of Ethernet Ports	2 (With capability to connect on Public and Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used foor WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Discussed at S. No. 79.	Mentioned at S. No. 79.
458	262	33	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Discussed at S. No. 80.	Mentioned at S. No. 80.
459	262	36	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured througgh LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
460	262	38	Video Recorder supports recording on NAS Directly	yes	Yes	Recording can be drectly in the HDD installed in NVR and same has ben asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 239.	Mentioned at S. No. 239.

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
				<b>NVR 8 Channel with inbuilt 16 TB Storage fully loaded</b>				
461	264	32	Number of Ethernet Ports	2 (With capability to connect on Public and Network simultaneously)	1 (With capability to connect on Public and Private Network simultaneously)	1 network port is sufficient for LAN connectivity . For WAN connectivity the internet is always terminated on router so sae port can be used four WAN also . Hence one port is more than sufficient , so kindly consider 1XLAN port.	Discussed at S. No. 79	Mentioned at S. No. 79
462	265	33	Number of HDMI Ports	2	1	2X HDMI port may be specific to OEM . Kindly consider 1 X HDMI port to have the healthier competition.	Discussed at S. No. 80.	Mentioned at S. No. 80.
463	265	36	Number of Serial Ports	1	Kindly remove	Serial port is used for configuring the device , however the NVR can be configured through LAN network or directly connectin the monitor to NVR through HDMI	Areed to the suggestion. NVR can be configured using Ethernet or Monitor, therefore RS 232 Port deleted for all NVRs.	Serial Port: Deleted
464	265	38	Video Recorder supports recording on NAS Directly	yes	Yes	Recording can be directly in the HDD installed in NVR and same has been asked in the solution , so kindly remove the clause as NAS is required in server/VMS based solution.	Discussed at S. No. 248.	Mentioned at S. No. 248.
			<b>Sl.No.</b>	<b>Item</b>	<b>Bid Specification</b>	<b>Query/Request for change</b>		
465		1	#15 (8-port Managed Industrial grade POE+ switch with 2 SFP)	Tender is asking for 1000Base SFP port – 2 nos.	Please suggest transceiver modules are to be provided with the switch or not. If yes whether SM or MM		Discussed at S. No. 353.	Mentioned at S. No. 353.
466				Tender is asking for switching capacity 10 Gbps or higher and throughput 24 Mpps	For 8+2 = 10 port Gigabit switch, with non-blocking architecture, switching should have 20 Gbps and throughput should be 14.8 Mpps. Please amend accordingly.		Discussed at S. No. 91.	Mentioned at S. No. 91.
467				Port Trunking	As this switch will be used at last mile for camera connectivity, so port trunking will not be used.		Discussed at S. No. 356.	Mentioned at S. No. 356.
468				Operating Temp : 0 to 60deg C	Standard operating temp of Industrial grade switch is -20 to 70 deg C. kindly amend the same		Discussed at S. No. 357.	Mentioned at S. No. 357.
469				PoE Budget : 130 watt or higher	Since PoE+ support switch is asked, it should support upto 240Watt. Kindly amend accordingly.		Discussed at S. No. 97.	Mentioned at S. No. 97.
470				IPv6 ready from day one and duly certified	Switch should be IPv6 ready from day one. Only few OEM have the certification ready as it involves lot of cost as a result product cost increases. For maximum participation of experienced/reputed		Discussed at S. No. 96.	Mentioned at S. No. 96.
471		2	#16 (Layer-3 Managed switch with 24-port SFP + 4 gigabit copper ports)	Tender is asking for switching capacity 88 Gbps or higher and throughput 65 Mpps	For 24+4 = 28 port Gigabit switch with 40 Gbps stacking, with non-blocking architecture, switching should have 96 Gbps and throughput should be 71.4 Mpps. Please amend accordingly.		Discussed at S. No. 362.	Mentioned at S. No. 362.
472				IPv6 ready from day one and duly certified	Switch should be IPv6 ready from day one. Only few OEM have the certification ready as it involves lot of cost as a result product cost increases. For maximum participation of experienced/reputed		Discussed at S. No. 361.	Mentioned at S. No. 361.
473		3	#17 (Layer-3 Managed Switch with 24 gigabit copper port + 4 SFP port)	Tender is asking for switching capacity 88 Gbps or higher and throughput 65 Mpps	For 24+4 = 28 port Gigabit switch with 40 Gbps stacking, with non-blocking architecture, switching should have 96 Gbps and throughput should be 71.4 Mpps. Please amend accordingly.		Discussed at S. No. 366.	Mentioned at S. No. 366.
474				IPv6 ready from day one and duly certified	Switch should be IPv6 ready from day one. Only few OEM have the certification ready as it involves lot of cost as a result product cost increases. For maximum participation of experienced/reputed		Discussed at S. No. 365.	Mentioned at S. No. 365.
475		4	#18 (Layer-2 Managed Switch with 24 gigabit copper POE port + 4 SFP port)	Tender is asking for switching capacity 48 Gbps or higher and throughput 36 Mpps	For 24+4 = 28 port Gigabit switch, with non-blocking architecture, switching should have 56 Gbps and throughput should be 41.6 Mpps. Please amend accordingly		Discussed at S. No. 370.	Mentioned at S. No. 370.
476				IPv6 ready from day one and duly certified	Switch should be IPv6 ready from day one. Only few OEM have the certification ready as it involves lot of cost as a result product cost increases. For maximum participation of experienced/reputed		Discussed at S. No. 369.	Mentioned at S. No. 369.
477				PoE budget – NOT SPECIFIED	For 24-port POE+ switch, the standard PoE budget is 370Watt. Kindly incorporate this in the specification and		Discussed at S. No. 373.	Mentioned at S. No. 373.

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478		5	#19 (SFP Module)	Wavelength : 1310/1490nm	Industry standard is 1310/1550 nm. Kindly amend accordingly.		Discussed at S. No. 375.	Mentioned at S. No. 375.
479		6	#20 (Media converter)	Port : 2 x 1000M SC UPC port	Kindly clarify whether 2 nos of duplex SC fiber ports are required on the media converter or 1 no. duplex SC fiber port.		Discussed at S. No. 251.	Mentioned at S. No. 251.
480				Environment : 0 to 60 deg C	Commercial grade media converter supports operating temp up to 50degC. Industrial grade media converter		Discussed at S. No. 378.	Mentioned at S. No. 378.
481		7	#53 (LIU)		Kindly clarify whether SLIDING type LIU is required or fixed type.		Sliding Type is required.	Liu Type - Sliding Type
482				Removable Rare & Front cover	Since LIU will be installed in the Rack, it is not possible to remove the rare cover. Top cover can be removed for better access to interior of LIU.	Agreed to the suggestion. Back cover is fixed in LIU for mounting		Front Cover and Top Cover- Removable. For all LIUs.
483		8	IP67 Metal Enclosure	IP67	Kindly clarify whether IP67 junction box will be required or outdoor rack. If		Clearly mentioned in TPS	No change in the NIT
		<b>RFP Volume, Clause &amp; Sub-Clause</b>	<b>Page No.</b>	<b>Existing clause</b>	<b>Amendment Required</b>	<b>Remarks (if any)</b>		
484		Clause 8: Eligibility Criteria A. Work Experience	4 of 350	The Intending bidder must have in its name or proportionate share as a member of Joint Venture/Partnership firm experience of having successfully completed similar works, as a prime contractor, during last 7(seven) years ending last day of month previous to the one in which bid applications are invited (i.e. eligibility period) should be any of the following :- Three similar completed works each costing not less than the amount equal to 40% of the estimated cost put to tender. Or Two similar completed works each costing not less than the amount equal to 50% of the estimated cost put to tender. Or One similar completed work costing not less than the amount equal to 80% of the estimated cost put to tender.  Experience for those works only shall be considered for evaluation	The Intending bidder must have in its name or proportionate share as a member of Joint Venture/Partnership firm experience of having successfully completed/on-going similar works, as a prime/sub-contractor contractor, during last 7(seven) years ending last day of month previous to the one in which bid applications are invited (i.e. eligibility period) should be any of the following :- Three similar completed/on-going works each costing not less than the amount equal to 40% of the estimated cost put to tender. Or Two similar completed/on-going works each costing not less than the amount equal to 50% of the estimated cost put to tender. Or One similar completed/on-going work costing not less than the amount equal to 80% of the estimated cost put to tender.  Experience for those works only shall be considered for evaluation purposes, which match eligibility requirement stipulated above, on or before the last day of month previous to one in which tender has been invited (publication date of NIT). If the		Not agreed to the suggestion.. This is not a standard term in CIL NIT.	No change in the NIT
485		Clause 8: Eligibility Criteria		<b>Clause addition</b>	<b>Request you to allow consortium as well (Please allow Lead Bidder+ 2 Consortium Member)</b>		Not agreed to the suggestion.. This is not a standard term in CIL NIT.	No change in the NIT
486		ANNEXURE B, Item No. 1:2 MP IP Camera, Dome Type, minm. 30 m IR		BIS Registration for safety general requirements as per IS 13252 (Part 1):latest : Yes	Certifications : UL/BIS, CE, FCC & RoHS, ONVIF	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
487				Video Streaming :Triple compressed stream	Video Streaming : <b>Quad compressed stream@30fps</b>	This will help further for video analytics processing, future technology advancement , and get true color image	Discussed at S. No. 404.	Mentioned at S. No. 404.
488				Minimum Illumination for Capturing Color Image:0.01 lux	Minimum Illumination for Capturing Color Image: <b>0.1 lux</b>	This helps for wider participation and fulfill the site conditions	Discussed at S. No. 405.	Mentioned at S. No. 405.
489				SD Card Memory(GB) :128 or higher (To be provided with the Camera)	SD Card Memory(GB) : <b>256 or higher (To be provided with the Camera)</b>		Discussed at S. No. 406.	Mentioned at S. No. 406.
490		ANNEXURE B, Item No. 2: 2 MP IP Camera,		BIS Registration for safety general requirements as per IS 13252 (Part 1):latest : Yes	Certifications : UL/BIS, CE, FCC & RoHS, ONVIF	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
491				2 MP IP Camera, Bullet Type, min. 50 m IR	2 MP IP Camera, Bullet Type, min. <b>30 m IR</b>	This helps for wider participation and fulfills the site conditions. Industry standard is 30 Mtrs IR .Please amend to 30 Mtrs IR	Discussed at S. No. 292.	Mentioned at S. No. 292.

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492		Bullet Type, min. 50 m IR		Video Streaming :Triple compressed stream	Video Streaming : <b>Quad compressed stream@30fps</b>	This will help further for video analytics processing, future technology advancement , and <b>get true color image</b>	Discussed at S. No. 408.	Mentioned at S. No. 408.
493				Minimum Illumination for Capturing Color Image:0.01 lux	Minimum Illumination for Capturing Color Image: <b>0.1 lux</b>	This helps for wider participation and fulfill the site conditions	Discussed at S. No. 409.	Mentioned at S. No. 409.
494		ANNEXURE B, Item No. 3: 2MP IP Camera, PTZ Type, min. 150 m IR	246 of 350	IR illumination Range(mtr) : 150	IR illumination Range(mtr) : <b>250</b>	1. 36x Optical Zoom PTZ Camera may view upto 500 Mtrs easily. 2. This will help further for more night vision coverage, future technology advancement and to get quality image as desired by user's Mtrs IR. So, for buffer, we suggest to keep 250 Mtrs IR Range	Discussed at S. No. 35.	Mentioned at S. No. 35.
495				BIS Registration for safety general requirements as per IS 13252 (Part 1): latest : Yes	Certifications : <b>UL/BIS, CE, FCC &amp; RoHS, ONVIF</b>	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
496				Focal Length(mm) : 4.5 - 162	Focal length should be open to meet zoom and IR distance	Each manufacturer having own set of focal length to meet the IR and optical and digital zoom. So please make it open for wider participation	Discussed at S. No. 34.	Mentioned at S. No. 34.
497				Video Streaming :Triple compressed stream	Video Streaming : <b>Quad compressed stream@30fps</b>	This will help further for video analytics processing, future technology advancement , and <b>get true color image</b>	Discussed at S. No. 412.	Mentioned at S. No. 412.
498		ANNEXURE B, Item No. 4: NVR 128 Channel with inbuilt 128 TB Storage fully loaded		NVR 128 Channel with inbuilt 128 TB Storage fully loaded	Item No. 4: NVR 128 Channel	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
499				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : <b>UL/BIS, CE, FCC &amp; RoHS, ONVIF</b>	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
500		ANNEXURE B, Item No. 5: NVR 64 Channel with inbuilt 64 TB Storage fully loaded		NVR 64 Channel with inbuilt 64 TB storage fully loaded with dual redundant power supply and RAID 0,1,5,10 are option should be there	NVR 64 Channel with dual redundant power supply and RAID 0,1,5,10 are option should be there	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
501				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : <b>UL/BIS, CE, FCC &amp; RoHS, ONVIF</b>	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
502		ANNEXURE B, Item No. 6: NVR 32 Channel with inbuilt 64 TB Storage fully loaded		NVR 32 Channel with inbuilt 64 TB Storage fully loaded	NVR 32 Channel with RAID facility	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
503				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : <b>UL/BIS, CE, FCC &amp; RoHS, ONVIF</b>	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
504		ANNEXURE B, Item No. 7: NVR 32 Channel with inbuilt 32 TB Storage fully loaded		NVR 32 Channel with inbuilt 32 TB Storage fully loaded	NVR 32 Channel with RAID facility	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
505				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : <b>UL/BIS, CE, FCC &amp; RoHS, ONVIF</b>	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.

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506		ANNEXURE B, Item No. 8: NVR 16 Channel with inbuilt 16 TB Storage fully loaded		NVR 16 Channel with inbuilt 16 TB Storage fully loaded	NVR 16 Channel	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
507				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : UL/BIS, CE, FCC & RoHS, ONVIF	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
508		ANNEXURE B, Item No. 9: NVR 8 Channel with inbuilt 16 TB Storage fully loaded		NVR 8 Channel with inbuilt 16 TB Storage fully loaded	NVR 8 Channel	Storage loading should be optional, to be calculated by bidder, in order to achieve the requirement based on no. of days storage required. It should be in bidder scope to calculate considering the offered technology. This would be fair and bidder responsibility to give appropriate storage	Discussed at S. No. 294.	Mentioned at S. No. 294.
509				Number of HDMI Ports : 2	Number of HDMI Ports : 1	For 8 Ch NVR, there is no use of 2x HDMI Ports. Request you to change it to 1 HDMI Port Only	Discussed at S. No. 80.	Mentioned at S. No. 80.
510				Number of USB Ports 4	Number of USB Ports :2	Global industry standard and wider participation	Discussed at S. No. 420.	Mentioned at S. No. 420.
511				BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest : Yes	Certifications : UL/BIS, CE, FCC & RoHS, ONVIF	Please ask for more certifications in order to get better quality product through competition between various OEMs.	Discussed at S. No. 84 & 203.	Mentioned at S. No. 84 & 203.
512		ANNEXURE B Item No. 15:8 Port Managed Industrial Grade Switch with PoE+ with 2 port SFP	281 of 350	Multicast :IGMP snooping V1, V2	IGMP snooping V1, V2 and MLD snooping, PIM for IPv4 and IPv6, IPv4 and IPv6 dual stack	MLD snooping and PIM are open standards for multicast CCTV streams. Without support, there will be issues of layer 2 loops in the networks which will impact the performance and availability of the CCTV services.	Not agreed to the suggestion. This will restrict competition without improving practical functionality.	No change in the NIT
513				Spanning Tree: IEEE 802.1D(STP), IEEE 802.1w(RSTP), IEEE 802.1s MSTP	IEEE 802.1D(STP), IEEE 802.1w(RSTP), IEEE 802.1s MSTP, ITU-T G.8032 for sub 50ms ring and loop protection	Request you to consider ITU-T G.8032 for sub 50ms ring and loop protection with seamless integration with other switches. The mentioned STP, RSTP, MSTP are legacy protocols and not in use anymore	Agreed to the suggestion. Required for ring network.	Spanning Tree: IEEE 802.1D(STP), IEEE 802.1w(RSTP), IEEE 802.1s MSTP, ITU-T G.8032 for sub 50ms ring and loop protection
514				MAC Address: 8000 or more	16000 or more	As all other switches have been asked with 16000 MAC table, so minimum 16K MAC table shall be required for seamless learning of MAC across the network	Agreed to the suggestion. MAC Addresses are learnt throughout network.	MAC Address: 16000 or more
515				Security Feature : IEEE 802.1x port based user authentication, Port security, Hardware support for IPACL, MAC ACL, VLAN ACL, IPv6 source / destination / TCP / UDP / protocol based ACL, User privileges classification and password protection, Head of Line (HOL) blocking prevention mechanism	IEEE 802.1x port based user authentication, Port security, Hardware support for IPACL, MAC ACL, VLAN ACL, IPv6 source / destination / TCP / UDP / protocol based ACL, User privileges classification and password protection, Head of Line (HOL) blocking prevention mechanism, FIPS 140/180 AES, DES for encryption of management traffic	FIPS is an open standard for encryption to secure the data against cyber threats	Not agreed to the suggestion. This will restrict competition without improving practical functionality.	No change in the NIT
516				Operating Temperature Range (Degree C) :0 to 60° C	0 to 60° C, NEMA-TS2 Certified	NEMA-TS2 certification certifies a product for its smooth operation under high operating temperature, vibration and shocks, else the switch provenness for high operating temperature cant be assessed.	Not agreed to the suggestion. Unnecessary certification.	No change in the NIT



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517		ANNEXURE B Item No. 16: Layer 3 Managed Switch with 24 Port SFP + 4 x 10/100/1000 BaseT Ports	282 of 350	Port Density:a. 1000base-X SFP: Atleast 24 Nos. (but should meet the requirement) b. 10/100/1000 BaseT (RJ45): Atleast 04 Nos. (but should meet the requirement) If this is achieved by inserting suitable SFP to Ethernet port trans-receiver/adapter into the SFP ports , will also be acceptable . However suitable SFP to Ethernet port trans-receiver/ converter /adapter to connect Cat-6 cable will have to be provided by the successful bidder. it may be noted that SFP transreceivers to connect optical fiber are already included in the BOQ.	Uplink Ports- 4x1G/10G SFP+ slots	For uplink of data, minimum 4x1G/10G SFP+ slots are required	Not agreed to the suggestion. 1 uplink port is sufficient and all ports are gigabit ports	No change in the NIT
518				Request for addition	1. The switch shall support active-active clustering VSS/equivalent technology with which upto 8 switches in cluster shall operate as one logical L3 switch (RIP, OSPF, BGP) with clustering bandwidth of 160Gbps. The switch should be SDN Openflow ready from day-1	For higher availability, switch level redundancy at L3 level is highly recommended as all cameras shall route from L3 switch.SDN openflow v1.3 is an open standard for network automation	Not agreed to the suggestion. Practically not required and will restrict competition.	No change in the NIT
519		ANNEXURE B Item No. 17: Layer 3 Managed Switch with 24 x 10/100/1000 BaseT Ports and 4 SFP Ports	284 - 285 of 350	Port Density: a. 1000base-X SFP: Atleast 04 Nos. (but should meet the requirement) b. 10/100/1000 BaseT (RJ45): Atleast 24 Nos. (but should meet the requirement)If this is achieved by inserting suitable SFP to Ethernet port trans-receiver/adapter into the SFP ports, will also be acceptable . However suitable SFP to Ethernet port trans-receiver/adapter /adapter to connect Cat-6 cable will have to be provided by the successful bidder. it may be noted that SFP transreceivers to connect optical fiber are already included in the BOQ.	a. 1000base-X/10G SFP: Atleast 04 Nos. (but should meet the requirement) b. 10/100/1000 BaseT (RJ45): Atleast 24 Nos. (but should meet the requirement) If this is achieved by inserting suitable SFP to Ethernet port trans-receiver/adapter into the SFP ports, will also be acceptable . However suitable SFP to Ethernet port trans-receiver/adapter /adapter to connect Cat-6 cable will have to be provided by the successful bidder. it may be noted that SFP transreceivers to connect optical fiber are already included in the BOQ.	1G uplinks are not sufficient to carry the high bandwidth CCTV traffic, please consider 4x1G/10G SFP+ slots	Not agreed to the suggestion. 1 uplink port is sufficient and all ports are gigabit ports	No change in the NIT
520				Request for addition	1. The switch shall support active-active clustering VSS/equivalent technology with which upto 8 switches in cluster shall operate as one logical L3 switch (RIP, OSPF, BGP) The switch should be SDN Openflow ready from day-1	For higher availability, switch level redundancy at L3 level is highly recommended as all cameras shall route from L3 switch.SDN openflow v1.3 is an open standard for network automation	Not agreed to the suggestion. Practically not required and will restrict competition.	No change in the NIT

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QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS								
S. No	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
521		ANNEXURE B Item No. 18: Layer 2 Managed Switch with 24 x 10/100/1000 BaseT Ports with PoE	286 - 287 of 350	Port Density: a. 1000base-X SFP: Atleast 04 Nos. (but should meet the requirement) b. 10/100/1000 BaseT (RJ45): Atleast 24 Nos. with PoE.  If this is achieved by inserting suitable SFP to Ethernet port trans-receiver/converter/adapter into the SFP ports, will also be acceptable. However suitable SFP to Ethernet port trans-receiver/converter /adapter to connect Cat-6 cable will have to be provided by the successful bidder. The switch should be able to provide PoE (Power over Ethernet) after use of such transceivers, if applicable. It may be noted that SFP transceivers to connect optical fiber are already included in the BOQ.	a. 1000base-X /10G SFP: : Atleast 04 Nos. (but should meet the requirement) b. 10/100/1000 BaseT (RJ45): Atleast 24 Nos. with PoE. If this is achieved by inserting suitable SFP to Ethernet port trans-receiver/converter/adapter into the SFP ports, will also be acceptable. However suitable SFP to Ethernet port trans-receiver/converter /adapter to connect Cat-6 cable will have to be provided by the successful bidder. The switch should be able to provide PoE (Power over Ethernet) after use of such transceivers, if applicable. It may be noted that SFP transceivers to connect optical fiber are already included in the BOQ.	For uplink of data, minimum 4x1G/10G SFP+ slots are required	Not agreed to the suggestion. 1 uplink port is sufficient and all ports are gigabit ports	No change in the NIT
522				Request for addition	1. The switch shall support active-active clustering VSS/equivalent technology with which upto 8 switches in cluster shall operate as one logical L3 switch (RIP, OSPF, BGP) The switch should be SDN Openflow ready from day-1	For higher availability, switch level redundancy at L3 level is highly recommended as all cameras shall route from L3 switch. SDN openflow v1.3 is an open standard for network automation	Not agreed to the suggestion. Practically not required and will restrict competition.	No change in the NIT
523		ANNEXURE B, Item No. 21: 75 inch LED Displays	289 of 350	Energy Star Rating : 5	Request for deletion	There is no energy star rating standard in UHD display as per EESL, which is the governing body.	Not agreed to the suggestion. Energy star rating is available in UHD Displays	No change in the NIT
524		ANNEXURE B, Item No. 21: 75 inch LED Displays  Item No. 22: 55 inch LED Displays	289-290 of 350	Addition Required	Contrast Ratio - 3000:1 or above Haze - 20% and above Certifications - CE, UL, FCC, BIS		Not agreed to the suggestion. Practically the TPS is sufficient.	No change in the NIT
525		ANNEXURE B, Item No. 23: 24 inch LED Displays	290 of 350	General	Mentioned specs are of 32" display and not of monitor. It is advised to change the display size to 32 inches to accommodate the specs.		Not agreed to the suggestion. These specs are available in 24 Inch Displays.	No change in the NIT
526		ANNEXURE B, Item No. 28: UPS (1kVA) with 2 hours battery backup	297-299 of 350	Technology : IGBT-PWM with inbuilt isolation transformer	For 1kva external transformer should be considered.		Not agreed to the suggestion. Built in isolation Transformer is available.	No change in the NIT
527				Degree of Protection : IP21	Degree of Protection : IP20		Not agreed to the suggestion. Reduction in specs may cause practical issues	No change in the NIT
528		Item No. 29: UPS (2 kVA) with 2 hours battery backup		Cabling 5 meters for input and output : With	Cabling between UPS and batteries should be considered while designing.		Partially agreed. Input and Output cabling has to be provided by the successful bidder.	Cabling for input and output : To be provided by the successful bidder as per site conditions.
529				50% Overload limit for minimum 1 minutes : Yes	For such a small capacity, it should be 2-3sec		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
530		Item No. 30: UPS		Maximum Operating Temperature : 55 degree Celsius	Maximum Operating Temperature : 50 degree Celsius		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
531		ANNEXURE B, Item No. 31: UPS (5 kVA) with 2 hours battery	300 of 350	Overall Efficiency (%) : >=90%	Overall efficiency should be read as 84%.		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
532				Maximum Operating Temperature : 55 degree Celsius	Maximum Operating Temperature : 40 degree Celsius		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
533				Rated Output (Volt) : Single phase sinewave 230v AC , 50Hz	The output for such a low capacity UPS is Simulated sine wave.		Not agreed to the suggestion. Sinewave output is available.	No change in the NIT

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S. No	query S. No	RFP Page No	Sub-Section	QUERIES/ CLARIFICATIONS/ SUGGESTIONS/ RECOMMENDATIONS BY THE PROSPECTIVE BIDDERS			DISCUSSIONS AND RESULTS	
				Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
534		ANNEXURE B, Item No. 32: UPS (650 VA) with 15 mins backup	301 of 350	Degree of protection : IP21	Degree of Protection : <b>IP20</b>		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
535				Efficiency (%) : > / = 90%	Efficiency for all capacities vary, hence for 650VA it should be 75%		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
536				Type of enclosure : ABS	As per standard enclosure are of M.S. sheet.		Agreed to the suggestion. Both are acceptable	Type of enclosure : ABS / M. S. Sheet
537				Maximum Operating Temperature : 55 degree Celsius	Maximum Operating Temperature : <b>40 degree Celsius</b>		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
538				Variation in AVR output in AC mode (%) AVR (Voltage regulation) output voltage in AC Mode : 230 Volts +/-9%, 50 +/-3 Hz	At output, the variation should be better i.e. ±10%		Not agreed to the suggestion. Specs reduction may cause practical issues.	No change in the NIT
539		ANNEXURE B: Item No. 43: CAT - 6 STP Cable	314 of 350	Category: CAT 6 SFTP Solid cable	<b>"CAT6 U/UTP Double jacketed Outdoor Cable, with PE inner sheath and LSFRZH outer sheath, UV resistance."</b>	STP may not be Suitable considering lightning.	Discussed at S. No. 196.	Mentioned at S. No. 196.
540				Request for addition	<b>Must be Compliant to ANSI/TIA.2-D, IEEE 802.3bt (Type 4), 4PPoE, ROHS.</b>	Please specify general standard and application compliance of cable.	Not agreed to the suggestion. TPS is sufficient	No change in the NIT
541				<b>Sheath: PVC/LSZH</b>	1. Inner sheath of PE, Outer sheath of LSZH compliant to IEC 60332-1. or 2. Inner Sheath : PVC; Outer Sheath : FRPVC		Discussed at S. No. 196.	Mentioned at S. No. 196.
542				Maximum Operating Temperature: 55 Deg C	<b>upto 70 Deg C</b>		Not agreed to the suggestion. TPS is sufficient	No change in the NIT
543				Request for addition	<b>"Cable pull force of 14 Kg"</b>		Not agreed to the suggestion. TPS is sufficient	No change in the NIT
544		ANNEXURE B: Item No. 44: Singlemode Unarmoured 24 Core Optical Fiber Cable / Item No. 45: Singlemode Unarmoured 12 Core Optical Fiber Cable / Item No. 46: Singlemode Unarmoured 6 Core Optical Fiber Cable	314 - 315 of 350	Item No. 44: Singlemode Unarmoured 24 Core Optical Fiber Cable / Item No. 45: Singlemode Unarmoured 12 Core Optical Fiber Cable / Item No. 46: Singlemode Unarmoured 6 Core Optical Fiber Cable	Please consider: "Singlemode Non-metallic armoured 24 Core Optical Fiber Cable"  "Singlemode Non-metallic armoured 12 Core Optical Fiber Cable"  "Singlemode Non-metallic armoured 6 Core Optical Fiber Cable"	The cables shall be laid in outdoor industrial area ? Kindly confirm	Discussed at S. No. 19.	Mentioned at S. No. 19.
545				Item No. 44: Singlemode Unarmoured 24 Core Optical Fiber Cable / Item No. 45: Singlemode Unarmoured 12 Core Optical Fiber Cable / Item No. 46: Singlemode Unarmoured 6 Core Optical Fiber Cable	Please consider: "Multi-loose tube, gel filled Cable with central FRP and peripheral E Glass yarn strength members, with rip cord and water swellable tape. 6 Fibers per tube. Both fiber and tubes must be color coded as per TIA 598-C"	Please define the general construction of cable.	Discussed at S. No. 19.	Mentioned at S. No. 19.
546				Item No. 44: Singlemode Unarmoured 24 Core Optical Fiber Cable / Item No. 45: Singlemode Unarmoured 12 Core Optical Fiber Cable / Item No. 46: Singlemode Unarmoured 6 Core Optical Fiber Cable	Please consider: Cable must be compliant to ANSI/TIA 568-C.3, Telcordia GR-20, ITU-T G.652.D and ROHS.	Please specify required Standard compliances for cable.	Not agreed to the suggestion. TPS is sufficient	No change in the NIT
547				Maximum Operating Temperature: 55 Deg C	<b>Please revise this to 70 Deg C for outdoor cables.</b>		Discussed at S. No. 200.	Mentioned at S. No. 200.
548				Outer Diameter: 6.8 mm to 7.3mm +/- 0.3mm	<b>10 – 12.00mm dia for Fiber cables.</b>	The given value is incorrect for Fiber cable.	Partially agreed. Higher dia OFC Cables upto 12 mm can be allowed without restricting lower dia cables	Outer Diameter: 6.8 mm to 12.0 mm +/- 0.3mm
549				IPulling Tension: Short Term: 1500N	<b>"Pull tension of 4000N"</b>		Not agreed to the suggestion. TPS is sufficient	No change in the NIT

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	query S. No	RFP Page No	Sub-Section	Existing Clause	Query/Request	Recommendation	Discussions in Pre-NIT Meeting	Action to be taken in NIT
550				Maximum Attenuation (db/km): 0.36 dB/Km	Request you to consider and maintain lowest attenuation for fiber respective to each applicable wavelength for SM: Max Attenuation – @1310nm: < 0.36dB/Km @ 1386nm: < 0.31dB/Km @1550nm: <0.22dB/Km	Please specify the attenuation for each wavelength.	Agreed to the suggestion. Attenuation is different at different wavelengths.	For all OFCs - Maximum Attenuation (db/km): @1310nm: < 0.36dB/Km @1550nm: <0.22dB/Km
551		Copper & Fiber Cabling:		Copper & Fiber Cabling:		Please specify if all the copper and fiber cable and accessories need to be from single OEM.	No such condition.	No change in the NIT
552		ANNEXURE B, Item No. 50: CAT 6 Patch Panel (8 PORTS LOADED)	317 - 318 of 350	Material of patch panel : Steel	Material of patch panel : Cold Rolled Steel		Agreed to the suggestion. Cold rolled steel also available in LIUs	Material of patch panel : Cold Rolled Steel
553		ANNEXURE B, Item No. 51: Cat 6 UTP Patch Cord ( 2 mtrs)  Item No. 52: Cat 6 UTP Patch Cord ( 1 mtrs)	319 - 320 of 350	Termination type / Connection type : Insulation Piercing Connection (IPC)	Termination type / Connection type : Insulation Piercing Connection (IPC) or Insulation Displacement Connection (IDC)		Discussed at S. No. 199.	Mentioned at S. No. 199.
554		ANNEXURE B, Item No. 53: 24 port Fully Loaded OFC LIU  Item No. 54: 12 port Fully Loaded OFC LIU  Item No. 55: 06 port Fully Loaded OFC LIU	321 - 323 of 350	Aluminum base material for light mounting. : Yes	Aluminum/ Cold rolled steel base material for light mounting.		Discussed at S. No. 201.	Mentioned at S. No. 201.
555		ANNEXURE B, Item No. 56: OFC Patch Cord - 3 meter duplex single mode	323 of 350	Return Loss : 60 dB	Return Loss : 50 dB		Agreed to the suggestion. Lower loss in Patch Cord	Return Loss : 50 dB

-SD-  
General Manager  
(Fin) I/C

-SD-  
General Manager (E&T)

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General Manager (Civil)/ HoD