## Last Date of Bid Submission has been extended from 31.05.2016 to 14.06.2016

Name of work: Selection of Concessionaire for Design, Development, Implementation, Operation and Maintenance of Wi-Fi, Smart LED Street Light, City Surveillance, Command and Control Center in NDMC area in lieu of use of Street Light Poles for hosting Telecom Services and use of Right of Way (RoW) for Laying Optical Fiber for Telecom Services.

Replies to the queries raised in the pre-bid meeting held on 10.05.2016 are as under.

Sl.	RFP Section	RFP	Clause description	Queries /	Remarks for consideration	Replies to the queries
No		Clause		Clarification		
•		No.		required		
REI	LIANCE					
	T =	T	T	T =		
1	Invitation for proposal	1.1.2	NDMC hereby invites bids for	_		Clarification w.r.t. clause No. 3.2:
			Selection of a Concessionaire for	clarification as there is		Operations and maintenance
			the following works in lieu of rights			
			over existing electrical poles		1 3	= -
			(approximately 18500) as provided	period clauses	that Period of fifteen (15) years	(implementation period 12
			in clause 3.4.3, except high mast		from the date of signing of	months). In any case, the total
			poles, for installation of telecom		concession agreement,	concession period, including the
			equipments to enable multiple		<b>excluding</b> the Implementation	implementation period and
			telecom services based on Wi-		stage period of maximum 12	operations and maintenance
			Fi/2G/3G/4G/NextGen and the use		months (implies 1+15 years)	period, shall not exceed 15 years
			of right of way for laying the			from the date of signing of the
			optical fibre for <b>Telecom services</b>			agreement.
			for the concession period of			
			fifteen (15) years [one year			
			implementation period + fourteen			
			year post-implementation			
			period]:			
2	Important information related	1.8	Last Date for furnishing of PBG to		The Last Date for providing	No change in RFP
	to bid		NDMC		PBG to NDMC from the date of	
					issuance of LOA to be	
					increased from fifteen (15) days	
					to thirty (30) days	
					1 , , ,	

3	Integration of Smart Services & solutions	3.1.5	Seamless integration of Smart Services and Solution Seamless integration of following smart services and solution is desired: 1. City Wi-Fi 2. Smart LED Street Light 3. City Surveillance 4. Central Command and Control Centre Future Smart City Services like: 1. Electric Vehicle charging. 2. Pollution Monitors. 3. Smart Street furniture Fixtures. 4. Citizen Apps & kiosks. 5. Intelligent parking management.	what are the integration requirements for future smart city applications. The platform will have the Open API for integration. But any sensor/devices field installation, cables termination, mounting requirements and integration with Lighting and CCTV cameras requirements of sensors and fixtures is not included in this bid. Please clarify	limited to the current scope of work. Any future Network bandwidth, DC/CC infrastructure, related application software and Hardware and field infrastructure is not considered. The modalities of any future service offering are not clear from the RFP. The future work	Refer Clause No. 3.5.6 read with clause 15.2.  APIs to be provided by the concessionaire free of cost.
4	Integration of Smart Services & solutions	3.1.5	Making Provision for Future Smart Services like Electric Vehicle Charging, Pollution Monitors etc		As the details for making provisions for future smart services are not presently available, hence taking up the cost of these services into the project cost is not feasible. The future work related to smart services should be given to the current bidder with mutually agreed techno-commercial terms.	Clause 3.5.6 read with clause 15.2 will apply. APIs to be provided by the concessionaire free of cost.

5	Integration of Smart Services & solutions	3.1.6	The Concessionaire shall have the right to use existing street lighting poles in NDMC area ( approx 18500), except high mast poles		High masts should not be excluded from the definition as these are located at very critical junctions and are required to be connected with various services like Lighting, CCTV and Wifi services.	Concessionaire is allowed to use existing (as per list attached) High mast poles subject to prior approval of NDMC, statutory approvals and security clearance. The concessionaire shall replace such High Mast pole with a pole of similar height to keep the aesthetic look (such as equipments fully concealed within the pole structure, etc.) and requisite strength, intact. The concessionaire shall get the design of such high mast pole approved by NDMC. The concessionaire shall replace the lightings of such High mast poles with basic LED lights (of same or higher lux level), in addition to the quantity specified in the RFP document. Installation and O&M of CCTV on such high mast poles shall be the responsibility of the concessionaire, if required by the NDMC. Installation and O&M of Wi-Fi on such high mast poles shall be the responsibility of the concessionaire.
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Ó	Revenue source for concessionaire	3.1.7	Digital Marketing Rights	design & control digital spaces across platforms like Wi-Fi	can generate revenue through online services without hindering the free WiFi service for more than 5% time in total. It may be noted that RFP reads that 50MB of data should be provided to each user per day,	this the concessionaire is allowed
					this data may be consumed in few minutes (if the users downloads some media content) or it may last for an hour or more (if one is just browsing a social media site or exchanging messages over chat applications). Thus, the 5% time would be variable for various users. Therefore, RJIL should be allowed to control & generate revenue by placing online advertisements on the	
					WiFi landing pages/ Login flow page etc. without any cap.	
,	Integration of Smart Services & solutions	3.1.7(a)	Sharing the telecom equipments at electric poles among the telecom services providers to provide Wi Fi/2G/3G/4G/Next Gen/any equivalent connectivity services		It is understood that the concessionaire can allow installation of telecom equipments for exclusive use of other telecom/cable operators on the existing street light poles or if required, with replacement of such poles with approved	equipments for delivering telecom

					other height, he shall take prior permission in writing from the NDMC before doing so. The replaced pole shall be aesthetically good (such as equipments fully concealed within the pole structure, etc.) and structurally stable and as per NDMC specifications. The Concessionaire will give its structural stability certificate.
8	Integration of Smart Services & solutions 3.1.7	After implementation of the project or 12 months from the date of signing of concession agreement, which is earlier and till expiry of the Project, the concessionaire shall pay an amount quoted by it as monthly concession fee		The delay caused due to extraneous reasons beyond the control of the concessionaire should be considered for completion of project and start of concession fee.	NDMC may extend the implementation period up to eighteen months from the date of signing of the agreement, after considering the delay caused, which the concessionaire establishes through records that it is beyond its control.  In any case, the total concession period will not be extended beyond a period of fifteen years from the date of signing of the agreement.
9	City WiFi services 3.2.1.2	Hotspots should cover entire area of places given in RFP document. Applicants will be responsible for design and engineering of all the network components to meet coverage and capacity requirements of hotspots based on following parameters	Installation of additional poles may be required based on survey report to cover the scope given in the RFP	Necessary provisions should be made in the RFP to cover requirement of additional poles for providing the Wi Fi/2G/3G/4G/Next Gen services	No change in RFP. No additional pole will be allowed.

10	City WiFi services	3.2.1	Proposed city WiFi solution should be an integrated solution for city wide connectivity that establishes a platform on which IoT based applications and multiple NDMC services can be developed for both citizens & NDMC operations.	1 1	APIs to be provided by the concessionaire free of cost. Future smart city services will use the
11	City WiFi services	3.2.1	Free Wi-Fi for will be given to Public at minimum one (1) Mbps speed with a minimum throughput of 100kbps with minimum limit to download 50MB data per day subject to a limit of 1 GB per month throughout the concession period.	Many factors like physical obstructions, line of sight between equipment impact WiFi speeds, hence, it is not possible to commit minimum speed on Wi-Fi Technology. We, thus, request to remove the requirement of minimum 1 Mbps speed per user	No change in RFP.
12	City WiFi services	3.2.1 (B)	Concessionaire shall get the sample of LED lights approved from NDMC	The impact of delays in such approvals and incorporating the changes suggested should be considered while finalizing the implementation period.	NDMC will approve the sample of LED luminaries supplied and installed by the concessionaire within 15 working days if sample found acceptable as per the specified standards. Any shortcomings in the sample will be communicated by the NDMC to the concessionaire within such period, the concessionaire shall rectify the same and submit a revised sample to the NDMC. The same will be approved by the NDMC within 15 working days if sample found acceptable as per the specified standards.  In case, if no approval / deficiency raised by the NDMC

					within prescribed time-limit, the concessionaire shall bring-it into the notice of the Chairperson, NDMC, who in-turn direct the concerned department to dispose of the matter within 15 working days.
13	Smart lighting solution	3.2.2 '(C)	The total comprehensive warranty for replacement of these LED luminaries is for throughout the concession period of fifteen (15) years. During this period, the Concessionaire has to provide the replacement of all defective LED luminaries and other equipments related to LED fittings of all types installed.	The expected life of an LED is about 7 years. Hence, comprehensive warranty of 15 years is not feasible. It should be 7 years	No change in RFP.
14	Smart lighting solution	3.2.2 (F)	F. For maintenance of the Semi-Advance LED nodes and Advance LED nodes, the Concessionaire will depute his technical staff /engineers along with NDMC staff so that their will not be any dispute or mishandling of any item by NDMC staff. The complete responsibility of making it operational will be of the Concessionaire.	We suggest that since the NDMC already has an established network of divisional and zonal offices and technical personnel in place for services like Lighting, CCTV maintenance control & Command centre, hence O&M should be excluded from the concessionaire scope except for providing 1.5% spares for such items. NDMC should manage and operate the Command & Control centre. It is suggested that concessionaire should have only subject matter experts for services provided to assist the NDMC O&M team	No change in RFP.

15	Smart lighting solution 3.	.2.2.(G)	The communication connectivity of all LED lights for managing & monitoring shall be borne & maintained by the concessionaire throughout the concession period		The damages caused to the Electronic cards and Items due to erroneous Power supply should not be to the cost of concessionaire and any related penalties thereof	No change in RFP.
16	Project Scope & Punitive 3. clauses 9.	.2 and .1.1	3.2. Project Scope The Engagement Model is bifurcated into following two stages- (i) Implementation Stage; and (ii) Operation and Maintenance Stage: Up to 12 months from the date of signing of concession agreement  9.1.1 Implementation SLAs: These SLAs shall be used to evaluate the timelines for completion of deliverables that are listed in the deliverable. These SLAs will be applicable for commissioning of the project (upto GO-LIVE).		NDMC shall provide all the field details including Lat/Long of the locations, power readiness from NDMC, and shall approve make and model of Product within 7 days to the signing of the contract.  NDMC shall define the TAT for document/product/services approvals or review. Any changes in the requirements from RFP will affect the project execution schedule and hence suitably considered.	No change in RFP.
17	Centralized Command & 3. Control Centre	.2.4.1 v.	Center for centralized monitoring and decision making as per the scope defined below : t Managed hosted Data Center (DC) at NDMC premises	Please provide the measurements of the DC and details about the existing facilities available in it and what shall be the scope of NDMC in terms of CIVIL and MEP works.		New Data Centre to be created by the concessionaire. The concessionaire will give the space requirement along with the architectural design showing Civil, Electrical & Airconditioning work for data centre & CCC. Accordingly, NDMC will provide the space in Palika Kendra or any other location. Clause 3.2.4.4 will be read as "Necessary Civil, Electrical work including furniture, but excluding Air-conditioning shall be the

						responsibility of NDMC for Data Centre, and Command & Control Centre".
18	Centralized Command & Control Centre	& 3.	Central Command Centre will be the nodal point of all online data & information related to LED Lighting, CCTV Cameras, Wi-Fi, Sensors and connected to NDMC network of services		It is understood that the network for Wi-fi, Street smart lights and CCTV being created under this project needs to be monitored. Please clarify.	The Concessionaire has not to install the sensors for other smart city services but Central Command and Control will be the central nodal point for integrating & display of all online data and information for other smart city initiatives.
19	Centralized Command & Control Centre	& 3.	Command Control Centre will be established with all hardware, software and network infrastructure including switches and routers and will be maintained by the Concessionaire throughout the concession period.	What is the built-up (Sft) area of the CCC and which floor level is this? Is it collocated with DC?	Site visit to CCC and DC is required	The concessionaire will give the space requirement within one month from the date of signing of the agreement. Accordingly, NDMC will provide the space in Palika Kendra or at any other location.
20	Centralized Command & Control Centre	& 3.	Necessary civil work including furniture shall be the responsibility of NDMC	Design and time period of this work is not clear	The delay in finalizing the design, approval and creating the said infrastructure for CCC may lead to delay in starting the work of integration and trials. This delay should be considered while defining the SLA for Project Period completion.	The concessionaire will give the Architectural Design showing Civil, Electrical, furniture, Airconditioning and all other work for Data Centre and CCC within two months from the date of signing of the agreement. Accordingly, NDMC will execute the Civil, Electrical works, excluding the Air-Conditioning works and provide furniture within a reasonable time.

21	Centralized Command & Control Centre	3.2.4.5 / 3.5.1	Providing 4 pairs of Optical fibres up to last mile connectivity free of cost.	mentioned up to pre- aggregation location	extended to each pole (last mile at poles may be with CAT5/6 cables to connected Wifi APs and CCTV cameras), it is assumed that the fiber will be extended upto the aggregation	· · · · · · · · · · · · · · · · · · ·
22	NDMC responsibilities/ROW	3.4.1	Free Right of way to lay U/G optical fibre cable for providing telecom services for 3 years & for fiber maintenance activities throughout the concession period of 1+14 years		It is suggested that since there will be continuous expansion of the telecom services, laying of optical fibre network will be a continuous process. Hence free RoW should be extended for the entire concession period of 15 years. Also, it shall eliminate the chances of any ambiguity for differentiating free services for maintenance purposes.	Refer Clause No. 3.4.1 & 3.4.2. After the expiry of three years, NDMC will allow permission for Right of Way for maximum fifty (50) KMs, free of cost, subject to other conditions mentioned in the RFP, including restoration by the concessionaire, during the rest of the concession period.

23	NDMC responsibilities/ROW	3.4.1	NDMC will provide permission in	We understand that any other	No exclusive right for RoW.
			writing for Right of Way, including	operators if requires any pair of	Other Service providers will be
			permission to use NDMC's existing	optical fibre cable/dark	allowed to lay optical cables by
			tunnel in Connaught Place area for	fibres/bandwidth/ducts for its	NDMC as per NDMC's
			such purpose, free of cost in	own consumption/usage shall	prevailing policy from time-to-
			NDMC area to lay underground	be required to take from the	
			optical fibres/cables for providing	existing concessionaire instead	
			licensed telecom services for three	of laying its own network of	
			years (i.e. implementation period of	optical fibre cable network by	
			one year and subsequent two	taking separate RoW from	
			years).	NDMC. This clarity is required	
				as multiple digging by various	
				agencies shall create chaos,	
				damages to existing networks	
				and also make judicious use of	
				existing available infrastructure	
				in NDMC	

24	Right of usage of street lighting poles	3.4.3	The concessionaire on its own will arrange power for telecom/Wifi/BTS equipments	The WiFi service & equipments are being installed to provided free of cost service to the citizens. The cost of establishing consumption & its recovery, for the WiFi equipment, would propabably, be more than the consumption charge itself. Thus, it is requested that NDMC should bear the electricity charges towards the WiFi equipment  For other equipments, instead of arranging power by the concessionaire which involves laying of separate power cable and energy meters; NDMC may charge the concessionaire on fixed consumption basis based on Rated power consumptions of telecom equipments. It is also understood that space can be provided under such poles for UPS/Battery banks for uninterrupted power supply to such equipment.	NDMC will provide the metered electricity to the concessionaire for telecom/ Wi-Fi/ BTS equipments on payment basis. As per NDMC's prevailing policy, necessary one-time charges for metered connection and recurring charges to be paid by the Concessionaire.
25	Right of usage of street lighting poles	3.4.3	NDMC reserves the right to use existing street lighting poles for any purpose. NDMC reserves the right to collect rental/user charges from those who have installed any equipments for any purpose on these street lights poles.	It is understood that status quo shall be maintained for any such usage and no poles will be further allocated to any other telecom or cable operators for putting up their gears. For any new requirement for any such services which is defined in RFP shall be shared through the concessionaire only during the	No change in RFP.

				concession period.	
26	Right of usage of street lighting poles	3.4.3 sub point (i) and (iii)	Right of usage of street lighting poles in NDMC area:  (i)This does not include right to use such street light poles by the Concessionaire for any other purpose except as mentioned herein above.  (iii) The Concessionaire shall have no right for any purpose on any street light poles, which would come in future i.e. other than street light poles covered above in clause 3.4.3(i).	RJIL requests NDMC to provide the space on poles for branding & marketing purpose to create awareness, free of cost	No change in RFP.
27	Right of usage of street lighting poles	3.4.4	All the electricity consumed for providing service to NDMC, like city surveillance, LED street light and any other equipment used for this project except Wi-Fi services, will be free of cost. The Concessionaire will take separate electric meter for running his own services.	Will NDMC bring the metered power to the pole where Camera is installed? If the ODC equipment installed on the pole/ground, will NDMC bring the metered power to the junction box/ODC? Whose scope is the application for electricity meter? And power cabling up to ODC?	It will be the responsibility of Concessionaire to apply for the electricity meters to the NDMC as per its requirement. NDMC will provide electric meters on feeder pillars. The concessionaire has to lay its own cable to extend power supply from the meter to the equipments. Necessary permissions for laying will be given by the NDMC. Any RoW permission for such purpose will be given by the NDMC, free of cost during the implementation period only, and subject to other conditions as mentioned in the RFP w.r.t. RoW for laying optical fibre including restoration by the Concessionaire.

					For Cameras and LEDs, electricity supply is already available on each pole, and no metering is required.
28	Right of usage of street lighting poles	3.4.7	During the concession period, if there is any requirement for replacement of (i) electric pole installed by NDMC on which no telecom equipment is installed by the Concessionaire for its usage; or (ii) power cable for providing electricity to LED/CCTV, the same shall be done by NDMC without any cost to Concessionaire	This should include poles where wifi equipment is installed	No change in RFP.
29	Right of usage of street lighting poles	3.4.8	After Concession period the optical fibre laid by the Concessionaire can be used by the Concessionaire as per NDMC policy in force at that time and as applicable to other service providers.	It is understood that the concessionaire will own all the fiber laid under this project after the concession period. Any service can be provided to NDMC on mutual agreed commercial terms after the concession period.	No change in RFP.
30	Right of usage of street lighting poles	3.4.9	At the end of concession period, all rights given to the concessionaire, including right to use the electric poles shall be terminated automatically	Since the investment made in creating this captive network of 3 tier architecture is huge, hence there should be reasonable clause put in place for continuity of the services by the concessionaire.	No change in RFP.

31	NDMC responsibilities/CCTV	3.4.10	For installation of CCTV(s),Hosting of telecom equipments will not be allowed on such additional poles by the Concessionaire.	equipments for CCTV Connectivity will be	cabinets / Junction Boxes shall be allowed to install on pole. Additional pole if required for providing the WiFi coverage shall be provided by NDMC	No change in RFP.
32	NDMC responsibilities/CCTV	3.4.10	For installation of CCTV(s), if there is any requirement of additional poles, the same will be provided by NDMC at its own cost. Hosting of telecom equipments will not be allowed on such additional poles by the Concessionaire.		Concessionaire should also be allowed to install additional poles for its 2G/3G/4G/Wi Fi/Next Gen coverage requirement other then 18500 Poles as the installations only on existing poles cannot give ubiquitous coverage for Wifi services	No change in RFP.
33	NDMC responsibilities	3.4.12	NDMC shall provide single window clearance to the concessionaire for the purpose of RFP document		We assume and understand that in Single window permission, the file shall not move to various other departments like Electrical, Civil, Horticulture, IT etc as these could lead to further delay in approvals and lose the advantages of Single Window Permission. Single window clearance should also have a time bound approval mechanism not exceeding 7 days	NDMC will give permission within 15 working days of submission of proposal subject to the completeness of the proposal. The concessionaire has to submit the proposal as per NDMC requirements and laid down procedures.  In case, if no approval is given by the NDMC within prescribed time-limit, the concessionaire shall bring-it into the notice of the Chairperson, NDMC, who in-turn direct the concerned department

				to dispose of the matter within 15 working days.
34	Concessionaire responsibilities 3.5.3	Set -up Captive Network ( IP MPLS based 3 Tier Architecture ) for NDMC to rollout various services.	It is understood that the existing network can be synergized so that all the technological benefits available today are fully harnessed/realized. Setting up a dedicated 3 Tier network exclusively for NDMC is neither desirable nor intended.  Continuity of NDMC services after the concessionary period can be ensured as per mutually agreed terms at that point in time	No change in RFP.
35	Concessionaire responsibilities 3.5.5	3.5.5 In case, any pair of fibre allotted to NDMC get damaged or not functional due to any reason, the Concessionaire will provide alternate fibre pair in not more than two hours so that NDMC service will not get effected.	Any fiber pair getting damaged/faulty is repaired in 4 hours on average basis. Any reason beyond the control of concessionaire (3rd party permissions or natural calamities) has to be considered in this.	In clause 3.5.5. "two hours" will be read as "3.5 hours".

nsibilities	It is the responsibility of the Concessionaire for the watch and ward of the assets / services created in this project except luminaries.  The Concessionaire has to replace the material(s) / equipment(s) in	The responsibility of Watch & Ward should rest with NDMC for all assets/services including Luminaries, CCTV and all related accessories, Network Gateways/Switches/Power
	case of any theft or loss due to any other reasons, which affects the services / assets provided for the NDMC under this project.	backup installed for the exclusive use of NDMC and Citizens including Free Wi-fi services.
		The concessionaire cannot be held responsible for any theft/loss/damages to the equipment and accessories which is beyond the control of the concessionaire

7 Concessionaire	3.5.10	The Concessionaire has to use the	It is assumed that all the	No change in RFP.
responsibilities		existing poles to provide the LED /	existing street light poles will	_
_		Smart / Semi-Smart LED street	be capable and sufficient to host	
		lights, Wi-Fi, CCTV. Replacement	the desired LED lightings and	
		of brackets on poles, wherever	CCTV including its accessories.	
		required, will be done by the	If this requires to be	
		Concessionaire . If Concessionaire	strengthened or replaced,	
		feels that any of the existing	NDMC should bear the cost	
		electric pole needs replacement to		
		enable fixture of these equipments,		
		the same will be done by the		
		Concessionaire at its own cost		
		subject to approval of the design,		
		aesthetics and safety of the pole by		
		the NDMC. If at any stage NDMC		
		wants to upgrade / replace these		
		poles as per its own assessment,		
		then NDMC will bear the cost of		
		replacement of electric poles.		

38	Concessionaire responsibilities	3.5.11	if the concessionaire wants to replace the existing pole with a pole of other height, he shall take prior permission in writing from the NDMC before doing so. The replaced pole shall be aesthetically good and structurally stable as per NDMC specifications	approval for such design which can host the telecom equipments for multiple operators shall be given in advance for the Masts being put with expected heights of 25-30 Mtrs. The LED Lights and CCTV if required shall be installed at desired heights. The Masts can be camouflaged as per design and the design for such Masts can be submitted along with bid document. Additionally there should be no requirement of taking separate NOC from NDMC for putting up such masts for telecom services.	
39	Concessionaire responsibilities	3.5.15	The Concessionaire is required to provide adequate battery bank to ensure uninterrupted power supply to services provided to the NDMC under this project except for LED lights at street poles.	NDMC should provide power supply with back up. Management of batteries in open environment is a challenge and beyond the control of Concessionaire.	No change in RFP.

40	Concessionaire responsibilities	3.5.18	Any damage to other services arising due to execution or repair or maintenance work by the Concessionaire shall have to be made good by the Concessionaire within 48 hours of such damage, failing which NDMC has right to get it done at the risk and cost of the Concessionaire and in such case, NDMC will charge double of the cost incurred on making it good from the Concessionaire.	While all efforts shall be made to rectify such damages within defined period but for some reasons if not done, the repair cost for same should be taken on actual cost only.	No change in RFP.
41	Concessionaire responsibilities	3.5.21	Failure to pay the Concession Fee in time will attract an interest of 18% per annum on the entire amount of unpaid concession fee due.	Prevailing bank rate should be applicable	No change in RFP.
42	Concessionaire responsibilities	3.5.22	The final route will be decided/approved by NDMC keeping in view the requirements of the concessionaire and site conditions	The decision to change the route can have lot of implications on network planning, hence any change should be based on mutually agreed terms	No change in RFP.
43	Concessionaire responsibilities	3.5.26	NDMC will appoint an independent third party to check the quality of restoration work done. The cost of hiring / engaging third party will be borne by the Concessionaire and NDMC equally.	Sharing of cost for hiring of third party inspection for road restoration should be excluded or else the penalty clause of 1.5X cost should be excluded.	No change in RFP.

44	Bid documents	4.10.2 / 5.4.1.2	4.10.2 Financial Bid to cover all annexure  5.4.1.2 The information regarding cost of equipments, cost of installations, manpower costs and O&M costs throughout the concession period should be provided as per the format given in the RFP document (Annexure- 15: Table 1 to 4).	be removed as the objective of this RFP	provided for LED lighting, CCTV, Wi-Fi and Command &	Information asked from the concessionaire is for the services to be provided by the concessionaire to the NDMC as per this RFP document, such as LED lightings, CCTVs, Wi-Fi, Data Centre, Command & Control Centre, etc.
45	Administrative guidelines	4.26	The concessionaire will also be responsible for coordination with Private and Public agencies for approvals and clearances for power and Utility Infrastructure		A necessary note/instruction is advisable to all Utility owners to provide permissions on priority including traffic permissions required for Machines and teams working on ground for all works mentioned under RFP. Any unwarranted delay in any permission and beyond the control of the concessionaire should be considered and acknowledged by NDMC while finalizing the 1 year implementation period or levying of any penalty	For permissions other than in purview of NDMC, the concessionaire has to arrange such permissions at their own. NDMC may act as a facilitator for obtaining such permissions by the Concessionaire. However, this will not create any right in favour of the concessionaire for getting such permission through NDMC.

46	O&M guidelines	4.27	Shall provide comprehensive on site warranty & maintenance for all the hardware items, Peripherals, CCTV's and LED Luminaries	People for onsite maintenance and managing the team for such small replacements and maintenance activities of items like CCTV,	NDMC already has an established network of divisional and zonal offices and technical personnels in place for services like Lighting, CCTV maintenance control & Command centre, hence O&M should be excluded from the concessionaire scope except for providing 1.5% spares for such items. NDMC should manage	No Change in RFP, considering clause 3.4.11 of the RFP document.
47	O&M guidelines	4.27	The concessionaire shall depute adequate manpower as full time dedicated onsite FMS team for day to day activities including taking back up of data etc		It is suggested that concessionaire should have only subject matter experts for Maintenance of Equipments installed and day to day activities and minor repairs and trouble shooting should be excluded from the scope	No Change in RFP.

48	Eligibility criteria	5.2.3 S1	Registration under Tax, Labour	<u> </u>	In specific requirements
		no. 6	Laws, Electrical Laws, etc.	works on its various	mentioned in Sl. No. 6 of the table
				projects through	provided under Clause 5.2.3, after
			The Applicant or the Lead	"principal employer",	sub-clause (e), the following
			Applicant should have a registered	therefore clause 5.2.3	proviso is added:
			number of:	Sr. No. 6 (d) & (e)	"Provided that in case of (d) and
			(a) VAT/Sales Tax where his	may please be	(e) above, if (i) ESI Registration;
			business is located;	removed as the same	or (ii) EPF registration; or (iii)
			(b) Service Tax;	is not required for the	registration of Labour License,
			(c) Income Tax PAN;	purpose of	is/are not available, then in such
			(d) The ESI & EPF registration	qualification of	case an undertaking on a stamp
			as per	applicant OR else the	paper of Rs.10 shall be provided
			Labour Laws;	clause should read as	stating that the same will be
			(e) Registration of Labour	applicant/Associate/pri	obtained within a period of two
			License	ncipal employer.	months from the date of signing
					of the agreement;"
					Documents Required mentioned
					in Sl. No. 6 of the table provided
					under Clause 5.2.3 will be read as
					follows:
					"Copies of relevant(s) Certificates
					of Registration. Undertaking on
					stamp paper, if applicable."

49		.3	Approach, Methodology, Project Management, Execution Methodology, SLA management (i) The Technology Architecture blue print with various components asked, (ii) Correlation and analytics of data, integration Architecture, (iii) Technical and functional specifications compliance, (iv) Make and model, (v) Response to SLAs and plans to manage uptime.  **Applicant has to offer best quality of products. Lower the quality, Lesser the marks.	benchmark/standard to assess the quality parameters if any other than the compliance to the product specs provided in RFP for evaluation process	No change in RFP.
50	Technical evaluation 5	.3.2	Criteria for Technical Evaluation	What will be evaluation period for technical bid proposal	No such evaluation period is prescribed.

51	Interest cost	8.19	Any sum which becomes payable under any of the provisions of this Agreement by the Concessionaire to the NDMC shall, if the same be not paid within the time allowed for payment thereof, shall be deemed to be a debt owed by the Concessionaire to the NDMC. Such sum shall until payment thereof carry interest at 18% per annum from the due date for payment thereof until the same is paid to or otherwise realised by the NDMC.	Prevailing bank rates should be applicable	No Change in RFP.
52	Miscellaneous/LED	8.8	The concessionaire has to replace 40% of all manageable and partially manageable LED light within first 4 months and balance 60% in next 3 months	There are multiple activities involved for installation of LED lighting including finalization of supplier, approval of LED lights from NDMC, forward logistics in replacement activity, removal of old lights and reverse logistics. Considering the lead time involved for multiple activities of such proportion, we recommend that the time period should be 12 months instead of 7 months presently	Clause 8.8 will be read as follows: "The Concessionaire has to replace 25% of all basic LED lights within first four months, thereafter 50% of all basic LED lights within next four months, and remaining 25% basic LEDs within next four months, from the date of signing of the agreement. The Semi-Advanced LEDs and Advanced LEDs and other equipments will be installed as per schedule prepared by the Concessionaire."

3	Punitive clauses/SLA (Implementation period)	9.1.1	Implementation SLAs: Penalty of Rs. 50 lakh per week going up to Rs. 15 crores for maximum 30	the working in NDMC area will have lot of	mechanism for acknowledgement of such	eighteen months from the date of
			weeks 15 croies for maximum 50 weeks	distractions and stoppage of work which could lead to delay beyond the 12 months period such as but not limited to 1) Any delay in approvals from NDMC like LED lights sample approval, readiness of Command and Control centre.	delays caused which is beyond the control of the concessionaire and acknowledgement of same in writing and consideration of same while computing the implementation period for the project and subsequent imposition of penalty clause.	signing of the agreement, after considering the delay caused, which the concessionaire establishes through records that it is beyond its control.  In any case, the total concession period will not be extended beyond a period of fifteen years from the date of signing of the agreement.
				GAIL/IGL/DJB/DMR C/DTL/Police Etc	the control/influence of the concessionaire should be explicitly defined and factored in while defining the scope and quantum of penalty	
1	Punitive clauses/SLA (post implementation)	9.1.2	Post-Implementation SLAs: Different penalty clauses for non performance /SLA violation (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)			

55	Punitive clauses/SLA (posimplementation)	9.2	SLA defined for Wi-Fi System availability (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
56	implementation)	t 9.2	SLA for availability of Wi-Fi System on Internet through Access Points (AP) (Per AP hour)	to 99% w.r.t Overall Quarterly Network Availability since the SLA of 99.5% is too high for a Wi-Fi Environment.	Points, switches etc.) would be exposed to the extreme climate, which may lead to break down of equipment. It is thus requested that the SLA for uptime of WIFi services should not be more than 99%	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
57	Punitive clauses/SLA (posimplementation)	et 9.2	SLA for availability of Wi-Fi System on Internet through Access Points (AP) (Per AP hour)	Also Wi-Fi being a service normally availed during prime hours, the SLA should be w.r.t prime hours for e.g. 8am to 8pm, wherein downtime due to electric supply failure, theft etc. should be considered as Force Majeure Cases	As WiFi equipments (Access Points, switches etc.) would be exposed to the extreme climate, which may lead to break down of equipment. It is thus requested that the SLA for uptime of WIFi services should not be more than 99%	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
58	Punitive clauses/SLA (posimplementation)	9.3	SLA defined for Internet throughput greater than 1 MB. (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.

59	Punitive clauses/SLA (post implementation)		SLAs for CCTV Surveillance System and ANPR cameras (per camera	What are the SLAs for ANPR performance for different vehicle categories (cards, bikes, heavy vehicles etc.)?  Number recognition accuracy for standard and non standard number plates? What speeds the ANPR is required? Any Indian letters/language to be supported (Hindi/etc.)?		At any speed, the concessionaire should ensure ≥95% vehicles detection accuracy.  For vehicle number plates, the accuracy should be ≥75% during daytime and ≥70% during nighttime.  ANPR may not be required to identify the vehicles number plates in Hindi / other regional language.  Application software should have provision to store stolen / black listed vehicle numbers manually/automatically. System should support Centralized ANPR system through SDK and should take updates of Stolen Vehicles / Black listed vehicles data from centralized ANPR system.
60	Punitive clauses/SLA (post implementation)	9.4	SLAs defined for CCTV Surveillance System and ANPR cameras (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.

61	Punitive clauses/SLA (posimplementation)	t   9.5	SLA defined for Central Command & Control room services uptime (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
62	Punitive clauses/SLA (posimplementation)	9.6	SLA defined for basic and semi- smart LED luminaries and their controller(s) (Penalty varies from Rs. 10 lacs to Rs. 50 lacs for SLA below 99.5% up to 95%)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
63	Punitive clauses/SLA (posimplementation)	9.7	SLA defined for other systems not explicitly covered (Penalty from Rs. 1-2 lacs defined for information security breach, network and system security breach on hourly basis and guideline breach on daily basis)		For O&M, we suggest to keep only spares as per the defined quantity. Stringent SLAs and Penalties should be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
64	Punitive clauses/SLA (posimplementation)	9.4/9.6/ 9.7	Post Implementation SLA's	LED lights and CCTV is very stringent as there could be failures because of various reasons beyond the	Penalties to be removed.  There may be Incidents beyond the control/influence of the concessionaire/NDMC.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.

				mishandling etc; hence it is suggested by us to relook into this penalty clause and reasonable exclusions should be provided on case to case basis.		
65	Force Majeure	10.2	force majeure events		The Concessionaire or the NDMC, as the case may be, shall be entitled to suspend or excuse performance of its respective obligations under this RFP document to the extent that such performance is impeded by an event that is outside the control of Concessionaire ('Force Majeure').	No change in RFP.
66	Events of Default	11.1 (v)	The Concessionaire has failed to ensure minimum shareholding requirements specified in clause 5.2		Restricts concessionaire from changing its shareholding structure. Shareholding of concessionaire needs to be negotiated.	No change in RFP.
67	Events of Default	11.1 (xii)	The Concessionaire is not able to meet the SLAs minimum requirement of 95% uptime at all the times or otherwise.		Clause to be deleted	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
68	Withdrawal of termination notice	11.6	Provided that the Concessionaire shall compensate the NDMC for any direct costs/ consequences occasioned by the Event of Default which caused the issue of Termination Notice.		Clause to be deleted	No change in RFP.

9	Termination payments	11.7 (a)	Performance Bank Guarantee	" all the assets and	RFP needs to provide both	If the Agreement is terminated
	(Implementation period)		furnished by the Concessionaire,	services created under	parties with a right to terminate.	due to Event of Default, NDMC
			and all the assets and services	this project will		shall forfeit the Performance
			created under this project will	become the property		Bank Guarantee furnished by the
			become the property of NDMC.	of NDMC." Exclusion		Concessionaire, and all the assets
				of Telecom services		and services created under this
				related infrastructure		project will become the property
				is missing		of NDMC. The Concessionaire
						shall pay all fees/ dues, if any, to
						the NDMC before the date of
						termination.
						This will include Performance
						Bank Guarantee furnished by the
						Concessionaire, all the assets &
						services created under this project
						for NDMC usage and for
						providing free Wi-Fi.
						This will exclude Telecom
						Services related infrastructure
						created by the Concessionaire for
						its sole usage.

70	Termination payments (post implementation)	11.7 (b)	However, the Concessionaire will be allowed to use the fibre network laid by it as per NDMC policy in force at that time and as applicable to other service providers only after successful delivery of the services /deliverable under this RFP document to the NDMC, including LED Street Lights, CCTVs, four pair in the optical fibre laid by the Concessionaire, Command and Control Centre inclusive of Networking and Data Centre.	concessionaire any termination rights. Concessionaire needs to reserve its right for	_	The concessionaire may terminate the agreement by giving a notice of 60 days to the NDMC. Such termination is subject to the fulfillment of the conditions, as prescribed under clause 11.7 and 11.8, by the concessionaire.
71	Dispute resolution	12	dispute resolution		1.In case of dispute both parties shall have a right to invoke arbitration as per Arbitration and Conciliation Act, 1996. Three Judges Arbitration panel. Each Arbitrator to be appointed by the parties and two appointed arbitrators shall appoint the third Arbitrator. 2. In case Arbitrator to be appointed by NDMC Chairman, then Chairman may suggest names from the panel of Retd Judges. Parties may consent for one name	No change in RFP.

72	Cooperation and provision of information	14.3	(i) the Concessionaire will allow the NDMC access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable the NDMC to assess the existing services being delivered;		It shall be at the discretion of the consessionaire to allow NDMC to access information	No change in RFP.
73	MPLS aggregation POP	15.1.5	(i) Network connectivity required up to Police Stations in NDMC area for viewing CCTV footage. Police station Sites to be confirmed (ii) Network connectivity up to all eleven Billing centers of NDMC area.	Please clarify	Site details of viewing center, police stations and billing centers are required.	Location of Police stations are: (i) Sansad Marg, (ii) Connaught Place, (iii) Barakhamba Road, (iv)Tughlak Road, (v) Chanakyapuri, (vi) Sarojini Nagar (vii) Tilak Marg, (viii) Mandir Marg, (ix) Lodhi Colony, (x) Kotla (Partly), (xi) Upcoming Police Headquearters at Jai Singh Road.  Network connectivity up to all fifteen Billing centers of NDMC area. The concessionaire will finalize these locations with prior approval of the NDMC.
74	Functional requirement of Command and Control Centre	15.2.1	The platform should be able to integrate with other e-governance and business application to read and analyses data from those applications to be visualized on the integrated dashboard.	Integration can be done through a standard API. No integration scope for e-governance applications is included in it.		No change in RFP.

75	Data centre switch	15.2.3	Technical Specifications for Data Center infrastructure	premises? If so please	DC and CCC can be in same premises or at different locations.  DC and CCC are to be created by the concessionaire. The concessionaire will give the space requirement along with the architectural design showing Civil, Electrical & Airconditioning work for data centre & CCC. Accordingly, NDMC will provide the space in Palika Kendra or any other location. Clause 3.2.4.4 will be read as "Necessary Civil, Electrical work including furniture, but excluding Air-conditioning shall be the responsibility of NDMC for Data Centre, and Command & Control Centre".
					NDMC will provide free electricity for DC and CCC but all other responsibilities lies with the concessionaire.

76	Functional requirement of City Surveillance	15.5.1	Functional requirement of City Surveillance- Video storage	As per the RFP it says recording at 15FPS/2MP for 30days. Please clarify the following: a) is the recording specs are same for day and night? b) is the recording specs are same for low and high motion areas? and for working and non working days? C) after 30days the video storage is backed up by NDMC as offline storage? If so it should be in scope of NDMC		Concessionaire has to provide recording solution at 15FPS of 2MP for day as well as night. Proposed application should support for back-up, if required by the NDMC.
77	Video management system	15.5.2.1	VMS Note - Video Surveillance Software and Cameras should be from single OEM		Video Surveillance Software and Cameras of various brands are available in the market. To ensure we procure the best quality at right prices, the spirit of competition has to be brought in. Therefore, it is imperative to have multiple vendors for selection. Hence, procurement should not be restricted to one single OEM	It is preferred to have Video Surveillance Software and Cameras from single OEM for better integration and interoperability perspective. In case more than one OEM is proposed then in such case, there should be compatibility and interoperability and integration between the Surveillance Software and Camera.  Preference will be given to solution from single OEM in QCBS criteria.  However, Concessionaire are free

					to provide the various brands solution, same will be evaluated in QCBS criteria.
78	Video management system	15.5.2.1	OEM Criteria All proposed Cameras should be from single OEM and OEM should have Registration in India min from 10 Years	remove this clause and especially being from same OEM and OEM being in India for last 10 years as most of the products are imported	No change in RFP.
79	HD Cameras	15.5.2.2	Type 1- PTZ - High Definition Camera	Power source can be either AC or DC based on the overall field engg. NDMC shall give the flexibility to the bidder	No change in RFP.
80	HD Cameras	15.5.2.2	Type 1- PTZ - High Definition Camera	what is the contact rating required for DI and DO?	Camera should support for input and output ports, state change of an input port triggers a camera to take defined action. An output port sends signals that can control 3rd party devices.
81	HD Cameras	15.5.2.2	Type 1- PTZ - High Definition Camera	Please clarify if Micro SD card slot support or also provide the storage card?	Storage card is to be provided by the Concessionaire.

82	HD Cameras	15.5.2.3	Type 2- PTZ - Standard Definition AI X4, AOX2	Please clarify if it is Analog input/output or video aux Input/output?		Requirement of this camera has been deleted from the RFP document.
83	Video & Audio Analytics	15.5.2.8	Video & Audio Analytics Audio Analytics - The System should support Audio Analytics at camera edge or at server level, should have provision to enable the following audio analytics with any camera, system Gunshot software shall be provided No change in RFP. requirements:	For Audio analytics, please advise a separate external microphone required or use Mic built into camera? Best practice is to use separate high quality micro phone for Gunshot detection		Concessionaire has to ensure functionality of system. No change in RFP.
84	Not covered in RFP	General	Interference free WiFi services	RJIL request to provide the exclusivity to provide WiFi in NDMC area as mentioned in RFP during the concession period	In order to provide glitch free Public WiFi service, we would need an interference free environment for our access points. For which there should be no other AP(s) (of any other operator) be deployed in vicinity, as they may cause interference & thus, impact the performance. The concessionaire should get exclusivity for creating Public WiFi services in the demarcated area / geography	No change in RFP. NDMC will not allow any exclusive rights for public Wi-Fi services.
85	Not covered in RFP	General	Kiosk / Physical marketing space	In order to serve the citizen better, kiosk space should be assigned to concessionaire. This kiosk would also act as a customer help	Request to consider	No change in RFP. NDMC will not allow any Kiosk/Physical marketing space.

				desk		
86	Not covered in RFP	General	Device Life Cycle	Hardware/Software Refresh timeline is not mentioned.	Refresh time line is required as it will add to the project cost	As per requirements of services asked in the RFP document, including SLAs.
87	Not covered in RFP	General	If there is any need of concessionaire for the space on NDMC building/premises for any site/equipment installation requirement, is the same available (beyond the poles)?	to install equipment		No other space will be provided at all.
88	Not covered in RFP	General	It is assumed that the fiber permission is available in the entire NDMC area for all the roads and lanes. If there is any restriction, the same may pl. be clarified.	for permission in		All permissions are subject to statutory approvals, security clearances, and conditions mentioned in the RFP document, including clause 3.5.22.
		3.2.4.4	Necessary civil work including furniture shall be the responsibility of NDMC			Clause 3.2.4.4 will be read as "Necessary Civil, Electrical work including furniture, but excluding Air-conditioning shall be the responsibility of NDMC for Data Centre, and Command & Control Centre".

INI	DUS			
89	General		Extension of RFP submission date to 30th June, 2016 because of the expansive nature of the project.	Bid submission date has been extended from 31-5-2016 to 14-6-2016.
90	1.2		Requesting Concession Period to be increased to 25 years from the current 15 years envisaged in the RFP for economic viability.	No change in RFP.
91	1.2		Request to include High Mast Poles in NDMC area in the scope of RFP in order to provide better network coverage. Please Confirm.	Read reply to Sl. No. 5 above.
92	1.2		No Termination of contract to be done before the concession period by NDMC. In case of termination, NDMC to reimburse the concessionaire, the CAPEX invested along with interest.	No change in RFP.
93	1.2 (III)		Wi-Fi speed provisioning for 1 Mbps is requested without mentioning number of people, device type. Please specify the number of people for which 1 Mbps is desired as it is highly impossible to estimate the movement of people in the area where Wi-Fi is desired. Please	1MBPS speed.

			clarify.	
94	1.2 (III)		It is also understood that free Wi-Fi 50 MB per day is for per user and not per location. Please confirm	Free Wi-Fi data is 50 MB per day per user.
95	1.2 (v)		NDMC to be provided 4 pairs of optical Fibre. Please clarify from where till where is the Fiber pair required.	Four pairs of optical fibre are required in complete network created in NDMC area, including from Command & Control Centre to equipments at last mile.  The optical fiber may not be
				extended to each pole (last mile connectivity to each pole) and the connectivity will be provided through POE/ CAT5/CAT6 cables depending on the equipments to be connected (such as Wi-Fi APs,
				LEDs Controller, CCTV cameras etc.). Distance of aggregation switch cannot be more than 50 mtrs. from the equipments i.e.
				gateways for luminaries controller, CCTV, Wi-Fi access point.
				Further, there should not be any loss of data and optimal bandwidth is ensured for each

				equipment.
96	3.2		Requesting Implementation Stage / Go LIVE period to be increased to 36 Months from currently envisaged 12 months due to restricted time window available for execution. e.g. In Monsoon Season and in Day Time, Fiber laying isn not possible / permitted in NDMC areas. Please Confirm.	eighteen months from the date of signing of the agreement, after considering the delay caused, which the concessionaire establishes through records that it is beyond its control.  In any case, the total concession period will not be extended beyond a period of fifteen years from the date of signing of the
97	3.2.1.1		Wi-Fi is to be provided in the locations specified. Any structure, power connection, Free Right of Way and restoration to be done/provided	agreement.  No change in RFP.
			by NDMC for such locations. Please confirm	
98	3.2.2 (G)		Communication Connectivity for LED Lights is desired. NDMC to pay the concessionaire the connectivity charges. Please clarify.	No change in RFP. It is the responsibility of the concessionaire.

99	3.2.3	For the CCTV mentioned locations, Fibre laying would be required. Any Structure, Power connection, Free Right of Way and restoration to be done /provided by NDMC for such locations as Fiber laying would be required. Please Confirm.  No change in RFP. It is the responsibility of the concessionaire as per the RFP document. Refer reply to Sl. No. 27 above.
10	3.4	Request NDMC to allow Laying of fiber for 5 years instead of 3 years as mentioned in the RFP. Please confirm
10	3.4.1	The RFP mentions use of ROW. It is assumed that no ROW or Restoration charges to be charged to concessionaire for Fiber and restoration is to be done by concessionaire on its own. Please Re-confirm
10 2	3.4.1	RFP Provides the concessionaire to lay Fiber for 3 years. It is assumed that Fiber can be laid anywhere in the NDMC area in addition to the requirement of this RFP without any ROW or restoration charges by NDMC. Please confirm
10 3	3.4.1	Fiber can be laid by Concessionaire, including Concessionaire, its associates/group companies or any parties duly authorized by the concessionaire. Please confirm

10 4	3.4.3 (i)	In case of DOT and or any other agencies instructs to deinstall telecom equipment on the street poles or does not allow to put telecom equipments, thus making this RFP VOID. In this case, NDMC to reimburse the CAPEX invested along with interest. Please confirm.
10 5	3.4.3 (ii)	NDMC to allow and provision for Space availability near (at the base of) each street poles for hosting the Telecom equipment and related accessories  NDMC to allow and provision for Space availability near (at the base of) each street poles for hosting the Telecom equipment and related accessories  NDMC will allow use of underground space of reasonable size below street poles for hosting of the telecom equipments and related accessories, subject to structural stability of the pole.
10 6	3.4.3 (ii)	NDMC to allow concessionaire the Right on pole for advertisements as well. NDMC to not have any rights to use street poles under this RFP for monetization / advertisement. RFP mentions that concessionaire will have no right on the pole other than hosting Telecom Equipment. Please confirm.
10 7	3.4.3 (ii)	Concessionaire and or concessionaire authorised parties to have EXCLUSIVE right on the NDMC street poles to host telecom equipment.

10 8	3.4.4		electricity consumed by LED,	All the electricity consumed for providing service to NDMC, like city surveillance, LED street light, DC & CCC and for any other equipment used for this project except Wi-Fi services, will be free of cost.
				The Concessionaire will take separate metered electric connections for running his services, including Wi-Fi services.
				Responsibility of all consumables will be of the concessionaire, except the consumables at DC and CCC (like papers, toners etc.) for which NDMC will bear the cost.
10 9	3.4.5		The placement of transmission equipment (Fiber POP, FMS Rack, etc) in control and command center premises needs to be defined.	All the equipments required for Command & Control Centre including fibre POP, FMS Rack etc. will be the responsibility of concessionaire, except as mentioned in clause 3.2.4.4.
				Clause 3.2.4.4 will be read as follows: "Necessary Civil, Electrical work including furniture, but excluding Air-conditioning shall be the responsibility of NDMC for Data Centre, and Command & Control Centre".

11 0	3.4.5	Civil and Electrical work required for installations of Gateway, Switches, Routers, etc. for NDMC services to be excluded from the scope of this RFP and should be arranged by NDMC. Please Confirm.	No change in RFP, considering modified clause 3.2.4.4.
11	3.4.9	After the end of concession period, Incumbent Concessionaire to be given first right of refusal for continuance of services as the CAPEX invested in disproportionately high.	No change in RFP.
11 2	3.4.12	Please mention the list of area were NDMC has full control.	NDMC area map is already a part of RFP document. NDMC has full control on the services/ permissions to be provided by the NDMC, subject to conditions as mentioned in reply to Sl. No. 88 above.
11 3	3.4.12	NDMC will provide Single Window Clearance where it has full control is mentioned. Requesting NDMC support and single point of contact with other civic agencies like Traffic Police, Delhi Police etc or any other where permission is to be sought. Please confirm.	Single Window Clearance is for NDMC related permissions. Refer reply to Sl. No. 45 above.
11 4	3.5.1.	Concessionaire to provide 4 pairs of optical fibre. Necessary equipment to light this fiber to be brought in by NDMC. Please confirm.	It is responsibility of the concessionaire to provide all related equipments as per specifications defined in RFP document.

11 5	3.5.2			The concessionaire has to provide the fiber connectivity to all locations as covered in this RFP document.
11 6	3.5.3 (g)		We understand the concessionaire has to do operation and maintenance. Hence, the scope of concessionaire is limited to providing IT and communication support for running the network and staffing and manning to be done by NDMC. Please confirm	Operation and Maintenance responsibilities will be as defined in the RFP document.
11 7	3.5.3 (g)		For sustainability of the project, It is requested to reduce the period of operation and maintenance to be reduced to 5 years beyond which NDMC to pay for O&M charges to the concessionaire including replacement of CCTV, LED, Wi-Fi, Switches, Routers and other accessories.	No change in RFP.
11 8	3.5.5		NDMC to maintain the fiber pairs given by the concessionaire by themselves at their own cost. Concessionaire may render its assistance for faster resolution of fault at a mutually agreed price. Further in some cases, it may be necessary to put overhead fibre which shall be allowed by	No change in RFP.

			NDMC. Please confirm	
11	3.5.6		Future services provisioning	No change in RFP.
9			will be based on technical feasibility.	
12	257		•	No shance in DED
12	3.5.7		It is proposed it should be a joint responsibility and NDMC	No change in RFP.
			should at least bear 50% of the	
			cost incurred to replace material	
10	250()		/ equipment after theft	N. I. DED
12	3.5.9 (c)		It is suggested that NDMC should pay for Separate internet	No change in RFP.
1			connection of 200 mbps desired	
			for command and control centre	
			in the RFP as it is to be used for	
			applications beyond the scope	
10	2.5.11		of the RFP	N. I. DED
12	3.5.11		Concessionaire would submit	No change in RFP.
2			its design of the street pole being replaced for placing the	
			telecom equipment which shall	
			be duly approved by NDMC	
			from all perspective.	

12 3	3.5.11	NDMC will not charge concessionaire any other fee / levy for installing telecom equipment on the street poles other than the bid amount. Please confirm. All necessary approvals will be provided by NDMC without any extra charges within 15 days  NDMC will not charge any fee for installation of telecom equipments on the street light poles covered under this RFP document during the concession period, subject to the conditions of the RFP document.  Refer reply to Sl. No. 33 above.
12 4	3.5.10	Concessionaire to replace the street poles only where it intends to install the telecom equipment and the existing pole is structurally not suitable to take the load of telecom equipment. All other places, NDMC to ensure the existing street poles is capable of taking the load of LED / CCTV / Wi-FI etc being desired by NDMC on such poles. Please confirm.
12 5	3.5.14	Dismantled fittings / poles shall be handed over to NDMC by concessionaire at the site only.  NDMC will make arrangement for its transportation on its own cost. Please confirm.
12 6	3.5.15	Adequate battery bank can be provided only in command and control centre. For all services, CCTV, Wi-Fi, etc, NDMC to bring in their own battery backup. Any SLA hit on account of non-availability of power will not be considered.

12	2516	DED ask that the ownership of	The Concessionaire has to greate
12 7	3.5.16		The Concessionaire has to create
/			the infrastructure for the NDMC
			in lieu of the ROW and right to
			use the street light poles during
			the concession period as per this
		Who would be paying for the	
		VAT, GST in case of ownership	
			The concessionaire is not allowed
			to raise finances against assets
		=	created for NDMC, since these
			assets will be the property of
		which will not be possible in	NDMC.
		case the asset is transferred to	
		NDMC. It is suggested to delete	
		this condition and the	
		ownership of assets created to	
		rest with concessionaire.	
12	3.5.17	In case the concession period is	No change in RFP.
8		not renewed, the concessionaire	
		shall handover all the assets as-	
		is where-is condition as on last	
		day of the concession period	
		and will not any responsibility	
		of rectifying and replacing it.	
		NDMC to releast the	
		performance guarantee	
		immediately after concession	
		period.	
12	3.5.19		There is no consolidated GIS map
9			available showing underground
			power cables, gas line, sewer line
		installation etc. GIS and	
		location drawings required.	
		Please confirm availability	The concessionaire will have to
		Trease commit availability	deploy advanced trenchless
			machine, which can detect utility
			services coming in its alignment.
			services coming in its angiment.

13 0	3.5.20	10% increase in the quantity is too large as contingency. It should be reduced to 1%. Please confirm.
13	3.5.21	Is the concession fee inclusive of taxes. In case, it is please specify the nature of different taxes. It is suggested for the concession fee to be inclusive of taxes.  It is suggested for the concession fee is exclusive of taxes. The concessionaire has to see & bear the applicable taxes, if any. Refer clause 5.4.1.4.
13 2	3.5.25	In case the delay is beyond the control of the concessionaire and / or force majeure, the delay should be considered suitably.
13	3.5.26	Cost of third party audit should be with the consent of concessionaire. NDMC to inform the rate of third party audit to concessionaire at least 30 days in advanced.  NDMC will engage third party through open tender on QCBS basis.
13 4	4.26(ix)	It is suggested that two person per 8 hour shift will be provisioned by concessionaire to manage IT related issues at the command and control centre. Please confirm  It is suggested that two person per 8 hour shift will be technical evaluation Sr. No. 6 - Manpower deployment. The total weightage is of 8.5 marks. The evaluation of the bid will be done based on the proposed Manpower deployment for this project by the applicant.
13 5	4.27 (i)	Please share the operation and maintenance policies of NDMC as mentioned here.  The concessionaire has to follow the operation and maintenance policies and procedures, as applicable from time to time.

13 6	4.27 (v)			Comprehensive O&M period is
13 7	4.27 (ix)		Please define the timeframe for data backup?	Time frame for regular data backup will be provided by the applicant in its proposed architecture of the system. NDMC reserves its right to ask the concessionaire to do modification in such time-frame, if required, at any time during the concession period.
13 8	4.27 (xii)		Please define "ANY" software and hardware devices? Does it mean any software required for the performance of the RFP	No change in RFP.
13 9	4.27 (xiii)		Process to be mutually agreed. The concessionaire shall inform NDMC regarding make of the model and NDMC to revert with 7 days failing which will be treated as deemed acceptance and replacement can't be provided. Please confirm	No change in RFP.

14 0	4.27 (xiv) (xv)	Hardware / Software system to be provided by concessionaire only ONE time and will not include replacement.
14	5.3	Technical Evaluation: CCTV, Wi-Fi Access Point and LED experience – Both, In India and or outside India to be considered as experience? Pls. confirm  Experience of the applicant within India or outside India will be considered. Attention is invited to the Note to the clause 5.3.2.
14 2	6.7	In case of failure to agree to terms and conditions in the RFP, the cure period to be extended to 90 days.
14 3	9	It is suggested that O&M to be meant for only maintaining the SLA and should not include manning for command centre.  No change in RFP, considering clause 4.27 (iii) & (vii).
14 4	9	It is suggested that SLA should be only for governance purposes and there should be no Penalties. In order to ensure compliance, maximum penalty should be not more than 5% of concessionaire fee.
14 5	15	Energy for CCTV and Wi-Fi to be paid for by NDMC provided by NDMC, but electricity charges for Wi-Fi equipments will be borne by the concessionaire.

14 6	15.2.1, 4c	Most of the command and control solutions are premise based. We request to change the clause to "Hosted in Datacenter or Cloud based as per solutions' capability"	The command and control platform will be hosted in data centre in NDMC premises.
14 7	15.2.1. 4f	Require details about existing systems and their API and protocol details. We assume those will be provided by NDMC during deployment and will set up joint responsibility among bidder and e-gov application owner	The details will be made available during the deployment.  The platform should be able to integrate with other e-governance and business application to read and analyses data from those applications to be visualized on the integrated dashboard.
14 8	15.2.1	We assume NDMC will provide GIS map with LAT LONG Position for the sensots and other data points on the map. Need clarification on the same.	NDMC will provide the existing GIS map, if any, on As And Where Basis. It will be responsibility of the concessionaire to provide new GIS map for command and control centre.
14 9	15.2.2 point 5	Please confirm the understanding that in this clause are you asking supervistor to view and monitor but does not acknowledge any event or alarms. Is he the supervisor responsibly only for viewing.	No change in RFP.
15	15.2.2 Point 19	We assume NDMC will provide GIS map with LAT LONG Position for the sensors and other data points on the map. Need clarification on the same.	Refer reply at Sr. No. 148 above.

15	15.5	Is the Storage of CCTV data to be planned for 30 days. Please re-confirm	Yes
15 2	General	Saving in energy from replacement with LED Lights to be mutually discussed and shared with concessionaire.	No sharing of energy saving is allowed.
15 3	General	NDMC to give permissions to use govt properties in the NDMC area for use by concessionaire for installing telecom equipment	
15 4	General	The connectivity of CCTV to command and control centre to be provided will be local bandwidth. No Provision of internet bandwidth is planned	The connectivity of CCTV to command and control centre to be provided will be local bandwidth. NDMC has asked for a separate Internet lease line at command and control centre as per clause 3.5.9(c).
15 5	Eligibility Criteria	It is mentioned consortium should have one Applicant with a Universal Access Service License [UASL/ UL(AS)]. Kindly clarify if consortium member having ISP licensees ONLY will meet the eligibility condition.	Proviso to (ii) of Specific requirements in clause 5.2.3 at Sl. No. 2 may be read as follows:  "Provided that in case of (ii)(a) and (ii)(b) above, such Applicant shall have one partner in consortium having a Universal Access Service License [UASL / UL(AS)] or Category 'A' ISP licensee from Department of Telecommunication, Govt. of India."

15 6	General	Is negative financial bid allowed i.e. NDMC covers some cost as viability gap funding or project support. How will the financial scoring work if all the bidders have bidded negatively for the RFP. Please clarify the same.	Not allowed.
15 7	15.5.2.6	As 2MP(1920*1080) is High definition, enough to take video at traffic junction. It will help to provide a good quality video and at same time save the cost as against 2560x1920 specified.	No change in RFP.
15 8	General	Please provide GIS maps with Latitude and longitude for the existing street light poles	Refer reply at Sr. No. 148 above.
15 9	General	Description of incidence and exception to be defined for surveillance	No change in RFP.
16 0	General	Civil, Structure & Electrical Design, drawings & specs for existing street light poles	No change in RFP.
16 1	General	List of Utility services under street light pole	No change in RFP.
16 2	General	Please share current algorithm and SOP of operating method and time during winter and summer	No change in RFP.

16 3	Annexure 4 (VI)		Please share the Wirequirement on the Key Road Should the Wi-Fi coverage provided on both sides of roads? Is there need of seaml Wi-Fi coverage or any hotsp would be defined?	be he ss
16 4	Annexure 4 (IX)		Is the 300 number fixed residential area?	or 300 numbers APs in the residential area are in addition to the requirement of hotspots defined at Sr. No. (i) to (viii) of Annexure-4. The number of equipments will not increase by more than 10% as defined in the RFP document (clause 3.5.20).
16 5	General		Please clarify if camera fee and different sensor data will displayed on the map.	
AI	RTEL			
16 6	General		Request Extension of R submission date to 30 <sup>th</sup> Ju 2016 because of the expanse the project.	ne,
16 7	9	1.2	If 4 pair requirement in cert area/sections/location asked NDMC can be met by exist fiber of OPCO, will it be s mandatory to lay fiber again that area - Kindly clarify.	oy optical fiber upto all last mile locations mentioned in RFP document (refer reply to Sl. No.

16 8	16	3.1.5	Future Smart City Services to be integrated. While few services are listed, it also says other services. Need a clear mentioning of the services and expectation in an elaborated manner.	Clause 3.5.6 read with clause 15.2 will apply. APIs to be provided by the concessionaire free of cost.
16 9	17	3.1.6	Lat/Long and pole height required for 18500 poles. Request to share the details of wind load to be considered for the poles. Also the details of dead weight these pole can sustain are requested to be shared  Do we need to camouflage the poles post placing the telecom equipment request to share the life of these poles	No such details available. The applicant may do the survey as per their requirement.  The concessioner has to camouflage the poles to maintain the aesthetics and structural stability, after installment / replacement / maintenance of the telecom equipments.
17 0	17	3.1.6	Request that the High Mast Poles at roundabouts and in the Parks/other areas should be included.	Refer to reply at S. No. 5 above.
17	17	3.1.7	If there is a need to strengthen the pole for sharing the infra with other operators, shall we do strengthening on pole for sharing	Refer modified clause 3.5.11 as mentioned at reply to Sl. No. 7 above.
17 2	17	3.1.7	Our understanding is that the Fiber pairs can be leased to other parties. Request confirmation	Services through fiber pairs can be leased to other parties by the concessionaire, subject to the conditions of the RFP document.

17 3	17	3.1.7	Need clarity on number of Fiber cables and Ducts to be laid	As per concessionaire requirement, subject to the conditions of the RFP document.
17 4	18	3.2.1	We need clarification on Point "Public at minimum one (1) Mbps speed with a minimum throughput of 100kbps with minimum limit to download 50MB data per day subject to a limit of 1 GB per month throughout the concession period" Does it mean 1Mbps per AP and 100kbps per user.	and not per Access Point.
17 5	19	3.2.1.1	We require details on "Smart Lighting sensors requiring Wi-Fi connectivity"	Refer clause 15.3.2. All basic nodes, semi advance nodes and advance nodes are to be connected through GPRS / WiFi / RF technology (like 802.15.4, Zigbee, LoRA).
17 6	19	3.2.1.2	We require following inputs for generating estimates: Area of Wi-Fi hotspot, Peak load, Density of user devices/concurrent users/Connections required in the area	The applicant may do the survey as per their requirement.
17 7	19	3.2.1.2	All demanded AP coverage will be outdoor and indoor coverage will not be there.	Outdoor coverage is to be ensured.

17 8	20	3.2.1.2	Request that the Technology Solution should be frozen for all 15 Year instead of keeping it open with inputs like (In future if Wi-fi technology is changed during concession period to any other technology, the same has to be provided by the concessionaire.)	No change in RFP. Any existing technology may not be available in future considering the fact that the concession period is of 15 years. Therefore, a provision has been kept for upgradation to new technology.
17 9	23	3.2.3.2	Telecom equipment installation at non pole locations/buildings & CCTV locations at NDMC facilities like Booster pumps, Sewerage center etc. should be permitted. Using CCTV pole itself or by installing extra pole for Telecom facilities.	equipments installation at buildings/non-pole locations is not allowed.
18 0	24	3.4.3	Security considerations, Asthetic of poles & structural stability - NOC/definition/who will decide/evaluate the structure stability.	The concessionaire has to provide the structural stability certificate from reputed institute/ structural consultant (must be holding Masters Degree in Structural Engineering).  All permissions are subject to statutory approvals, security clearances, and conditions mentioned in the RFP document
18	25	3.4.3	Our understanding is that the Concessioner will have the rights to lease the 18500 poles for other telecom operator and will be able to charge them. Kindly confirm	The Concessionaire will have the rights to share services of its Telecom infrastructure on poles

		for installment of infrastructure.	such telecom
18 2	25 3.4.3	Request to share the list of 18500 existing poles and demarcate them so that we are able to clearly distinguish the new and existing poles	concessionaire
18 3	3.4.6	Concessioner should be given Right to use DATA command/control centre building/ premises to use it as Fibre POP/ HUB and put GBT/GBM/RTT and IBS.	ly be used for
18 4	26 3.4.8	Applicant's telecom equipment shall not be dismantled till the time renewal/next bidding results are declared and 45 days therafter for vacating the same. Fiber usage rights will stay with winner of this bid forever and new winner after 15 years will have to lay his own fiber to get this contract. Kindly clarify	
18 5	29 3.5.11	Please share the Timelines/SLA for NDMC to grant the permission for height increase pole  Refer to reply as me No. 7 above.	entioned in Sl.

18 6	94	9.5	Penalty should be based over services outages and not Equipment / losses of redundancy.	Penalty will be levied on the service down time.  The concessionaire has to replace the faulty equipments within reasonable time.
18 7	118	15.1.4	Pl elaborate "Easy insertion of new node without config change at core switch/router"	Network should be designed in a way that any insertion of node in access and pre-aggregation layer should not require changes at aggregation and Core node, and should not create outage at Core level.
18 8	172	15.4	We shall need KMZ file for Roads, streets of NDMC, with Lat Longs for all Wi-Fi / CCTV locations for better planning.	Proposed Wi-Fi hotspots and CCTV locations are given in the RFP document. NDMC reserves the right to change such proposed locations.  The applicant may do the survey as per their requirement.
18 9	General		Roads & streets on google map in softcopy in KMZ format clearly mentioning the below information, i. Width of the road, ii. Length of the road, iii. Type of road is needed for detailed planning.	The applicant may do the survey as per their requirement.
19 0	General	3.4	Our understanding on ROW (right of way) will be free of cost: Kindly confirm. a) In case of HDD ( Trenchless Method) : Will ROW's component like, Pit creation at Kaccha/ Pakka Portion cost,	a) RoW will be free of cost for laying of optical fibres subject to the conditions mentioned in the RFP document, including the responsibility of concessionaire to restore

installation rent, fting double side ( tone/ granite eqv) security @ 50%, charges are also of cost. Open Trenching: charges for e of road surface, ges, store keeping blishment charges, charges and 50%, etc is free of

c) In the period of three year if we are laying fiber for connectivity other than wifi, survelliance and LED will be also free of cost. d) Will all other authorities GAIL, IOCL, DMRC, etc fiber laying ROW charges will be FOC and permission responsibility with NDMC?

- the same and sharing 4 pairs with NDMC.
- b) Refer clause 3.5.23. If trenchless technology is not feasible, then open trenching for laying of optical fibres will be allowed free of cost subject to the conditions mentioned in the RFP document, including the responsibility of concessionaire to restore the same and sharing 4 pairs with NDMC.
- c) RoW for laying of optical fibre by the concessionaire will be free of cost, subject to the conditions mentioned in the RFP document, including the responsibility of concessionaire to restore the same and sharing 4 pairs with NDMC.
- d) No. The concessionaire shall take all security clearances and statutory approvals from concerned authorities.

19	General	Expectations: NDMC Scope	W.r.t. points No. 1 to 6, there is
1			no change in RFP.
		1. Fiber RoW on Dig and	
		Restore basis should be allowed	* · · · · · · · · · · · · · · · · · · ·
		for the entire concession period.	reply given at Sl. No. 33 and 45
		2. Electrical power including	above.
		cabling and meter provision	
		shall be NDMC's	
		responsibility.	
		3. Equipment safety and	
		security for all the equipment's	
		including telecom equipment	
		should be NDMC's	
		responsibility.	
		4. Space and power provision	
		for Transport and other	
		Telecom equipment's, Space	
		for electrical power backup	
		equipment's at poles.	
		5. Electricity power availability	
		should be better than 99.9%	
		6. Operation of LED lighting,	
		CCTV Network etc (L1OPS)	
		should be handled by NDMC	
		while	
		Field maintenance support (L2	
		& L3) support by Concessioner.	
		7. Easy and quick clearance of	
		RoW permission.	
		8. Clearances from other civic	
		agencies like Police, Fire,	
		Forest(as applicable) within	
		stipulated time frame shall be	
		NDMC's responsibility.	
		TODITIE Brookstoffity.	

19 2	General	Concessioner Responsibility - SLA of 2 Hours for Dark Fiber rectifications/Alternate fober arrangement is too short. This should be 3.5 hours as per Industry practice.	Refer to reply mentioned at Sl. No. 35.
19	General	NDMC Scope - Physical security of all the equipment's deployed for NDMC should be NDMC's responsibility.	No change in RFP.
19	General	Is the bidder responsible for developing all the applications required for providing the Iot and other services mentioned in RFP	provided by the concessionaire
19 5	General	Is it mandatory for bid winner to provide the infra to all opcos having respective service license?	
19 6	General	Wifi around all metro stations - need to know how much area is to be covered?	Requirement mentioned in the RFP document. The applicant may do the survey as per their requirement.
19 7	General	Technical Qualification/Scoring - Emphasis has to be on Services rather than equipment's specification for scoring.	No change in RFP.
	Bajaj Electricals		

19 8	15.3.2.4	Test report as per tender specification ( drive efficiency , THD, Surge protection > 6kv)		as it is industry practice, also there will be additional surge protection of 10KV external to driver but integrated within driver compartment	No change in RFP.
19 9	15.3.2.4	point1: LED chip manufacturer to provide an authorization letter in favour of bidder stating their supply for execution of the project.	Consider manufacturer in place of bidder	as bidder and manufacturer may be different parties.	In types of test/specification provided under Sl. No. 1 in table to the clause 15.3.2.4, the relevant portion will be read as follows:  "LED chip manufacturer to provide an authorization letter in favour of luminary manufacturer stating their supply for execution of the project."
20 0	15.3.2.4	point 5: LED chip efficiency shall be more than 135 lumens/watt at TJ 25C (Manufactures shall submit the proof- LED Technical Data Sheet to be submitted)			"LED chip efficiency" will be read as "LED chip efficacy".
20	15.3.2.4	point 11: Shall be 135 lumen/watt, system lumen output at 25 degree C, supported by LM79 report shall be submitted.			"LM 79" may read as "LM 80".
20 2	15.3.2.4	Point 12: CRI of Luminaries >80 (supported by LM 79 report shall be submitted			CRI of luminaries > =70

20 3	15.3.2.4	Point 15: Operating voltage 120V to 270V universal electronic driver with surge protection of 6 KV (Application IS 15885, Driver safety 16104-1/2)		No change in RFP.
20 4	15.3.2.4	The Lumaninaire shall be built in such a way it can withstand wind speed of 150Kmps. NABL accredited lab report supporting the same shall be furnished by the manufacture. (Impact resistance> IK07)		The Lumaninaire shall be built in such a way it can withstand wind speed of 80Kmph. NABL accredited lab report supporting the same shall be furnished by the manufacture. (Impact resistance> IK07)
20 5	16	A: Dimmable Drivers in lieu of standard driver		Item deleted.
20 6	16	A: quantities		Wattages for dimmable drivers will be as per Luminaries wattage. Quantities will be based on actual survey at site during detailed design before execution. Total quantities of dimmable drivers will be equal to sum of number of semi advanced nodes and advanced nodes.
Himachal Futuristic Communication Ltd.				

20 7	Project objective (i.e. Go-Live period) or 12 months from the date of signing or concession agreement, which is earlier, and till expiry of the Project, the Concessionaire shall pay an amount quoted by it as the monthly concession fee to the NDMC. Such concession fee will be increased at the rate of "Bank Rate (given by Reserve Bank or India) as applicable on the last day of the preceding financial year every year on annual compounding basis.	concession fees to be paid annually to the NDMC. What will be the basis of the asked concession fees. Kindly clarify.	The applicant has to quote the monthly amount that it will pay to the NDMC as concession fee. The selection of the preferred applicant is on the basis of the QCBC. Based on the technical evaluation criteria and financial bids, the preferred applicant will be decided.
20 8	3.2 Implementation Stage - Up to 12 months from the date of signing or concession agreement	2 0	Refer reply at S. No. 8 above.
20 9	3.4 NDMC shall provide single window clearance (" in area where responsibi lities, Concessionaire for the purpose of this RFP document.	facilitate and support for the areas which requires approvals	Refer reply at Sl. No. 33 and 45 above.

21 0	3.5 Concessio naire Responsib ilities, 3.5.5	functional due to any reason, the	The ask of resolution of fibre damage in two hours is not realistic, hence we request for a period of minimum 8 hours for resolving them from the time of registering the complaint. Kindly Confirm.	Refer to reply mentioned at S1. No. 35.
21	3.5 Concessio naire Responsib ilities, 3.5.9	and Control Center for uses by	I — — — — — — — — — — — — — — — — — — —	No change in RFP. Refer clause 3.1.7.
21 2	15.2.2 Operation Center - Command Control Center and Communi cation System (C4S)	Functional requirement of C4S software - GIS Map	Please provide the detailed scope of GIS Map and their services. Kindly confirm.	Refer to reply mentioned at Sl. No. 148.

21 3	Operation Center - Command Control Center and Center Communi cation System (C4S)  Mass Notification - Provide a single web based dashboard to send notifications to target audiences using multiple communication methods including voice-based notification on SMS, E-mail and Social Media.	1. Who shall provide the SMS gateways for the mass notifications. 2. How shall the system connect and communicate with social media platforms. Kindly confirm.
21 4		Kindly provide the layout of Command & Control Center, and Data center for detailed design and estimation of the systems to be installed.  Refer reply at S. No. 19 and 20 above.
Wipro		
21 5	15.1.6.1 The router shall have minimum of 200 Gig Full Duplex capacity per slot with redundancy. Failure of any switch fabric should not degrade the per slot bandwidth.  Router/ Switch	The router shall have minimum of 200Gig Full Duplex capacity per slot with redundancy on day one which can be upgraded to 400Gbps without changing the hardware. Failure of any switch fabric should not degrade the per slot bandwidth.  Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
21 6	15.1.6.1 New Clause MPLS Core/ Aggregati on Router/ Switch	The Router Should support Segment routing, BGP Link state ,API feature to enable Software defined network capabilities  Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.

21 7	15.1.6.1 New Clause  MPLS Core/ Aggregati on Router/ Switch	The Router must support PCE and SDN based architecture to enable routing of traffic based on Application requirement.  Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
21 8	15.1.6.2 New Clause MPLS Pre Aggregati on-Type- 1	All the interfaces and ports on router should be hot-swappable provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
21 9	5.2 You are suggested to OEM minimum pre-qualification criteria for Active products OEM	OEM should not have been blacklisted by any sovereign government and barred from participating in government projects due to security reasons in the last five years.  After the Note to the clause 5.3.2, the following will be added: "Concessionaire has to ensure that proposed OEM should not have been blacklisted by any sovereign government and barred from participating in government projects due to security reasons in the last five years."
22 0	5.2 You are suggested to OEM minimum pre-qualification criteria for Active products OEM  )	OEM should have spare depot at NCR  No change in RFP.
22	5.2 You are suggested to OEM minimum pre-qualification criteria for Active products OEM  )	All the proposed Routers and switches has to be from One OEM  No change in RFP.

22 2	(OEM- minimum	suggested to OEM pre-qualification criteria products OEM	The OEM of the equiper quoted for should be proint the last 3 consections financial Years.	
22 3	(OEM- minimum	suggested to OEM pre-qualification criteria products OEM	OEM shall have certification in the ISO 9001:2000 & ISO 14	No change in RFP.
22 4	(OEM- minimum	suggested to OEM pre-qualification criteria products OEM	OEM should not declare equipment proposed Examples Support till atleast 5 year Date of Bidding. Confirm from OEM signed by Poattorney should be furnish same	s from mation wer of
22 5	15.2.3.3. QoS & ma WAN Services router OR Internet Router, Page 149	nagement Features	applications like ERP should be able to guaran minimum amount of band policy routed, and man preferential treatment. should also have provisi Non-critical applications Internet gaming applications.	and critical and teed a width, ck for And on for s like cations haring ssified effort ked as onality kternal party

	15.2.3.3. WAN Services router OR Internet Router, Page 149	Addition Request: The router should have ability to classify application based on various attributes such as: Application-group, category, sub-category, P2P, Tunnel & Encrypted. Router should be able to identify more than 1000 applications and supports application categorization with the ability to perform in-service update of application signatures. Same functionality can be provided via external appliance or 03rd party application on router modules.
22 7	15.2.3.3. Security features  WAN Services router OR Internet Router, Page 149	Addition Request: The Router should be able to support a Stateful, Zone Based & VRF Firewall.
22 8	15.2.3.3. Security features  WAN Services router OR Internet Router, Page 149	Addition Request: The router should support IPSec with IKE v2 Authentication and should support ipv6 for IPsec & Ikev2

22 9	15.2.3.3. Security features WAN Services router OR Internet Router, Page 149	Addition Request: The router should have ability to set up secure tunnels to a Hub and as well as between individual sites dynamically to carry unicast and multicast IP based traffic and should support dynamic routing protocols. The router should support also support tunnel-less VPN connectivity with multicast support on same.	No change in RFP.
23 0	15.2.3.3. Software Details - Addition WAN Services router OR Internet Router, Page 149	Addition Request: Router should support should support Suite-B cryptography algorithms	No change in RFP.
23	15.2.3.3. WAN Services router OR Internet Router, Page 149 Product / OEM Evaluation Criteria - Addition Request	Addition Request: Routers should be IPv6 Logo Ready	Agreed. Routers should be IPv6 Logo Ready.
23 2	15.4.4.1, Support Encrypted and authenticated connectivity between all Backhaul Components page 178, point no. 14	Does this mean all the communication happening among the access points and access point and controller including IOS upgrade should be secure?	Yes, Support Encrypted and authenticated connectivity between all Backhaul Components including OS upgrade.
23 3	15.4.4.1, page 178, interface for connection to local point no. 15 area networks or backhaul of local clients.	Clause to be read as " Mesh Nodes shall provide a wired interface for connection to local area networks or backhaul of local clients. OR for the LAG purpose"	Agreed.  "Mesh Nodes shall provide a wired interface for connection to local area networks or backhaul of local clients or for the LAG

				purpose."
23 4	15.4.4. WLAN Contro , P 182, p no. 12	remain the same if encryption is on or Off for wireless SSIDs	Please remove this	Clause Deleted.
23 5	3.2.1 Q Wi-Fi Service for selecte hot s areas	Public at minimum one (1) Mbps speed with a minimum throughput of 100kbps with minimum limit to download 50MB data per day	Kindly clarify the same, this is contradictory statement as you are asking 1 Mbps of speed whereas throughput is only asked of 100 Kbps, kindly clarify the same	Requirement is of 1 Mbps with minimum throughput of 100kbps per user.
23 6	3.2.1 Q Wi-Fi Service for selecte hot s areas, Page 1	Barakhambha Road, Janpath, BKS Marg and Sansad Marg. All these roads should be covered from CP outer Circle till the first crossing.	Do bidder need to cover both side of pedestrian on roads?	No change in RFP. It is clarified that the complete road including pedestrian path is included in the scope of work.
23 7	3.2.1 G Wi-Fi Service for selecte hot s areas, Page 1	following residential area will also be installed.  d spot	Please advise if you have fixed the quantity of APs for Residential area to be 300?	Refer to reply given at Sl No. 164 above.

23 8	3.2.1.2, Page 19	Applicant can consider the contention ratio of 1:10 per user from day 1 of implementation of the project;	Requesting you to leave the contention ratio as per bidder design	
23 9	15.4.2, Page 173	Min SLA and Operations for Wi-FI services, Page 174	As under this project bidders are expected to run these services for 15 years, so predict the user behavior for coming 15 years would be extremely difficult to predict, so we request you to let bidders submitted their footfal assessment for all the Wi-F hot-spots, and request NDMC to approve the same as part or contract and let bidder plan as per that assessment. Any thing over and above the agreed assessment should be allowed to be charged additionally as per bidder and NDMC mutual agreement. Please clarify on the same?	revised SLAs are attached as Annexure to this document.
24 0	15.4.3, Page 174	Sample coverage for few Locations	Please advise if the sample planning to be considered as bench marking for the Wi-F hot-spot calculations?	

24	& EAL2	e (NDPP) certified un non Criteria Eva	otection der the aluation	While we agree that Common Criteria Evaluation Program certification is important criteria for the assessment of product, but please note the Data Center switching platform as going through technology evolution with the introduction of many technologies such as SDN, VXLAN, programmability etc, so most of the OEM have these platform under evaluation with relevant agencies for Common criteria certification, so for DC switching platforms your are request to allow product under evaluation as well, subject to that OEM can be asked to submit undertaking that product is in evaluation as well confirmation of the same from evaluation agencies can also be asked.	No change in RFP.
24 2		net Module/ FC M erged Module	Module/	The mentioned per blade bandwidth requirement is very low considering the all the latest workloads, you are requested to increase the minimum throughput per server. To have right platform which are scalable for future services?	Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
24 3	4.c., Page Cities	platform can be hos Data Center or in on Cities choice.	Cloud	Most of the command and Control Solutions are premise based. We Request to change the Clause to "Hosted in Datacenter or Cloud based as per solution's capability"	Refer reply to Sl. No. 146 above.

24 4	15.2.1, 4.d., Page 13415.2.1 , 4.c., Page 134	It can be done, but would require details about those existing systems and their API and protocol details. We assume those will be provided by NDMC during deployment and will set-up the join responsibility among bidder and e-gov application Owner.
24 5	15.2.1, Page 136 2D map	We assume NDMC will provide the GIS map with Lat Long positions for the sensors and other data points on the map.  Need clarification on the same.
24 6	15.2.2, Page 137, Point 5  Remote view / Supervisor module	Can you please confirm the understanding that in this clause are you asking Supervisor to view and monitor but does not acknowledge any events or alarms. He just views it.
24 7	15.2.2, Page 138, Point 19	Please confirm if NDMC will provide the GIS map with Lat Long positions for the sensors and other data points on the map. Need clarification on the same.
24 8	15.2.2, Page 139 Web Remote Supervisor	We provide the Remote supervisor on the client based software and not on a browser based one as there is a lot of processing in terms of images, video and visualization. Request to change to "Web or client based Remote Supervisor"

24 9	General Questions	Data points on the Map	Please clarify if camera and different Sensor data be displayed on the map. I clarification.	will
25 0	169	The luminaire light output (lumen) shall be constant. The voltage variations/fluctuations in the specified voltage range shall not impinge upon the lumen it produce maximum +/-2% is allowed throughout in the input operating voltage range	The lumen variation rangementioned in other placed page no. 166 & 167 as and in most of the LED 1 this is standard. We request keep it standard as +-5%	es in 5% ights
25 1	168	CRI of luminaries	CRI is mentioned as >7 point no. 4 while it is mentioned as >80 in point number 12 request to keep CRI as >70.	. We
25 2	205	* Advanced Smart Luminaire Control nodes with dimming and Traffic + Parking analytics  * Semi Advanced Luminaire Control nodes (Dimming only)	To supply right dimn drivers, it is important to he the Wattage of Lights that require dimmable drivers. It clarification on the same.	know above.
25	205	Dimmable drivers in lieu of standard drivers - Qty 2590	What is the implication of Need clarification on the sa	
25 4	16. Bill of Material . Page 207	DC - CCTV - Onboard/Server Based ANPR Software for Gunshot Detection	this is for Onboard/S Based for Gunshot Dete Software, Please clarify.	

25 5		16. Bill of Material . Page 207	DC - CCTV- Video Management System- Software for Recording, Viewing of Videos (2200 Cameras)		Current Project required 2260 Camera, However software required for 2200 Camera. Request you change this to, Bidder need to provide min 5000 Camera software and min 2500 Camera storage & related infra to be provided by Bidder.	Herein, "2200" will be read as "2261".  Concessionaire has to ensure minimum 10% additional Camera storage & related infrastructure. Refer clause 3.5.20.
25 6	15.5.2.6 Type 5- Traffic Junction Camera- High Definition, Page 195		Lens/Iris 3 to 10 mm P-Iris or better with Motorized Zoom Lens and Vandal-Resistant Dome		Kindly Accept, "Lens/Iris 3 to 9 mm Lens and Vandal-Resistant Dome." this change does not affect the functionality of the system and this clause will allow maximum participation from the leading camera's OEM's.	Sl. No. 6 of table in Cluase 15.2.2.6 will be read as "Lens/Iris 3 to 9 mm P-Iris/DC-Iris or better with Motorized Zoom Lens and Vandal-Resistant Dome".
25 7	15.5.2.5 Type 4- Fixed Box Camera, Page 193		Lens/Iris 3-8mm- P-Iris		Kindly Accept, "Lens/Iris 3.1 to 8 mm Lens." this change does not affect the functionality of the system and this clause will allow maximum participation from the leading camera's OEM's.	Sl. No. 5 of table in Cluase 15.2.2.5 will be read as "Lens/Iris 3.1 to 8mm P-Iris".
25 8				Under Eligibility criteria: NLD/ILD/ISP/CMTS license holder should also be allowed as BSNL doesn't carry UASL or UL(AS) license. BSNL is having separate license for each service.		Refer reply at S. No. 155 above.

25 9	Once the concessionaire is selected, whether permission for laying of fibre will be given to any othe agency by NDMC or other operators have to use only concessionaire laid fibre.  What is the present	The permission to lay optical fibre to the concessionaire during the concession period is not exclusive in nature. Only concessionaire, including through sub-contractor, can lay its optical fibre as per this RFP document. The concessionaire can share services of its optical fibre with others. Any other operator can take permission from NDMC for laying its optical fibre in the NDMC area as per the policy prevailing then.  Cost varies depending on the
	estimated cost per meter of road restoration in NDMC area.	restoration material like red sand stone, granite, CC, RCC etc.
26	Whether any constraint by NDMC on depth of fibre laying in NDMC area.	No constraint, subject to statutory approvals, security clearances, and conditions mentioned in the RFP document.
26 2	Whether concessionaire can lease out fibre to other operators. If yes, then whether is there any limitation on number of operators?	The concessionaire can share services of its optical fibre with any number of other operators, subject to the conditions mentioned in the RFP.

26 3	Whether concessionaire can lease out right of street poles to other operators. If yes, then whether is there any	The concessionaire can share services of its telecom equipments install on street light poles with any number of other operators, subject to the conditions mentioned in the RFP.
26 4	limitation on number of operators?  Whether concessionaire can	No leasing of street light poles allowed.
	lease out street poles to other operators. If yes, then whether is there any limitation on number of operators?	
26 5	Whether these street poles can be used for advertisement purpose through LED screen or any other mode.	No.
26 6	Whether fees can be zero or negative which needs to be paid by concessionaire on monthly basis.	No.
26 7	Access of poles will be available with two agencies. One is concessionaire and other is NDMC staff. In case, any malpractice followed by NDMC staff (e.g. LED switches damaged by them), in that case, how concessionaire will be	No change in RFP.

	held responsible all the time.	
26 8	SLA clauses are too stringent, BSNL requests to relax SLA criteria.	SLAs have been revised, and revised SLAs are attached as Annexure to this document.
26 9	How the segregation of electricity will be decided when TSP will earn revenue from WiFi services beyond free limit.	Electricity to Wi-Fi equipments is chargeable and not free.
27 0	BSNL is likely to participate in the bid and amount of Rs. 10,000/- will be deposited along the bid. So, it is requested to allow BSNL to participate in the prebid. It will enhance more participation and competitive bid.	Already allowed in the pre-bid meeting.
27	BSNL request NDMC to waive off EMD and PBG for public sector enterprises. In case, if it is not feasible, then kindly accept EMD in the form of BG.	EMD in the form of BG is allowed (Refer clause 4.1.10).

Extreme Networ	rks			
27 3	15.4.4.1	Access Point		
27 4		Access Points must support signal rejection for 3G/LTE/WiMAX in co-Located environment.	Please consider removing this	No change in RFP.
27 5		Must support 2X2 multiple-input multiple-output (MIMO) with two spatial streams	Must support 4x4 multiple-input multiple-output (MIMO)	No change in RFP. Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
27 6		Must support simultaneous 802.11n on both the 2.4 GHz and 5 GHz radios.	Must support simultaneous 802.11 n on both the 2.4 GHz and 5 GHz radios. And 802.11AC on 5 GHZ	Sr. No. 7 in table of Clause 15.4.4.1 will be read as "Must support simultaneous 802.11n on both the 2.4 GHz and 5 GHz radios. May support 802.11AC on 5 GHZ."
27 7		Must support Controller-based and standalone (autonomous) deployments	Must support Controller-based and sustain complete operation if controller has an outage	No change in RFP.
27 8		The Access point shall be rated for operation over an ambient temperature range of -30° to 65°C (-22° to 149°F)	The Access point shall be rated for operation over an ambient temperature range of - 30° to 60 °C (-22° to 149°F)	No change in RFP.
27 9	15.4.4.2	Industrial Grade Switch – Type 1		

28 0	support f	and minimum 1K Mac minimum VLANs	ith support for m 500 active and minimum addresses	Sr. No. 3 in table of Clause 15.4.4.2 will be read as "802. 1Q VLAN on all ports with support for minimum 500 active VLANs and minimum 1K Mac addresses or higher".
28	and sched on all por per port. S Egress Mechanis	duling as per IEEE 802.1P rts and four egress queues Switch should also support Queueing/shaping, am of applying Automatic quivalent mechanism Switch support Classific scheduli IEEE 8 ports are queues Switch support	cation and ing as per 802.1P on all and four egress per port. should also	No change in RFP.
28 2	TACACS Filtering, snooping, Dynamic source gu	S+, RADIUS, IP Route ARP spoofing, DHCP , DHCP Option 82, ARP Inspection (DAI), IP uard and BDU Guard or at, IEEE 802.1AE  ACLs, RADIUS Filtering spoofing snooping option ARP (DAI), I	TACACS+, S, IP Route g, ARP g, DHCP g, DHCP 82, Dynamic Inspection IP source guard DU Guard or	No change in RFP.

28 3	The switch should support following IPv6 Features: 128-Bit Wide Unicast Addresses, DNS for IPv6, ICMPv6, Neighbor Discovery, IPv6 Stateless Autoconfiguration and Duplicate Address Detection, SNMP and Syslog Over IPv6, HTTP over IPv6 and IPv6 MLD snooping	Please remove this clause	No change in RFP.
28 4	RoHS Compliant, IEEE 1588v2 hardware ready - Precision Time Protocol, IEEE 802.3af, 802.3at, NTP, PTP	RoHS, IEEE 802.3af, 802.3at, NTP	No change in RFP
28 5	KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate,	Please remove this clause and keep only IP30	No change in RFP.
28 6	UL 508, CSA C22.2 No.142, UL/CSA 60950-1, EN60950-1, CB to IEC 60950-1, ANSI/ISA 12.12.01 (Class 1, Div 2 A-D), EN 60079-0, -15 ATEX certification (Class I, Zone 2 A-D) with cabinet enclosure	Please remove this clause	These are industry standards and equivalent standards can be proposed.
28 7	FCC, IEC/EN 61000-(4-2 to 4-6, 4-8, 4-9, 4-11, 4-29), RoHS	FCC, IEC/EN 61000- (4-2 to 4-6, 4-8, 4-9), RoHS	These are industry standards and equivalent standards can be proposed.

28 8		IEC 60068-2-27 (Operational Shock, Non-Operational Shock)	Please remove this clause	No change in RFP.
28 9		IEC 60068-2-6, IEC 60068-2-64, EN61373 (Operational Vibration, Non-operational Vibration)	Please remove this clause	No change in RFP.
29 0		RelativeHumidityof5%or95%Non-condensing,IEC 60068 -2-3, IEC 60068-2-30, IEC 60068-52-2	Relative Humidity of 5% or 95% Non-condensing	No change in RFP.
29 1	15.4.4.4	WLAN Controller		
29 2		WLAN Controller should support up-to 30,000 Clients per chassis and should have two or more 10 Gigabit Ethernet interfaces. Higher number of supported clients and interface count is preferred.	support count mentioned here is very high and is specific to OEM. Kindly clarify if the count can be supported via multiple devices.	No change in RFP.
29 3		WLC should support First hop security features in IPv6 network like Router Advertisement guard, DHCPv6 guard and IPv6 source guard and should support IPv6 access control lists	Please remove this clause	No change in RFP.

29 4		Should adhere to the strictest level of security standards, including 802.11i Wi-Fi Protected Access 2 (WPA2), WPA, Wired Equivalent Privacy (WEP), 802.1X with multiple Extensible Authentication Protocol (EAP) types, including Protected EAP (PEAP), EAP with Transport Layer Security (EAP-TLS), EAP with Tunneled TLS (EAP-TTLS), RFC 4347		Agreed. Requirement of RFC 4347 is deleted.
29 5		Controller should have Deep Packet Inspection for Layer 4- 7 traffic for user for all traffic across the network to analyses information about applications usage and prioritization		No change in RFP.
29 6	15.5.2.9	Industrial Grade Switch – Type 2		
29 7		802. 1Q VLAN on all ports with support for minimum 255 active VLANs and minimum 1K Mac addresses		Sr. No. 3 in table of Clause 15.5.2.9 will be read as "802. 1Q VLAN on all ports with support for minimum 255 active VLANs and minimum 1K Mac addresses or higher."

29 8	Switch should support classification and scheduling as per IEEE 802.1P on all ports and four egress queues per port. Switch should also support Egress Queueing/shaping, Mechanism of applying Automatic QoS or equivalent mechanism	Switch should support classification and scheduling as per IEEE 802.1P on all ports and four egress queues per port. Switch should also support Egress Queueing/shaping,	No change in RFP.
29 9	Switch should support ACLs, TACACS+, RADIUS, IP Route Filtering, ARP spoofing, DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP source guard and BDU Guard or equivalent, IEEE 802.1AE	Switch should support ACLs, TACACS+, RADIUS, IP Route Filtering, ARP spoofing, DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP source guard and BDU Guard or equivalent	No change in RFP.
30 0	The switch should support following IPv6 Features: 128-Bit Wide Unicast Addresses, DNS for IPv6, ICMPv6, Neighbor Discovery, IPv6 Stateless Autoconfiguration and Duplicate Address Detection, SNMP and Syslog Over IPv6, HTTP over IPv6 and IPv6 MLD snooping	Please remove this	No change in RFP.

30	RoHS Compliant, IEEE 1588v2 hardware ready - Precision Time Protocol, IEEE 802.3af, 802.3at, NTP, PTP	RoHS, IEEE 802.3af, 802.3at, NTP	No change in RFP.
30 2	KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate,	Please remove this clause and keep only IP30	No change in RFP.
30 3	UL 508, CSA C22.2 No.142, UL/CSA 60950-1, EN60950-1, CB to IEC 60950-1, ANSI/ISA 12.12.01 (Class 1, Div 2 A-D), EN 60079-0, -15 ATEX certification (Class I, Zone 2 A-D) with cabinet enclosure	Please remove this clause	These are industry standards and equivalent standards can be proposed.
30 4	FCC, IEC/EN 61000-(4-2 to 4-6, 4-8, 4-9, 4-11, 4-29), RoHS	FCC, IEC/EN 61000- (4-2 to 4-6, 4-8, 4-9), RoHS	These are industry standards and equivalent standards can be proposed.
30 5	IEC 60068-2-27 (Operational Shock, Non-Operational Shock)	Please remove this clause	No change in RFP.
30 6	IEC 60068-2-6, IEC 60068-2-64, EN61373 (Operational Vibration, Non-operational Vibration)	Please remove this clause	No change in RFP.

30 7		RelativeHumidityof5%or95%Non-condensing,IEC 60068 -2-3, IEC 60068-2-30, IEC 60068-52-2	Relative Humidity of 5% or 95% Non-condensing	No change in RFP.
30 8	15.5.2.10	Industrial Grade Switch – Type 3		
30 9		802. 1Q VLAN on all ports with support for minimum 255 active VLANs and minimum 1K Mac addresses	802. 1Q VLAN on all ports with support for minimum 500 active VLANs and minimum 8K Mac addresses	Sr. No. 3 in table of Clause 15.5.2.10 will be read as "802. 1Q VLAN on all ports with support for minimum 255 active VLANs and minimum 1K Mac addresses or higher."
31 0		Switch should support classification and scheduling as per IEEE 802.1P on all ports and four egress queues per port. Switch should also support Egress Queueing/shaping, Mechanism of applying Automatic QoS or equivalent mechanism	Switch should support classification and scheduling as per IEEE 802.1P on all ports and four egress queues per port. Switch should also support Egress Queueing/shaping,	No change in RFP.
31		Switch should support ACLs, TACACS+, RADIUS, IP Route Filtering, ARP spoofing, DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP source guard and BDU Guard or equivalent, IEEE 802.1AE	ACLs, TACACS+,	No change in RFP.

31 2	fo V II D c A S		Please remove this clause	No change in RFP.
31 3	h P	RoHS Compliant, IEEE 1588v2 nardware ready - Precision Time Protocol, IEEE 802.3af, 802.3at, NTP, PTP	RoHS, IEEE 802.3af, 802.3at, NTP	No change in RFP.
31 4	I I	KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate,	Please remove this clause and keep only IP30	No change in RFP.
31 5	1 6 (1	UL 508, CSA C22.2 No.142, UL/CSA 60950-1, EN60950-1, CB o IEC 60950-1, ANSI/ISA 12.12.01 (Class 1, Div 2 A-D), EN 60079-0, -15 ATEX certification (Class I, Zone 2 A-D) with cabinet enclosure	Please remove this clause	These are industry standards and equivalent standards can be proposed.
31 6		FCC, IEC/EN 61000-(4-2 to 4-6, 4-3, 4-9, 4-11, 4-29), RoHS	FCC, IEC/EN 61000- (4-2 to 4-6, 4-8, 4-9), RoHS	These are industry standards and equivalent standards can be proposed.

31 7			IEC 60068-2-27 (Operational Shock, Non-Operational Shock)	Please remove this clause		No change in RFP.
31 8			IEC 60068-2-6, IEC 60068-2-64, EN61373 (Operational Vibration, Non-operational Vibration)	Please remove this clause		No change in RFP.
31 9			RelativeHumidityof5%or95%Non-condensing,IEC 60068 -2-3, IEC 60068-2-30, IEC 60068-52-2	Relative Humidity of 5% or 95% Non-condensing		No change in RFP.
Inn	ovative Secure Technologic	es Pvt. Ltd	•	<u> </u>		
32 0	General Queries	Scope of Work/ Rights to bidders			As in NDMC area some companies had already installed BTS/ microcell on pilot basis like Tata do-como in CP area, Reliance Jio on approx. 750 poles, Vodafone in Khan market etc. so we request you to clarify if these pole/ area are also to be part of this rfp or not? If yes than will these services/ contract be discontinued? If not it will not be viable for any concessionaire to participate in this rfp as these are the key area in NMDC which bidder in this RFP would also be inserted. We request you to provide concessionaire exclusive rights. All these existing contracts	All these poles are part of this RFP. The concessionaire can install its telecom equipments on these poles. There is no exclusive right of the concessionaire over such poles.

32	General Queries	Right of	shall have to tie up with new concessionaire only  Kindly clarify if bidder will	No change in RFP. No exclusive
1		way for Fiber	have the exclusive right to lay the fiber for the duration of contract in NDMC area. Kindly advise if all the other player who want to lay fiber will have to tie up with new concessionaire only.	right to the concessionaire for laying optical fibre in the NDMC area during the concession period.
32 2	General Queries	Right of Pole	Kindly clarify if bidder will have the exclusive right of poles for the duration of contract in NDMC area. Kindly advise if all the other player who want to use poles for any purpose will have to tie-up new concessionaire only.	No change in RFP. No exclusive right to the concessionaire on poles in the NDMC area during the concession period.

Hu	awei Telecommunications(India) CO.	PVT. LTD		
32 3	15.2.3.6	The server should have at least 16 GB per core DDR 3/DDR 4 memory. After populating DIMMs, Each blade server should have 100% free memory DIMM slots remaining for future expansion. Server should be scalable to 96 DIMM slots per blade. Should have atleast 48 DIMMs slots with 2 CPUs populated.	In the tender 8 core CPU is required, which means after populating all the 4 CPU's, we will have total 32 cores requirement. Memory requirement per core is 16Gb, which means maximum memory required is 512 GB. As per the clause, we need 100% scalability, which means server should support max of 1024 GB Memory. by using 32 GB RAM module, we need max of 32 slots and hence we request this clause to be changed to 32 slots against a requirement of 96 DIMM Slots.	
32 4	15.5.2.1	n. Video Surveillance Storage System – The video surveillance storage system should support multiple options to store video. Servers, Direct Attached, shall augment server internal storage. The video surveillance storage system shall store video in loops, one-time archives, or event clips triggered by alarm systems. It shall support for RAID 6 storage.	In video surveillance, RAID 5 the safety is enough. And with safe video RAID 5 technology, even more than 2 disks is broken, the video playback will not be affected.	
32 5	15.5.2.6	3. Max resolution: 2560x1920	As 2MP(1920*1080) is High definition, enough to take video at traffic junction. It will help to	No change in RFP.

			provide a good quality video and at same time save the cost.	
32 6	15.1.6.1	The proposed router should have 12 GB DRAM and 8GB Flash , also should support 30GB storage in SSD	SSD storage in router is required for storing the logs and events. However the same function shall be achieved by the EMS system in Network. This should be relaxed.	No change in RFP.
32 7	15.1.6.2	The router shall support following type of interfaces — 10GE, 1GE interfaces with DWDM.; 10GE WAN PHY and 10G DWDM ,Ch.STM1 and E1.	This is envisaged to be an Ethernet RFP for IN-City network. Need of DWDM interfaces is not seen.	No change in RFP.
32 8	15.16.3	For DC: -40°C to 65°C operating temperature and 5 to 95%, noncondensing		No change in RFP.
32 9	15.1.6.3	The router should have 4GB DRAM and 2GB flash	Flash memory in a device is required to store the offline data (logs/config backup etc). Every OEM has different algorith/File system and hence the need for memory size is different for everyone. 2GB flash can be rather stated as	No change in RFP.

33 0	15.2.3.8	The proposed solution must be based on standard computer technology (not ASICs) so that future enhancements and protocols do not require hardware refresh to support. The proposed solution platforms must be based on a hardened operating system.		No change in RFP.
33	15.4.4.1	Must have minimum -97 dB or better Receiver Sensitivity	Its suggested that rather than binding the sensitivity to a value, it should be SLA centric. In most deployments -75 is practical value.	No change in RFP.
33 2	15.4.4.4	Controller should have Deep Packet Inspection for Layer 4- 7 traffic for user for all traffic across the network to analyses information about applications usage and prioritization		No change in RFP.
Mic	crosoft Corporation India Pvt Ltd			
33	G. Operation and Maintenance (O&M) Guidelines, 4.27 viii		There is no SLA Monitoring Tool Specification which is provided, kindly provide the same.	The concessionaire has to provide standard SLA monitoring tool which can integrate with other management modules.

33 4	5.3.2 Criteria for Technical Evaluation, Pt 4, Page 67	The List does not include the Following Important Component  1. Magic Quadrant for the Operational Database Management Systems  2. Magic Quadrant for Cloud Infrastructure as a Service (Iaas) in place of Enterprise Server in case bidder is providing the Infra on Public Cloud  3. Magic Quadrant for the Public Cloud Storage  4. Magic Quadrant for Data Warehouse and Data Management Solutions for Analytics	No change in RFP.
33 5	15.2.1Functional Requirement of Command and Control Centre, Page 136	We request to kindly illustrate the requirement for Cloud Service Provider, also Hope the Cloud Service Provider is as chosen by the concessionaire as its charges are paid by him.	will be hosted in NDMC's

33 6	Specifications for Data Center infrastructure, Page 144	In case the Concessionaire is providing the Public Cloud Infrastructure the Data centre Infrastructure may not be required, Request you to kindly make the same optional for the concessionaire if public cloud is quoted by him	Refer reply to Sl. No. 335 above.
33 7	15.5.1 Functional requirement of City Surveillance, Page 184	We request to kindly allow other Major Operating System Platform like Windows Server, which is the most used Operating System.	other major operating systems,
33 8	15.2.1Functional Requirement of Command and Control Centre, Page 136	We request to kindly illustrate the requirement for Cloud Service Provider, also Hope the Cloud Service Provider is as chosen by the concessionaire as its charges are paid by him.	Refer reply to Sl. No. 335 above.
33 9	9.1.2 Post-Implementation SLAs, Page 90	The RFP does not specify the SLA for the Cloud Service provider, Request you to kindly add the same	Refer reply to Sl. No. 335 above.

34		Smart Street lighting Technical Specifications:	available ted Semi-Advar nodes is W proven tech street lighti there are n large so references hence reque GSM/GPRS is profess upgraded, m secure net leading tele the com- communicat individual li	echnology for Basic, nce & Advance in Fi which is not a shoology for outdoor ing application and not many city wide scale installation across the world, est you to consider in the scale installation across the world, est you to consider in the scale installation across the world, est you to consider in the scale installation across the world, est you to consider in the scale installation across the world, est you to consider in the scale installation across the world, est you to consider in the scale in the	Refer clause 15.3.2. All basic nodes, semi advance nodes and advance nodes are to be connected through GPRS / WiFi / RF technology (like 802.15.4, Zigbee, LoRA).  Group control is not allowed. Each street LED light is to be controlled individually.
34 2	5.3.2.4	Luminaire Technical Specifications:	protection request you surge protection is widely	of 10kV specified a to consider driver ction of >3kV which available diver in V is not an industry ED driver.	No change in RFP.

M Prime Advisory Service	
34 Command and Control 3	Will other organizations (in addition to NDMC) I participate in the Command and Control Centre? e.g Will stakeholders such as Delhi Police, DTC, Delhi Metro, Indian Meteorological Department, Private bus operators, Parking contractors, etc. be part of Centre's day to day operations?  Will other organizations (in addition to NDMC) I participate in the Command and Control center will be hosted at a location provided by NDMC.  NDMC reserves the right to allow other Departments/ Agencies/ Authorities etc. to use the facilities available at its Command and Control Centre.
34 4	Who is going to develop the processes/procedures, organization, roles and responsibilities, and staffing plan? Is it NDMC or the Concessionaire?  The concessionaire has to follow the operation and maintenance policies and procedures, as applicable from time to time.  The Concessionaire will be responsible for create and update SOPs etc. in consultation with NDMC. The concessionaire will be responsible for implementation of such SOPs.  NDMC reserves the right to influence the processes/ procedures, SOPs etc. as per its requirements.
34 5	As part of the dashboard which services/information will be open to the citizens and which will be for internal staff use of the Centre only?  This will be decided by NDMC during the implementation period.

34 6	Is NDMC or the concessionaire going to identify the systems of e-governance that will need to be integrated with the Centre?  Is NDMC going to develop the corresponding specifications of the interfaces?	responsible for developing / providing interfaces, if required by NDMC.
34 7	Is the concessionaire required to develop SOPs?	Refer reply at Sr. No. 344.
34 8	Is the concessionaire required to develop incident resolution plans based on nature of each incident (including roles and responsibilities per plan step/activity?)	
34	What is the procedure to agree standard operating procedure and incident resolution plans with external stakeholders?	
35 0	What will be the role of Delhi Police in the Centre? Will they have physical presence?	
35 1	For traffic analytics, which parameters will are you interested in detecting? Vehicle flow (vehicles per min?), speed of vehicles, queue length an intersections or junctions, etc.	

35 2		Will the CCTV cameras be operated from the control centre (e.g. camera orientation, zoom, etc.)?  Yes, the CCTV cameras will be controlled / operated from the places designated by the NDMC, including the Command and Control Centre.
35		Will the specifications for the No change in RFP.
3		Video Analytics function of
		CCTVs be provided by
		NDMC? e.g. rules to identify suspicious objects, rules to
		identify trespassing, rules for
		detecting encroachment, etc.
35		Who will define the rules for Concessionaire will be
4		counting function of CCTVs responsible for all device
		e.g. to count people, to count all configuration, in consultation
		vehicles as one category vs with NDMC.
		count vehicles of each category,
35		etc.  Has NDMC defined the Refer clause 15.1.5(A).
5		specifications to connect CCTV
		data to Police Station?
Eri	icsson India Pvt. Limited	

35 6	5.2.3	Applicant/consortium should be: (i) Telecom Service Provider having valid UL(AS) / UASL from Department of Telecommunication	delivering B2C Wi-Fi services, the same objective can be met with CAT A ISP license. NDMC should allow CAT A ISP providers as part of consortium instead of UASL License to allow:  1. Wider participation and better revenue for NDMC  2. Equal access of sites to all Telecom service providers in a non-prohibitory manner at predefined rates. Kindly confirm.	Refer reply at Sr. No. 155 above.
35 7	5.2.7.1	Members of the Consortium undertake that they shall collectively hold at least 51% (fiftyone per cent) of the subscribed and paid up equity of the SPV at all times until the second anniversary of the commercial operation date of the Project; and	26% or more equity stake only till second year of commercial	No change in RFP.  Refer clauses 5.2.7.1(iii), clause 5.2.7.1(vii)(iv) and 5.2.7.1(vii)(v).
35 8	5.2.7.1	Members of the Consortium undertake that they shall collectively hold at least 51% (fiftyone per cent) of the subscribed and paid up equity of the SPV at all times until the second anniversary of the commercial operation date of the Project; and	Could you please clarify, who will hold rest of the 49% stake?	No change in RFP.

35 9	5.3.5.1	Proof of Concept (PoC) Demonstration and Client Visit	Please clarify duration and scope of PoC - For example, how many LEDs, cameras, Wi-Fi access points etc. to be integrated and demonstrated and for what duration. The scope of PoC - which parts of the complete RFP to be demonstrated in the PoC	Details will be intimated by NDMC to the applicant by giving a 15 days' notice before proposed date of POC.
36 0	Annex 10	Role of Parties  Joint Bidding Agreement - part 4. Role of Parties	Can one party, say Ericsson - play the role of 'Lead Member', 'Technical Member' (in terms of project experience) and 'Financial Member' (in terms of annual turn over and net worth)? Such a party to hold 26% or more stake in SPV for two years and all parties in consortium to collectively hold atleast 51% stake in SPV for two years. Please confirm our understanding	No change in RFP.
36	5.3.2	Criteria for Technical Evaluation - 2 a. (a) Experience : Public W i- Fi including Related Network Infrastructure	NDMC has only asked for experience in Wi-Fi, however Fiber and Telecom network form extremely important parts of the RFP. We propose that the concessionaire should have adequate experience 1) In managing atleast 50,000 km of fiber in India and 2) At least 10,000 radio base stations in India. This will ensure that only qualified concessionaire who can execute the project well get higher score	No change in RFP.

36 2	3.4.3	Successful Applicant/ Concessionaire will have right of usage of existing street lighting poles in NDMC area (approx. 18500) for the purpose of installation of telecom/ WiFi/ BTS equipments etc. subject to security considerations as prescribed by security agencies, structural stability of poles, asthetic of poles and subject to the guidelines of the Department of Telecommunication	Please clarify the kind of RoW for street poles. Can the entire pole be replaced with a smart pole - with LEDs, cameras and telecom equipment?  Will the RoW include digging to accommodate underground compartment for the smart pole?  Please clarify - RoW is only for street light poles?  Please include poles in gardens, parks and metros as well	Refer clauses 3.4.7, 3.5.10 and modified clause 3.5.11 w.r.t. queries related to replacement of poles.  Refer reply to Sl. No. 105 w.r.t. queries related to space below the Smart Poles.  RoW (non-exclusive) is for laying optical fibre and as replied in Sl. No. 27 above, subject to the conditions mentioned in the RFP document.  No change in RFP.
36 3	3.4.1	NDMC will provide permission in writing for Right of Way, including permission to use NDMC's existing tunnel in Connaught Place area for such purpose, free of cost in NDMC area to lay underground optical fibers/cables for providing licensed telecom services for three years (i.e. implementation period of one year and subsequent two years).	Please clarify our understanding - Optical fiber cable can be laid out for the first three years of the project	Refer to reply at Sr. No. 22.
36 4	3.4.3	The Concessionaire shall have no right for any purpose on any street light poles, which would come in future	Please allow the concessionaire to monetize the street poles using advertisements, digital signage etc. This will allow better revenues for NDMC	No change in RFP.

36 5	3.4.3	Successful Applicant/Concessionaire will have right of usage of existing street lighting poles in NDMC area (approx. 18500) for the purpose of installation of telecom/WiFi/BTS equipments etc. subject to security considerations as prescribed by security agencies, structural stability of poles, asthetic of poles and subject to the guidelines of the Department of Telecommunication	Is this right of way to street light poles exclusive to concessionaire? If no, how will NDMC calculate the charges of right of way, if a telecom operator requires RoW in future since they will not be required to provide additional services asked in this tender. We request NDMC to provide exclusive ROW for telecom sites in NDMC to ensure fair, non-prohibitive and timely access to telecom infrastructure to all Telecom service providers equally and ensure better monetization for NDMC	There is no-exclusive right for street light poles under this RFP document.
36 6	3.4.1	NDMC will provide permission in writing for Right of Way, including permission to use NDMC's existing tunnel in Connaught Place area for such purpose, free of cost in NDMC area to lay underground optical fibres/cables for providing licensed telecom services for three years (i.e. implementation period of one year and subsequent two years).	Is this right of way to rollout fiber exclusive to concessionaire? We request NDMC to provide exclusive ROW for Fiber in NDMC to avoid repeated digging of roads and the concessionaire can put multiple ducts for future use. This will also allow better monetization and easier access to backhaul for future IOT applications	There is no-exclusive rights for laying optical fibre under this RFP document.
36 7	8	Indemnity Clause	Please clarify - the bidder should indemnify NDMC against any patent infringement claims by any other technology vendors	

36 8	3.4.3	Successful Applicant/Concessionaire will have right of usage of existing street lighting poles in NDMC area (approx. 18500) for the purpose of installation of telecom/WiFi/BTS equipments etc. subject to security considerations as prescribed by security agencies, structural stability of poles, asthetic of poles and subject to the guidelines of the Department of Telecommunication	As we understand the existing pole cannot be used to equip telecom equipment without hampering city asthetics. It should be allowed to replace the existing poles with the smart poles which should meet city aethetic requirement and should be visually appealing and should be able to house telecom equipment Please confirm	No change in RFP.
36 9	15	Detailed Project Scope	The smart pole used to replace exisitng poles and to equip the telecom equipment should able to support city as well telecom standards for India such as wind speed, climate ,aesthetic etc . Please confirm  Please confirm, all cabling, cooling/heating etc should be via/inside the pole and it should not be visible from outside due to aesthetic and security reasons	
			For security reasons and in order to maintain city aesthetics, all the telecom equipment should be inside the pole or below. Please confirm  The smart poles used to replace existing light poles should be made in India. Please confirm	

			The surveillance camera should be camouflage inside the light arm. Please confirm	No change in RFP.
			The smart pole structure should be IP67 up-to 1 meter height from reference ground level. Please confirm	No change in RFP.
37 0	3.4.3	The Concessionaire on its own will arrange power for such equipments;	Will NDMC provide electricity from the poles at no cost or cost to Concessionaire for the power usage of such equipments. Please clarify who will pay for one time electricity meter	Refer reply to Sl. No. 24 above.
37	3.5.14	NDMC will be the owner of all dismantled existing equipments, including	Concessionaire will be the owner of all dismantled or replaced equipments ( except the existing equipments or the equipment at the end of the concession period), including	No change in RFP.
37 2		lights/ fittings, and such equipments shall be handed over to NDMC not later than a month from date of such dismantling.	lights/ fittings, and such faulty, scrap and replaced equipment shall belong to the Concessionaire and be kept by Concessionaire.	No change in RFP.
37	3.5.16	"telecom equipments of Concessionaire"	"telecom equipments of Concessionaire" would also include the telecom equipment of Concessionaire's customer's.	No change in RFP.

37 4	4.1.22	"the date of commercial operation of the project."	"the date of commercial operation of the project." Means what date?	'Date of commercial operation of the project' is same as 'the date of Go-Live' after completion of the implementation period.
37 5	4.2.1	"26% (twenty six per cent) of the subscribed and paid-up equity of the Concessionaire"	In case of 4 consortium members may not be possible for such condition to be closed by more than 3 members. Can in that case the fourth have less than 26% stake?	, , , , ,
37 6	9.1.2	Hourly delay penalty	What happens to part of hour delay? How to calculate finally.	Time will be counted on pro-rata basis.
37 7	15.5.2.9	Should support Improved resiliency with the support of Resilient Ethernet Protocol (REP) or equivalent for ring topology	Should support Improved resiliency with the support of Resilient Ethernet Protocol (REP) or equivalent for ring Topology like ERPS (Ethernet Ring Protection Switching)	
37 8	15.5.2.9	Switch should support ACLs, TACACS+, RADIUS, IP Route Filtering, ARP spoofing, DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP source guard and BDU Guard or equivalent	Since other Security features are enough for this network. Request to delete IP Route Filtering, IEEE 802.1AE	

37 9	15.5.2.9	Switch should have a console port, support for SNMP Version 1, 2 and 3, TELNET, SSHv2, 4 groups of embedded RMON, UDLD, Layer 2 Trace route or equivalent, DHCP server	Request to delete DHCP Server. DHCP Server should be a feature of Aggregation or Core Switch function	The Concessionaire shall provide the detailing in the proposed solution, without compromising with the functional and technical requirements of DHCP server.
38 0	15.5.2.9	The switch should support following IPv6 Features: 128-Bit Wide Unicast Addresses, DNS for IPv6, ICMPv6, Neighbor Discovery, IPv6 Stateless Autoconfiguration and Duplicate Address Detection, SNMP and Syslog Over IPv6, HTTP over IPv6 and IPv6 MLD snooping	DNS IPv6 is a Core, Aggregation Switch requirement. Request to delete DNS IPv6	No change in RFP.
38	15.5.2.9	• KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate, IP30	There are multiple standard. Please confirm Supporting IP30 should fulfil the requirement	No change in RFP.
38 2	15.5.2.10	Switch should support ACLs, TACACS+, RADIUS, IP Route Filtering, ARP spoofing, DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP source guard and BDU Guard or equivalent	Since other Security features are enough for this network. Request to delete IP Route Filtering, IEEE 802.1AE	No change in RFP.

38 3	15.5.2.10	Switch should have a console port, support for SNMP Version 1, 2 and 3, TELNET, SSHv2, 4 groups of embedded RMON, UDLD, Layer 2 Traceroute or equivalent, DHCP server	Request to delete DHCP Server. DHCP Server should be a feature of Aggregation or Core Switch function	Refer reply to Sl. No. 379 above.
38 4	15.5.2.10	The switch should support following IPv6 Features: 128-Bit Wide Unicast Addresses, DNS for IPv6, ICMPv6, Neighbour Discovery, IPv6 Stateless Autoconfiguration and Duplicate Address Detection, SNMP and Syslog Over IPv6, HTTP over IPv6 and IPv6 MLD snooping	DNS IPv6 is a Core, Aggregation Switch requirement. Request to delete DNS IPv6	No change in RFP.
38 5	15.5.2.10	• KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate, IP30	There are multiple standard. Please confirm Supporting IP30 should fulfil the requirement	No change in RFP.
38 6	15.5.2.11	Layer 2 trace route eases troubleshooting by identifying the physical path that a packet takes from source to destination.	Please confirm support of LLDP should be the requirement of this clause	No change in RFP.

38 7	15.5.2.11	Should support DHCP Server feature to enable a convenient deployment option for the assignment of IP addresses in networks that do not have without a dedicated DHCP server.	Request to delete DHCP Server. DHCP Server should be a feature of Aggregation or Core Switch function	Refer reply to Sl. No. 379 above.
38 8	3.2.1.2	In future if Wi-fi technology is changed during concession period to any other technology, the same has to be provided by the concessionaire.	Is concessionaire to reinvest on technology again? How to define Technology life cycle? Who will fund the technology upgration?	Refer reply at Sl. No. 178 above.
38 9	3.1.6 /3.4.3	3.1.6 The Concessionaire shall have the right to use existing street lighting poles in NDMC area (approximately 18500), except high mast poles, to create infrastructure to enable multiple telecom services based on Wi-Fi/2G/3G/4G/RF/NextGen in terms of clause 3.4.3 to be utilized by multiple service providers having valid license from Department of Telecommunication (DoT), Government of India on nondiscriminatory basis on fair market price.	Can poles be used for other monetization means (Advertisement - Electronic or other type) etc.	No change in RFP.

39 0	3.4.3	NDMC reserve right to collect rental/user charges from those who have installed any equipments for any purpose on these street light poles. Such user/rental charges would be collected by NDMC based on market rate is covered from this RFP process.	How concessionaire will earn revenue? Will NDMC be shared this revenue with concessionaire?	No change in RFP.
39	3.4.4	3.4.4 All the electricity consumed for providing service to NDMC, like city surveillance, LED street light and any other equipment used for this project except Wi-Fi services, will be free of cost. The Concessionaire will take separate electric meter for running his own services.	WiFi services are being provided free of cost. NDMC should provide electricity free of cost for WiFi services.	No change in RFP.
39 2	3.4.5	3.4.5 Minimum space required for installation of Gateway, Switches, Routers etc. for NDMC services will be provided free of cost by NDMC. Any Civil/Electrical work required will be the responsibility of the Concessionaire.	Need clarity on type of civil/Electrical work to be carried out at which multiple locations (POP etc.)	No change in RFP.

	39 3	3.5.5	3.5.5 In case, any pair of fibre allotted to NDMC get damaged or not functional due to any reason, the Concessionaire will provide alternate fibre pair in not more than two hours so that NDMC service will not get effected.	Only in case service affecting. SLA 2Hrs is very strict. All nodes should be in ring architecture.	Refer reply at Sl. No. 35 above.
<b>-</b>	39 4	4.1.21	4.1.21 If during the course of execution of the project any minor revisions to the work requirements like technical specifications, equipment sizing, etc. are to be made to meet the goals of the project, such changes shall be carried out without any cost. The quantities of hardware and software items as mentioned in this RFP document are indicative.	Any revision in the scope minor or major shall be mutually discussed and agreed.	Clause 4.1.21 will be read as follows:  "If during the course of execution of the project any minor revisions to the work requirements like technical specifications of the command and control centre applications are to be made to meet the goals of the project, such changes shall be carried out without any cost. The quantities of hardware and software items as mentioned in this RFP document are indicative".

39 5	4.28.1 The Concessionaire is required to carry out all work related to passive cabling under the scope of setting up the command center. All work under passive cabling should be governed by a set of standards that specify wiring data centers, offices, and other buildings for data or voice communications, using fiber cables. The category 5 (CAT 5E), category 6 (CAT 6), category 6A (CAT6A) and category 7 (CAT 7) and modular sockets will only be used when requirement of data transfer is very low. All material used shall be conforming to relevant standard as per ISO.	What are the cabling work (services) standards??	
	Option to attach Singleband, Dualband Antennas directly on Access Point	Option to attach Single band, Dualband Antennas directly on Access Point or integrated antenna.	Item No. 3 in Table to the Clause 15.4.4.1 will be read as follows: "Option to attach Singleband, Dualband Antennas directly on Access Point or integrated antenna".
	Must have minimum -97 dB or better Receiver Sensitivity.	Must have minimum -90 to - 97 dB or better Receiver Sensitivity.	No change in RFP.
	Must support 2X2 multiple-input multiple-output (MIMO) with two spatial streams	Must support 3x3 multiple- input multiple-output (MIMO) with three spatial streams	No change in RFP.  Minimum specifications are provided in the RFP document.  The applicants are free to provide higher scale as per proposed solution.

		Must support data-rates upto 300 Mbps or Higher	Must support data-rates upto 1300 Mbps or Higher on 802.11ac 5 ghz.	No change in RFP.  Minimum specifications are provided in the RFP document. The applicants are free to provide higher scale as per proposed solution.
		Must support 40 MHz wide channels in 5 GHz.	Must support 80 MHz wide channels in 5 GHz.	No change in RFP.
		Access point shall support powering from AC Adapter, DC and POE(802.3af/802.3at+).	Access point shall support powering from direct 100-240 VAC and POE (802.3af/802.3at+).	No change in RFP.
39 6	15.4.1	City Wi-Fi Requirements	Access point should able to work as sensor for WIDS/WIPS functionality. Please confirm	The following clause will be added at the end of clause 15.4.1:
			Access Point must support spectrum analysis intelligence to detect different wi-fi and non wi-fi interference and take corrective action for self healing and self optimized network. Please confirm	"The overall wireless proposed solution should able to provide the detection, classification and containment of Rogue Access Point along with the basic WIPS signature etc."
			Access point should send spectrum analysis data to Controller for performance optimization on basis of spectrum analysis data sent to controller. Please confirm	

			Access point should support	
			technology to increase the	
			downlink performance to	
			802.11g clients, providing	
			improved coverage and	
			throughput to existing clients	
			Please confirm	
			Advance WIDS/ WIPS	
			Security	
			•	
			The WLAN solution should	
			have the HW to implement	
			advance WIDS & WIPS from	
			day 1.Please confirm	
			WIPS solution should	
			Automatically blacklist clients	
			when it attempt any attack.	
			Please confirm	
			Troube commin	
			WIPS solution should be	
			capable of wireless intrusion	
			detection & prevention .The	
			WLAN should be able to detect	
			Rogue AP and take corrective	
			action to prevent the rogue AP.	
			The system should detect and	
			prevent an organization's	
			wireless client connecting to	
			rogue AP and also prevent an	
			outside client trying to connect	
			to organizational WLAN.	
			Please confirm	

1	
	WIPS solution should detect &
	prevent an Ad-hoc connection
	(i.e. clients forming a network
	amongst themselves without an
	AP) as well as windows bridge
	(client that is associated to AP
	is also connected to wired
	network and enabled bridging
	between two interfaces). Please
	confirm
	The system should detect an
	invalid AP broadcasting valid
	SSID and should prevent valid
	clients getting connected from
	these AP's. Please confirm
	WIPS Solution should track the
	location of interferer objects.
	Please confirm
	For advance forensic WIPS
	I I
	spectrum analysis to detect and classify sources of
	interferences. System should
	provide chart displays and
	spectrograms for real-time
	troubleshooting and
	visualization. Please confirm
	The WIPS solution should able
	to detect and locate the rogue
	access point on floor maps once
	detected. Please confirm

The WIPS solution should able
to detect and prevent if a client
use FATA-Jack 802.11 DoS
tool (Available free on internet)
and tries to disconnect other
stations using spoofed
authentication frames that
contain an invalid
authentication algorithm
number. Please confirm
The WIPS solution should
detect and protect if a client
±
probe-request frame will be
answered by a probe response
containing a null SSID to crash
or lock up the firmware of any
802.11 NIC. Please confirm
The WIPS solution should
detect and protect if a client/tool
try to flood an AP with 802.11
management frames like
authenticate/associate frames
which are designed to fill up the
association table of an AP.
Please confirm
The WIPS solution should
detect and protect if a client/tool
keep on sending disassociation
frames to the broadcast address
(FF:FF:FF:FF:FF)
disconnect all stations on a
network for a widespread DoS.
Please confirm

The WIPS solution should
detect and protect if somebody
try to spoof mac address of
client or AP for unauthorized
authentication. Please confirm
The WIPS solution should
detect and protect if a client/tool
try de- authentication broadcast
attempts to disconnect all
clients in range rather than
sending a spoofed deauth to a
specific MAC address. Please
confirm
The WIPS solution should
detect and protect if an attacker
attempts to lure a client to a
malicious AP using SSID on
fake AP in close proximity of
the premises. It should detect
When the Valid Client probes
for Valid SSID and these
malicious APs respond and
invite the client to connect to
them. Please confirm
when client radio is in sleep
mode to save battery and AP
then begins buffering traffic
bound for that client until it
indicates that it is awake. The
WIPS solution should detect
and protect if intruder try
sending spoofed frames to the
AP on behalf of the original
client to trick the AP into
believing the client is asleep to
buffer the AP beyond limit.
Please confirm

39 7	15.2.1.1	The dashboard and operations center should be able to visualize various real time data on the map of the City. For example, data of all Smart LED, its control & policy implementation, the current number of Wi-Fi users across all locations, real time data about all connected parking spaces, any video analytics alerts coming from the surveillance, environmental parameters etc. all should be visualized and reported on this single integrated city operations dashboard.	Please clarify on the source of having real time data about all connected parking spaces?	The source of Parking System etc. data will be provided as and when such other services are needed to be visualised on the dashboard by the NDMC. The proposed solution should be standard and capable of integrating such other systems in future.
39 8	15.2.1.3	The integrated platform can have its own application or it can provide API(s) so that Cities partners can develop dashboard applications or mobile applications leveraging those API(s)	Please clarify whether the services to be integrated need to have dashboard applications or mobile application which can be integrated with API of integrated platform. Or is it the other way around?	No change in RFP.
39 9	15.2.1.4.c	The platform can be hosted in Cities Data Center or in Cloud based on Cities choice.	Please clarify on the hosting of platform i.e on cities data centre or in cloud.	Refer reply to Sl. No. 146 above.

40 0	15.2.1.4.	The platform should be able to integrate with other e-governance and business application to read and analyses data from those applications to be visualized on the integrated dashboard.	Please provide details of other e-governance and business applications to be integrated in the dashboard.  API's and other integration support of these services shall be provided or not?	Refer reply to Sl. No. 147 and 346 above.
40	15.2.1.1	Command & Control Center will integrate new and existing security systems into a common platform. It will connect disparate information to mitigate risk across the security environment by providing actionable intelligence and speeding security incident resolution. Mitigate risk across the security environment.	Please provide details of existing security system (make/model/BOQ etc) which need to be integrated with Command & Control Centre. API's and other integration support of these services shall be provided or not?	The details will be made available during the deployment. The concessionaire will be responsible for developing / providing interfaces, if required by NDMC.
40 2	15.2.1.4	Single Dashboard for City Infrastructure Management & Smart City Services for Smart Lighting ,Parking System, GIS Services and Other Manual Services of Municipality work visulised real time on 2D/3D map of City. This dashboard can be accessed via web application as well as mobile app. The various information that may be accessed from the system but not limited to are as below. Some of features of Integrated Command and Control Center shall include:  (i) Access and operate city lighting infrastructure  (ii) Parking availability status of	The scope mentions to integrate Wi-Fi, Smart LED Street Light, City Surveillance with Command and Control Centre. Which among these services are already existing with NDMC and do we have integration support in terms of API's etc fr these services?	None of them exists as on date as envisaged in this RFP document.

			automated city parking areas (iii) Visual alerts generated by any endpoint that is part of the city infrastructure e.g. Surveillance cameras, City lights or any other sensors that manages various city management use cases. (iv) Access information of water management resources. (v) Information about waste management resources. (vi) Various citizen services e.g. Land records, Municipality tax, billing etc (vii) City environmental data (viii) Information from smart energy management system. (ix) Take action based on events generated by any city infrastructure device		
40 3	1	15.2.2	Command Control Center and Communication System application should support API integration with existing Dial 100 or CCTNS etc.	Please provide details of existing DIAL 100 or CCTNS etc (make/model/BOQ etc) which need to be integrated with Command & Control Centre.  API's and other integration support of these services shall be provided or not?	Refer reply to Sl. No. 401 above.

	NDMC responsibility (no charges from Concessionaire)  Concessionaire Responsibilities	NDMC will provide permission in writing for Right of Way, including permission to use NDMC's existing tunnel in Connaught Place area for such purpose, free of cost in NDMC area to lay underground optical fibres/cables for providing licensed telecom services for three years (i.e. implementation period of one year and subsequent two years).  As numbers of other Civic Services like power cables, gas line, water supply line, sewer line, cables of telecom service providers, defense installations etc. are running under-ground,	No change in RFP.  No change in RFP.
		the Concessionaire will give a advance schedule of trenchless digging and shall get clearance before starting the trenchless work. The Concessionaire will deploy advance trenchless machine, which can detect any utility services coming in its alignment.	
	Concessionaire Responsibilities		No change in RFP.
ComNet			

40 4	INDUSTRIAL GRADE LAYER SWITCH TYPE 1 / TYPE 2 / TYPE 3	<u>2</u>	1. Industry Standards: • KEMA,NEMA TS-2, ODVA Industrial EtherNet/IP, PROFINETv2, ABB IT Certificate, IP30	No change in RFP.
40 5			2. Safety & Hazard: ANSI/ISA 12.12.01 (Class 1, Div 2 A-D), EN 60079-0, -15 ATEX certification (Class I, Zone 2 A-D) with cabinet enclosure DIN rail mount	No change in RFP.
40 6			3. Certifying body could any global body like ABB/IT, KEMA or TuV. Kindly add, or TuV certified	No change in RFP.
40 7			4. EtherNet/IP, PROFINETv2 are for factory automation, so not relevant. Kindly remove	No change in RFP.
40 8			5. https://en.wikipedia.org/wiki/A TEX_directive: is for explosive environment, note that cameras are not explosive proof! Kindly remove ATEX	No change in RFP.
40 9			6. Mounting option, shall be manufacturer, DIN or rack mount. Kindly add Rack Cabinet Mount	No change in RFP.
41 0			7. Rack Cabinet must be IP 67 rated, to protect these Industrial grade switch from dust and water	No change in RFP.

41 1	8. All the Type 1 to Type 6 cameras are PoE or PoE+ requiring PoE power from 5w to 20w, we should also consider the drop in the cable length.
41 2	9. In view of point 6, above, the requirement of Type 1, 2 and 3 grade Industrial switch for CCTV PoE camera, all ports must be PoE/PoE+, to connect all these PoE cameras.
41 3	10. Industrial grade switch Type 1 and 2 has only 4 PoE/PoE+ ports out of 8 ports. Type 3 has Zero PoE/PoE+ Ports,
41 4	11. TYPE 1: The switch should provide 8 port 10/100 Mbps FE ports downlink out of which minimum four should be POE+ and switch should additionally have 4 GE SFP uplinks.
41 5	12. Standard product available in market is with 2 GE fiber port, this would ensure competition among OEM

41 6			13. TYPE 2: The switch should provide 8 port 10/100/1000 Mbps GE ports downlink out of which minimum four should be POE/POE+ and switch should additionally have 4 GE SFP uplinks. Should be proposed with ruggedized transceivers as per Concessionaire solution. Standard product available in market is with 2 GE fiber port, this would ensure competition among OEM	
41 7			14. In order to avoid monopoly, as some manufacturers lock optics, must demand MSA compliant SFP :https://en.wikipedia.org/wiki/Multi-source_agreement	hange in RFP.
Spa	arsh			
41 8	15.5.2.2 Type 1- PTZ - High Definition Camera	Digital I/O: DI x 4, DO x 2	Digital I/O -1/1 ch is available which are more than enough to integrate other security devices.  Request to change from Digital I/O: DI x 4, DO x 2 to Digital I/O: DI x 1, DO x 1.	hange in RFP.
41 9	15.5.2.2 Type 1- PTZ - High Definition Camera 1 5.5.2.3 Type 2- PTZ - Standard Definition	Certifications Safety and Certifications EMC- Requirements: CE, Class A FCC, Class A UL/cUL Listed C-Tick	Request to change from Certifications Safety and Certifications EMC-Requirements: CE, Class A FCC, Class A UL/cUL Listed C-Tick to CE, FCC, UL/EN/IS/IEC.	hange in RFP.

				As explained above IS & UL are the same standards and both are derived from IEC	
42 0	15.5.2.3 Type 2- PTZ - Standard Definition	Digital I/O: AI x 4, AO x 2		Request to change Digital I/O: AI x 1, AO x 1.	No change in RFP.
42	15.5.2.4 Type 3- Fixed IR Camera 15.5.2.5 Type 4- Fixed Box Camera 15.5.2.6 Type 5- Traffic Junction Camera- High Definition 15.5.2.7 Type 6- Number Plate Recognition Camera	Certifications Safety:UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825	i 1 1 1 1 2	IEC /EN 60950-1 certification is available. We request you to please consider a change from UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825 to UL60950-1 2nd edition / CSA22.2-No.60950-1 /IEC/EN60950-1 2nd edition /IEC/EN60825	No change in RFP.
42 2	15.5.2.4 Type 3- Fixed IR Camera 15.5.2.5 Type 4- Fixed Box Camera 15.5.2.6 Type 5- Traffic Junction Camera- High Definition 15.5.2.7 Type 6- Number Plate Recognition Camera	Certifications EMC-Requirements:CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class KN22 Class B KN24		Request to remove these certification as these are part of CE & EN certification	No change in RFP.

3	15.5.2.5 Type 4- Fixed Box Camera 15.5.2.6 Type 5- Traffic Junction Camera- High Definition	Lens/Iris: 3-8mm- P-Iris Lens/Iris3 to 10 mm P-Iris or better with Motorized Zoom Lens and Vandal-Resistant Dome	Limited vendors have P-Iris technology which restricts others to participate in the tender. request to change Lens/Iris from 3-8mm- P-Iris to 2.8~12 mm Auto Iris	ge in RFP.
42 4	15.5.2.7 Type 6- Number Plate Recognition Camera	Lens/Iris: Megapixel P- Iris Lens, 8 to 50mm/ 12.5 to 50mm	Limited vendors have P-Iris technology which restricts others to participate in the tender. request to change Lens/Iris from Megapixel P-Iris Lens, 8 to 50mm/ 12.5 to 50mm to 5-50 mm Auto Iris	ge in RFP.

#### Other changes as proposed in the RFP document are as follows:

- In clause 6.1.1, the words "Letter of Award" shall be read as "Letter of Acceptance".
- Clause 4.27(iv) will be read as:
  - "After implementation period, the Operations and Maintenance (O&M) period shall be upto a period of fifteen years from the date of signing of concession agreement. From the date of GO-LIVE (Implementation period of maximum one year from the date of signing of the concession agreement)."
- "9.3.1.1" in clause "15.3.2" will be read as "15.3.2.1".
- In sub-clause (vii) of Annexure 4 of the RFP document, after Gole Market area, the words "Delhi Haat" will be added.
- After S. no. 3 of the Clause 15.3.2.4 the following will be added "The LED Drivers for all types of Luminaries under this RFP must be approved from BIS under Compulsory Registration Scheme."
- After clause 3.5.29, the following clause will be added:
  - "3.5.30 The Concessionaire may install one telecom equipment of its own on a pole considering the aesthetics and structural stability of the pole and surrounding areas. In case, the concessionaire wants to install more than one telecom equipments of its own on a pole, in such case, the concessionaire shall get NDMC's prior approval considering the aesthetics (such as equipments fully concealed within the pole structure, etc.) and structural stability of the pole. The concessionaire is not allowed to install any telecom equipment on a pole, except its own telecom equipments and equipments for NDMC. The concessionaire can share services of its own telecom equipments with other entities. NDMC reserves the right to use such poles for any purpose.
  - 3.5.31 For the operation and maintenance as per this RFP document, the Concessionaire may engage specialized agencies on its behalf to execute the same. In such cases, the liability of fulfilling the terms and conditions of the agreement, including RFP document, remains of the concessionaire."

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1 SLAs mentioned in clause 9.2 and 9.3 have been revised as follows:

#### "9.2 SLA for availability of Wi-Fi System on Internet through Access Points (AP) (Per AP hour)

Sr.	Uptime SLA (Quarterly)	Penalty values per qtr
No	For AP hours	
1	Uptime up to 99.5%	No Deduction
2	Between 99.5% to 99%	Rs. 4 Lacs
3	Between 99% to 98%	Rs. 12 Lacs
4	Between 98% to 97%	Rs. 20 Lacs
5	Between 97 % to 96%	Rs. 28 Lacs
6	Between 96% to 95%	Rs. 36 Lacs
7	Below 95%	Not acceptable. NDMC can terminate the Concession Agreement.

#### **Note:** For Internet Wi-Fi System:

- Downtime means non-working/ non-availability of Access Points (APs)/ not getting per user speed of 1Mbps. Uptime shall be calculated as [1- (no. of AP hours not available/ per user 1Mbps speed not available)/ (Total no of APs\* Total hours in one quarter)]. For ex, if 600 nos. of APs are deployed at various locations, and 20 AP do not work for 1 hour, the total non-working AP hours with be 20 and the uptime would be {1-(20/(600\*90\*24))}, 600 being the number of APs, for 90 days on 24 hours basis. This down time will be used for penalty calculations on quarterly basis and necessary penalty calculated have to be deposited by the concessionaire. The penalties would be levied for every AP down time, be it for non-availability of network, theft, damage or non-availability of power etc., because the Concessionaire is responsible for supply of all enabling components on end-to-end basis.
- Downtime for single AP at any location should not be greater than 24 hours. For every day beyond these 24 hours downtime, penalty of Rs.1000/- per AP per location would be applicable additional to penalty specify as per SLA and Penalty Deduction for Wi-Fi.

#### 9.3 SLA for Internet throughput

Throughput and Coverage: Minimum throughput and coverage has to **95%** of prescribed values of each AP. The throughput will be measured at **least 10 times** on a random basis in a day by the NDMC or by a third party appointed by the NDMC, and it shall be acceptable and binding on the Concessionaire. In case throughput falls below the guaranteed level, NDMC will impose the penalty of **Rs.1000/- (Rupees one thousand) per instance per <del>location</del> AP** in addition to SLA and Penalty defined in clause 9.2."

Table of SLA mentioned in clause 9.4 has been revised as follows:

## "9.4 SLAs for CCTV Surveillance System and ANPR cameras (per camera hour)

Sr. No.	Uptime SLA (Quarterly)	Penalty values per qtr
1	Uptime up to 99.5%	No Deduction
2	Between 99.5% to 99%	Rs. 4 Lacs
3	Between 99% to 98%	Rs. 12 Lacs
4	Between 98% to 97%	Rs. 20 Lacs
5	Between 97 % to 96%	Rs. 28 Lacs
6	Between 96% to 95%	Rs. 36 Lacs
7	Below 95%	Not acceptable. NDMC can terminate
		the Concession Agreement.

".

3 SLA mentioned in clause 9.5 has been revised as follows:

#### "9.5 SLAs for Central Command & Control room equipments, Data Center and Citywide Network

Sr. No	Uptime SLA (Quarterly)	Penalty values per qtr
1	Uptime up to 99.5%	No Deduction
2	Between 99.5% to 99%	Rs. 5 Lacs
3	Between 99% to 98%	Rs. 15 Lacs
4	Between 98% to 97%	Rs. 25 Lacs
5	Between 97 % to 96%	Rs. 35 Lacs
6	Between 96% to 95%	Rs. 45 Lacs
7	Below 95%	Not acceptable. NDMC can terminate
		the Concession Agreement.

### **Note: Uptime definition:**

• All devices have to be working and deliver the desired results. The no. of hours that the particular device/ equipment does not work will be treated as down time. Uptime shall be calculated as [1- (no. of hours the unit was not working)/(Total no of units available \* Total hours in one quarter)]. For example, if 10 nos. of Sensors for Digital display equipments are deployed at various locations, and 2 device/ units equipments does not work for 5 Hours, the total non-working device equipments hours will be 10 unit hours, and the uptime would be {1-(10/(10\*90\*24)}, 10 being the number of units, for 90 days on 24 hours basis. This down time will be used for penalty calculations on quarterly basis and necessary penalty calculated have to be deposited by the concessionaire. The penalties would be levied for every unit down time hour, be it for non-availability of network, theft, damage or non-availability of power etc., because the Concessionaire is responsible for supply of all

enabling components on end-to-end basis. The same analogy applies to central command and control room, where different weightage will be assigned for different equipments as under: 1 server is 25 units, 1 video wall is equal to 10 units, 1 storage server is 5 units, 1 router/ switch is 5 units etc. network switch at core location is equal to 5 units, firewall is equal to 5 units."

4 Table of SLA mentioned in clause 9.6 has been revised as follows:

# "9.6 SLAs for basic and semi-Advanced LED luminaries and their controller(s)

Sr. No	Uptime SLA (Quarterly)	Penalty values per qtr
1	Uptime up to 99.5%	No Deduction
2	Between 99.5% to 99%	Rs. 4 Lacs
3	Between 99% to 98%	Rs. 12 Lacs
4	Between 98% to 97%	Rs. 20 Lacs
5	Between 97 % to 96%	Rs. 28 Lacs
6	Between 96% to 95%	Rs. 36 Lacs
7	Below 95%	Not acceptable. NDMC can terminate
		the Concession Agreement.

Table of SLA mentioned in clause 9.7 has been revised as follows:

# "9.7 SLAs for Advanced Street Lights and other systems not explicitly covered in specific SLAs

Sr. No	Uptime SLA (Quarterly)	Penalty values per qtr
1	Uptime up to 99.5%	No Deduction
2	Between 99.5% to 99%	Rs. 2 Lacs
3	Between 99% to 98%	Rs. 6 Lacs

4	Between 98% to 97%	Rs. 10 Lacs
5	Between 97 % to 96%	Rs. 14 Lacs
6	Between 96% to 95%	Rs. 18 Lacs
7	Below 95%	Not acceptable. NDMC can terminate
		the Concession Agreement.

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