

ADDENDUM & CORRIGENDUM-3 REQUEST FOR PROPOSAL FOR

SELECTION OF IMPLEMENTATION AGENCY FOR INTEGRATED COMMAND AND CONTROL CENTER (ICCC) IN SURAT CITY

RFP No.: SSCDL-ICCC-RFP-01-2019

Last date for Price Bid Submission: 17.05.2019



Invited by

Surat Smart City Development Limited

115, Smart City Cell, Surat Municipal Corporation,

Muglisara, Main Road, Surat - 395003, Gujarat.



Surat Smart City Development Limited ADDENDUM AND CORRIGENDUM-3

RFP Notification No.: SSCDL-ICCC-RFP-01-2019

The Bidder are requested to take note of the following changes made in the RFP documents, which are to be taken in to account while submitting the RFP. They shall be presumed to have done so and submitted the RFP accordingly.

- This Addendum and Corrigendum shall be the part of the RFP documents.
- All items specified in this Addendum and Corrigendum supersede relevant items to that effect as
 provided in the original RFP documents. All other specifications, terms and conditions of the
 original RFP document shall remain unchanged.
- Bidder shall read and consider following points, which shall be a part of the RFP documents.
- All the changes mentioned in this document should be read across the RFP, Addendum & Corrigendum, wherever applicable.
- The queries raised and given by bidders, but the clarifications are not made in this Addendum and Corrigendum shall be considered to remain unchanged as per the terms and conditions mentioned in the original RFP documents.

Changes with respect to RFP Schedule

Please note that with respect to tendering schedules, the following changes have been effected. Bidders are requested to take note of the same and adhere to the dates specified hereunder with regards to Price Bid Submission and Technical Bid Submission:

Particular	Current Dates	Proposed Dates
Online Price Bid Submission Date	06.05.2019 up to 18:00 hrs.	17.05.2019 up to 18:00 hrs.
Technical Bid Submission (in Hard Copy) Filled-in Technical Bid along with Bid Fee, EMD and other documents	In sealed envelope strictly by RPAD/Postal Speed Post On or before 10.05.2019 up to 18:00 hrs. To the Chief Accounts, Surat Municipal Corporation, Muglisara, Surat – 395003, Gujarat by RPAD or Speed Post Only.	In sealed envelope strictly by RPAD/Postal Speed Post On or before 22.05.2019 up to 18:00 hrs. To the Chief Accounts, Surat Municipal Corporation, Muglisara, Surat – 395003, Gujarat by RPAD or Speed Post Only.



Other Changes

#	Section	Page No.	Tender Reference	Existing Clause	Amended/New Clause
1.	5.1	20	Bidder's Eligibility Criteria		Please refer to Annexure I for revised Bidder's Eligibility Criteria
2.	5.2	23	OEM's Eligibility Criteria		Please refer to Annexure II for revised OEM's Eligibility Criteria
3.	6.22	36	Technical Evaluation Criteria		Please refer to Annexure III for revised Technical Evaluation Criteria
4.	15.1 , 15.2, 15.3	30	Addendum & Corrigendum 1	 15.1 Video Wall Screen 15.2 Video Wall Controller 15.3 Video Wall Management Software 	Bidder is required to provide 60 encoders (inputs) and 60 decoders (outputs) w.r.t Video Wall controller. Further, please note the encoder: decoder should be in 1:1 ratio only. The solution comprising encoder / decoder which connects more than one input / output respectively is not acceptable. Please refer to Annexure IV for revised Specifications
5.	15.4	33	Addendum & Corrigendum 1	• 15.4 49" Curved Monitor for ICCC Operator	Please refer to Annexure IV for revised Specifications
6.	15.5	34	Addendum & Corrigendum 1	• 15.5 Workstations for ICCC Operators	Please refer to Annexure IV for revised Specifications
7.	16.1	219	Painting	Fire retardant paint of pre-approved make and shade to give an even shade over a primer coat after applying painting putty to level and plumb and finishing with 2 coats of fire retardant paint. Base coating shall be as per manufacturer's recommendation for coverage of paint.	approval of SSCDL/SMC) to give an even shade over a primer coat after applying painting putty to level and plumb and finishing with 2 coats of fire retardant paint. Base coating shall be as per manufacturer's



ANNEXURE-I

5.1 Revised Bidder's Eligibility Criteria

Note: For evaluation following definition is considered

- The total Project value shall be considered as Capex Cost + Opex Cost
- OEM experience will not be considered for Pre-Qualification Criteria and Technical Evaluation.
- Integrated Command & Control Centre (ICCC)/ Command Control Centre (CCC): ICCC/CCC Project is defined as those project where Command Centre Application is implemented along with / without Video Wall component. ICCC Application at such installation should not only be a viewing platform but should be used for SOP creation and triggering for specific event/incident.
- In case of Consortium only 2 partners are allowed including Prime Bidder. For more details on Consortium please refer to the section 6.6

#	Eligibility Criteria	Proof Document Required	Applicable to Sole Bidder	Applicable to Consortium
1.	The Prime Bidder / Sole Bidder should be registered under the Companies Act 1956 and should be in operation in India for a period of at least 5 years as on publication of bid.	Copy of certification of incorporation issued by competent authority/Registration Certificate	Yes	Yes
	In case of Consortium, the Consortium Partner should be registered under the Companies Act 1956 Or a partnership firm registered under LLP Act, 2008 or partnership firm registered under Indian Partnership Act 1932			
2.	Bidder/ Primer Bidder should have a minimum average annual turnover of Rs. 100 crore from ICT based business for last three financial years i.e. FY 2017-18,FY 2016-17, 2015-16 In case of Consortium, Consortium Partner should have a minimum average annual turnover of Rs. 25 crore from ICT business for	Copy of the Audited Profit and Loss statement and statutory auditor / CA certificate from a regarding turnover. The certificate should be originally signed or notarized.	Yes	Yes



#	Eligibility Criteria	Proof Document Required	Applicable to Sole Bidder	Applicable to Consortium
	last three financial years i.e. FY 2017-18, FY 2016-17, 2015-16 The copies of Audited Annual Accounts for last three years to be submitted along with the bid [Financial Years of 2015-16, 2016-17 and 2017-18].		Diddel	
3.	Bidder/ Consortium should have a positive net worth as on 31st March 2018	Certificate from the statutory auditor / CA towards positive net worth of the company. The certificate should be originally signed or notarized	Yes	Yes (All Members of Consortium)
4.	Sole Bidder / Prime Bidder (in case of consortium) should have an experience in implementation of Integrated Command & Control Centre (ICCC) / Command Control Center (CCC) in India in last 7 years from the date of publishing this RFP One project costing not less than the amount equal to INR 20 Cr. with ICCC application with or without video wall solution component worth minimum INR 2.5 Cr. OR Two projects costing not less than the amount equal to INR 12 Cr. each with ICCC application with or without video wall solution component worth minimum INR 1.5 Cr. OR	 Copy of completion certificate issued by client In case of an ongoing project, the project must have achieved the respective value in terms of entire project cost and ICCC application with or without video wall solution component respectively from financial perspective. The Certificate to this effect from the client on client's letter head to be provided. Copy of Work order / Contract 	Yes	Yes (Prime Bidder in case of Consortium)



#	Eligibility Criteria	Proof Document Required	Applicable to Sole Bidder	Applicable to Consortium
	application with or without video wall solution component worth minimum INR 1.25 Cr.			
5.	In case of consortium, the consortium partner should have completed at least one project pertaining to setting up of Datacenter / Data Center Infrastructure in last 7 years as on Bid Submission date of value not less than INR 3 Crore in India. Note: In-house projects for own or group companies shall not be considered for above criteria. Data Center Infrastructure cost should be excluding software license cost.	 Copy of completion certificate issued by client Copy of Work order / Contract 	No	Yes (Consortium Partner)
6.	Bidder should be registered for GST number in India.	GST Registration Certificate PAN Card	Yes	Yes (All Members of Consortium)
7.	Bidder should not be blacklisted or debarred by any Government / PSU in India at the time of submission of the bid.	Declaration letter by bidder as per format given in the RFP document	Yes	Yes (All Members of Consortium)



ANNEXURE-II

5.2. Revised OEM's Eligibility Criteria

#	Selection criteria for the OEM	Proof Document Required
A	Active Network Equipment (Network Switches)	
1.	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure.	Latest and relevant report from Gartner to be submitted clearly showing presence of the OEM.
2.	Commitment to Support The OEM should commit to support the product proposed in the scope of this RFP for at least five (5) years. End of support date should not have been announced for the product proposed.	OEM self-certification as per Section-TQ_8 indicating the commitment to support along with product roadmap
В	Server	
1.	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for Modular Servers	Latest and relevant report from Gartner to be submitted clearly showing presence of the OEM.
2.	Commitment to Support The OEM should commit to support the product proposed in the scope of this RFP for at least five (5) years. End of support date should not have been announced for the product proposed.	OEM self-certification as per Section-TQ_8 indicating the commitment to support along with product roadmap
C	Storage	
1	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for General-Purpose Disk Arrays	Latest and relevant report from Gartner to be submitted clearly showing presence of the OEM.
2	Commitment to Support The OEM should commit to support the product proposed in the scope of this RFP for at least five (5) years. End of support date should not have been announced for the product proposed.	
D	ICCC OEM	
1	ICCC OEM Solution should be implemented for at least 2 distinct projects covering at least 3 domains (with minimum 1 use case per domain) from below mentioned list out of which minimum 1 deployment should be within India. 1. Adaptive/Intelligent Traffic Control System (ATCS Signals with or without ANPR, RLVD, Wrong side, Speed detection, etc.) 2. Intelligent Transit Management System 3. Water Supply / Water SCADA	 Work order of projects for supply of ICCC Solution Any client document that clearly specifies the use cases implemented as part of solution.



#	Selection criteria for the OEM	Proof Document Required
	 Drainage / Drainage SCADA Solid Waste Management Grievance Redressal System CCTV/ Surveillance Network (Excluding Camera considered under Point 1) Smart Street Lighting Revenue Collection Systems (Property Tax, Water Meter Billing, Other Utility Meter Reading, AFCS etc.) Energy / utility SCADA Project Management System Network monitoring for large scale WiFi service / dedicated OFC network Smart Parking 	
E	Enterprise Security Solution for Servers	
1	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for Endpoint Protection Platforms	Latest and relevant report from Gartner to be submitted clearly showing presence of the OEM



ANNEXURE -III

6.22 Revised Technical Evaluation Criteria

	Technical	Technical Evaluation parameter		Marks
#	Evaluation Criteria			
A		Competence & Organizational Strength		20
1	Bidder's	• The bidder (Prime bidder in case of consortium	n) having	10
	Competence –	average annual turnover of 100 Cr from ICT based business		
	Turnover	in last three financial years (FY 2017-18,FY 2016-17		
		will get 7 of total allocated marks.	, 0 ,	
		• For every additional Rs.50 Cr of average turnover	from ICT	
		business the bidder (Prime bidder in case of consor		
		get additional marks as below, subject to a maxin marks.	num of 10	
		Average Turnover	Marks	
		(in crores)	Watks	
		>= INR 200 Cr	10	
		>= INR 150 Cr. and < INR200 Cr.	9	
		>= INR 100 Cr. and < INR 150 Cr.	8	
		Maximum Marks: 10		
		Bidder to submit the Certificate from the statutory	•	
		CA clearly specifying the annual turnover from Io		
		specified years. Original or Notarized copy of the should be submitted	certificate	
2	People in	• The prime bidder having at least 250 FTE	(full_time	F
_	organization	employees) on the payroll of organization working		5
	01841112411011	projects will get 7 marks	ig on ici	
		• For every additional FTEs as below the bidde	r will get	
		additional marks subject to maximum of 5 marks.	O	
		Number of FTE	Marks	
		> 500	5	
		> 250 FTE to =<500 FTE	4	
		= 250 FTE	3	
		Maximum marks: 5		
		Note: Full time Employees defined as employees on t	the Payroll of	
		organization.	ino rayron or	
		Bidder to submit the Certificate from the HR or	Company	
		Secretary clearly specifying the total no of employ		
		the organization. Original or Notarized copy of the		
		should be submitted		
	Bidder's	Certification with the Sole Bidder or any member of co	onsortium	
	Certification	(valid as on date of issuance of the bid):		
		• ISO 9001:2008		
		ISO 20000:2011 for IT Service Management		



	Technical	Technical Evaluation parameter		Marks
#	Evaluation			
	Criteria	LICO 0700110010 for Information Congrity Mon	aagamant	
		• ISO 27001:2013 for Information Security Man System	nagement	
		• CMMi Level 3		
		CMMi Level 5		
		Certification	Marks	
		Any one ISO certificate	2	
		Any two ISO certification or CMMi Level 3	3	
		All ISO certification or ONN: Level = Certification or		
		 CMMi Level 5 Certification or Any two ISO certification & CMMi Level 3 	4	
		Certification		
		Any two ISO certification & CMMi Level 5		
		Certification or All ISO Certification & CMMi	5	
		Level 3 Certification		
В	Project Experienc	e of Bidder		60
1	Bidder	Experience of Sole Bidder / Prime Bidder (in case of con		35
	Experience – Executing	implementation of Integrated Command & Control Co		
	Command	/Command Control Center (CCC) in India in last 7 year	ars from the	
	Control Center	date of publishing this RFP (maximum 2 projects)		
	Project	Number of Businets	Morte	
		Number of Projects	Marks	
		For satisfying PQ criteria	20	
		Additional project over and above the projects sul	omitted	
		under PQ criteria		
		Every additional project costing not less than the		
		amount equal to INR 20 Cr. with ICCC application	15	
		with or without video wall solution component worth	15	
		minimum INR 2.5 Cr.		
		Every additional costing not less than the amount		
		equal to INR 12 Cr. each with ICCC application with		
		or without video wall solution component worth	9	
		minimum INR 1.5 Cr.		
		Every additional project costing not less than the		
		amount equal to INR 10 Cr. each with ICCC		
		application with or without video wall solution	7.5	
		component worth minimum INR 1.25 Cr.		
		Maximum Marks: 35		
		Didden is required to submit		
		Bidder is required to submit : • Copy of completion certificate issued by client		
		 In case of an ongoing project, the project must have 	ve achieved	
		the respective value in terms of entire project cos		
		application with or without Video Wall Solution		
		respectively from financial perspective. The Certi-		
		effect from the client on client's letter head to be pr		
		2.1000 II official official official official to be pr	J.1404.	



#	Technical Evaluation	Technical Evaluation parameter		Marks
#	Criteria			
		Copy of Work order / Contract		
	Bidder Experience – Executing Command Control Center Application	Experience of Sole Bidder / Prime Bidder (in case of consortium) in implementation of ICCC Solution integrating domains/systems in the last seven (7) years (maximum 2 projects) 1. Adaptive/Intelligent Traffic Control System (ATCS Signals with or without ANPR, RLVD, Wrong side, Speed detection, etc.) 2. Intelligent Transit Management System 3. Water Supply / Water SCADA 4. Drainage / Drainage SCADA 5. Solid Waste Management 6. Grievance Redressal System 7. CCTV/ Surveillance Network (Excluding Camera considered under Point 1) 8. Smart Street Lighting 9. Revenue Collection Systems (Property Tax, Water Meter Billing, Other Utility Meter Reading, AFCS etc.) 10. Energy / utility SCADA Project Management System 11. Network monitoring for large scale WiFi service / dedicated OFC network 12. Smart Parking		20
		Particular	Marks	
		One project integrating any 4 domains/systems mentioned above	10	
		One project integrating any 3 domains/systems mentioned above	7.5	
		One project integrating any 2 domains/systems mentioned above	5	
		Maximum Marks: 20 Maximum projects:	2	
		Bidder is required to submit: 1. Copy of completion certificate issued by clien 2. In case of an ongoing project, the claimed do must have been integrated. The Certificat from the client on client's letter head to be possible. 3. Copy of Work order / Contract	mains/systems te to this effect	
3	Bidder Experience – Executing Data Center Project	Relevant experience of Sole bidder / Any member in in creation of Datacenter/ Data Center Infrastru Govt./Central Govt./ULB/ Public Sector Units(PSU) 7 years having minimum project value of Rs. 3 Crore (Note: In-house projects for own or group companiconsidered for above criteria)	icture in State in India in past	5
		Each Project: 2.5 marks Maximum Projects: 2		
		Bidder is required to submit : Copy of Work Order/ Contract Copy of completion certificate issued by client		



#	Technical Evaluation Criteria	Evaluation	
		Note: In-house projects for own or group companies shall not be	
		considered for above criteria. Data Center Infrastructure cost	
		should be excluding software license cost	
C	Presentation and Demonstration		
1	Presentation and Demonstration		
	Following parameters	s will be evaluated:	
	Understanding of the project		
	Approach & Methodology		
	Ability to clearly explain the proposed Solution		
	 Uniqueness of proposed solution as per requirement of SSCDL/SMC 		
	 Demonstration 	on of proposed ICCC Software for Use cases provided by SSCDL/SMC	



ANNEXURE -IV

15.1 Video Wall Screen

The Video Wall for CCC shall be configured with 14×4 matrix formation of the following Professional Display (TV) Screens of

DELTA /BARCO/CHRISTIE/PLANNER/NEC/MITSUIBISHI make.

#	Parameter	Minimum Specifications	Compliance (Yes/No)	Remarks, if any
1.	Technology	DLP Display suitable for use in video wall		
2.	Screen Size	70" or higher (14x4 matrix)		
3.	Projection Operation	Rear projection 24 X 7		
4.	Lifetime of Light Source	Minimum 60,000 hrs.		
5.	Resolution	1920 x 1080 Full high definition (1080p) 16:9 Widescreen or 16:10		
6. —	Contrast ratio	2200:1		
7.	Brightness	Minimum 1000 lumens (ANSI) or Minimum onscreen 230 Cd/m2		
8.	Brightness Uniformity	≥ 95 %		
9.	Viewing angle	Maximum ± 35° Horizontal / ± 33°Verticle		
10.	Response time	8ms		
11.	Screen to Screen Gap	≤ 0.2 mm at all temperature/humidity conditions		
12.	Input	HDMI and other inputs as per Video Wall solution offered		
13.	Control	- On Screen Display (OSD) - IR remote control (Desirable)		
14.	Chip Type	Single chip DLP		
15.	Operations	24 x 7		
16.	Specify the proposed Make			
17.	Specify the proposed Model No			



15.2 Video Wall Controller (From same Video wall OEM)

#	Parameters	Minimum Requirements	Compliance	Remarks, if any			
			(Yes/No)				
Dis	Display Processor						
1.	Features	Supports output up to 1920 * 1200					
		resolution with 60fps					
		Supports H.264 decoding					
		immediately					
		Supports up to 64 windows per					
		display					
		Supports Multicasting Windows					
2.	Output	HDMI 1.3 , Channel -1 , Color depth 8/10 bit					
3.	Image processing	High tap filter for image scaling					
		Accurate synchronization for display wall					
		Support H.264/H.265/MPEG4					
		decoding					
		Up to 64 free window per display					
		Window title with vector texts					
		Bezel-compensation and overlap					
4.	Network	1000 MB network with redundancy					
		Should support POE(Desirable)					
		Supports protocol - DHCP, UDP,					
		TCP/IP					
		Supports Static IP & Automatic IP					
5.	MTBF	more than 100,000 hours					
6.	Interface	HDMI /DVI-D, RS 232x1, USB x 2,					
		RJ-45 x 2, BNC-F*2 Sync In/Out					
7.	Operating Range	Temperature: 0-40 degree					
		Centigrade, Humidity - 10 to 90%					
		non condensing					
8.	LED indicator	LED indicators for Power, Status,					
110		Network, Fan.		1			
	Input Processor						
9.	Features	Captures signals up to 1920 * 1200					
		resolution with 60fps					
		Supports four windows at any position and in any size					
		Supports to loopback progressive					
		VGA or HDMI input signal					
		Supports Multicasting Windows		-			
		Supports Power-on-Ethernet		+			
		(Desirable)					
		Supports KVM		-			
	<u> </u>	FF					



#	Parameters	Minimum Requirements	Compliance	Remarks, if any
	- 		(Yes/No)	
10.	Input	DVI -I, Channel -1, Color depth 8 bit		
11.	Output	HDMI 1.3 , Channel -1		
12.	Network	1000 MB network with redundancy		
		Should support POE <mark>(Desirable)</mark>		
		Supports protocol - DHCP, UDP, TCP/IP		
		Supports Static IP & Automatic IP		
13.	Image processing	High tap filter for image scaling		
		Accurate synchronization for display wall		
		Support 4 window simultaneously		
		Supports windows multicasting		
14.	LED indicator	LED indicators for Power, Status, Network, Fan.		
15.	Operating Range	Temperature: 0-40 degree Centigrade, Humidity - 10 to 90% non condensing		
16.	MTBF	more than 100,000 hours		
17.	Interface	HDMI Type A /DVI-I Type A/DVI-		
		D /DP, RS 232 (DB 9), USB x 2, RJ- 45 x 2,		
18.	Specify the proposed Make	Make should be same of Video wall display		
19.	Specify the proposed Model No			
Ser	ver Specifications	1		
20.	CPU	Core 2 Duo 2.4G Hz or above		
21.	Memory	16 GB or above		
22.	Network	2*1 GbE LAN		
23.	OS	Windows Server 2008/2010 or latest		
24.	HDD	2*1TB SAS HDD with RAID - 1 configuration		
25.	Make	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for Modular Servers		
26.	Specify the proposed Make			
27.	Specify the proposed Model No			



15.3 Video Wall Management Software

#	Functionality	Compliance (Yes/No)	Remarks, if any				
Vid	Video Wall Monitoring Software from same OEM						
1.	Ability to pre-configure and store various display layouts						
	and access them at any time with a simple mouse click.						
2.	Ability to display multiple sources anywhere on video wall						
	in any size.						
3.	Ability to configure display layouts in real time without reboot.						
4.	Ability to create the display layout in background without interrupting the live display.						
5.	Ability to create and store different profiles defining one or more source and size for different scenarios.						
6.	Application must be GUI based with easy to use and configure interface.						
7•	Ability to control the Wall Monitoring System through remote PC connected by LAN						
8.	Ability to display the screen content of the desktop / workstation connected with the Display Controller on the Display wall.						
9.	The wall management software should support open APIs to enable system integrators to integrate it with their Software.						
10.	Ability to centrally manage configuration parameters.						
11.	Ability to schedule backup and restore the configuration						
	parameters.						
12.	Ability to Drag and Drop of sources.						
13.	Event log of user access and client access with time stamp.						
14.	Role based user creation and management.						
15.	Specify the proposed Make (Make should be same of Video wall display)						
16.	Specify the proposed Model No						

15.4 49" Curved Monitor for ICCC Operator

#	Parameter	Minimum Specifications	Compliance (Yes/No)	Remarks, if any
1.	Screen Size (Diagonal)	48 - 49 Inch		
2.	Technology	LED Backlit		
3.	Resolution (Pixels)	Minimum 3840 X 1080		
4.	Aspect Ratio	32:9		
5.	Brightness (Nits)	300		



#	Parameter	Minimum Specifications	Compliance (Yes/No)	Remarks, if any
6.	Native Contrast Ratio (Minimum)	1000:1		
7.	Antiglare Coating	Yes		
8.	Split Screen Feature	Yes		
9.	Inbuilt Speakers	Yes		
10.	Input Ports	Minimum 3 ports (HDMI / Display Port / DVI- D/Type C USB)		
11.	USB Port	Yes		
12.	Mounting Arrangement	Table Mount		
13.	Operating Humidity (%RH)	10 - 80%		
14.	Power Supply	230V AC, 50 Hz		
15.	Type Of Power Supply	In-built		
16.	Specify the proposed Make			
17.	Specify the proposed Model No			

15.5 Workstations for ICCC Operators

#	Parameter	Minimum Specifications	Compliance (Yes/No)	Remarks, if any
1.	Processor	Intel® 8th generation Core™ i7-8700 Processor (3.20 GHz Base Frequency/Clock Speed, 12M Cache, 6 core) or higher		
2.	Chipset	Intel Q370 chipset or better		
3.	Motherboard	OEM Motherboard		
4.	RAM	16 GB DDR4 RAM @ 2666 MHz or higher with single DIMM, Minimum 4 DIMM slots and Shall be expendable to 64 GB		
5.	Graphics card	Graphics card with 4 GB memory		
6.	HDD	Minimum 2 TB SATA III Hard Disk @7200 RPM or higher		
7.	Media Drive	NO CD / DVD Drive		
8.	Network interface	10/100/1000 Mbps autosensing on board integrated RJ-45 Ethernet port.		



#	Parameter	Minimum Specifications	Compliance (Yes/No)	Remarks, if any
9.	Audio	Line/Mic IN, Line-out/Speaker Out (3.5 mm)		
10.	USB Ports	Minimum 6 USB ports at least 4 USB 3.0 ports (out of that 2 must be in front)		
11.	Ports	Minimum 3 display output ports(HDMI/DVI/Display Port)		
12.	Keyboard	104 keys minimum OEM keyboard		
13.	Mouse	2 button optical scroll mouse (USB)		
14.	Monitor	Please refer specifications for 49" Curved Monitor for Operators		
15.	Accessories	All workstations should be with keyboard, mouse, headphones including mic.		
16.	Certification	Energy star 5.0/BEE star certified		
17.	Operating System	Pre-loaded Windows 10 (or latest) Professional 64 bit, licensed copy with certificate of authenticity (or equivalent authenticity information) and all necessary and latest patches and updates. All Utilities and driver software, bundled in CD/DVD/Pen-drive media No software that are trial version or unlicensed in nature should be pre- installed on the system.		
18.	Security	Onboard Integrated Trusted Platform Module 2.0		
19.	Specify the proposed Make			
20.	Specify the proposed Model No			