CSIR-CENTRAL GLASS AND CERAMIC RESERACH INSTITUTE



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PURCHASE ORDER

M/s. Wizertech Informatics Pvt. Ltd.,	P.O. No.	P/I/NC/397/SB/DB/OLT/19-20
Electronic Security & Infrastructure Division	Date	08/10/2020
Unit – 904, Ecostation, Plot – 7,	Subject	Purchase Order
Block – BP, Sector – V,		
Salt Lake City, Kolkata – 700 091		
Ph.: 033 2367 6555		
Email: tanmovc@wizertech.in		

Reference:

- 1. Our Bid Document No. P/I/NC/397/SB/DB/OLT/19-20
- 2. Technical & Price Bid No.: Nil.
- 3. Our letter dt. 12/03/2020
- 4. Your reply through email dt. 16/03/2020

Dear Sir,

I am directed to request you to kindly supply the following material as the enclosed terms & conditions.

SI.	Item Description	Quantity	Unit	Price/	Total	Price/
1.	Supply, Installation, Testing and commissioning of CCTV System for the extension of the existing surveillance coverage inside the Institute campus consisting of:- 4MP IP IR dome Camera – 24 Nos. 4K IP IR Box/ Bullet Camera – 6 Nos. 4MP IP IR Bullet Camera – 6 Nos. 64Ch NVR – 2 Nos. Client Monitoring Workstation – 1 No. Enterprise class 24 port 10/100/1000T stackable L3 switch with 4 SFP + ports and 2 power supplies – 1 No. Enterprise class L2 + switch with 8 x10/100/1000TPoE ports and 2 x 100/1000X SFP ports – 5 Nos. Enterprise class L2 + switch with 16 x10/100/1000 T PoE ports and 2 x 100/1000X SFP ports. – 2 Nos. Industrial managed PoE switch, 8x10/100/1000TX PoE +ports and 2x100/1000X SFP combo with adaptor (third party) 120W- 48VDC – 2 Nos. 1000 Base LX (10KM) SFP (10 km with SMF) – 22 Nos. 10/100/1000 Base T SFP (100m with UTP) – 4 Nos. 6U Wall Mounted Rack with all accessories – 7 Nos. Outdoor JB with all accessories – 2 Nos. 42U Floor mounted Rack with all accessories – 1 No. Wiring, Cable laying, installation and commissioning of entire CCTV system – 1 Job The above job is inclusive of one year comprehensive warranty and four quarterly (Every three month) visit for preventive maintenance	1 job	INR	,000.00	INR	,000.00
2.	GST @18%				,	,820.00
	TOTAL F.O.R. DESTINATION	PRICE INC	LUDING	G GST:	22,99	,820.00

GRAND TOTAL ::	23,98,940.00
GST on Installation and Commissioning Charges	15,120.00
Installation and Commissioning Charges	84,000.00

Bill of Materials

SI. No	Description	Unit	Qty
1	4MP IP IR dome Camera as per specification mentioned in tender.		24
2	4K IP IR Box/ Bullet Camera as per specification mentioned in tender.	No	6
3	4MP IP IR Bullet Camera as per specification mentioned in tender.	No	6
4	64Ch NVR as per specification mentioned in tender	No	2
5	Client Monitoring Workstation as per specification mentioned in tender.	No	1
6	Enterprise class 24 port 10/100/1000T stackable L3 switch with 4 SFP + ports and 2 power supplies	No	1
7	Enterprise class L2 + switch with 8 x10/100/1000TPoE ports and 2 x 100/1000X SFP ports		5
8	Enterprise class L2 + switch with 16 x10/100/1000TPoE ports and 2 x 100/1000X SFP ports. Operating temp 0 to 50 degree		2
9	Industrial managed PoE switch , 8x10/100/1000TX PoE+ ports and 2x100/1000X SFP combo with adaptor (third party) 120W- 48VDC	No	2
10	1000 Base LX (10KM) SFP (10 km with SMF , 1310 nm)	No's	22
11	10/100/1000 Base T SFP (100m with UTP)	No	4
12	6U Wall Mounted Rack with all accessories	No	7
13	Outdoor JB (600*600*350) with all accessories	No	2
14	42U Floor mounted Rack with all accessories as per specification mentioned in tender.	No	1
15	Installation, Testing & Commissioning of system	Job	1

TECHNICAL SPECIFICATION

1. 4MP IR IP Motorized lens Dome cameras

General requirement:

- A. This product shall be manufactured by a firm whose quality system is in compliance with the I.S./ISO 9001: 2008, Quality System.
- B. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.
- C. The BIS certificate of the Cameras & NVRs should have OEM's own factory address. The cross reference will be checked on BIS official website.

SL. No.	PARAMETER	SPECIFICATIONS
1	Image Sensor	1/3" CMOS
2	Lens	Motorized zoom lens, F1.4, f=2.8-12mm
3	IR Illumination	30meters or more
4	Day/Night Switching	Camera shall have IR-Cut Removable (ICR) filter and provide automatic Day/Night functionality
5	Sensitivity	Color mode: 0.01 lux@F1.4

6		B/W mode: 0 lux (IR ON)	
7	S/N Ratio	52dB	
8	Exposure	Scene, Manual, Shutter	
9	Shutter Speed	1/1s~1/30000s	
10	AGC	Auto/Manual	
11	White Balance	Auto/Manual	
12	WDR	120dB	
13	Video Adjustment	Brightness, contrast, saturation, chroma, sharpness	
14	Noise Reduction	3D	
15	Special Feature	Defog, EIS, Corridor Mode, Image Mirror	
16	Video Compression	H.265, H.264, M-JPEG	
17	Encoding Capacity	2592×1520@15fps+720P@30fps+M-JPEG1080P@5fps	
18	Audio Compression	G.711a, G.711u, AAC	
19	Audio Port	1 linear input, 1 linear output	
20	Video Analytics	Tampering, Tripwire, Intrusion, Motion etc	
21	Motion Detection	Minimum 4 motion detecting areas	
22	Privacy Mask	Minimum 4 masks	
23	Edge Storage	min 128GB support	
24	Security	Password protection, IP Address Filtering	
25	Network Port	10/100 RJ45	
26	Alarm	2 alarm inputs, 1 on-off output	
27	Onvif Profiles	S&G	
28	Network Protocols	IPv4, IPv6, TCP, UDP, IGMP, DHCP, FTP, SNMP (V3), SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, TSL, SSL, 802.1X, QoS, PPPoE, DNS, DDNS, ARP, ICMP, UPnP	
29	Power Supply	PoE+/PoE/12VDC/24VAC	
30	Power Consumption	<9W	
31	Operating Temperature	-40°C ~ 60°C	
32	Operating Humidity	0%~90% RH (non-condensing)	
33	Product Certifications	FCC Part 15, UL 60950-1, IP66, IK10, BIS	
34	Approved Makes	Axis, Bosch, Honeywell, Infinova, Pelco	
35	Copy of all certificates should be produced along with the bid		

2. HD 4K IR IP Outdoor motorized lens Bullet/Dome cameras

General requirement:

- A. This product shall be manufactured by a firm whose quality system is in compliance with the I.S. /ISO 9001: 2008, Quality System.
- B. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.
- C. The BIS certificate of the Cameras & NVRs should have OEM's own factory address. The cross reference will be checked on BIS official website.

SI. No	Parameter	Specification
1	Image Sensor	1/1.9 " progressive scan CMOS
2	Lens	Motorized zoom lens F1.4, f=2.8-12mm
3	IR Illuminator	40 meters or more
4	Day/Night Switching	Camera shall have IR-Cut Removable (ICR) filter and provide automatic Day/Night functionality
5		Color mode: 0.001 lux or better
	Sensitivity	B/W mode: 0.0001 lux or better; 0 lux (IR ON)
6	Exposure	Scene, Manual, Shutter
7	Shutter Speed	1/1s~1/30000s
8	AGC	Auto/Manual
9	White Balance	Auto/Manual/ Outdoor
10	WDR	120dB
11	Video Adjustment	Brightness, contrast, saturation, chroma, sharpness
12	Noise Reduction	3D
13	Special Feature	Defog, Corridor mode, Image Mirror etc
14	Video Compression	Camera shall be available with four Simultaneous Video Streams: H.265+M-JPEG, H.264+M-JPEG video encoding
15	Encoding Capacity	3840*2160@30fps
16	Audio Compression	G.711a, G.711u, AAC
17	Audio Port	1 linear input, 1 linear output
18	Video Analytics	Tampering, Tripwire, Intrusion, Motion etc
19	Alarm	2 alarm inputs, 1 on-off output
20	Motion Detection	Minimum 4 motion detecting areas
21	Privacy Mask	Minimum 4 masks
22	Edge Storage	min 128GB support
23	Network Port	10/100 RJ 45
24	Network Protocols	IPv4/IPv6, TCP, UDP, IGMP, ICMP, IGMPv2/3, DHCP, SNMP (V1, V3), FTP, SMTP, NTP, RTC, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, DES, Multicast
25	Onvif Profiles	S&G
26	Power Supply	PoE+/PoE/12VDC/24VAC
27	Power Consumption	<20W
28	Operating Temperature	-40°C ~ 60°C
29	Operating Humidity	0%~90% RH (non-condensing)
30	Product Certifications	FCC Part 15, UL 60950-1, IP67, IK10,BIS
31	Approved Makes	Axis, Bosch, Honeywell, Infinova, Pelco
32	Copy of all certificates	should be produced along with the bid

3. 4 MP IR IP Outdoor motorized lens Bullet cameras

General requirement:

- A. This product shall be manufactured by a firm whose quality system is in compliance with the I.S./ISO 9001: 2008, Quality System.
- B. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.
- C. The BIS certificate of the Cameras & NVRs should have OEM's own factory address. The cross reference will be checked on BIS official website.

SI. No	Parameter	Specification
1	Image Sensor	1/3 " progressive scan CMOS
2	Lens	Motorized zoom lens F1.4, f=2.8-12mm
3	IR Illuminator	50 meters or more
4	Day/Night Switching	Camera shall have IR-Cut Removable (ICR) filter and provide automatic Day/Night functionality
5	Sensitivity	Color mode: 0.01 lux@F1.4 ; B/W mode: 0 lux (IR ON)
6	Exposure	Scene, Manual, Shutter
7	Shutter	1/1s~1/32000s
8	AGC	Auto/Manual
9	White Balance	Auto/Manual/ Outdoor
10	WDR	120dB or better
11	Video Adjustment	Brightness, contrast, saturation, chroma, sharpness
12	Noise Reduction	3D
13	Special Features	Defog, Corridor Mode, Image Mirror
14	Video Compression	H.265/H.264 switchable M-JPEG independent
15	Encoding Capacity	2592×1520@20fps+720P@30fps+M-JPEG1080P@5fps
16	Audio Compression	G.711a, G.711u
17	Audio Port	1 linear input, 1 linear output
18	Video Analytics	Tampering, Tripwire, Intrusion, Motion etc
19	Alarm	2 alarm inputs, 1 on-off output
20	Motion Detection	Minimum 4 motion detecting areas
21	Privacy Mask	Minimum 4 masks
22	Internal Storage	min 128GB supports
23	Network Port	10/100 RJ45
24	Network Protocols	IPv4, IPv6, TCP, UDP, IGMP, DHCP, FTP, SNMP (V3), SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, TLS, SSL, 802.1X, QoS, PPPoE, DNS, DDNS, ARP, ICMP, UPnP
25	Open Profiles	S
26	Power Supply	PoE+/PoE/12VDC/24VAC
27	Power	<13W
28	Operating Temperature	-40°C ~ 60°C
29	Operating Humidity	0%~90% RH (non-condensing)
30	Product Certifications	FCC Part 15, UL 60950-1
31	Approved Makes	Axis, Bosch, Honeywell, Infinova, Pelco
32	Copy of all certificates	should be produced along with the bid

4. Network video recorder, up to 64-ch video inputs

General Requirement:

- A. This product shall be manufactured by a firm whose quality system is in compliance with the I.S. /ISO 9001: 2008, Quality System.
- B. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.
- C. The BIS certificate of the Cameras & NVRs should have OEM's own factory address. The cross reference will be checked on BIS official website.

SI No	Parameter	Specifications
1	Operating System	Adopts professional high-performance multi-media network processor and embedded Linux system, low power consumption and high stabilization
2	Image Decoding Standard	Supports H.265, H.264 video format
3	Network Video Input	64 channels
4	Network Video Bandwidth	minimum 380Mbps incoming bandwidth minimum 380Mbps outgoing bandwidth
5	Network Video Access Protocols	ONVIF, etc.
6	Audio Input	64-ch IPC composite audio input
7	Recording Resolution	8MP/5MP/3MP/1080P/1600×1200/720P/640×480/D1/4CIF/DCIF /2CIF/CIF/QCIF
8	Recording Methods	Manual, motion detection, timing and alarm
9	Playback	Supports 4 channels 1080P synchronous playback
10	HDMI Output	2ch, HDMI0 resolution 1920×1080P, HDMI1 resolution 3840×1080
11	VGA Output	1ch, resolution 1920×1080P
12	Split Preview	1/2/4/9/16
13	Audio Output	1ch, BNC
14	Туре	16 × SATA ports
15	HDD Capacity	Each port supports an HDD of 6TB capacity
16	Support Raid 5	Yes
17	HDD hot swap	Required
18	File locking	NVR shall support recording files locking to ensure that significant files should not be overwritten
19	Failover feature	NVR shall support N+1 system level protection and backup.
20	Network Port	2 × RJ45, 10/100/1000M self-adaptive Ethernet port
21	USB Port	2 × USB2.0, 1 × USB3.0
22	Alarm I/O	8-ch input, 2-ch output
23	Protocol	Supports TCP/IP, UDP, DHCP, DNS, NTP, DDNS, PPPOE, FTP, UPNP, multicast
24	Power	100 ~ 240 VAC, 5 A
25	Power Consumption (without hard disk)	<30W(without hard disk)
26	Operating Temperature	23°F ~ 131°F (-5°C ~ 55°C)
27	Operating	10% ~ 90% (non-condensing)

		Humidity	
ſ	28	Product	CE, FCC, UL, BIS
L		Certifications	
	29	Approved	Axis, Bosch, Honeywell, Infinova, Pelco
		Makes	•
Ī	30	Copy of all certificates should be produced along with the bid	

5. Client Workstation for using CMS Software

SI. No.	Туре	Minimum Specification
1	Make	Bidder to mention
2	Model	Bidder to mention
3	Туре	Workstation
4	Processor	Intel Xeon W-2145 Series Processor or higher, 3.7 GHZ or more, 8 Core, 11 MB Cache or higher
5	Motherboard	OEM Motherboard
6	Memory	16GB DDR4 2666 MHz RDIMM ECC or higher
7	Dedicated Graphics Card	VTS
8	Hard Disk Drive	1 TB 7200 rpm SATA or better
9	Ports	Minimum 6-USB Ports (4 Rear & 2 Front), at least two USB 3.0 ports out of above 6 USB ports
10	Keyboard	USB Standard keyboard (Same make as workstation)
11	Mouse	USB 2 Button Optical Scroll Mouse (Same make as workstation)
12	Optical Disk Drive	8x DVD+/-RW ODD or better
13	Network Interface	1x Gigabit Ethernet Port or better
14	Audio	Integrated High Definition Audio
15	Slots	Min.1 No. PCI Express free slot
16	Operating System	Preinstalled Windows 10 Pro for Workstations (4 Cores plus) with recovery media and mechanism.
17	Accessories	Power cords, Audio/Video cables, standard patch cord
18	Approved Make	Dell, Fujitsu, HP

6. Core Switch

SN.	Specification		
1	Port Density: Enterprise Grade L3 Switch should have minimum		
	4x10/100/1000 Base-T and 20x100/1000 Base-x SFP Ports. Additional		
	4x1/10G SFP+ ports. Populated with required module from day 1. Should		
	have dual power supply from day 1.		
2	Switch architecture & Performance: The Switch should support a minimum of 128Gbps of Switching Fabric Capacity. The Switch should		
	support a minimum of 95Mpps of forwarding capacity and 16K MAC address		
	or better. Should have IPv6 Ready Logo from Day 1.		
3	High Availability: Should support stacking up to four physical units for		
	single IP management. Minimum stacking bandwidth should be 40Gbps or		
	more. All the necessary accessories should be provided from day 1.		

4	Layer 2 and Layer 3 Feature: Should support 4K active Vlan, Port base, MAC base, Protocol base and Voice VLAN, Loop Detection and Loop protection, Control Plane Prioritization (CPP), RSTP, MSTP, Q-in-Q, <50ms ring recovery, IEEE 802.3ac VLAN tagging, IEEE 802.1v, RIPv1&v2, OSPF V3, BGP, Policy-based routing, VRRP V3, PIMv6-SM and SSM from Day 1.	
5	Multicast Support: MLD snooping and Querier IGMP snooping v1, v2 and v3	
6	Quality of Service: IEE 802.1p compliance, DSCP Prioritization, Wire speed traffic classification with low latency essential for VOIP and real time streaming media applications. Policy-based QoS based classifying traffic based on MAC, Port, VLAN, Protocol, L3 Parameters.	
7	Security Feature: ACLs, DHCP snooping, STP Root Guard, IP source guard and Dynamic ARP Inspection (DAI), RADIUS and TACACS+ accounting and authentication, MAC address filtering and MAC address lock-down, Tri authentication: MAC-based, web-based and IEEE 802.1x, DoS attack blocking.	
8	Management Feature: SNMPv6, Telnetv6 and SSHv6, SNMPv1, v2 and v3, RMON, Sflow /NetFlow or equivalent, Openflow for SDN, 1xRJ45 Console port, USB or equivalent memory card slot for backup.	
	Other Essential Feature: Should support UDLD or equivalent feature to prevent loops on detecting unidirectional links, Connectivity Fault Management, Monitoring Temperature, Supply voltage, Average transmit power, Average receive power and Laser bias current of the FO module, should have feature if any intrusion is detected on fiber link the particular port should be shutdown automatically.	
9	Certification: EN55022, EN55024, UL60950-1, FCC class A, VCCI class A, cUL and RoHS compliant	
10	All the switches should be offered with min 5 years replacement warranty with proper back-up on respective-OEM letter Head. All the switches and FO Modules should be from the same OEM.	
11	OEM should be in Gartner's Magic quadrant in the latest Gartner report for Wired and wireless LAN. (Report should be attached along with the Bid)	

7. 16 Port PoE Switch

SN.	Specification	
1	Port Density: Enterprise Grade L2 Switch should have minimum	
	16x10/100/1000 Base-T PoE ports and 2x1G SFP ports. Populated with	
	required module from day 1. Minimum PoE budget 245Watt or more.	
2	Switch architecture & Performance: The Switch should support a minimum	
	of 36Gbps of Switching Fabric Capacity. The Switch should support a	
	minimum of 26Mpps of forwarding capacity and 16K MAC address or better.	
4	Should have IPv6 Ready Logo from Day 1. Layer 2 and Layer 3 Feature: Should support 2K active Vlan, Port base,	
4	MAC base, Protocol base and Voice VLAN, Loop Detection and Loop	
	protection, Control Plane Prioritization (CPP), RSTP, MSTP, Q-in-Q, <50ms	
	ring recovery, IEEE 802.3ac VLAN tagging, IEEE 802.1v, Static routing and	
	RIPv1&v2 from Day 1.	
5	Multicast Support: MLD snooping and Querier IGMP snooping v1, v2 and	
	v3	
6	Quality of Service: IEE 802.1p compliance, DSCP Prioritization, Wire speed	
	traffic classification with low latency essential for VOIP and real time	
	streaming media applications. Policy-based QoS based classifying traffic	
_	based on MAC, Port, VLAN, Protocol, L3 Parameters.	
7	Security Feature: ACLs, DHCP snooping, STP Root Guard, IP source guard	
	and Dynamic ARP Inspection (DAI), RADIUS and TACACS+ accounting and	
	authentication, MAC address filtering and MAC address lock-down, Tri	
	authentication: MAC-based, web-based and IEEE 802.1x.	
8	Management Feature: SNMPv6, Telnetv6 and SSHv6, SNMPv1, v2 and v3,	
	RMON, Sflow /NetFlow or equivalent, Openflow for SDN, 1xRJ45 Console	
	port, USB or equivalent memory card slot for backup.	

	Other Essential Feature: Should support UDLD or equivalent feature to prevent loops on detecting unidirectional links, Connectivity Fault Management, Monitoring Temperature, Supply voltage, Average transmit power, Average receive power and Laser bias current of the FO module, should have feature if any intrusion is detected on fiber link the particular port should be shutdown automatically.
9	Certification: EN55022, EN55024, UL60950-1, FCC class A, VCCI class A, cUL and RoHS compliant
10	All the switches should be offered with min 5 years replacement warranty with proper back-up on respective-OEM letter Head. All the switches and FO Modules should be from the same OEM.
11	OEM should be in Gartner's Magic quadrant in the latest Gartner report for Wired and wireless LAN. (Report should be attached along with the Bid)

8. 8 Port PoE Switch

SN.	Specification		
1	Port Density: Enterprise Grade L2 Switch should have minimum 8x10/100/1000 Base-T PoE ports and 2x1G SFP ports. Populated with required module from day 1. Minimum PoE budget 120Watt or more.		
2	Switch architecture & Performance: The Switch should support a minimum of 20Gbps of Switching Fabric Capacity. The Switch should support a minimum of 14Mpps of forwarding capacity and 16K MAC address or better. Should have IPv6 Ready Logo from Day 1.		
4	Layer 2 and Layer 3 Feature: Should support 2K active Vlan, Port base, MAC base, Protocol base and Voice VLAN, Loop Detection and Loop protection, Control Plane Prioritization (CPP), RSTP, MSTP, Q-in-Q, <50ms ring recovery, IEEE 802.3ac VLAN tagging, IEEE 802.1v, Static routing and RIPv1&v2 from Day 1.		
5	Multicast Support: MLD snooping and Querier IGMP snooping v1, v2 and v3		
6	Quality of Service: IEE 802.1p compliance, DSCP Prioritization, Wire speed traffic classification with low latency essential for VOIP and real time streaming media applications. Policy-based QoS based classifying traffic based on MAC, Port, VLAN, Protocol, L3 Parameters.		
7	Security Feature: ACLs, DHCP snooping, STP Root Guard, IP source guard and Dynamic ARP Inspection (DAI), RADIUS and TACACS+ accounting and authentication, MAC address filtering and MAC address lock-down, Tri authentication: MAC-based, web-based and IEEE 802.1x.		
8	Management Feature: SNMPv6, Telnetv6 and SSHv6, SNMPv1, v2 and v3, RMON, Sflow /NetFlow or equivalent, Openflow for SDN, 1xRJ45 Console port, USB or equivalent memory card slot for backup.		
	Other Essential Feature: Should support UDLD or equivalent feature to prevent loops on detecting unidirectional links, Connectivity Fault Management, Monitoring Temperature, Supply voltage, Average transmit power, Average receive power and Laser bias current of the FO module, should have feature if any intrusion is detected on fiber link the particular port should be shutdown automatically.		
9	Certification: EN55022, EN55024, UL60950-1, FCC class A, VCCI class A, cUL and RoHS compliant		
10	All the switches should be offered with min 5 years replacement warranty with proper back-up on respective-OEM letter Head. All the switches and FO Modules should be from the same OEM.		
11	OEM should be in Gartner's Magic quadrant in the latest Gartner report for Wired and wireless LAN. (Report should be attached along with the Bid)		

9. 8 Port Industrial PoE Switch

SN.	Specification
1	Industrial managed PoE+ switch 8 x 10/100/1000T ports (PoE+ support) and 2x 1G SFP combo ports from Day1. POE + Standards should be in accordance with IEEE 802.3af and IEEE 802.3at standards with 30W PoE+ with PoE budget of 120W
2	Performance: Switching capacity min 20Gbps and min forwarding rate min 14Mpps, Min 8K or better MAC address, Min 4K configurable VLAN, Packet buffer min 4Mb and 9Kb Jumbo frame
3	L2 Features: IEEE 802.3ac, IEEE 802.3az, IEEE 802.1ad, IEEE 802.1Q, IEEE 802.1D, IEEE 802.3ad, RSTP, MSTP, GVRP or equivalent, VLAN stacking or Q-in-Q, Loop back detection and storm control, REP/ ITU-T G.8032/equivalent open standard with seamless integration with other control centre switch/core L3 switch
4	QOS: Should support eight priority queues, IEEE 802.1P and traffic shaping and rate limiting
5	Multicast Protocols for Video: IGMP snooping v1, v2 and v3, MLD snooping (v1 and v2) and min 255 or better multicast entries
6	Security: Should support IEEE 802.1x based port authentication, DHCPv4 client, RADIUS, SSL, SSH, Port Mirroring
7	IPv6 Features: Should support DHCPv6, ICMPv6 and neighbour discovery for IPv6
8	Management: SNMPv1, v2c and v3, ICMPv6, LLDP, RMON, Web GUI and CLI
9	Operating Temperature: Min of -10°C to 75°C, Humidity: 10% to 95% or better
10	Certifications: CE, FCC, TUV, VCCI, EN60068-2-27/IEC60068-2-27, IEC60068-2-31/EN60068-2-31, EN60068-2-6/ IEC60068-2-6, NEMA TS2, EMC: EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN55024, EN55032, EN50121-4.
11	UL/IEC/EN 60950-1; ROHS and WEEE Compliance; Min. IP30 Enclosure Rating, DIN Rail Mounting
12	All the switches should be offered with min 5 years replacement warranty with proper back-up on respective-OEM letter Head. All the switches and FO Modules should be from the same OEM.

10. FO Module

SL No	Specification	
1	Single mode - Media Type	
2	Wave length- 1310 nm	
3	Distance support - Min 10 Km	
4	Connector LC Type	
5	Hot swap architecture	
6	Min. operating temperature range: 0 Degree C to 70 Degree C	
7	FO Module should be MSA compliant	
8	Min. Data rate 1 Gbps	

11. 6 U Wall Mounted Rack

SI. No.	Туре	Minimum Specification

1	Make/Model	Bidder to mention
2	Rack Dimension	6U or better
3	Door & Lock	Front section with glass door and lock
4	Cable entry	Enclosure should have suitable cable entry section. Bidder to ensure proper sealing of cable entry section after termination of all cables.
5	Ventilation	Cooling fans with provision to mount on the rack, Fan On/Off switch should be provided inside the rack.
6	Cable Manager	1U 19" Cable Manager included
7	PDU	Inbuilt AC PDU 5/15 AMP Socket x 06 (Single strip) with Indian standard power connector/adapter for input & output. Power strip shall be supplied by bidder.
8	Approved Make	D-Link/ Netrack/ Valrack

12. Outdoor Junction Box

SI. No.	Туре	Minimum Specification
1	Make	Reputed brand
2	Dimension	600x600x350 (LxBxD) approx
3	Туре	Welded body
4	Door & Lock	Single section with Lockable/removable front door
5	Cable entry	Enclosure should have suitable cable entry section. Bidder to ensure proper sealing of cable entry section after termination of all cables.
6	Protection degree	IP65 or better
7	Approved Make	Pyrotech, Rackom, WK india

13. Floor Mounted Rack

1	Approved Make	D-Link/ Netrack/ Valrack
2	Rack Dimension	42U or better
3	Rack Type	Wall mount Rack with adjustable 19" rails in the front side and rear side,
4	Door & Lock	Front section with door and lock
5	Cable entry	Enclosure should have suitable cable entry section. Bidder to ensure proper sealing of cable entry section after termination of all cables.
6	Ventilation	Cooling fans with provision to mount on the rack, Fan On/Off switch should be provided inside the rack.

7	Cable Manager	1U 19" Cable Manager included
8	PDU	Inbuilt AC PDU 5/15 AMP Socket x 06 (Single strip) with Indian standard power connector/adapter for input & output. Power strip shall be supplied by bidder.

Scope of work & incidental services

Scope of the job is to provide Turnkey Solution that includes but is not limited to supply, installation, implementation, testing and commissioning with demonstration of new CCTV software along with allied hardware and includes training, providing user manual, providing 12 months comprehensive warranty (repairing and replacement as per requirement without any expanses involved). The existing CCTV system of the Institute will be a part of the supplied system and to be tested together. It has to be ensured by the vendor that the supplied system and the existing system perform together seamlessly as one integrated system.

The scope of the work includes but not limited to the following:

Integration of CCTV software including allied servers, client machines and other hardware such as switches, network rack etc. where ever applicable including design, engineering, supply, erection, installation, commissioning and interface with IP based new CCTV cameras & integration of existing CCTV cameras, field switches etc.

Storage to be provided for minimum 30 days for all **new and existing cameras** at their full resolution and 15 FPS.

Existing cameras are from Honeywell make which need to be integrated with new CCTV system. Details of cameras are in below:-

- 1. HBL2GR1 01 No's
- 2. HBW2GR3 05 No's
- 3. HBW2GR1 04 No's
- 4. H4W2PRV2 13 No's

The following passive components will be supplied by CSIR CGCRI (Client) and the same will be installed / laid by the vendor during installation of entire CCTV system. The vendor has to take complete responsibility of satisfactory performance of the entire CCTV system.

- 1. Storage 8x8 TB total 64 TB
- 2. Cat 6 UTP Cable approx. 3500 Mtr
- 3. PVC Conduit approx. 1000 Mtr
- 4. HDPE conduit approx. 400 Mtr
- 5. Line Interactive UPS approx. 14 Nos.
- 6. 6 Port fully loaded LIU approx. 20 Nos.
- 7. 6 Core armoured OFC single mode approx. 1500 Mtr.
- 8. SC-SC/LC SM 2Mtr OFC Patch Cord 20 Nos.
- 9. Cat 6 Patch Cord approx 60 Nos.

The Specifications of the goods and other services shall strictly conform to those laid down in your offer and other correspondences.

This Contract/Purchase Order shall be governed by:-

- (1) General Conditions of Contract and Special Conditions of Contract as detailed in the Bid Document and
 - (2) Special Conditions of Contract enclosed with this Purchase Order.

The Order Acknowledgement must be submitted immediately and in any case, within 14 days from the date of placement of this Purchase Order failing which, the order will be deemed as cancelled, and the Bid Security submitted by you/Indian Branch Office will be forfeited.

You are requested to return the duplicate copy of this Purchase Order, duly signed and stamped, as a token of your acceptance to this order.

Yours faithfully,

Sd/(Arun Kr. Banerjee)
Section Officer (S&P) (Acting)
For & on behalf of the Council of Scientific &
Industrial Research

Enclo:

- 1. Terms & Conditions.
- 2. **PBG Format.**

Explanations
The following words and expressions used in this Tender Document shall have the meanings hereby assigned to them:

Purchaser	means CSIR-CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE, 196 RAJA S.C. MULLICK ROAD, KOLKATA 700 032, INDIA
Supplier	means M/s. Wizertech Informatics Pvt. Ltd., Kolkata

1.	Delivery Term	FOR CSIR-CGCRI, Kolkata
2.	Purchase Order Value / Contract Price	INR 23,98,940.00 [INR Twenty Three Lakh Ninety Eight Thousand Nine Hundred Forty only]
3.	Payment	The payment shall be made in Indian Rupees, as follows: (a) After shipment: Eighty percent (80 %) of the Contract Price, i.e. INR 19,19,152.00 [INR Nineteen Lakh Nineteen Thousand One Hundred Fifty Two only] shall be paid on receipt of the Goods in good condition and upon submission of the documents specified in SCC Clause (of Tender Document). (b) On Acceptance: The remaining Twenty percent (20 %) of the Contract value, i.e. INR 4,79,788.00 [INR Four Lakh Seventy Nine Lakh Seven Hundred Eighty Eight only] shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser and upon completion of satisfactory installation and commission subject to submission of performance security. The Performance Security of 10% (Ten percent) of value of Purchase Order should be valid till 60 (Sixty) days beyond the date of expiry of Warranty Period of 1 (One) year. Note: All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.
4.	Performance Security	The vendor has to furnish a Performance Bank Guarantee equivalent to 10% of the Purchase Order value as per the format, specified by CSIR-CGCRI (enclosed) prior to release of payment. The validity of PBG should cover the period of Warranty plus 60 days. This PBG will be returned to the vendor soon after successful completion of warranty and performance obligations.
5.	Goods & Service Tax (GST)	18% GST CSIR-CGCRI GST No.: 19CALC01020F1DL
6.	Delivery period	The Supplier shall deliver the consignment within 30 (Thirty) days from the date of issue of our Purchase Order.

7.	Warranty	1 (One) year comprehensive warranty from the date of completion of installation and commissioning of the equipment to the entire satisfaction of this Institute (Purchaser).
8.	Insurance	The Insurance in respect of goods to cover all risks upto final destination shall be borne by Supplier at its own costs.
9.	Installation, Commissioning, Training	Installation to be done by expert and trained engineers at free of cost in Kolkata.
10.	Acceptance	The materials dispatched should be as per our Purchase Order. The bidder has to pass acceptance test at CSIR-CGCRI.

Yours faithfully,

Sd/-

(Arun Kr. Banerjee)
Section Officer (S&P) (Acting)
For & on behalf of the Council of Scientific &
Industrial Research

CONDITIONS OF CONTRACT

A GENERAL CONDITIONS OF CONTRACT (GCC)

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GENERAL CONDITIONS OF CONTRACT (GCC)

2.1 Definitions

2.1.1

The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
- (d) "Day" means calendar day.
- (e) "Completion" means the fulfilment of the Goods and related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (f) "GCC" means the General Conditions of Contract.
- (g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (h) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (i) "SCC" means the Special Conditions of Contract.
- (j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (k) Supplier" means the natural person. private or government entity. combination of the above, whose bid to perform the Contract been accepted by the Purchaser and is named as such in the Contract Agreement.
- (I) The "Council" means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India.
- (m)The "Purchaser" means any of the constituent Laboratory/Institute of the Council situated at any designated place in India as specified in SCC.
- (n) "The final destination," where applicable, means the place named in the SCC.

2.2 Contract Documents

2.2.1

Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

2.3 Code of Integrity

2.3.1

Without prejudice to and in addition to the rights of the Purchaser to other penal provisions as per the bid documents or contract, if the Purchaser comes to a conclusion that a (prospective) bidder /supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the Purchaser may take appropriate measures including one or more of the following:

- a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the purchaser;
- b) Forfeiture or encashment of any other security or bond relating to the procurement;
- c) Recovery of payments including advance payments, if any, made by the Purchaser along with interest thereon at the prevailing rate.
- a) Provisions in addition to above:
 - Removal from the list of registered suppliers and banning/debarment of the bidder from participation in future procurements of the purchaser for a period not less than one year;
 - 2) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;
 - 3) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

2.4 <u>Joint Venture, Consortium or Association</u>

2.4.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfilment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

2.5 Scope of Supply

2.5.1 The Goods and Related Services to be supplied shall be as specified in Chapter 4 i.e. Specifications and allied technical details.

2.6 Suppliers' Responsibilities

2.6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

2.7 Contract price

2.7.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

2.8 Copy Right

2.8.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

2.9 Application

2.9.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2.10 Standards

2.10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

2.11 Use of Contract Documents and Information

2.11.1

The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

2.11.2

The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.

2.11.3

Any document, other than the Contract itself, enumerated above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

2.12 Patent Indemnity

2.12.1

The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 2.12.2 Indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in India; and
- (b) the sale in any country of the products produced by the Goods.

2.12.2

If any proceedings are brought or any claim is made against the Purchaser, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

2.13 Performance Security

2.13.1 Within 21 days of receipt of the notification of award/PO, the Supplier shall furnish performance security in the amount specified in SCC, valid till 60 days after the warranty period.

2.13.2

The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

2.13.3

The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries or in equivalent Indian Rupees in case the Performance Security is submitted by the Indian Agent.

2.13.4

In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their authorized dealer/bidder.

- 2.13.5 The Performance security shall be in one of the following forms:
 - (a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents.

Or

(b) A Banker's cheque or Account Payee demand draft in favour of the purchaser.

2.13.6

The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC, without levy of any interest.

2.13.7

In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

2.13.8

The order confirmation must be received within 14 days. However, the Purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order confirmation /PS are not received, the contract shall be cancelled provided that the purchaser, on being satisfied that it is not a case of cartelization and the integrity of the procurement process has been maintained, may, for cogent reasons, offer the next successful bidder an opportunity to match the financial bid of the first successful bidder, and if the offer is accepted, award the contract to the next successful bidder at the price bid of the first successful bidder.

2.13.9

Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

2.14 Inspections and Tests

2.14.1

The inspections & test, training required would be as detailed in Chapter-4 of the Bidding Document relating to Specification and Allied Technical details.

2.15 Packing

2.15.1

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

2.15.2

The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

2.16 Delivery and Documents

2.16.1

Delivery of the Goods and completion and related services shall be made by the supplier in accordance with the terms specified by the Purchaser in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

2.16.2

The terms FOB, FCA, CIF, CIP, etc. shall be governed by the rules prescribed in the current edition of the Inco terms published by the International Chambers of Commerce, Paris, currently it is Incoterms 2010.

2.16.3

The mode of transportation shall be as specified in SCC. In case the purchaser elects to have the transportation done through Air, then air lifting needs to be done through Air India only. In case Air India does not operate in the Airport of despatch, then the bidder is free to engage the services of any other Airlines.

2.17 Insurance

2.17.1

Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

2.17.2

Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, on the event of any loss or damage.

2.17.3

Where delivery is on FOB or FCA basis, insurance would be the responsibility of the purchaser.

2.17.4

With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

2.18 Transportation

2.18.1

Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of

loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

2.18.2

Where the Supplier is required under the Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

2.18.3

In the case of supplies from within India, where the Supplier is required under the Contract to transport the Goods to a specified destination in India, defined as the Final Destination, transport to such destination, including insurance and storage, as specified in the Contract, shall be arranged by the Supplier, and the related costs shall be included in the Contract Price.

2.19 Incidental Services

2.19.1

The supplier may be required to provide any or all of the services, including training, if any, specified in chapter 4 of Tender Document.

2.20 Spare Parts

2.20.1

The Supplier shall be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

2.21 Warranty

2.21.1

The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

2.21.2

The Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.

2.21.3

Unless otherwise specified in the SCC, the warranty shall remain valid for Twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for Eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.

2.21.4

The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

2.21.5

Upon receipt of such notice, the Supplier shall, within a reasonable period of time, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

2.21.6

If having been notified, the Supplier fails to remedy the defect within a reasonable period of time; the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

2.21.7

Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.

2.22 Terms of Payment

2.22.1

The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.

2.22.2

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfilment of other obligations stipulated in the contract.

2.22.3

Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier. While claiming the payment, the supplier should certify in the bill/invoice that the payment being claimed strictly in terms of the contract and all

obligations on the part of the supplier for claiming the payment have been fulfilled as required under the contract.

2.22.4 Payment shall be made in currency as indicated in the contract.

2.23 Change Orders and Contract Amendments

2.23.1

The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the GCC make changes within the general scope of the Contract in any one or more of the following:

- (a) Increase or decrease in the quantity required, exercise of quantity opinion clause;
- (b) Changes in schedule of deliveries and terms of delivery;
- (c) The changes in inspection arrangements;
- (d) Changes in terms of payments and statutory levies;
- (e) Changes due to any other situation not anticipated;

2.23.2

No changes in the price quoted shall be permitted after the purchase order has been issued except on account of statutory variations.

2.23.3

No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

2.24 Assignment

2.24.1

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

2.25 Subcontracts

2.25.1

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or duties or obligation under the contract.

2.26 Extension of time.

2.26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser.

2.26.2

If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

2.26.3

Except as provided under the Force Majeure clause of the GCC, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to liquidated damages Clause of the GCC unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

2.27 Liquidated Damages

2.27.1

Subject to GCC Clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services or contract value in case the delivered price of the delayed goods or unperformed services cannot be ascertained from the contract, for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause on Termination for Default.

2.28 Termination for Default

2.28.1

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part

- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause on Extension of Time; or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent or collusive or coercive practices etc as defined in GCC Clause and ITB clause on code of integrity in competing for or in executing the Contract.
- 2.28.2 In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following action:
 - (a) The Performance Security is to be forfeited;

- (b) The purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.
- (c) However, the supplier shall continue to perform the contract to the extent not terminated.

2.29 Force Majeure

2.29.1

Notwithstanding the provisions of GCC Clauses relating to extension of time, Liquidated damages and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

2.29.2

For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

2.29.3

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

2.29.4

If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of Force Majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

2.30 Termination for Insolvency

2.30.1

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

2.31 Termination for Convenience

2.31.1

The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

2.31.2

The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) To have any portion completed and delivered at the Contract terms and prices; and/or
- (b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

2.32 Settlement of Disputes

2.32.1

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

2.32.2

If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

2.32.3

The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) If any dispute or difference arises between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- (b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

2.32.4

The venue of the arbitration shall be the place from where the purchase order or contract is issued.

2.32.5

Notwithstanding, any reference to arbitration herein,

- (a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

2.33 Governing Language

2.33.1

The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

2.34 Applicable Law

2.34.1

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

2.35 Notices

2.35.1

Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX, e-mail or and confirmed in writing to the other party's address specified in the SCC.

2.35.2

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

2.36 Taxes and Duties

2.36.1

For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside India.

2.36.2

For goods Manufactured within India, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.

2.36.3

If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

2.36.4

All payments due under the contract shall be paid after deduction of statutory levies (at source) (like IT, etc.) wherever applicable.

2.36.5

Customs Duty – If the supply is from abroad this Institute is permitted to import goods as per notification No.51/96 – Customs and pay a concessional duty up to 5% as per notification 24/2002 – Customs on all imports.

2.37 Right to use Defective Goods

2.37.1

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

2.38 Protection against Damage

2.38.1

The system shall not be prone to damage during power failures and trip outs. The normal voltage and frequency conditions available at site as under:

- (a) Voltage 230 volts Single phase/ 415 V 3 phase (+_ 10%)
- (b) Frequency 50 Hz.

2.39 Site preparation and installation

2.39.1

The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of award/contract.

2.40 Import and Export Licenses

2.40.1

If the ordered materials are covered under restricted category of EXIM policy in India the Vendor / Agent may intimate such information for obtaining necessary, license in India.

2.40.2

If the ordered equipment is subject to Vendor procuring an export license from the designated government agency / country from where the goods are shipped / sold, the vendor has to mention the name, address of the government agency / authority. The vendor must also mention the time period within which the license will be granted in normal course.

2.41 Risk Purchase Clause

2.41.1

If the supplier fails to deliver the goods within the maximum delivery period specified in the contract or Purchase Order, the purchaser may procure, upon such terms and in such a manner as it deems appropriate, Goods or Services similar to those undelivered and the Supplier shall be liable to the purchaser for any excess costs incurred for such similar goods or services.

2.42 Option Clause

2.42.1

The Purchaser reserves the right to increase or decrease the quantity of the required goods up to 25% (Twenty-Five) per cent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

2.43 Integrity Pact

2.43.1

The SCC shall specify whether there is a need to enter into a separate Integrity pact or not.

2.43.2

The names and contact details of the Independent External Monitors (IEM) on the event of the need of IP is as detailed in the SCC.

2.44 Order Acceptance

2.44.1

The successful bidder should submit Order acceptance within 14 days from the date of issue of order/signing of contract, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 1.16.9 of ITB.

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

SCC 1	The Purchaser is: Director, CSIR-Central Glass & Ceramic Research Institute, 196, Raja S. C.Mullick Road, P.O. Jadavpur, Kolkata-700032, West Bengal, India.
SCC 2	The Supplier is: M/s. Wizertech Informatics Pvt. Ltd., Kolkata
SCC 4	Calibration:
	Certificates of calibration traceable to International Standards must be provided, if applicable.
SCC 5	Final Destination:
	CSIR-Central Glass & Ceramic Research Institute, 196, Raja S. C. Mullick Road, P.O. Jadavpur, Kolkata-700032, West Bengal, India
SCC 6	Order Acknowledgement/Confirmation:
	The order confirmation should be received within 14 days from the date of purchase order indicating detailed specifications of the equipment as mentioned in the purchase order including the value of the purchase order/equipment. The schedule of the visit of Service Engineer/(s) for inspection of the site may also be provided along with the order confirmation.
SCC 7	Performance Security
0007	The amount of the Performance Security shall be: INR 2,39,894.00
	The Supplier shall furnish performance security equivalent to 10% of the contract price, valid till 60 days after the warranty period. At the time of release of final 20% payment after completion of Installation, Commissioning of all the indigenous supplies and Acceptance Certificate issued by the Purchaser and fulfillment of all contractual obligations prescribed in Purchase Order.
	The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
	The Performance security shall be in one of the following forms: a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/Scheduled bank located in India Or
	b) A Banker's cheque or Account Payee demand draft in favour of the purchaser. The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, without levy of any interest.
SCC 8	Delivery:
	The delivery of the Goods shall be within 30 (Thirty) days from the date of issue of Purchase Order.
	The delivery should be synchronized alongwith the supply of main imported items. (IF APPLICABLE) Except as provided under the Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.
SCC 9	Part supply will not be accepted.
SCC 10	The country of origin of the Goods is India
SCC 11	The port of shipment of the Goods is India.
SCC 12	The mode of shipment: By Road - FOR CSIR-CGCRI, Kolkata as per Purchase Order.
SCC 14	Pre-Despatch Inspection: The Director, CSIR-Central Glass & Ceramic Research Institute, Kolkata reserves the right to depute the persons from CSIR-CGCRI for pre-despatch inspection, if required, at the Works of Supplier. The Supplier shall inform the Purchaser the readiness of the equipment before its despatch for arranging pre-
CCC 45	despatch inspection.
SCC 15	Training, Installation & Commissioning
	Supplier shall arrange to complete installation and commissioning of the goods/equipment within 1 month of arrival of goods/equipment at CSIR-CGCRI and confirmation from Purchaser's end stating that all

installation pre-requisites are in place at final destination. The Supplier shall depute its experts / engineers at CSIR-CGCRI for carrying out the installation and commissioning and training of the equipment to the entire satisfaction of the CSIR-CGCRI. The charges are included in the Contract Price of the goods. SCC 16 **Inspection and Tests** The Inspection tests prior to shipment of goods and at final acceptance at buyers site. After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the Supplier's plant by the Supplier prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturers Test Certificate with data sheet shall be issued to the effect and submit alongwith delivery documents. The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. In the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier. Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipment built. These shall be in such details as will enable the Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications. The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract. Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purposes of taking over until such Manuals and Drawing have been supplied to the Purchaser. On successful completion of acceptability test, receipt of deliverables, etc. and after the Purchaser is satisfied with the working of the equipment, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment. SCC 17 Annual Maintenance Contract (AMC) - NOT APPLICABLE In case CSIR Central Glass & Ceramic Research Institute, Kolkata requires AMC, a separate contract will SCC 18 Packing: The marking and documentation within and outside the packages shall be: a. Each package should have a packing list within it detailing the part No.(s), description, quantity etc. b. Outside each package, the contract No., the name and address of the purchaser and the finaldestination should be indicated on all sides and top. c. Each package should be marked as 1/x, 2/x, 3/x.....x/x, where "x" is the total No. of packagescontained in the consignment. d. All the sides and top of each package should carry an appropriate indication/label/stickers indicating the precautions to be taken while handling/storage.

SCC 19 Shipping and other Documents

Details of Shipping and other Documents to be furnished by the Supplier are

(i) For Goods manufactured within India

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX:

- (a)Two copies of Supplier's Invoice indicating, *inter-alia* description and specification of the goods, quantity, unit price, total value;
- (b)Packing list;
- (c)Certificate of country of origin;
- (d)Insurance certificate, if required under the contract;
- (e)Railway receipt/Consignment note;
- (f)Manufacturer's guarantee certificate and in-house inspection certificate;
- (g) Inspection certificate issued by purchaser's inspector, if any and
- (h) Any other document(s) as and when required in terms of the contract.

Note:

- 1. The nomenclature used for the item description in the invoices(s), packing list(s) and thedelivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
- 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses
 - (ii) For Goods manufactured abroad

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/courier and copies thereof by FAX:

- (a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- (b) Packing list;
- (c) Certificate of country of origin;
- (d) Manufacturer's guarantee and Inspection certificate;
- (e) Inspection certificate issued by the Purchaser's Inspector, if any;
- (f) Insurance Certificate, if required under the contract;
- (g) Name of the Vessel/Carrier;
- (h) Bill of Lading/Airway Bill;
- (i) Port of Loading;
- (i) Date of Shipment:
- (k) Port of Discharge & expected date of arrival of goods and
- (I) Any other document(s) as and when required in terms of the contract.

Note:

- 1.The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s).
- 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

SCC 20	Mode of despatch
300 20	In case of supplies from within India, the mode of transportation shall be by Road.
	In case of supplies from abroad, the mode of transportation shall be by Air.
SCC 21	Insurance
	The Insurance in respect of goods to cover all risks upto final destination shall be borne by Supplier at its
	own costs.
SCC 22	Warranty:
	The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The Supplier should further warrant that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
	1 (One) year comprehensive warranty from the date of completion of installation and commissioning of the equipment to the entire satisfaction of this Institute (Purchaser).
	The Buyer shall promptly notify the Supplier in writing of any claims arising under this warranty.
	Upon receipt of such notice, the Supplier shall, within 21 days, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination point / Buyer's site i.e CGCRI premises. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Buyer for the replaced parts/goods thereafter on this account.
	The period for correction of defects in the warranty period is 21 days. If the Supplier having been notified fails to remedy the defects within 21 days, the Buyer may proceed to take such remedial action as may be necessary, at the Supplier's risk and expenses and without prejudice to any other rights which the Buyer may have against the Supplier under the order.
SCC 23	Payment:
	The payment shall be made in Indian Rupees, as follows:
	(a) After shipment: Eighty percent (80 %) of the Contract Price, i.e. INR 19,19,152.00 [INR Nineteen Lakh Nineteen Thousand One Hundred Fifty Two only] shall be paid on receipt of the Goods in good condition and upon submission of the documents specified in SCC Clause (of Tender Document).
	(b) On Acceptance: The remaining Twenty percent (20 %) of the Contract value, i.e. INR 4,79,788.00 [INR Four Lakh Seventy Nine Lakh Seven Hundred Eighty Eight only] shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser and upon completion of satisfactory installation and commission subject to submission of performance security.
	The Performance Security of 10% (Ten percent) of value of Purchase Order should be valid till 60 (Sixty) days beyond the date of expiry of Warranty Period of 1 (One) year.
	Note: All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.
SCC 24	Liquidated Damages: Subject to the operation of force majeure, time of delivery and acceptance is the essence of this order. The supplier shall arrange to ship the consignment within 30 (Thirty) days from the date of issue of Purchase Order unless an extension is granted by a mutual agreement. As the sole and exclusive remedy for delay in shipment beyond the agreed upon shipment date, the supplier shall pay to the buyer liquidated damages at 0.5% per week or part of a week towards late delivery and towards delay in installation and commissioning. The maximum amount of liquidated damages shall be 10%. The liquidated damages shall be levied on the delivered price of the delayed Goods or unperformed Services or contract value.
SCC 25	Site preparation and installation
	The Purchaser along with the Supplier will demarcate the scope along with responsibility of site preparation and installation. The Purchaser in consultation with the Supplier will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of award/contract.

SCC 26	Manuals & Drawing
	Supplier will make available to the Buyer necessary documents and manuals. Before the goods and equipment's are taken over by the Buyer, the Supplier shall supply operation and maintenance manuals together with drawings of the goods and equipment's built. These shall be in such details as will enable the Buyer to operate, maintain, adjust and repair all parts of the equipment to be delivered under this Purchase Order.
	The manuals and drawings shall be in the ruling language (English).
	Unless and otherwise agreed, the goods / equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Buyer.
SCC 27	Notice of Improvement On a continuing basis, the supplier shall inform the buyer the time to time improvement in respect of the equipment. Such information shall be accompanied by technical newsletter, reliability improvement notice etc.
SCC 28	Force Majeure Notwithstanding the provisions relating to extension of time and penalty the Supplier shall not be liable for forfeiture of its performance security or liquidated damages, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
	For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
	If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
	If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.
SCC 29	Settlement of Disputes The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
	If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.
	The dispute settlement mechanism/arbitration proceedings shall be concluded as under: (a) If any dispute or difference arises between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
	(b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
	The venue of the arbitration shall be the place from where the purchase order or contract is issued.

	Notwithstanding any reference to arbitration herein,
	a) The parties shall continue to perform their respective obligations under the Contract unless they
	otherwise agree; and
	b) The Purchaser shall pay the Supplier any monies due the Supplier.
SCC 30	Supplier's Integrity
	The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.
SCC 31	Integrity Pact
	The Integrity pact is not to be signed.
SCC 32	Termination for Default The Buyer may, without prejudice to any other remedy for breach of contract, by written notice of default
	sent to the Supplier, terminate the Purchase Order / Contract in whole or part
	 a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Purchase Order, or within any extension thereof granted by the Buyer. b) If the Supplier fails to perform any other obligation(s) under the Purchase Order. c) If the Supplier, in the judgment of the Buyer has engaged in corrupt or fraudulent or collusive or coercive competing for or in executing the Purchase Order /Contact.
	In the event the Buyer terminates the contract in whole or in part, he may take recourse to any one or more of the following action:
	 a) The Performance Security is to be forfeited. b) The Buyer may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the Supplier shall be liable for all available actions against it in terms of the contract. c) However, the Supplier shall continue to perform the contract to the extent not terminated.
SCC 33	Applicable Laws
	The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to the jurisdiction of Kolkata, India.

PERFORMANCE SECURITY FORM

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,
WHEREAS
AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;
AND WHEREAS we have agreed to give the supplier such a bank guarantee;
NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of
We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.
We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.
This guarantee shall be valid until the day of
(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, Name & Address of the Issuing Branch of the Bank

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.