

Organisation Details	Buyer Details
Type: Central PSU Ministry: Ministry of Coal Department: Materials Management Organisation Name: Bharat Coking Coal Limited Office Zone: Bccl Dhanbad	Designation: deputy manager MM Contact No.: - Email ID: sonu.gupta@nic.in GSTIN: 20AAACB7934MFZB Address: MM Department, level 3, Commercial Building, Koyla Bhawan, Koyla Nagar, DHANBAD, JHARKHAND-826005, India

Financial Approval Detail	Paying Authority Details
IFD Concurrence: Yes Designation of Administrative Approval: DT OP Designation of Financial Approval: DT P&P	Payment Mode: Offline Designation: HOD Purchase Finance Email ID: pao5.bccl.jh@gembuyer.in GSTIN: N Address: MM Department, level 3, Commercial Building, Koyla Bhawan, Koyla Nagar, DHANBAD, JHARKHAND-826005, India

Seller Details	
GeM Seller ID: E3D7180000091451 Company Name: HUE SERVICE PRIVATE LIMITED Contact No.: 03322835240 Email ID: hue@hueservice.com Address: 38A,BROAD STREET, Kolkata, WEST BENGAL-700019, - MSME verified: Yes GSTIN: 18AACCH6467K1Z4 , 10AACCH6467K1ZK , 20AACCH6467K1ZJ , 20AACCH6467K1ZJ , 19AACCH6467K1Z2	

*GST / Tax invoice to be raised in the name of - Consignee

Product Details							
#	Item Description	Category Name	Model	HSN Code	Ordered Quantity	Unit	Price (Inclusive of all Duties and Taxes in INR)
1	Product Name : Networking/Server Rack Brand : netrack Brand Type : Registered Brand Catalogue Status : OEM verified catalogue Selling As : OEM verified Reseller	Networking/Server Rack	NRS1 36U 600x1000	HSN not specified by seller	1	pieces	57,590
2	Product Name : insulated electrical conduits Pipe Brand : RICHA Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Insulated Electrical Conduits Pipe-IS 9537	Richa 25MM CONDUIT PIPE	HSN not specified by seller	8,144	pieces	732,960
	Product Name : Layer 2 Access Switch Brand : NETGEAR Brand Type : Registered						

Brand
Catalogue Status : OEM

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Layer 2 Access
Switch

MODEL# GS728TP

HSN not
specified by
seller

19

pieces 773,300

	verified catalogue Selling As : OEM verified Reseller						
4	Product Name : Fiber Optic Patch Cord Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Fiber Optic Patch Cord	91.LL.872.00200	HSN not specified by seller	44	pieces	55,000
5	Product Name : CAT 6 Information outlet Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	CAT 6 Information outlet	CAT 6 Information outlet with face plate (Blue Color) (KSJ-00018-BL + WSY-00012-02)	HSN not specified by seller	349	pieces	90,740
6	Product Name : Wireless Access Point Brand : NETGEAR Brand Type : Registered Brand Catalogue Status : OEM verified catalogue Selling As : OEM verified Reseller	Wireless Access Point	NETGEAR MODEL# WAC510	HSN not specified by seller	81	pieces	1,370,925
7	Product Name : CAT 6 Patch Panel Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	CAT 6 Patch Panel	Molex PCD-00141-I	HSN not specified by seller	19	pieces	87,400
8	Product Name : Fibre Cable for Networking Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Fibre Cable for Networking	12 core Multi mode fiber cable OM3, (Molex - ZFOUZ012OM3)	HSN not specified by seller	6,200	meter	806,000
9	Product Name : Cat 6 Patch cord Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Cat 6 Patch cord	PCD-02001-0E (Molex) CAT 6 Patch Code U/UTP,LS0H-1 Meter Grey	HSN not specified by seller	349	meter	59,330
	Product Name : Small form-factor pluggable transceiver Brand : NETGEAR Brand Type : Registered Brand						

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Small form-factor
pluggable transceiver

NETGEAR MODEL# AGM731F

HSN not
specified by
seller

40

pieces

240,000

	verified catalogue Selling As : OEM verified Reseller						
11	Product Name : Pigtailed for Fiber Cable Connection Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Pigtailed for Fiber Cable Connection	Multi Mode fiber SC fiber pigtail (Molex - 91.30.332.00100)	HSN not specified by seller	684	pieces	307,800
12	Product Name : Cat 6 Patch cord Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Cat 6 Patch cord	(PCD-02003-0E) Molex CAT 6 Patch Cord U/UTP,LSZH 2 Meter Color-Grey	HSN not specified by seller	349	meter	62,820
13	Product Name : Small form-factor pluggable transceiver Brand : NETGEAR Brand Type : Registered Brand Catalogue Status : OEM verified catalogue Selling As : OEM verified Reseller	Small form-factor pluggable transceiver	NETGEAR MODEL# AXM761	HSN not specified by seller	4	pieces	48,400
14	Product Name : CAT 6 Cable for Indoor use Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	CAT 6 Cable for Indoor use	PowerCat 6 4 Pair PVC Cable Blue CM Rated 305m Box (Molex) (CAA-00076)	HSN not specified by seller	24,430	meter	537,460
15	Product Name : Fiber Optic Patch Panels, Rack Mountable Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Fiber Optic Patch Panels, Rack Mountable	24 port fiber patch panel loaded with LC adapter and pigtail (17.C102G + accessory)	HSN not specified by seller	19	pieces	383,800
16	Product Name : Networking/Server Rack Brand : netrack Brand Type : Registered Brand Catalogue Status : OEM verified catalogue Selling As : OEM verified Reseller	Networking/Server Rack	WM-12-550500	HSN not specified by seller	19	pieces	229,900
	Product Name : Layer-3 Core Switch Brand : NETGEAR Brand Type : Registered Brand						

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Layer-3 Core Switch

NETGEAR MODEL# XSM4348S

HSN not
specified by
seller

2

pieces 860,000

	verified catalogue Selling As : OEM verified Reseller						
18	Product Name : Fiber Optic Patch Panels, Rack Mountable Brand : Molex Brand Type : Registered Brand Catalogue Status : Catalogue not verified by OEM Selling As : Reseller not verified by OEM	Fiber Optic Patch Panels, Rack Mountable	12 port loaded fiber patch panel with LC adapter and pigtail (17.C102G +accessory)	HSN not specified by seller	19	pieces	357,200

Total Order Value (in INR)

7,060,625

Consignee Detail

S.No	Consignee	Item	Lot No.	Quantity	Delivery Start After	Delivery To Be Completed By
1	Designation: - Email ID: con1.bccl.jh@gembuyer.in Contact: 62876-95727- GSTIN: 20AAACB7934MFZB Address: Depot Officer, Central Store, Ekra, BCCL, Post Office- BANSJORA, Dhanbad, Jharkhand-828101., DHANBAD, JHARKHAND-828101, India	Layer 2 Access Switch	-	19	16-Mar-2021	14-Jun-2021
		CAT 6 Patch Panel	-	19	16-Mar-2021	14-Jun-2021
		Small form-factor pluggable transceiver	-	40	16-Mar-2021	14-Jun-2021
		Small form-factor pluggable transceiver	-	4	16-Mar-2021	14-Jun-2021
		Networking/Server Rack	-	19	16-Mar-2021	14-Jun-2021
		Networking/Server Rack	-	1	16-Mar-2021	14-Jun-2021
		CAT 6 Information outlet	-	349	16-Mar-2021	14-Jun-2021
		Cat 6 Patch cord	-	349	16-Mar-2021	14-Jun-2021
		Cat 6 Patch cord	-	349	16-Mar-2021	14-Jun-2021
		Fiber Optic Patch Panels, Rack Mountable	-	19	16-Mar-2021	14-Jun-2021
		Fiber Optic Patch Panels, Rack Mountable	-	19	16-Mar-2021	14-Jun-2021
		Fiber Optic Patch Cord	-	44	16-Mar-2021	14-Jun-2021
		Fibre Cable for Networking	-	6,200	16-Mar-2021	14-Jun-2021
		Pigtails for Fiber Cable Connection	-	684	16-Mar-2021	14-Jun-2021
		CAT 6 Cable for Indoor use	-	24,430	16-Mar-2021	14-Jun-2021
		Layer-3 Core Switch	-	2	16-Mar-2021	14-Jun-2021
insulated electrical conduits Pipe	-	8,144	16-Mar-2021	14-Jun-2021		
Wireless Access Point	-	81	16-Mar-2021	14-Jun-2021		

Product Specification for Networking/Server Rack

Specification	Sub-Spec	Value
	Type of Server Racks	Rack Enclosures
	Size of Server Rack Enclosure	36U
	Depth of the Rack (mm)	Upto 1000
	Mount Type	Free-Standing

Specifications	Front glass Door	Yes
	Type of glass used in front door	Transparent Toughened Glass
	Material used for rear door	CRCA Steel
	Both rear and front doors with Perforation	No
	Side Panels With Key Locks and Slam Latch	Yes
	Secure Locks	Available
	Rear split door design	No
	Keyboard Tray Sliding and Rotary	Yes
	Shelf For CRT/TFT Display	Yes
	Cable channel in rear side for cable management	Yes
	Support cable entry from top or bottom	Yes
	Vertical & Horizontal managers	Yes
	Numbers of Rack trays	1
	Number of Fan For Heat dissipation (nos)	4
	Number of fan trays	1
	Heavy Duty Caster Wheels	Yes
	If yes, then Front Break Options	Available
	Load Bearing Capacity (Kgs)	350
	If Wall mount racks then ,Swing-Out Racks	NA
	Dust or water resistant	No
PDU Power Strips	Available	
Weight (Kg)	110	
Warranty (Years)	5	

Product Specification for insulated electrical conduits Pipe

Specification	Sub-Spec	Value
GENERIC	Conformity to Indian Standard	IS:9537(Part-3) Latest
	Classification of Conduit	Light Mechanical Stresses
CONSTRUCTIONAL	Material	PVC
	Nominal Size of the Conduit, (mm)	25
	Length (Metres)	3
	Socket ended conduit (at one end)	Yes
CERTIFICATION	ISI Marked	Yes
	CM/L No	8604577
	Availability of Test Reports from Central Govt./State Govt/NABL/IL AC accredited Lab covering all the Declared Parameters as per IS Specification	YES
	Test Report No and Date	EL(C)/2013/252
	Name of the Lab	national test house
	Address of the Lab	Chennai 600113

Note: Seller has given an undertaking that it has made arrangements for getting the stores from an authorized distributor / dealer / channel partner of the OEM of the

offered product. At the time of delivery of goods, Seller will provide necessary chain documents (in the form of GST Invoice) to prove that the supplied goods are genuine and are being sourced from an authorized distributor / dealer / channel partner of the OEM. In case of any complaint about genuineness of the supplied products, Seller shall be responsible for providing genuine replacement supplies.

Product Specification for Layer 2 Access Switch

Specification	Sub-Spec	Value
Specification	Type of Switch	Managed
	Technology	PoE+
	Number of 1G Copper Ports	24
	Number of 10G Copper Ports	0
	No. of 1 G SFP Port (Uplink)	4
	No. of 10 G SFP+ Port (Uplink)	0
	Multi-Gigabit Support	No
	Redundant Power supply (from day one)	Not available
	Console Port	Not Available
	Switching Capacity -Non Blocking (Gbps)	56
	Throughput (MPPS)	41.67
	Operating System	available
	Dedicated Stacking Port/Slot (from day one)	Not available
	Stacking Bandwidth (Gbps)	0
	Basic Layer-3 Protocol	static routing, VLAN routing, DHCP snooping
	Security Feature	802.1x authentication, Network Storm Protection, DoS, Dynamic ARP inspection, RADIUS
	Management Protocol	Easy-to-use Web browser-based management GUI, Remote/Cloud Management
	QoS	DiffServ QoS,IEEE 802.1pCOS,WRR
	Operating Temperature Range (Degree C)	0°C to 50°C
	Operating Humidity (RH)(%)	90% maximum relative humidity (RH), non-condensing
IPv6 Ready from day one and dully certified	Yes	
PoE Power Budget (Watt)	190	
on Site OEM Warranty	5	

Product Specification for Fiber Optic Patch Cord

Specification	Sub-Spec	Value
GENERIC	Description of item	Fiber Optic Patch Cord for Optical Fiber Cabling
	Connector type, Connector End A	LC
	Connector type, Connector End B	LC
	Cable type	Duplex
	Fiber type	Multimode 50/125 micron
	Cable Size, Outer dia (in mm)	2
	Cord Length (in m)	2
	Jacket material (Sheath material)	LSZH
	Cable color	Aqua
	Operating temprature	-20 deg.C to +60 deg C

CONSTRUCTION	Connector Insertion loss, Max. (in dB)	0.3
	Connector Return loss , Min. (in dB)	50
	Material of Ferrule	Zirconia Ceramic, PreRadiused and pre polished
	Durability	1000 Mating cycle
CERTIFICATIONS	Availability of Type test report from Central government/NABL/ILAC accredited laoratory to prove conformity of products to the specification	Yes
	Test report number - Must declare	180612
	Report date - Must declare Must declare	12-06-2018
	Name of lab - Must declare Must declare	Molex internal lab
	Address of lab - Must declare Must declare	bangalore
	Agreed to furnish all the test reports and certificates to the buyer/consignee on demand	Yes

Buyer Defined Additional Specification for Fiber Optic Patch Cord

Specification	Value
Durability	1000 Mating cycle minimum shall be allowed
Cable Size, Outer dia (in mm)	minimum 2 mm is required

Product Specification for CAT 6 Information outlet

Specification	Sub-Spec	Value
GENERIC	Cate 6 Information outlet with faceplate (Single/Dual/Quad) conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	Type of information outlet	U/UTP (Unshielded)
	Connector type	RJ45
	No. of ports (RJ 45)	One port
	Dust protection for Face Plate or Information Outlet	Yes
	Back Box (3x3 inches)	Yes
	Termination type	With tool
CONSTRUCTIONAL	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Plug insertion durability	? 750 mating cycles
CERTIFICATIONS	Category 6 information outlet shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/UL/Intertek as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate number must declare	3040798
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number - Must declare	180612
	Report date - Must declare	12-06-218
	Name and address of lab - Must declare	MOLEX INDIA PVT LTD
	All the test reports shall furnish to the buyer/consignee on demand	Yes

Product Specification for Wireless Access Point

Specification	Sub-Spec	Value
Specification	Type of Access Point	Controller Based
	Deployment	Indoor
	Mounting	Ceiling
	Antenna Type	Internal
	Number Of Radios	Dual
	Frequency Band	2.4 GHz & 5.0 GHz
	Supported Wi-fi Standards	802.11 b/g/n,802.11ac,802.11 a/b/g/n/ac,802.11ac Wave 2
	Wireless Speed Up to (Mbps)	1267
	Max Wireless Signal Range in Mts	40
	Channel Width (MHz)	80
	Maximum Data Rate MBps	1267
	Supported Encryption	WPA-PSK,WPA-TKIP,WPA2 AES,802.11i,EAP-TLS.,802.11,WPA AES
	Dedicated Console Port	Not Available
	Receiver Sensitivity in db	-90
	Transmit power (tx)(dBm)	18
	Radio Resource Management such for power channel,coverage hole detection and performance optimization	Available
	Support for Load Balancing between 2-4 Ghz and 5 Ghz	Available
	Support for Configurable Carrier Threshold	Available
	Device Management	Web-based Configuration Interface (GUI)
	Support for Mesh Networking	Available
	Support for QoS for Voice over Wireless	Available
	Support for MU-MIMO	Available
	Number of MIMO supported & Spatial Streams	2 x 2 :2
	Number of WLAN (SSID) per AP	8
	Maximum clients Nos	100
	Support for Autonomous access-point option	Available
	USB Ports	Not Available
	Number of 10/100/1000 port	2
	mGig support	Not Available
	Fiber port (in case of outdoor AP)	Not Available
	Support for Bluetooth Low Energy (BLE) support on AP	Not Available
	Support for Beam forming	Not Available
Operate as a sensor for wireless IPS	Not Available	
Support for QoS and Video Call Admission Control capabilities	Not Available	
Support for Rogue access point detection	Available	
Support for Wireless Intrusion Protection System	Available	
WPC certified	Yes	

Wi-Fi CERTIFIED	No
Support non-Wi-Fi detection for off-channel rogues and Containment for both radio while serving the client simultaneously	Available
Powering options (Such as AC/DC, 802/3af PoE, 802/3at PoE+), specify	AC/DC With With Power Addopter,802.3af PoE,802.3at PoE+
Power POE (Watt)	9.3
Environmental Standard : plenum-rated (UL2043) for Indoor and IP67 for Outdoor	Yes
Operating Temperature Range (Degree C)	0° to 40°C
Operating Humidity (%RH)	90
Dimension (mm x mm x mm)	197.32 x 197.32 x 37mm
Weight (grams)	555.5
On Site OEM Warranty (Years)	5

Buyer Defined Additional Specification for Wireless Access Point

Specification	Value
Supported Encryption	WEP is not mandatory

Product Specification for CAT 6 Patch Panel

Specification	Sub-Spec	Value
CONSTRUCTIONAL	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Material of patch panel	Cold rolled steel
	Modular plug fitting (RJ 45)	Individual ports for loaded
	Plug insertion durability	? 750 mating cycles"
	Holder for connector / module	Yes
	Dust protection for information outlet	Yes
GENERIC	CAT 6 patch Panel conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	Patch panel suitability for (Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair)	CAT 6 U/UTP
	Height of patch panel	1 U
	No. of ports (RJ 45)	24 Ports Loaded
	Cable Management (Rear side)	With
CERTIFICATIONS	Category 6 patch panel / information outlet shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/UL/Intertek as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate Number - Must declare	E137775
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	E137775
	Report date	07/11/2012
	Name and address of lab	UL
	All the test reports shall furnish to the buyer/consignee on demand	Yes

Product Specification for Fibre Cable for Networking

Specification	Sub-Spec	Value
Generic	Fibre cable generally conforming to IEC 60793-1, IEC 60793-2, and to conform other normative specifications as specified in IEC:60793 Part 1 and Part 2	Yes
	Fibre count	12
	Jacket material	LSZH
	Fibre type	Multi mode OM3
	Nominal Cable weight Kg/Km - Must declare	95
	Operational temperature range	-20 deg C to +60 deg. C
	Storage temperature range	-20 deg C to +60 deg. C
Constructional	Type of tube / no. of tube / no. of core per tube	Multitube/4/12
	Cable Armouring	Armoured with ECCS tape
	Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes
Certifications	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Yes
	Test report Number	180612
	Report date	12-062018
	Name and address of Lab	MOLEX INDIA PVT LTD
	All the test reports and certificates shall furnish to the buyer/consignee on demand	Yes
Performance	Maximum Crush Resistance(short)	125 lbs/in (220 N/cm)
	Maximum Crush Resistance(long)	63 lbs/in (110 N/cm)
	Minimum Bend Radius(installation)	20 X OD
	Minimum Bend Radius(in service)	10 X OD
	Max Tensile load	long term: 800N
	Installation temperature range	-30 deg C to + 60 deg C
	Loose tube diameter	2.5±0.2mm

Product Specification for Cat 6 Patch cord

Specification	Sub-Spec	Value
GENERIC	Cate 6 patch cord conforming to ANSI/TIA/EIA-568 C.2 or ISO/IEC:11801 latest	Yes
	Patch cord type : Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair	CAT6 U/UTP
	Patch cord colour	Grey
	Conductor diameter	24 to 26 AWG
	Length of Patch cord (Mtrs)	1.0
	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Termination type / Connection type	Insulation Piercing Connection (IPC)

CONSTRUCTIONAL	Modular plug	RJ45
	Plug insertion durability	? 750 mating cycles"
	Conductor Materail	Stranded copper
	Conductor Insulation Material	Polyethelene
	Cable jacket material	Low Smoke zero halogen (LSZH)
	Storage temperature range	-20 deg.C to +60 deg.C
	Operating temperature range	-20 deg.C to +60 deg.C
CERTIFICATIONS	Category 6 patch cord shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/Intertek /UL as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate number - Must declare	10041025BCRT-0010
	UL Marking on Cable	Yes
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	120618
	Report date	18-06-2019
	Name and address of lab	Molex India Pvt.Ltd.
	All the test reports shall furnish to the buyer/consignee on demand	Yes

Product Specification for Small form-factor pluggable transceiver

Specification	Sub-Spec	Value
Specification	Type of Transceiver	SFP
	SFP Mode	Multi
	Supported Protocols	IEEE 802.3z
	Compatability with OEMs Products	Yes
	Wavelength(nm)	850
	Fibre Cable Type	Multi Mode
	Core Size (Micron)	9
	Maximum Data Rate	1000
	Modal Bandwidth (MHz/Km)	1000
	Max.Cable Distance	550
	Optical Component (nm)	850
	Digital Optical Monitoring (DOM) Support	Yes
	Interface	LC
	Tx Power (dBm)	-9.5
	Receiver Sensitivity (dBm)	-17
	Operating Temperature Range(Degree C)	-5 to 70
	Operating Humidity (RH) (%)	90
On Site OEM Warranty (Year)	5	

Buyer Defined Additional Specification for Small form-factor pluggable transceiver

Specification	Value
Type of Transceiver	Both SFP or SFP+ shall be allowed

Product Specification for Pigtails for Fiber Cable Connection

Specification	Sub-Spec	Value
GENERIC	Conformity of the specification	as per IEC:61754(Fibre optic connector), IEC:61300 (Basic test and measurement procedures) , IS/IEC:60794 (Optical fibre cables)
	Connector type (Connector End)	SC
	Fiber type	Multimode OM3
	Cable Size (dia, in mm)	2
	Cable Length (in m)	1
	Jacket material (Sheath material)	LSZH
	Jacket thickness (in mm)	0.45
	Cable color	Yellow
	Operating temprature	-20 deg.C to +70 deg C
OPTICAL SPECIFICATIONS	Connector Insertion loss, Max. (in dB)	0.35
	Connector Return loss , Min. (in dB)	50
MECHANICAL	Bend radius, Min., (in mm)	30
	Retention strength (in N)	100
	Material of Ferrule	Ceramic
	Repeatability	</-0.2 dB
	Durability	1000 Matings
	Cable type	Simplex
CERTIFICATIONS	Availability of Type test report from Central government/NABL/ILAC accredited laoratory to prove conformity of products to the specification	Yes as per IEC:61754, IEC:61300, IS/IEC:60794
	Test report number - Must declare	IEC-60332-1
	Report date - Must declare Must declare	12-06-18
	Name of lab - Must declare Must declare	IEC
	Address of lab - Must declare Must declare	IEC
	Agreed to furnish all the test reports and certificates to the buyer/consignee on demand	Yes

Product Specification for Cat 6 Patch cord

Specification	Sub-Spec	Value
GENERIC	Cate 6 patch cord conforming to ANSI/TIA/EIA-568 C.2 or ISO/IEC:11801 latest	Yes
	Patch cord type : Category 6 Unshilded/Unshilded twisted pair or Category 6 Foiled/Unshilded twisted pair	CAT6 U/UTP
	Patch cord colour	Grey
	Conductor diameter	24 to 26 AWG
	Length of Patch cord (Mtrs)	2.0
	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Termination type / Connection type	Insulation Piercing Connection (IPC)
	Modular plug	RJ45

CONSTRUCTIONAL	Plug insertion durability	? 750 mating cycles"
	Conductor Materail	Stranded copper
	Conductor Insulation Material	Polyethelene
	Cable jacket material	Low Smoke zero halogen (LSZH)
	Storage temperature range	-20 deg.C to +60 deg.C
	Operating temperature range	-20 deg.C to +60 deg.C
CERTIFICATIONS	Category 6 pacht cord shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/Intertek /UL as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate number - Must declare	10041025BCRT-0010
	UL Marking on Cable	Yes
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	120618
	Report date	18-06-2019
	Name and address of lab	Molex India Pvt.Ltd.
	All the test reports shall furnish to the buyer/consignee on demand	Yes

Product Specification for Small form-factor pluggable transceiver

Specification	Sub-Spec	Value
Specification	Type of Transceiver	SFP+
	SFP Mode	Multi
	Supported Protocols	IEEE 802.3ae
	Compatability with OEMs Products	All as IEEE Standard
	Wavelength(nm)	1310
	Fibre Cable Type	MMF
	Core Size (Micron)	9
	Maximum Data Rate	10000
	Modal Bandwidth (MHz/Km)	500
	Max.Cable Distance	300
	Optical Component (nm)	1310
	Digital Optical Monitoring (DOM) Support	Yes
	Interface	Fiber
	Tx Power (dBm)	4
	Receiver Sensitivity (dBm)	-13
	Operating Temperature Range(Degree C)	0-70
	Operating Humidity (RH) (%)	85
On Site OEM Warranty (Year)	5	

Product Specification for CAT 6 Cable for Indoor use

Specification	Sub-Spec	Value
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GENERIC	Cate 6 cable conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	Cable category: Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair or Category 6 Shielded /Foiled Twisted Pair	CAT6 U/UTP
	Cable colour	Blue
	Conductor diameter	0.57 mm (23 AWG)
	Conductor count (in Nos.,)	8
	Length of cable in a bundle (Mtrs)	305 mtrs.
CONSTRUCTIONAL	"CAT6 Cable can transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 250 MHz and suitable for 10BASE-T, 100BASE-TX Fast Ethernet and 1000BASE-T / 1000BASE-TX (Gigabit Ethernet)."	Yes
	Maximum DC resistance - in Ohm/Km	Max. 100 Ohm/Km
	Conductor Materail	Bare Copper
	Conductor Insulation Material	Polyethylene
	Cable jacket material	Fire retardant PVC
	Conductor stranding	Solid
	Cable should have internal cross separator	Yes
	Storage temperature range	minus 20 degree C to plus 60 degree C
	Operating temperature range	minus 20 degree C to plus 60 degree C
	Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes
CERTIFICATIONS	Category 6 cable shall have valid verified certificate from ERTL/ETL /Intertek/3P /GHMT /Delta/UL as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate Number - Must declare	VOICECOM-ITK/16-70
	UL Marking on Cable	Yes
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Yes
	Test report Number	VOICECOM-ITK/16-70
	Report date	15-12-2018
	Name and address of Lab	Intertek, New Delhi
	All the test reports and certificates shall furnish to the buyer/consignee on demand	Yes

Product Specification for Fiber Optic Patch Panels, Rack Mountable

Specification	Sub-Spec	Value
GENERIC	Description of item	Rack Mountable Fiber Optic Patch Panels (Pre-Loaded) for Fiber Cabling and it manage both splices and terminations and panel with rubber grommet
	Type of Connector for which optic fiber panel is compatible	LC
	Fiber Optic Panels Compatible for	Multi Mode , Duplex
	No. of ports (in Nos.)	24
	Size of Fiber Optic Patch panel suitable for	19 inch 1 U Rack
	Material of Panel	Steel
	Color of the panel	Black (Powder coated)
	Accessories	Mounting kit /Bracket,Cable ties,Mounting Ear Screw,Cable entry Gland,Fiber Management clip,Cable Grounding kits,Port Caps

	Cable saddles	Front mounted
	Top and Front cover	Removable
CERTIFICATIONS	Availability of Type test report from Central government/NABL/ILAC accredited laoratory to prove conformity of products to the specification	Yes
	Test report number - Must declare	180612
	Report date - Must declare Must declare	12-06-2018
	Name of lab - Must declare Must declare	MOLEX INDIA PVT LTD
	Address of lab - Must declare Must declare	bangalore
	Agreed to furnish all the test reports and certificates to the buyer/consignee on demand	Yes

Buyer Defined Additional Specification for Fiber Optic Patch Panels, Rack Mountable

Specification	Value
Type of Connector for which optic fiber panel is compatible	only LC shall be considered as Bid requirement

Product Specification for Networking/Server Rack

Specification	Sub-Spec	Value
Specifications	Type of Server Racks	Rack Enclosures
	Size of Server Rack Enclosure	12U
	Depth of the Rack (mm)	Upto 500
	Mount Type	Wall mount
	Front glass Door	Yes
	Type of glass used in front door	Transparent Toughened Glass
	Material used for rear door	CRCA Steel
	Both rear and front doors with Perforation	No
	Side Panels With Key Locks and Slam Latch	No
	Secure Locks	Available
	Rear split door design	No
	Keyboard Tray Sliding and Rotary	No
	Shelf For CRT/TFT Display	No
	Cable channel in rear side for cable management	No
	Support cable entry from top or bottom	Yes
	Vertical & Horizontal managers	Yes
	Numbers of Rack trays	1
	Number of Fan For Heat dissipation (nos)	1
	Number of fan trays	1
	Heavy Duty Caster Wheels	NA
	If yes, then Front Break Options	NA
	Load Bearing Capacity (Kgs)	50
	If Wall mount racks then ,Swing-Out Racks	NA
Dust or water resistant	No	
PDU Power Strips	Available	

Weight (Kg)	15
Warranty (Years)	5

Product Specification for Layer-3 Core Switch

Specification	Sub-Spec	Value
Generic	Type Of Core Switch	Non Chassis Based
	No. of Interface Slots	0
	No. of MPU/SUP/Fabric Slots (with redundancy)	0
	No. of Power supply (with redundancy)	2
	No. of FAN Tray	1
	No. of 1G/10G SFP+ Port	24
	No. of 1000 base-T Ports	24
	Support for 40G QSFP+ Port	No
	Number of 40G Q SFP+ Porta	0
	Support for 100G QSFP+ Port	No
	Number of 100 G QSFP+ Port	0
	Console Port	Available
	Modular OS	Available
	Support for virtual Chassis	Yes
	Switching Capacity (Gbps)	960
	Throughput (MPPS)	714
	Advance Layer-3 Protocol	RIP,OSPF,VRRP,PBR
	Security Feature	DHCP Snooping,DAI,IP Source Guard,Successive Tiering,ACLs,MAC Filtering
	Management Protocol	Out-of-band,Web GUI,HTTPs,CLI,Telnet,SSH,SNMP,MIBs,RSPAN,Radius Users,TACACS+
	QoS	DiffServ QoS,IEEE 802.1p COS,Ingress/egress,Single Rate Policing,Auto-VoIP,MAC ACL Support
	Dimension/ Form Factor(RU)	1U
	Wattege (Watt)	161
	Operating Temperature (Degree C)	0° to 50°C
Operating Humidity (RH)(%)	90% maximum relative humidity, non-condensing	
IPv6 Ready	Yes	
On Site OEM Warranty(Year)	5	

Product Specification for Fiber Optic Patch Panels, Rack Mountable

Specification	Sub-Spec	Value
GENERIC	Description of item	Rack Mountable Fiber Optic Patch Panels (Pre-Loaded) for Fiber Cabling and it manage both splices and terminations and panel with rubber grommet
	Type of Connector for which optic fiber panel is compatible	LC
	Fiber Optic Panels Compatible for	Multi Mode , Duplex
	No. of ports (in Nos.)	12
	Size of Fiber Optic Patch panel suitable for	19 inch 1 U Rack

	Material of Panel	Steel
	Color of the panel	Black (Powder coated)
	Accessories	Mounting kit /Bracket,Cable ties,Mounting Ear Screw,Cable entry Gland,Fiber Management clip,Cable Grounding kits,Port Caps
	Cable saddles	Front mounted
	Top and Front cover	Removable
CERTIFICATIONS	Availability of Type test report from Central government/NABL/ILAC accredited laboratory to prove conformity of products to the specification	Yes
	Test report number - Must declare	180612
	Report date - Must declare Must declare	12-06-2018
	Name of lab - Must declare Must declare	MOLEX INDIA PVT LTD
	Address of lab - Must declare Must declare	Bangalore
	Agreed to furnish all the test reports and certificates to the buyer/consignee on demand	Yes

Corrigendum

1. 1: (a) OFC will be laid through underground with HDPE pipe in that case all the civil work (Digging/Cutting Road Boring including refilling) will be in bidders scope. OFC joint pit wherever required will be included in scope of work. All the UTP cable laid with PVC conduits as per IT standard practice.(b) All the Switches SFP Transceiver and Access Points should be from single OEM for better compatibility and all the UTP and Fiber components should be from single OEM for better compatibility. (c) The bidder should have to submit valid OEM authorization for the all products (except insulated electrical conduits Pipe).(d) Additional Specification Parameters for Layer 3 Core Switch should support: 1. Security Feature: DHCP Snooping IP Source Guard Successive Tiering ACLs and MAC Filtering.2. Management Protocol : Out-of-band Web GUI HTTPs CLI Telnet SSH SNMP RSPAN TACACS+ 3. QoS: IEEE 802.1p COS Ingress/egress Single Rate Policing Auto-VoIP MAC ACL Support. 2: (e)Additional Specification Parameters for Layer 2 Access Switch should support:1. Basic Layer-3 Protocol: static routing VLAN routing DHCP snooping.2. Security Feature : 802.1x authentication Network Storm Protection DoS Dynamic ARP inspection RADIUS3. Management Protocol : Easy-to-use Web browser-based management GUI Remote/Cloud Management4. QoS: DiffServ QoS IEEE 802.1pCOS WRR.

Terms and Conditions

1. General Terms and Conditions

1.1 This Contract between the Seller and the Buyer, is for the supply of the Goods and/ or Services, detailed in the schedule above, in accordance with the General Terms and Conditions (GTC) as available on the GeM portal (unless otherwise superseded by Goods / Services specific Special Terms and Conditions (STC) and/ or BID/Reverse Auction Additional Terms and Conditions (ATC), as applicable

1.2 **Terms of delivery:** Free Delivery at Site including loading/unloading. In respect of items requiring installation and / or commissioning and other services in the scope of supply (as indicated in respective product category specification / STC / ATC), and the cost of the same is also included in the Contract price.

1.2.1 Contracted goods should be delivered at the consignee or designated delivery location as per the working time of the buying organisation. Seller may get the same confirmed from consignee before scheduling delivery.

1.2.2 A copy of the contract should be available with the messenger / dispatching agency that delivers the Goods at consignee / delivery location (preferably pasted / attached outside the consignment / package) for easy reference and ease in delivery acceptance.

1.3 **Delivery period:** The Delivery Period/Time shall be essence of the Contract and delivery must be completed not later than such date(s). Any modification thereto shall be mutually agreed and incorporated in the Contract as per the provisions of the GTC.

1.4 **Performance Security:** If the Seller fails or neglects to observe or perform any of his obligations under the contract it shall be lawful for the Buyer to forfeit either in whole or in part, the Performance Security furnished by the Seller.

1.5 **Taxes and Duties:** Contract Prices are all inclusive i.e. including all taxes, duties, local levies / transportation / loading-unloading charges etc. Break up of GST shall be indicated by the Seller while raising invoice / bill on GeM. While submitting the bill / invoice Seller shall undertake that the Goods and Services Tax (GST) charged on this bill is not more than what is payable under the provision on the relevant Act or the Rules made there under and that the Goods on which GST has been charged have not been exempted under the GST Act or the Rules made there under and the charges on account of GST on these goods are correct under the provision of that Act or the rules made there under.

1.6 **Octroi Duty and / or other local taxes:** Contract Prices are all inclusive hence no reimbursement over and above the contract price(s) shall be allowed to seller towards payment of local taxes (such as levy of town duty, Octroi Duty, Terminal Tax and other levies of local bodies etc).

1.7 Limitation of Liability: The provisions of limitation of liability between Buyer and Seller as given in the GTC shall be applicable here.

1.8 Resolution of disputes: The provisions of DISPUTE RESOLUTION BETWEEN BUYER AND SELLER as given in the GTC shall be applicable here.

1.9 Liquidated Damages: If the Seller fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract, the Buyer will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value without any controversy/dispute of any sort whatsoever. In case, Service Level Agreement (SLA) is applicable the same shall be applicable for the Contract.

1.10 Financial Certificate:

1.10.1 The expenditure involved for this purpose has received the Sanction of the competent financial authority.

1.10.2 The funds are available under the proper head in the sanction budget allotment for the concern financial year.

1.10.3 I have been fully authorized by the department to sign the supply order or incur the liability of the Goods being ordered.

1.11 The bidder should submit a self declaration to the effect in bidder's official letter head that their agency have not been black listed by any Agency whatsoever till date.

2. Additional Terms and conditions

2.1 Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

2.2 Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

2.3 Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

2.4 Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

2.5 Experience Criteria: The Bidder or its OEM (themselves or through reseller(s)) should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for 3 years before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the primary product having highest value should meet this criterion.

2.6 OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

2.7 Over and above the normal Warranty terms as per GeM GTC, the successful bidder / OEM shall have to provide Comprehensive Warranty during the entire Standard warranty period as per contract. : The comprehensive warranty shall be covering the following scope 5 YEARS OF COMPREHENSIVE WARRANTY FOR ALL MATERIAL SUPPLIED (Upload an undertaking with the bid confirming compliance by the bidder if Bidder is taking onus of this compliance. In case OEM is taking onus of this compliance, OEM undertaking is to be uploaded along with Bidder undertaking)

2.8 OPTIONAL SITE VISIT:

1. The Bidder is advised to visit and examine the installation site and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid. The costs of visiting the site shall be borne by the Bidder. YES,MAY SURVEY THE SITE BEFORE BIDDING TO UNDERSTAND THE SITE CONDITION AND INSTALLATION PROCEDURE

2. The Bidder representative shall be allowed entry upon consignee premises for such visits, only upon the express conditions that the Bidder will release and indemnify the Buyer and Consignee against all liabilities arising out of such visit including death or injury, loss or damage to property, and any other loss, damage, costs, and expenses incurred as a result of such visit.

3. The Bidder shall not be entitled to hold any claim against Buyer for noncompliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the Bidder to obtain all the necessary information with regard to site, surrounding, working conditions, weather etc. on its own before submission of the bid.

2.9 Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

2.10 Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 15 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.

2.11 The Bidder / OEM (themselves or through reseller(s)), should have executed project for supply and installation / commissioning of same or similar Category Products during preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid, as per following criteria:

(i) Single order of at least 35% of estimated bid value; or

- (ii) Two orders of at least 20% each of estimated bid value; or
- (iii) Three orders of at least 15% each of estimated bid value.

Satisfactory Performance certificate issued by respective Buyer Organization for the above Orders should be uploaded with bid. In case of bunch bids, the Category related to primary product having highest bid value should meet this criterion

2.12 The successful bidder has to supply all essential accessories required for the successful installation and commissioning of the goods supplied. Besides standard accessories as per normal industry practice, following accessories must be part of supply and cost should be included in bid price: PROPOSED DIAGRAM TO BE UPLOADED WITH THE BID. IF ANYTHING EXTRA EG FIBRE PATCH CORD, LOADED FIBRE PANEL/LIU, SWITCH BOARD, WIRES AND CABLES ETC REQUIRED FOR EXECUTION OF PROJECT SHALL BE BORN BY THE BIDDER. BCCL SHALL NOT BE LIABLE TO PAY ANY EXTRA CHARGES FOR THE SAME.

- 2.13**
1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
 2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
 3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

2.14 Upload Manufacturer authorization: Wherever Authorised Distributors are submitting the bid, Manufacturers Authorisation Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid.

2.15 Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

2.16 While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

2.17 Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:

Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC): NOT APPLICABLE

Post Receipt Inspection at consignee site before acceptance of stores: AUTHORIZED REPRESENTATIVE OF HOD(IT), HQ, BCCL

2.18 Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

2.19 Bidder Turn Over Criteria: The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

Note: This is system generated file. No signature is required. Print out of this document is not valid for payment/ transaction purpose.