NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Research Institution of the Department of Biotechnology
Ministry of Science and Technology, Govt. of India)
Aruna Asaf Ali Marg, New Delhi – 110 067
Phone: 26735139, 26735141 Fax: 26741658, 26741146

TENDER NOTICE
Tender No. NIPGR/NIQ/ S&P/2014-15/CCTV

Sealed item rate Tenders (in two bid system) are invited on behalf of the Director, NIPGR from manufactures or their authorized dealer, so as to reach this office upto 03.00 PM on or before 07/04/2015 for the Supply, Installation, Testing & Commissioning of CCTV Cameras at NIPGR Campus, Aruna Asaf Ali Marg, New Delhi 110067.

Sl.No.	Estimated Cost (₹)	EMD (₹)	Time for Completion	Last Date & Time for Sale of Tender Documents	Date & Time of Submission / Opening of Tenders
1.	2.00 lakhs	4,000.00	03 Weeks	06/04/2015 1600 Hrs.	07/04/2015 1500 / 1530 Hrs.

The Earnest Money should be deposited along with the tender in the form of Demand Draft drawn in favour of the Director, NIPGR, payable at New Delhi. The tender documents and detailed specifications can be obtained in person by the interested firms from the Purchase-Cum-Store Officer, NIPGR, during office hours against non-refundable cash payment of ₹ 500.00 (Rs. Five hundred only) as mentioned above from 16/03/2015 to 06/04/2015 upto 1600 hrs.

The tender document can be downloaded from our website: **www.nipgr.ac.in** and eprocure.gov.in and the cost of Tender document ₹ 500.00 (Rupees Five hundred only) should be submitted in the form of Demand Draft drawn in favour of Director, NIPGR payable at New Delhi in separate sealed envelope along with the sealed Tender. In case the Tender cost is not submitted, the tender will not be considered.

The bids will be accepted in respect of those vendors having successfully completed one similar work costing not less than ₹ 3,20,000/- or two similar works each costing not less than ₹ 2,00,000/- or three similar works each costing not less than ₹ 1,60,000/- during the last three years ending February 2015. Similar work means work related to supply and installation of CCTV Camera setup in Govt. /State Govt. /Govt. Institutions /Universities and reputed organizations. The Completion Certificate issued by the appropriate authority must be enclosed with the tender.

The Director, NIPGR, reserves the right to accept or reject all or any of the bids without assigning any reasons thereof.

क्रय एवं भंडार अधिकारी

1

Technical Specifications for CCTV Camera Setup at NIPGR.

Sl.no.	Description	Qty Req.
1	**NVR 16 channel:-** 16 Channel - HDMI Interface - VGA Output 2 USB Port - IPC access – 2 Ch. - Audio In - Audio Out *A lockable Rack should also be provided for its safe custody.*	01 no.
2	**Hard Disk :-** - 1 SATA HDD, 2 TB (for 30 days or more recording backup for 8 cameras)	01 no.
3	**Bullet IP Camera** **Image Device** 1/2.8" progressive scan 3.4 Megapixel CMOS image sensor **Effective Pixels** 2096 x 1561 pixels (minimum 3 Megapixel) **Lens** Vari-focal lens 3 - 9mm **IRIS** Support DC IRIS Lens **Min. Illumination** 0.5 Lux (Color) / 0 Lux (B/W) **Day & Night** True Day/Night (TDN) **Illumination LED** 24 IR LEDs **IR Distance** 20 - 25m **IR LED Control** Auto (Photo Sensor Mode) IR LED ON when less than 15 Lux Manual: User Programmable **Backlight Compensation** On/Off **Electronic Shutter Speed** Auto Exposure **Pan/Tilt/Zoom Control** Via RS485 **Video Compression** H.264 (base line, main-profile, and hi-profile) and MJPEG simultaneously **Video Profile** 8 profiles simultaneously for 3M mode 12 profiles simultaneously for 1080p mode **Frame Rate** Up to 25/30fps in all resolutions **Region of Interest** Max. 2 ROI @ 3M mode. Editable range Max. 3 ROI @ 1080P mode. Editable range **Image Setting** BLC, AGC, AE, AWB; 3D Noise reduction; WDR; Color, brightness, sharpness, contrast, Hue; Image Mirror/Flip; Privacy Masks: 7 areas **Streaming** Simultaneously multi-profile streaming; Streaming over UDP, TCP, HTTP, or HTTPS; M-JPEG streaming over HTTP (server push); Controllable frame rate and bandwidth; Constant and variable bit rate; ROI **OSD** Text, time and date overlay; Editable OSD (bitmap format) **Language** English **Audio Encoder** RTSP: G.711 64kbps, G.726 32kbps **Audio Streaming** One way or two way **Microphone** External microphone **Audio Output** Adjustable audio output gain **Supported Protocols** IPv4, IPv6, TCP, UDP, HTTP, HTTPS, SMTP, FTP, NTP, DNS, DDNS, DHCP, DIPS, ARP, Bonjour, UPnP, RTSP, RTP, RTCP, IGMP, PPPoE, 3GPP, Samba, ICMP **Security** Password protection, IP address filtering, HTTPS encrypted data transmission, user access log **Users** 8 simultaneous unicast users	02 no.

	Ethernet 10Base-T/100Base-TX/1000Base-T auto negotiation **Supported Interface** ONVIF **Alarm Triggers** Intelligent video motion detection; Camera Tampering; Audio Detection; Digital input **Video Buffer** Pre- and post- alarm buffering **Power Supply** DC12V / AC24V **Power Consumption** 7W (12VDC) **Poe** IEEE 802.3af Class 3 **Connectors** RJ-45 10Base-T/100Base-TX/1000Base-T; 12VDC power jack; AC24V Terminal; 1 alarm input and 1 output; RS485; Audio out; External MIC input; Composited video out; Factory default reset **Indication LED** Green and orange LEDs **Protection** IP66, vandal-proof **Operating Temperature** -20°C to 60°C **Operating Humidity** 10% - 90% (non-condensing) **Certificate** CE, FCC & UL	
4	**Fixed Dome Day / Night –IP Camera:** Key Features: • High resolution 550 TV Lines • 1/3" Color CCD • Minimum illumination: 0.04 lx • True Day & Night • Real color picture through ATW • Signal to Noise ratio: more than 46dB • Automatic Back Light Compensation • Fixed and DC type Vari-focal Lens Support **Specifications** • Pick-up Device ....1/3" Color CCD • Video Out ....Composite (1.0Vp-p), 75 ohm • Picture Elements ....PAL: 795(H) X 596(V) • Sync. System ....Internal (DC12V) • Horizontal Resolution ....550 TV Lines • Minimum Illumination ....0.04 lx (F1.2, 30 IRE, without LED, B/W) • Lens Type Fixed Lens .... 3.8mm / 6.0mm • Electronic Shutter ....PAL : 1/50 ~ 1/100k • Signal-to-Noise Ratio ....More than 46dB (AGC Off) • AGC (Automatic Gain Control) ....ON / OFF selectable • White Balance ....Auto (Dip switch Select AUTO/Manual) • BLC ....ON / OFF selectable • Power Requirements ....DC12V • Video out .... BNC • Operating Temperature ....-10°C to 50°C • Storage Temperature ....-20°C to 70°C • Humidity ....Under 80% RH (non-condensing) • Certification ....FCC, CE The High-Resolution True Day Night Camera shall be designed to meet the following environmental conditions: 1. Operating Temperature .... 14° to 122° F (-10° to 50° C) 2. Operating Humidity ....<85% 3. Storage Temperature................... -4° to 140° F (-20° to 60° C) 4. Emissions .... FCC: Part 15, Class A	03 no.

	Mechanical Specifications The High-Resolution True Day Night Camera must have the following mechanical specifications: 1. Video Output..............................BNC connector 2. Power Input............................... 3-pin push terminal 3. Auto Iris Output .... 4-pin standard jack 4. Lens Mount .... C/CS Electrical Power Requirements The High-Resolution True Day Night Camera must have the following electrical Specifications: 1. Voltage (+/-10%) ....24VAC/12VDC 2. Power Indicator........................... Green LED	4
5.	LED Screen 40" (LG, Samsung, Sony)	01 no.
Additional Items Required		
1.	Supply & Laying (CAT 6- cable) underground in PVC pipes. a) Including excavation along with PVC Conduit b) Excluding excavation along with PVC Conduit c) Only cable	Per mtr.
2	IP/Lan Point if required for Camera.	Per mtr.
3.	Online UPS (1 KVA) Single phase in/out, Backup- 30 minutes.	01 no.
4.	Power point if required for power supply of UPS/Operating system.	01 no.
5.	Complete Installation, Commissioning & configuration Charges	Complete job.

क्रय एवं भंडार अधिकारी

Network Video Recorder

SYSTEM DESCRIPTION

1. The NVR shall deliver 16-channel real-time recording at 720p resolution 25 FPS for 20- 30 days. The NVR must have 1080P HDMI video output, VGA output and BNC output. The NVR shall support multicast for remote users.

2. Management must be flexible. The NVR can either be used as standalone devices or perform as part of a larger system. When used independently, the NVR shall be interfaced with IP cameras via ONVIF to quickly and conveniently construct a high-definition IP surveillance system at multiple sites.

3. The NVR should also be seamlessly integrated with smart IP security platform from same OEM. Operators can easily perform recording, live viewing, playback, configuration, PTZ control, video switch, and so forth.

SYSTEM PERFORMANCE

The NVR must have the following minimum features:

1. H.264 / MJPEG dual codec decoding
2. 16 channels @ D1/ 8 channels @ 720P / 4 channels @ 1080P real-time live view.
3. Support 8 channels simultaneous playback
4. Support log system.
5. Remote network camera set-up and image adjustment
6. Automatic IP search and "one-click" IP camera import.
7. Support Patrol live view.
8. Support the IP cameras.
9. Support Web client Remote control.
10. Support Dual Network
11. 16 channel display on one single monitor
12. Instant Playback
13. Alarm trigger E-mail
14. Support Both IOS & Android App access

Parameter	Description
Operating System	LINUX/Windows
Processor	High performance Dual-core embedded microprocessor
Video Output	1HDMI(1920x1080,1280x1024), 1VGA(1920x1080,1280x1024), 1BNC (800x600)
Video Standard	PAL or NTSC
Compression	H.264 / MJPEG
Multi-screen Channels	1 and 8 Channels
Audio Input	The audio input with video. It requires that IPC supports audio input.
Alarm Event	Recording, Alarm, Buzzer and Screen tips
Internal HDD	1 SATA HDD ports, 2TB storage for 30 days or more recording backup for 8 cameras
Backup	Flash drive, USB HDD, Network download
Recording Mode	Manual, Schedule, Alarm trigger
Search Mode	Date/Time, Event (Alarm, Motion detection), codec type search (accurate to second),Log link
Playback	8 Channel simultaneous playback (forward / reverse, fast playback, slow playback, pause, full screen, backup selection)
Digital Zoom	digital zoom in live view and playback
Protocol Support	HTTP,HTTPS, TCP/IP, RTSP,RTP/RTCP,UDP,NTP,DHCP,IPC search
USB Interface	2 USB2.0 ports

Specific conditions of the Work:

1. Before quoting the rates, the supplier must visit the site and access the location of installation, wiring, testing & commissioning of the required cables along with Cameras and ensure satisfactory coverage at the Institute. All the necessary fittings such as M.S. Pipe, Stand, & Connectors etc. along with all items required during execution of work should be included in the bid and nothing extra shall be entertained after opening of price bids.
2. All the required cables must be provided by the supplier and laid through proper size of casing/conduit pipes as per the site requirement.
3. Indoor wiring/cables in the centralized control room of location must be laid neatly and properly along the route using proper size of clamps & fixtures.
4. Any damage in any existing installation during the execution of work shall be the responsibility of the supplier/contractor and shall be made good to the satisfaction of the Institute and nothing extra shall be paid. If not rectified the damage shall be rectified at the risk & cost of the Contractor and expenditure shall be deducted from the bills.
5. Any kind of accident/ electrocution caused due to negligence or during the course of normal work etc. shall be the responsibility of supplier/contractor. The contractor shall be responsible for all compensation to the staff engaged by him.
6. The work must be completed within 21 days of issue of work order. If not carried out recovery@1% shall be deducted from the bill.
7. The agency must mention battery AH, No. of batteries and their make along with the tender. The minimum VAH value of UPS back up for battery bank should be 1500VAH.
8. All the cameras must be IP type and must have features of alarm to avoid Camera tampering.
9. No advance shall be paid.

Standard Terms and Conditions

1. Every tender shall be accompanied with the required Earnest Money Deposit in the form of Demand Draft drawn in favour of the "**Director, NIPGR**" payable at New Delhi. Any tender not accompanied by earnest money will be rejected straight away.

2. The rates quoted in the tender shall remain valid for a period **180** days. No tenderer can withdraw/or modify his tender or revoke the same within the said period. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within the period mentioned in the tender notice, his earnest money deposit shall stand forfeited. Notwithstanding foregoing, the Institute reserves the right to take other actions as deemed appropriate.

3. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.

4. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.

5. The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.

6. All the correspondence on the tender shall be addressed to the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi and any communication addressed to anyone else shall not in any manner to be binding upon the NIPGR.

7. The tenderer shall submit a copy of PAN/TIN numbers allotted to them.

8. NIPGR reserves the right to change the quantities of the units while issuing the letter of award of work.

9. The successful tenderer shall be required to deposit an amount equal to 10% of the Tender value as Performance Security after adjusting the Earnest Money Deposit within 10 days from the date of issue of award letter. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India Or any Scheduled bank.

10. The rates shall be inclusive of Transportation, loading, unloading, taxes etc., nothing extra will be paid.

11. The supplier should be responsible for any damage and site clearance. If not carried out recovery @ 1% of Work Order amount shall be made from the bills.

क्रय एवं भण्डार अधिकारी

TECHNICAL BID

NAME OF WORK: Supply, Installation, Testing & Commissioning of CCTV Cameras at NIPGR Campus, New Delhi

Sl. No.	Description	Qty Req.	Rate per Unit	Rate in INR, FOR Institute
01	**NVR 16 channel:-** • 16 Channel • HDMI Interface • VGA Output • 2 USB Port • IPC access – 2 Ch. • Audio In • Audio Out *A lockable Rack should also be provided for its safe custody.*	01 no.		**Rates not to be quoted**
02	**Hard Disk :-** - 1 SATA HDD, 2 TB (for 30 days or more recording backup for 8 cameras)	01 no.		
03	**Bullet IP Camera** **Image Device** 1/2.8" progressive scan 3.4 Megapixel CMOS image sensor **Effective Pixels** 2096 x 1561 pixels (minimum 3 Megapixel) **Lens** Vari-focal lens 3 - 9mm **IRIS** Support DC IRIS Lens **Min. Illumination** 0.5 Lux (Color) / 0 Lux (B/W) **Day & Night** True Day/Night (TDN) **Illumination LED** 24 IR LEDs **IR Distance** 20 - 25m **IR LED Control** Auto (Photo Sensor Mode) IR LED ON when less than 15 Lux Manual: User Programmable **Backlight Compensation** On/Off **Electronic Shutter Speed** Auto Exposure **Pan/Tilt/Zoom Control** Via RS485 **Video Compression** H.264 (base line, main-profile, and hi-profile) and MJPEG simultaneously **Video Profile** 8 profiles simultaneously for 3M mode 12 profiles simultaneously for 1080p mode **Frame Rate** Up to 25/30fps in all resolutions **Region of Interest** Max. 2 ROI @ 3M mode. Editable range Max. 3 ROI @ 1080P mode. Editable range **Image Setting** BLC, AGC, AE, AWB; 3D Noise reduction; WDR; Color, brightness, sharpness, contrast, Hue; Image Mirror/Flip; Privacy Masks: 7 areas **Streaming** Simultaneously multi-profile streaming; Streaming over UDP, TCP, HTTP, or HTTPS; M-JPEG streaming over HTTP (server push); Controllable frame rate and bandwidth; Constant and variable bit rate; ROI	02 no.		

	OSD Text, time and date overlay; Editable OSD (bitmap format) **Language** English **Audio Encoder** RTSP: G.711 64kbps, G.726 32kbps **Audio Streaming** One way or two way **Microphone** External microphone **Audio Output** Adjustable audio output gain **Supported Protocols** IPv4, IPv6, TCP, UDP, HTTP, HTTPS, SMTP, FTP, NTP, DNS, DDNS, DHCP, DIPS, ARP, Bonjour, UPnP, RTSP, RTP, RTCP, IGMP, PPPoE, 3GPP, Samba, ICMP **Security** Password protection, IP address filtering, HTTPS encrypted data transmission, user access log **Users** 8 simultaneous unicast users **Ethernet** 10Base-T/100Base-TX/1000Base-T auto negotiation **Supported Interface** ONVIF **Alarm Triggers** Intelligent video motion detection; Camera Tampering; Audio Detection; Digital input **Video Buffer** Pre- and post- alarm buffering **Power Supply** DC12V / AC24V **Power Consumption** 7W (12VDC) **Poe** IEEE 802.3af Class 3 **Connectors** RJ-45 10Base-T/100Base-TX/1000Base-T; 12VDC power jack; AC24V Terminal; 1 alarm input and 1 output; RS485; Audio out; External MIC input; Composited video out; Factory default reset **Indication LED** Green and orange LEDs **Protection** IP66, vandal-proof **Operating Temperature** -20°C to 60°C **Operating Humidity** 10% - 90% (non-condensing) **Certificate** CE, FCC & UL		
04	**Fixed Dome Day / Night- IP Camera:** Key Features: • High resolution 550 TV Lines • 1/3" Color CCD • Minimum illumination: 0.04 lx • True Day & Night • Real color picture through ATW • Signal to Noise ratio: more than 46dB • Automatic Back Light Compensation • Fixed and DC type Vari-focal Lens Support Specifications • Pick-up Device ....1/3" Color CCD • Video Out ....Composite (1.0Vp-p), 75 ohm • Picture Elements ....PAL: 795(H) X 596(V) • Sync. System ....Internal (DC12V)	03 no.	

| | • Horizontal Resolution ....550 TV Lines
• Minimum Illumination ....0.04 lx (F1.2, 30 IRE, without LED, B/W)
• Lens Type Fixed Lens .... 3.8mm / 6.0mm
• Electronic Shutter ....PAL : 1/50 ~ 1/100k
• Signal-to-Noise Ratio ....More than 46dB (AGC Off)
• AGC (Automatic Gain Control) ....ON / OFF selectable
• White Balance ....Auto (Dip switch Select AUTO/Manual)
• BLC ....ON / OFF selectable
• Power Requirements DC12V
• Video out .... BNC
• Operating Temperature ....-10°C to 50°C
• Storage Temperature ....-20°C to 70°C
• Humidity ....Under 80% RH (non-condensing)
• Certification ....FCC, CE

The High-Resolution True Day Night Camera shall be designed to meet the following environmental conditions:
1. Operating Temperature .... 14° to 122° F (-10° to 50° C)
2. Operating Humidity ....<85%
3. Storage Temperature.................. -4° to 140° F (-20° to 60° C)
4. Emissions .... FCC: Part 15, Class A
Mechanical Specifications
The High-Resolution True Day Night Camera must have the following mechanical specifications:
1. Video Output.............................BNC connector
2. Power Input................................ 3-pin push terminal
3. Auto Iris Output .... 4-pin standard jack
4. Lens Mount .... C/CS

Electrical Power Requirements
The High-Resolution True Day Night Camera must have the following electrical Specifications:
1. Voltage (+/-10%) ....24VAC/12VDC | | |

	2. Power Indicator........................ Green LED	
05	LED Screen 40" (LG, Samsung, Sony)	01 no.
	Additional Items Required	

01	Supply & Laying (CAT 6- cable) underground in PVC pipes.
	    a) Including excavation along with PVC Conduit
	    b) Excluding excavation along with PVC Conduit
	    c) Only cable
		Per mtr.

02	IP/Lan Point if required for Camera.	Per mtr.
03	Online UPS (1 KVA) Single phase in/out, Backup-30 minutes.	01 no.
04	Power point if required for power supply of UPS/Operating system.	01 no.
05	Complete Installation, Commissioning & configuration Charges	Complete job.

क्रय एवं भण्डार अधिकारी

Name & Signature of Tenderers/
Company with Seal

PRICE BID

NAME OF WORK: Supply, Installation, Testing & Commissioning of CCTV Cameras at NIPGR Campus, New Delhi

Sl. No.	Description	Qty Req.	Rate per Unit	Rate in INR, FOR Institute.
01	**NVR 16 channel:-** • 16 Channel on single monitor • HDMI Interface • VGA Output • 2 USB Port • IPC access – 2 Ch. • Audio In • Audio Out • *A lockable Rack should also be provided for its safe custody.*	01 no.		
02	**Hard Disk :-** - 1 SATA HDD, 2 TB (for 30 days or more recording backup for 8 cameras)	01 no.		
03	**<u>Bullet IP Camera</u>** **Image Device** 1/2.8" progressive scan 3.4 Megapixel CMOS image sensor **Effective Pixels** 2096 x 1561 pixels (minimum 3 Megapixel) **Lens** Vari-focal lens 3 - 9mm **IRIS** Support DC IRIS Lens **Min. Illumination** 0.5 Lux (Color) / 0 Lux (B/W) **Day & Night** True Day/Night (TDN) **Illumination LED** 24 IR LEDs **IR Distance** 20 - 25m **IR LED Control** Auto (Photo Sensor Mode) IR LED ON when less than 15 Lux Manual: User Programmable **Backlight Compensation** On/Off **Electronic Shutter Speed** Auto Exposure **Pan/Tilt/Zoom Control** Via RS485 **Video Compression** H.264 (base line, main-profile, and hi-profile) and MJPEG simultaneously **Video Profile** 8 profiles simultaneously for 3M mode 12 profiles simultaneously for 1080p mode **Frame Rate** Up to 25/30fps in all resolutions **Region of Interest** Max. 2 ROI @ 3M mode. Editable range Max. 3 ROI @ 1080P mode. Editable range **Image Setting** BLC, AGC, AE, AWB; 3D Noise reduction; WDR; Color, brightness, sharpness, contrast, Hue; Image Mirror/Flip; Privacy Masks: 7 areas **Streaming** Simultaneously multi-profile streaming; Streaming over UDP, TCP, HTTP, or HTTPS; M-JPEG streaming over HTTP (server push); Controllable frame rate and bandwidth; Constant and variable bit rate; ROI	02 no.		

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	• Horizontal Resolution ....550 TV Lines • Minimum Illumination ....0.04 lx (F1.2, 30 IRE, without LED, B/W) • Lens Type Fixed Lens .... 3.8mm / 6.0mm • Electronic Shutter ....PAL : 1/50 ~ 1/100k • Signal-to-Noise Ratio ....More than 46dB (AGC Off) • AGC (Automatic Gain Control) ....ON / OFF selectable • White Balance ....Auto (Dip switch Select AUTO/Manual) • BLC ....ON / OFF selectable • Power Requirements ....DC12V • Video out .... BNC • Operating Temperature ....-10°C to 50°C • Storage Temperature ....-20°C to 70°C • Humidity ....Under 80% RH (non-condensing) • Certification ....FCC, CE The High-Resolution True Day Night Camera shall be designed to meet the following environmental conditions: 1. Operating Temperature .... 14° to 122° F (-10° to 50° C) 2. Operating Humidity ....<85% 3. Storage Temperature................. -4° to 140° F (-20° to 60° C) 4. Emissions .... FCC: Part 15, Class A Mechanical Specifications The High-Resolution True Day Night Camera must have the following mechanical specifications: 1. Video Output.............................BNC connector 2. Power Input................................ 3-pin push terminal 3. Auto Iris Output .... 4-pin standard jack 4. Lens Mount .... C/CS Electrical Power Requirements The High-Resolution True Day Night Camera must have the following electrical Specifications:			

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	    c) Only cable
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02	IP/Lan Point if required for Camera.	Per mtr.		
03	Online UPS (1 KVA) Single phase in/out, Backup-30 minutes.	01 no.		
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05	Complete Installation, Commissioning & configuration Charges	Complete job.		

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Name & Signature of Tenderers/
Company with Seal