



### TENDER NOTICE

TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING
SYSTEM, SERVER ROOM EQUIPMENT & WIFI SYSTEM
(WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING,
PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD
UNDER TENDER ENQUIRY No. 11 OF 2022

- The Oil and Gas Regulatory Authority (OGRA) hereby invites sealed bids/proposals from well-reputed IT firms for carrying out IT works at OGRA's Head Office Building situated at Plot No.37 & 39, Mauve Area, Sector G-10/4, Islamabad, having minimum five (05) years relevant experience, registered with Sales Tax, Income Tax Departments and Pakistan Engineering Council (PEC) in Category–C5, preferably stationed at Islamabad/Rawalpindi, under Tender Enquiry No. 11 of 2022.
- The Tender Documents containing detailed information, terms and conditions etc. are available on the websites of PPRA (www.ppra.org.pk) and OGRA (www.ogra.org.pk). These documents can also be obtained from office of the undersigned on any working day i.e. Monday to Friday from 09:00 a.m. to 05:00 p.m.
- 3. The bids shall be received latest by **January 12**, **2023** on or before **11:00 a.m**. and will be opened at **11:30 a.m** on the same date in OGRA's office at 54-B, Fazal-ul-Haq Road. Blue Area. Islamabad by OGRA's Bid Opening Committee.
- 4. In case, the last date of bids submission falls on the closed official day(s) / holiday(s), the date for submission and opening of the bids shall be the next working day.
- OGRA reserves the right to cancel/reject any or all bids or proposals at any time prior to the acceptance of a bid/proposal as per PPRA Rules. 2004.

### Joint Executive Director (Admin) Oil and Gas Regulatory Authority

Plot No. 54-B, Fazal-ul-Haq Road, Blue Area, Islamabad Ph: 051-9244373

Public Service Message:

قدرتی گیس کے غیر ضروری استعال سے اجتناب آپ کا اخلاقی اور معاشرتی فریضہ ہے۔





## 

اوگراکے نئے ہیڈآ فس واقع پلاٹ نمبر 37و **39** سیٹر 40/4-G ماؤاریا،

اسلام آباد کے لیے آئی ٹی ورکس کی ٹرن کی سلوشن (Turn Key Solution)

جبيها كه دُينانيك وركنگ سشم، سرورروم ايكوپمنك ايندُ واكي فاكي سشم

(وائرکیس لین)وغیرہ زبرتحت ٹینڈرانکوائری نمبر 11/2022مطلوب ہے

1۔ آئل ایٹڈ گیس ریگولیٹری اتھارٹی (اوگرا) کوزیر تحت ٹ**ینڈرانگوائری نمبر 11/2022**اوگرا کے نئے ہیڈ آفس واقع پلاٹ نمبر 37و39 سيكٹر G-10/4 ماؤايريا،اسلام آباديين آئي ٿي ورئس کيليئے کم از کم 05 سال کا متعلقہ تجربہ کی حامل اورانکم ٹیکس وسیلز نکیس ڈیپارٹمنٹس اور پاکستان انجینئر نگ کونسل ہے کیٹیگر ی C-5 میں رجسٹرڈ معروف آئی ٹی فرموں سے سر بمہر پیشکشیں

2\_ ٹینڈر دستاویزات بشمول تفصیلی معلومات، شرا کط وضوابط وغیرہ پیپرا ویب سائٹ (www.ppra.org.pk) اوراوگراویب سائٹ (www.ogra.org.pk) پردستیاب ہیں۔ دستاویزات دفتر زیر شخطی ہے بھی کسی بھی یوم کار یعنی سوموارتا جمعه دن 09:00 تاشام 05:00 بجے حاصل کی جاسکتی ہیں۔

3۔ سربمہر پیشکشیں 12 جنوری 2023 دن 10:10 بج تک یا پہلے موصول کی جائیں گی اورائی روز دن 30:11 بجے اوگرا دفتر B-54 فضل حق رودُ ، بليوايريا ، اسلام آباد ميں بڈاو پننگ مميٹی کی جانب سے کھولی جانيں گی۔

4۔ پیشکش جمع کروانے کی آخری تاریخ پر تعطیل ہونے کی صورت میں پیشکشیں جمع کروانے اور کھلنے کی تاریخ آئندہ ایوم کار ہوگا۔

5۔ اوگرا پیپرا قوانین 2004، کے تحت پیشکش کومنظوریا جملہ تباویز کومنسوخ /مستر دکرنے کاحق محفوظ رکھتا ہے۔

جواَئنٹا نگزیکٹوڈائریکٹر(ایڈمن)

آئل ایند گیس ریگولیشری اتھارشی پائنم B-54،اے کفش ح رود، بلواریا، اسلام آباد فون نمبر: 9244373-051

پیغام برائے عوامی آگاہی:

قدرتی گیس کے غیرضروری استعال ہے اجتناب آپ کا اخلاقی اور معاشرتی فریضہ ہے۔



### TENDER NOTICE

## TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENT & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 11 OF 2022

- 1. The Oil and Gas Regulatory Authority (OGRA) hereby invites sealed bids/proposals from well-reputed IT firms for carrying out IT works at OGRA's Head Office Building situated at Plot No.37 & 39, Mauve Area, Sector G-10/4, Islamabad, having minimum five (05) years relevant experience, registered with Sales Tax, Income Tax Departments and Pakistan Engineering Council (PEC) in Category—C5, preferably stationed at Islamabad/Rawalpindi, under Tender Enquiry No. 11 of 2022.
- 2. The Tender Documents containing detailed information, terms and conditions etc. are available on the websites of PPRA (<a href="www.ppra.org.pk">www.ppra.org.pk</a>) and OGRA (<a href="www.ogra.org.pk">www.ogra.org.pk</a>). These documents can also be obtained from office of the undersigned on any working day i.e. Monday to Friday from 09:00 a.m. to 05:00 p.m.
- 3. The bids shall be received latest by January 12, 2023 on or before 11:00 a.m. and will be opened at 11:30 a.m on the same date in OGRA's office at 54-B, Fazal-ul-Haq Road, Blue Area, Islamabad by OGRA's Bid Opening Committee.
- 4. In case, the last date of bids submission falls on the closed official day(s) / holiday(s), the date for submission and opening of the bids shall be the next working day.
- 5. OGRA reserves the right to cancel/reject any or all bids or proposals at any time prior to the acceptance of a bid/proposal as per PPRA Rules, 2004.

Joint Executive Director (Admin)

Oil and Gas Regulatory Authority

Plot No. 54-B, Fazal-ul-Haq Road, Blue Area, Islamabad Ph: 051-9244373



#### **TENDER DOCUMENTS**

## TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENT & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 11 OF 2022

The Oil and Gas Regulatory Authority (OGRA) hereby invites sealed bids/proposals from well-reputed IT firms for carrying out IT works at OGRA's Head Office Building situated at Plot No.37 & 39, Mauve Area, Sector G-10/4, Islamabad, having minimum five (05) years relevant experience, registered with Sales Tax, Income Tax Departments and Pakistan Engineering Council (PEC) in Category–C5, preferably stationed at Islamabad/Rawalpindi, under Tender Enquiry No. 11 of 2022.

### **General Terms & Conditions:**

- The bidder should submit a single package containing two separate sealed envelopes. One envelope should contain the Pre-qualification/Technical Proposal (Annex-I) and the other envelope should contain the Financial Proposal (Annex-II), both showing the tender enquiry No.11 of 2022 and marked as "TECHNICAL PROPOSAL" and "FINANCIAL PROPOSAL" respectively.
- 2) The firm should be registered with Income Tax, Sales Tax Departments and Pakistan Engineering Council (PEC) in Category–C5 (Registration Numbers should be clearly mentioned and valid documentary evidence be attached).
- 3) The firm should have relevant experience of minimum five (05) years of similar nature projects in computer/network field etc., preferably stationed at Islamabad/Rawalpindi. Documentary proof e.g copies of purchase orders and list of clientage must be attached in support of relevant experience.
- 4) The bidder will be required to submit a bid security/earnest money equivalent to 3% of the total quoted value of bid alongwith Financial Proposal in shape of **Call Deposit** from any scheduled Bank of Pakistan in favour of OGRA, payable at Islamabad.
- 5) The bid validity period will be three (03) months, starting from the date of opening of technical bids. The rates quoted by the bidder are final & fixed and no inflation/ escalation in dollar against Pak rupees will be paid by OGRA and any increase in price shall also not be borne by OGRA. No such claim from the bidder will be entertained.
- 6) Sealed bids/ proposals are required to be delivered at OGRA's Head Office, Plot No. 54-B, Fazal-ul-Haq Road, Blue Area, Islamabad latest by January 12, 2023 on or before 11:00 a.m. The Bid Opening Committee of OGRA shall open the Technical/ Prequalification proposals (Annex-I) in the first instance at 11:30 on the same date i.e. January 12, 2023 in the presence of bidders or their authorized representatives, who may like to be present. Subsequently, technical/pre-qualification proposals shall be evaluated by OGRA's Bid Evaluation Committee as per the terms & conditions of bidding documents & Criteria given at Annex-III.
- 7) The detailed scope of work is at **Annex-IV** and ToRs of the job is at **Annex-V** which may please read carefully before submission of bid in a proper way.

- 8) Bids, which are not accompanied by the documents mentioned at Clause No. 2 & 5 shall be declared Non-responsive and their financial proposals will be returned unopened.
- 9) The Bid Opening Committee will open the financial proposals (**Annex-II**) of the only bidders whose technical/ pre-qualification proposals as well as samples are accepted, on a date and time to be communicated to them in advance, in the presence of the bidders or their authorized representatives, who may like to be present.
- 10) Only one authorized representative per bidder shall be allowed to attend the opening of bids.
- 11) The Successful Bidder should be required to deposit a "Performance Bond" equivalent to 5% of the total value of the quoted amount through a **Call Deposit** in favour of OGRA payable at Islamabad. If the bidder fails to deposit the Performance Bond within one week of the receipt of the Purchase/Work Order, the same shall be treated as cancelled and 3% Earnest Money already deposited by the bidder shall be forfeited.
- 12) 3% earnest money of the un-successful bidders shall be released within 30 days. However, 5% Performance Bond shall be released after completion of task and support & service period i.e. satisfactory supply/delivery/installation of subject works at OGRA's newly constructed office building situated at Plot No. 37 & 39, Sector G-10/4, Islamabad and warranty period, if any.
- 13) The proposals should not have any over-writings or cutting. The bids with any of the aforementioned deficiencies may not be considered.
- 14) The firm should have to attach Original and latest **undertaking**/ **Affidavit** on judicial paper that the firm has not been blacklisted by any Government, Semi-Govt., Autonomous body or any state-owned organization.
- 15) An **undertaking** on affidavit shall be submitted by the bidder/firm, indicating that to accept all terms & conditions given in tender. Acceptance that biding firm has participated in full tender for providing each and every item/solution on turns key basis i.e. the project must be treated as a Turnkey solution and an intended vendor must offer all items, in case of any discrepancy or less item the Bid will be rejected/ work order will be cancelled and earnest money will be forfeited without any responsibility on OGRA for any expenditure already incurred on the project by the vendor.
- 16) An **undertaking** on Company/firm letter head be given to ensure that the bidder has read all clauses of the tender documents/ToRs, indicating that all information provided herein and documents attached with the proposal are correct and if any information/documents found incorrect, false or fake etc., the Authority reserves the right to disqualify and blacklist the firm.
- 17) Contract for IT works will be awarded to the bidder whose **bid** will be determined as **most advantageous** bid being substantially responsive and more relevant to the bidding documents/ requirements.
- The successful bidder/ firm shall be bound to complete the IT works at OGRA office situated at Plot No. 37 & 39, OGRA Headquarter, Sector G-10/4, Islamabad, as per scope of work, ToRs, Bill of Quantity (BOQs), specifications, standard, quality & design as mentioned at **Annex-IV and Annex-V** of tender documents within a period of two (02) months from the date of receipt of Work/ Purchase Order, however, due to some specific reasons OGRA may allow extension in the period without any financial impact.

- 19) The bidders should examine carefully the terms & conditions of the tender, and should also visit the site on any working day from Monday to Friday from 10:00 a.m to 4:00 p.m, at their own expenses and responsibility and obtain all necessary information prior to submitting the tender. Clarification if any, about the tender may be obtained from OGRA's IT Department on telephone No. 051-9244050 before submitting tenders. Once the tender is submitted, it will be assumed that no further clarification is required.
- 20) Payment shall be made after completion of entire task/IT works and issuance of completion/satisfactory report by OGRA's IT Department.
- 21) Payment of the bill (s) will be subject to the deduction of all applicable government taxes.
- 22) Any defective/ sub-standard item(s), if delivered, it will be replaced by the bidder in same quoted cost without any claim from OGRA. In case of failure to supply the specific item(s), OGRA reserves the right to deduct the difference of amount from performance bond already submitted by the firm to whom contract has been awarded.
- 23) The firm must have appropriate managerial, supervision & production staff after Sale Service and Customer Care Staff. (Attach a separate list showing their qualification & experience etc.).
- 24) The contract will be awarded on "lump sum basis" and not on "item rate basis".
- In case, the last date of submission of bids falls on closed official day(s)/ holiday(s), the date for submission & opening of the bids shall be the next working day.
- OGRA reserves the right to cancel/reject any or all bids or proposals at any time prior to the acceptance of a bid or proposals as PPRA rules.

(Ejaz Ahmad Gohar)
Joint Executive Director (Admin)





### **TECHNICAL PROPOSAL**

# TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENTS & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 09 OF 2022

Name of the Firm	
Address (Telephone, Fax & E-mail)	
Year of Establishment	
Sales Tax Registration No. (attach documentary evidence)	
National/Income Tax No. (attach documentary evidence)	
Bank's Name	
Experience related to similar assignments	
Whether Bank Pay Order as Earnest Money @ 3% of the total value of bid is enclosed with financial Proposal (Yes or No)	
Annual Turnover (last two years)	
Assignments in Hand (Current)	
Clientage	
(Attach separate Annexure, if necessary)	
Affidavit	Yes:
(that the firm has not been blacklisted by private,	
Govt., Semi Govt. ant Autonomous Body)	No:
Undertakings as demanded under Sr. No.15 & 16	Yes:
of General Terms & Conditions of Tender	
Documents.	No:
Contact Person	Name & Designation
Date:	Authorized Signature & Stamp

### آئلاينڈگىيس ريگولىيٹرى اتھارٹى



### ASSESSMENT CRITERIA

# TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENTS & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 09 OF 2022

The pre-qualification proposals will be evaluated as per the following criteria:-

Grading	Marks
Experience related to similar assignments	25
Clientage	25
Annual Turnover (last two years)	20
Managerial Capability	15
Assignment in Hands (Current)	15
Total Marks	100

**Note:** Minimum score required to pass for Pre-qualification is 60%

### آئلااینڈگیس ریگولیٹری اتھارٹی



### Oil & Gas Regulatory Authority

### **SCOPE OF WORK**

TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM,
SERVER ROOM EQUIPMENTS & WIFI SYSTEM (WIRELESS LAN) etc. AT
OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4,
MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 09 OF 2022

1. <u>Establishment of Computer Network, Server Room Equipment and Wifi System (wireless LAN) at OGRA New Building, Plot No. 37 & 39, Sector G-10/4, Mauve Area, Islamabad.</u>

**Turnkey solution** for the supply, installation, complete configuration, testing, commissioning and support & services of Computer Network, Data Cabinets, Patch Panels, Patch Cords, Network Switches (managed) 10 Gigabyte supported, Fiber Optic up-linking/ backbone for network switches connectivity, Server Room Equipment, UPS with electric wiring and Wifi System (wireless LAN). The passive networking with UTP Cat-6A cable of computers/ laptops for approx. 220 nodes has already being laid down in OGRA's new building by the Contractor. However, the following work of IT network infrastructure are required on turnkey basis and complete in all respect: -

- 1. Data Network
- 2. Server Room Equipment
- 3. Wifi System (wireless LAN)

### **TERM OF REFERENCE (ToRs)**

## TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENT & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 09 OF 2022

- 2. <u>Term of Reference (ToRs) for Establishment of Computer Network, Server Room Equipment and Wifi System (wireless LAN) at OGRA New Building, Plot No. 37 & 39, Sector G-10/4, Mauve Area, Islamabad.</u>
- i) Complete hardware, software, configurations, installations and support & service for all networking switches, Server Room Equipment, Network Firewall, and Wifi System (wireless LAN). Three (03) years support & services are required for all network switches Layer-2 & Layer-3, Server Room Equipment, Network Firewall and Wifi System will be the sole responsibility of the vendor.
- ii) The project must be treated as a Turnkey solution and an intended vendor must offer all items, in case of any discrepancy or less item the Bid will be rejected/ work order will be cancelled and earnest money will be forfeited without any responsibility on OGRA for any expenditure already incurred on the project by the vendor.
- iii) All products support & services must be within 72 hours hardware replacement under warranty period as described in detailed specifications. During the time or if delay in replacement of under warranty items, the vender will arrange/ provide temporary replacement of the critical hardware/ item.
- iv) In case of failure or malfunctioning of any hardware equipment/ component, a free replacement and installation of the device/ part will be the responsibility of the vendor and on exchange bases as free of cost under the warranty.
- v) Technical support & services should include resolution of complaints related to all network equipments/ component, network switches, firewall, access point, controller, etc.
- vi) All operating system support, compatibility issues and setup/ configuration of LAN services both wired & wireless are the responsibility of the vendor.
- vii) The vendor should ensure that office work shall not be disturbed during networking/construction/ renovation an especial care should be given. If there is any disturbance occurred during work, it should be solution be provided and immediately fixed.
- viii) The drivers/ applications support CD or media must be provided for hardware equipment compatible with the OS respectively.
- ix) If any hardware devices having end of life must be communicated to OGRA, moreover, nearly end of life hardware devices will not be acceptable.
- x) The vender will be responsible for all types of IT equipment being delivered.
- xi) Hands on training on active components of network switches, firewall, wifi system (wireless LAN), etc. will be provided to OGRA's technical team
- xii) The completion time of the project is two months, which may be extended by the competent authority based on reasonable justification is provided by the vendor.
- xiii) Pay order/ draft performance bond as per PPRA's rules be submitted to OGRA which will be release after completion of support & service period.
- xiv) The location for installation of network layer 3 switch, access controller and network switches (PoE) will be at Server Room on 3<sup>rd</sup> floor of the building with all accessories and cabinets.

- xv) The OGRA's new building floor wise layout designs are attached, however, the vendor may visit the new building site at Mauve Area, G-10, Islamabad or OGRA present office at Blue Area, Islamabad for any query, if required.
- xvi) 24 x 7 availability of hotline, mobile, email, or sms.

**Note**: The Vendor is solely responsible to provide the support & services for the offered product even the support for the same product would have been discontinued by the OEM.

### 3. <u>Data Networking System – BOQ / Technical Specifications</u>

### **DATA NETWORKING SYSTEM**

l No.	Description	Unit	Quantity
1101			
3.01	Computer Points in Floor Outlet Box / Walls.		
	Wiring for each data/computer point on floor with outlet boxes / wall point with UTP 4 pair Cat. 6A cable for data support 10 Giga at 500 Mhz upto 100 meters, with pure copper conductor PVC insulated PVC sheathed, manufactured by M/s. Norden, Panduit, Leoni from Data Voice Cabinet to each data point, connections of cables and identification tags at both ends, PVC conduit heavy duty local made, recessed in walls, columns, slabs, floors or above false ceiling with all necessary fixing accessories as required as per site condition, including cost of single shutter face plate with Cat-6 UTP Keystone Jack, all necessary materials and accessories, complete in all respects.(these network points may increase or decrease depending upon requirement) Make; - Norden / Panduit / Comscope or equivalent	Nos.	20
3.02	Data Cabinet 15U at 4th floor.		
3.02a	Supply & Installation of Data Cabinet of Size 15U, Imported w M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF	, two wa	ay opening, 2
-			
	Data askingt (600v550v701mm ) Wall Mauntad	Noo	1
a	Data cabinet (600x550x701mm ) Wall Mounted.	Nos.	1
b	PDU (Power Distribution Unit) Six Sockets	Nos.	1
b b	PDU (Power Distribution Unit) Six Sockets Data Patch Panel UTP Cat-6A 24 Port Network Layer 2 Switch 24 Ports with 10 Giga Up-links.	Nos.	1 2
b c d	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links.  Sophos or equivalent	Nos. Nos. Nos.	1 2 2
b c d	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links.  Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager	Nos. Nos. Nos.	1 2 2 2
b c d	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links.  Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length	Nos. Nos. Nos.	1 2 2 2
b c d	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links.  Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager	Nos. Nos. Nos. Nos. vall mour, two wa	1 2 2 48 2 2 anted, made of ay opening, 2
b c d	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager  Voice Cabinet 9U at 4th floor.  Supply & Installation of Voice Cabinet of Size 9U, Imported w M.S Sheet, Powder Coated having lockable fron glass door	Nos. Nos. Nos. Nos. vall mour, two wa	1 2 2 48 2 2 anted, made of ay opening, 2
b c d e f	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager  Voice Cabinet 9U at 4th floor.  Supply & Installation of Voice Cabinet of Size 9U, Imported w M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF  Voice cabinet (600x550x501mm) Wall Mounted.  Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos. Nos. Nos. Nos. vall mour, two was	1 2 2 48 2 nted, made of ay opening, 2 or equivalent
b c d s a s a s a s a s a s a s a s a s a s	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager  Voice Cabinet 9U at 4th floor.  Supply & Installation of Voice Cabinet of Size 9U, Imported w M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF	Nos. Nos. Nos. Nos. vall mour, two was P / DELL	1 2 2 48 2 inted, made of ay opening, 2 or equivalent
b c d 3.02b	PDU (Power Distribution Unit) Six Sockets  Data Patch Panel UTP Cat-6A 24 Port  Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent  Data Patch Cords Cat-6A 1 Meter length  Cable Manager  Voice Cabinet 9U at 4th floor.  Supply & Installation of Voice Cabinet of Size 9U, Imported w M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF  Voice cabinet (600x550x501mm) Wall Mounted.  Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos. Nos. Nos. Nos. vall mour, two was of DELL Nos. Nos.	1 2 2 48 2 nted, made of ay opening, 2 or equivalent

	<u> </u>		
	Supply & Installation of Data Cabinet of Size 15U, Imported v M.S Sheet, Powder Coated having lockable fron glass door re opening, 2 way fans on top, complete in all respect. Make: Nor equivalent	ar perfor	ated, two way
	or equivalent		
а	Data cabinet (600x550x701mm ) Wall Mounted.	Nos.	1
b	PDU (Power Distribution Unit) Six Sockets	Nos.	1
С	Data Patch Panel UTP Cat-6A 24 Port	Nos.	3
d	Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent	Nos.	3
е	Data Patch Cords UTP Cat-6A 1 Meter	Nos.	51
f	Cable Manager	Nos.	3
3.02d	Voice Cabinet 9U at 3rd Floor.		
	Supply & Installation of Voice Cabinet of Size 9U, Imported v M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HR	r, two wa	ay opening, 2
а	Voice cabinet (600x550x501mm ) Wall Mounted.	Nos.	2
b	Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos.	6
С	Voice Patch Cords S/FTP Cat-6- 1 Meter Length	Nos.	51
d	Cable Manager	Nos.	4
3.02e	Data Cabinet 15U at 2nd Floor.  Supply & Installation of Data Cabinet of Size 15U, Imported v		
	M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / H		
а	Data cabinet (600x550x701mm ) Wall Mounted.	Nos.	1
b	PDU (Power Distribution Unit) Six Sockets	Nos.	1
С	Data Patch Panel UTP Cat-6A 24 Port	Nos.	3
d	Network Layer 2 Switch 24 Ports with 10 Giga Up-links.  Make: - Sophos or equivalent	Nos.	3
е	Data Patch Cords UTP Cat-6A 1 Meter	Nos.	60
f	Cable Manager	Nos.	3
3.02f	Voice Cabinet 9U at 2nd Floor.		
	Supply & Installation of Voice Cabinet of Size 9U, Imported v M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF	r, two wa	ay opening, 2
а	Voice cabinet (600x550x501mm ) Wall Mounted.	Nos.	2
b	Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos.	6
С	Voice Patch Cords S/FTP Cat-6- 1 Meter Length	Nos.	58
d	Cable Manager	Nos.	4
3.02g	Data Cabinet 15U at 1st Floor.		
	Supply & Installation of Data Cabinet of Size 15U, Imported v M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / Hi	r, two wa	ay opening, 2
а	Data cabinet (600x550x701mm ) Wall Mounted.	Nos.	1
b	PDU (Power Distribution Unit) Six Sockets	Nos.	1
d	Data Patch Panel UTP Cat-6A 24 Port	Nos.	2
е	Network Layer 2 Switch 24 Ports with 10 Giga Up-links. Sophos or equivalent	Nos.	2
L	Sopriso of oquitations	1	

f	Data Patch Cords UTP Cat-6A 1 Meter	Nos.	36
g	Cable Manager	Nos.	2
			<u> </u>
3.02h	Voice Cabinet 9U at 1st Floor.		
	Supply & Installation of Voice Cabinet of Size 9U, Imported w	/all mour	nted, made of
	M.S Sheet, Powder Coated having lockable fron glass door	, two wa	ay opening, 2
	way fans on top, complete in all respect. Make: NORDEN / HF	P/DELL	or equivalent
а	Voice cabinet (600x550x501mm ) Wall Mounted.	Nos.	1
b	Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos.	3
С	Voice Patch Cords S/FTP Cat-6- 1 Meter Length	Nos.	36
d	Cable Manager	Nos.	2
3.02i	Data Cabinet 15U For Floors. (Ground)		
	Supply, Installation of Data Cabinet of Size 15U, Imported W		
	M.S Sheet, Powder Coated having lockable fron glass door		
	way fans on top, complete in all respect. Make: NORDEN / HF	/ DELL	or equivalent
	Data achinat (600 v 550 v 701mm ) Wall Mounting	Nos.	1
b b	Data cabinet (600 x 550 x 701mm ) Wall Mounting.  PDU (Power Distribution Unit) Six Sockets	Nos.	1
	Data Patch Panel UTP Cat-6A	Nos.	1
d	Network Layer 2 Switch 24 Ports with 10 Giga Up-links.	Nos.	1
"	Sophos or equivalent	1105.	ı
e	Data Patch Cords UTP Cat-6A 1 Meter	Nos.	12
f	Cable Manager	Nos.	1
<del>- '</del>	Cable Manager	1403.	!
3.02j	Voice Cabinet 9U For Floors. (Ground)		
	Supply, Installation of Voice Cabinet of Size 9U, Imported Wa	ı all Moun	ted . made of
	M.S Sheet, Powder Coated having lockable fron glass door		
	way fans on top, complete in all respect. Make: NORDEN / HF	P/DELL	or equivalent
а	Voice cabinet (600 x 550 x 701mm ) Wall Mounting.	Nos.	1
b	Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos.	2
С	Voice Patch Cords S/FTP Cat-6- 1 Meter Length	Nos.	12
d	Cable Manager	Nos.	1
3.02k	Data Cabinet 15U For Floors. (Basement)		
0.021	Supply, Installation of Data Cabinet of Size 15U, Imported Wa	ı all Moun	ted_made.of
	M.S Sheet, Powder Coated having lockable fron glass door		
	way fans on top, complete in all respect. Make: NORDEN / HF		
а	Data cabinet (600 x 550 x 701mm ) Wall Mounting.	Nos.	1
b	PDU (Power Distribution Unit) Six Sockets	Nos.	1
С	Data Patch Panel Cat-6A	Nos.	1
d	Network Layer 2 Switch 24 Ports with 10 Giga Up-links.	Nos.	1
	Sophos or equivalent		
е	Data Patch Cords UTP Cat-6A 1 Meter	Nos.	12
f	Cable Manager	Nos.	1
3.02L	Voice Cabinet 9U For Floors. (Basement)	I	

	Supply, Installation of Voice Cabinet of Size 9U, Imported W M.S Sheet, Powder Coated having lockable fron glass door way fans on top, complete in all respect. Make: NORDEN / HF	, two wa	y opening, 2
а	Data cabinet (600 x 550 x 501mm ) Wall Mounting.	Nos.	1
b	Voice Patch Panel Cat-6 - 24 Ports Shielded	Nos.	2
C	Voice Patch Cords S/FTP Cat-6- 1 Meter Length	Nos.	 12
d	Cable Manager	Nos.	1
	Gabio Managoi	1100.	
3.03	UTP Cat-6A Patch Cords.		
	Supply, Installation of UTP Cat-6A Patch Cords with m connectors on both end, support 10 Giga of Following Sizes M / Comscope or equivalent		
i	UTP Cat-6A, 3 - Meter Length	Nos.	200
ii	UTP Cat-6A, 5 - Meter Length	Nos.	100
"	OTT Gat-on, O- Motor Length	1403.	100
3.04	Core L-3 Network Switch for Server Room		
3.04a 3.04b	Supply, Installation and complete network configurations of Layer-3, Core Network Switch with 24 x 10GbE SFP+ ports alongwith network Layer-2 switches, availability of one modular slot for Additional 6x 10/40GbE QSFP+ ports. Base layer 3 software feature, advanced L3 features.1U Rack Mounted with L3 chassis with 24 x 10Giga -SFP ports, 6 x 10/40 Giga QSFP+ ports, 2 stack ports, Enhanced network services, Routing SW. Redundant power, Advanced Switching, Layer-3 Routing Protocols, (network VPN connectivity support), Complete in all respect, as per drawing and specifications, Included three years support & services remotely or on site as per the need / requirement. Make: Al-Catel, Cisco, HP, Huawei, Rukus, H3C or equivalent  Duplex SFP Multimode Transceiver 10 Giga for Core Switch  SFP Multimode Transceiver 10 Giga for Edge Switches	Nos.	24 24
3.05	10-KVA Online UPS Un-Interruptible Power Supply for Ma	in Data	/ Server
	Cabinet.  Supply, Installation, testing & commissioning of 10 KVA Online UPS with 0.8 Power Factor with dry batteries with standard backup and complete with electric wiring, ducting, separate D.B. with circuit breakers. Make: APC, Norden, Emerson or equivalent	No.	1
3.06	Fiber Optic Cable		
0.00	Supply, Laying, Installation of 12 Core Multimode (50/125 Micron) Armored Fiber Optic Cable OM3 from Main Data Center to Floor Level Cabinets, Complete in all respect. Make: Norden / Panduit / Comscope.	Mtr	500
2.07	OFFE 42 Posts (Ontical Fiber Distribution France)		
3.07	OFDF-12 Ports (Optical Fiber Distribution Frame)  Supply, Installation of 12 Ports 19" Rack Mounted Fiber Optic distribution frame (1U) with Om3 Duplex Multimode Couplers, Pigtails, Fiber Patch Cords, including cost of fiber splicing charges, Complete in all respect. Make: Norden/Panduit / Comscope or equivalent.	Nos	6
	- and and your support of a square and the		
3.08	OFDF-24 Ports (Optical Fiber Distribution Frame)		

Supply, Installation of 24 Ports 19" Rack Mounted Fiber Optic distribution frame (1U) with Om3 Duplex Multimode Couplers, Pigtails, Fiber Patch Cords, including cost of fiber splicing charges, Complete in all respect. Make: Norden/ Panduit / Comscope or equivalent.  3.09 Data Cabinet For Server Room (Third Floor)  Supply, Installation of Data Cabinet of Size 42U, Imported Floor standing, made M.S Sheet, Powder Coated having lockable fron glass door rear perforated, two w opening, 4 way fans on top, 02 No. Vertical Cable Managers, complete in all respendake: NORDEN / HP / DELL or equivalent  i Server cabinet (800x800x2055mm ) Floor Standing Nos. 1  ii PDU (Power Distribution Unit) Six Sockets Nos. 1  3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.  Warranty letter from principle for the supplied active				
Supply, Installation of Data Cabinet of Size 42U, Imported Floor standing, made M.S Sheet, Powder Coated having lockable fron glass door rear perforated, two wopening, 4 way fans on top, 02 No. Vertical Cable Managers, complete in all respendix Norder in the Norder Cabinet (800x800x2055mm) Floor Standing Nos. 1  ii Server cabinet (800x800x2055mm) Floor Standing Nos. 1  iii PDU (Power Distribution Unit) Six Sockets Nos. 1  3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.		Optic distribution frame (1U) with Om3 Duplex Multimode Couplers, Pigtails, Fiber Patch Cords, including cost of fiber splicing charges, Complete in all respect. Make: Norden/	Nos	2
Supply, Installation of Data Cabinet of Size 42U, Imported Floor standing, made M.S Sheet, Powder Coated having lockable fron glass door rear perforated, two wopening, 4 way fans on top, 02 No. Vertical Cable Managers, complete in all respendix Norder in the Norder Cabinet (800x800x2055mm) Floor Standing Nos. 1  ii Server cabinet (800x800x2055mm) Floor Standing Nos. 1  iii PDU (Power Distribution Unit) Six Sockets Nos. 1  3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.				
M.S Sheet, Powder Coated having lockable fron glass door rear perforated, two wopening, 4 way fans on top, 02 No. Vertical Cable Managers, complete in all respensive Make: NORDEN / HP / DELL or equivalent  i Server cabinet (800x800x2055mm) Floor Standing Nos. 1  ii PDU (Power Distribution Unit) Six Sockets Nos. 1  3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	3.09	<u>Data Cabinet For Server Room (Third Floor)</u>		
ii PDU (Power Distribution Unit) Six Sockets Nos. 1  3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.		M.S Sheet, Powder Coated having lockable fron glass door recopening, 4 way fans on top, 02 No. Vertical Cable Managers, c	ar perfor	ated, two way
3.10 Terms / Testing & Commissioning of Data System with Fluke Reports. (Copper & Fiber)  i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	i	Server cabinet (800x800x2055mm ) Floor Standing	Nos.	1
i) The job will include Punching of UTP cables (already laid) for patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job 1 Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	ii	PDU (Power Distribution Unit) Six Sockets	Nos.	1
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patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification of Complete system.  ii) 5 days on site Training of Client IT Team on Switches Job Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	3.10		eports. (0	Copper &
Configuration  iii) Included with three years (03) support & services of network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	i)	patch panels with I/O, Installation of patch cords, Configuration of Layer-2 and Layer-3 switches, Testing & Commissioning of complete network system with Fluke Testing of Copper & Fiber Cable with Report & Certification	Job	1
network switches Layer-2 & Layer-3 remotely or on site as per the need / requirement  iv) Standard warranty on site for all Active items/equipments.	ii)		Job	1
	iii)	network switches Layer-2 & Layer-3 remotely or on site as	Job	1
products.	iv)	Warranty letter from principle for the supplied active		
v) Passive items cover standard warranty, certificate from manufacturer required	v)	Passive items cover standard warranty, certificate from manu	facturer	required

The UPS (mentioned above) will be installed with centralized electric wiring for network switches, cabinets and Wifi access point/ routers on all floors of the building including separate D.B and circuit breakers complete in all respect.

Standard Warranty be given for all equipments with three years support & service.

### 4. Server Room Equipment – BOQ / Technical Specifications

#### SERVER ROOM EQUIPMENT.

Item No.	Description	Unit	Quantity
4.01	10-KVA Online UPS Un-Interruptible Power Supply for Cabinets.	Main Da	ata / Server
	Supply, Installation, testing & commissioning of 10 KVA Online UPS with 0.8 Power Factor with dry batteries with standard backup and complete with electric wiring, ducting, separate D.B. with circuit breakers. Make: APC, Norden, Emerson or equivalent.	No.	1
4.02	Fire Wall		
4.02	Supply, Installation and complete configuration of Next Generation of Unified Threat Management firewall. Multilayer security. Stateful and deep packet inspection for Network. Application and User Identity- based security. DoS, DdoS and IP and Mac Spoofing attacks. Access Control for User Identity, Source & IP address, Protocol based control. Integrated with Web & URL filtering, IPS, E-mail Security. Destination zone, MAC and Bandwidth Management, Multiple Link Management, High Availability with stateful failover, Multiple Security zones, Routing support, VLAN support, multiple VPN support (support 8+ site offices). Multicore Technology and high speed parallel processing. Centralized logging and reporting, identity based reporting, ICSA- certified firewall, checkmark certified and other industry standard certifications, Included three years support & services remotely or on site as per the need / requirement. Make: -Sophos / Cisco/Fortinet/Juniper or equivalent	No.	1
	Firewall included with 5 years license support		
4.03	Server Cabinet 42U For Server Room (Third Floor)		
	Supply, Installation of Data Cabinet of Size 42U, Imported of M.S Sheet, Powder Coated having lockable fron glass two way opening, 4 way fans on top, 02 No. Vertical Cable in all respect. Make: NORDEN / HP / DELL or equivalent	door re	ar perforated,
i	Server cabinet (800x1000x2055mm ) Floor Standing	Nos.	1
ii	PDU (Power Distribution Unit) Six Sockets	Nos.	1
4.04	Access Control System for Server Room and IT Section		
а	Biometric / RFID Proximity Reader		
	Supply, Installation of Access Control Device support Biometric, RFID, Keypad input. Make: Norden, Honey Well, Bosch or equivalent.	Job	2
b	Exit Push Button  Supply, Installation of Exit push button including control & power wiring upto system manager complete in all respects. Make: Norden / Honey Well / Bosch or equivalent.	Nos	2
С	Magnetic Single Door Lock		
		<u> </u>	L

	Supply, Installation of single door magnetic Door Loon necessary accessories required for installation and procomplete in all respect. Make: Norden / Honey Well / Bosc	oper func	tion of lock
	Lock Size: 250Lx48.5Wx25H(mm)		
	Holding Force 280kgx2 (600Lbsx2)		
	Voltage :DC12V or DC24V (adjustable)		
	Current: 12V/500mAx2 24V/250mAx2		
	Operating Temperature : -10°C ~ 55°C (14°F~131°F)	Nos	2
d	Wiring		
	Complete Power and Communication wiring of Access Control system	Job	2
e	Power Supply for Door Locks		
	Supply, Installation of Power supply for Door Lock System. Make: Norden / Honey Well / Bosch or equivalent.	Nos	2
4.05	Testing & Commissioning of Server Room Equipment	 with train	ing.
i)	Configuration, Testing & Commissioning of complete Firewall System for Network Switches, LAN and WAN.	Job	1
ii)	Training of Client IT Team on firewall configuration for 5 days	Job	1
iii)	Standard warranty on site for all active items/equipments. Warranty letter from principle for the supplied active products.		
iv)	Included with three years (03) years warranty and support remotely or on site as per the need / requirement	& service	s of Firewall

The UPS (mentioned above) will be installed with centralized electric wiring for Servers at Server Room (08 power sockets and for Server Rack), 04 x routers, network Layer-3 switch, 05 x computers power sockets at IT Section on 3rd floor of the building including separate D.B and circuit breaker complete in all respect.

• Standard Warranty be given for all equipments with three years support & service.

### 5. WIFI System - BOQ / Technical Specifications

### WIFI SYSTEM.

Item No.	Description	Unit	Quantity
F 01	Wifi Points On Well / Folos Coiling		
5.01	Wifi Points On Wall / False Ceiling.		
	Wiring for each Wifi point with 4 pair Cat. 6A, UTP cable, pure copper conductor PVC insulated PVC sheathed, manufactured by M/s. Norden, Panduit, Comscope or equivalent from data cabinet to each Wifi point, connections of cables and identification tags at both ends, in Pre-Laid 1" dia. PVC conduit heavy duty local made, recessed in walls, columns, slabs, floors or above false ceiling with all necessary fixing accessories as required as per site condition. Make Norden, Panduit, Comscope or equivalent, complete in all respects.	Rft	4000
5.01a	Supply, installation of Cat-7 Shielded RJ-45 Connector.	Nos.	13
5.02	Wifi Access Points		
0.02	THE ACCESS I CHIES		
	Supply at site, installation and configuration of Wifi-6 Access Points to be installed on walls / false ceiling or as required by site conditions, Wireless Access Points should support 802.11 a/b/g/n/ac wave 2 standards, should work on 2.4 (4 X 4 MIMO) & 5.8 Ghz band Simultaneously and @ 2.4 Ghz support 600 Mbps and @ 5.8 Ghz support 2400 Mbps, should work on MIMO 4 X 4, Support Automatic RF channel selection, Support 50 concurrent clients, should support IPv4, IPv6 and dual stack. Support integrated NAT and DHCP as standalone access point and should be managed by wireless controller. Make: - Unfi / Aruba / Cisco / Al-Catel / Rukus or equivalent.	Nos	13
5.03	Wifi Access Controller		
0.00	Supply at site, installation and complete configuration of Hardware base Wifi Access Controller UD-PRO to be installed in Main Data Cabinet at Server Room, Wireless Access Controller should support 15 Access Points, should support 500 concurrent users, Should have a customizable dash board, fast 1.7 GHz quad-core processor, Advanced Security Gateway with Built-in Switch, Dual WAN Ports: One 10G SFP+ and One Gigabit RJ45, One 10G SFP+ LAN Port, Embedded Enterprise Application, 3.5" HDD Bay for NVR Storage. Controller must be compatible with Apple & Android devices. Make: - Unfi, Aruba, Cisco, Al-Catel, Rukus or equivalent.	Nos.	1
5.04	UTP Cat-6A Patch Cords.		D 1 45
	Supply, Installation of UTP Cat-6A Patch Cords with machin connectors on both end, support of Following Sizes Make: - equivalent.		
_	UTP Cat-6A, 1 - Meter Length	Nos.	26
5.05	Layer-2 (PoE) Edge Network Switch		
•		l	l

	Supply, Installation and complete configuration of 12 / 24 - Port Giga PoE Network Switch Layer-2, 10 / 100 / 1000 Mbps (Switching Capacity 56 Gbps) with two fiber Uplink 10G Ports, PoE 370 Watts. Make: Cisco / HP / Al-Catel / Unfi or equivalent.	Nos.	2
5.05a	10 Giga Stacking Cable for Layer-2 (PoE) Edge Network Switch connectivity with LAN (Network Layer-2), alongwith all necessary accessories, UTP Cat-6A cable, SFP, OFDF or etc. if any as per requirement for up-linking	Nos.	2
5.06	Testing & Commissioning		
i)	Configuration, Testing & Commissioning of complete Wifi system including, Controller, Access Points & Switches with Fluke test Reports	Job	1
ii)	5 days on site Training of Client IT Team on Wifi Configuration	Job	1
iii)	Included with three years (03) years support & services remotely or on site as per the need / requirement	Job	1
iv)	Standard warranty on site for all Active items/equipments. Warranty letter from principle for the supplied active products.		
v)	Passive items cover standard warranty, certificate from man	ufacture	r required

The UPS as mentioned above at Sr.No.03 in data network system will be used for wifi access points/ routers electric powering and centralized electric wiring will be laid down for all Wifi access point/routers installed on all floors of the building including separate D.B and circuit breakers complete in all respect.

Standard Warranty be given for all equipments with three years support & service.

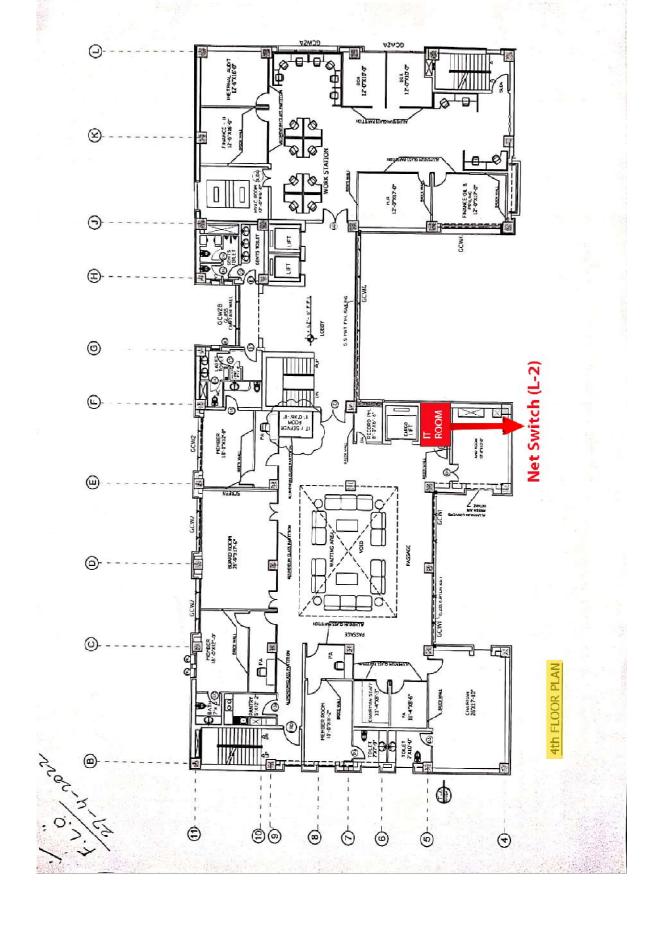
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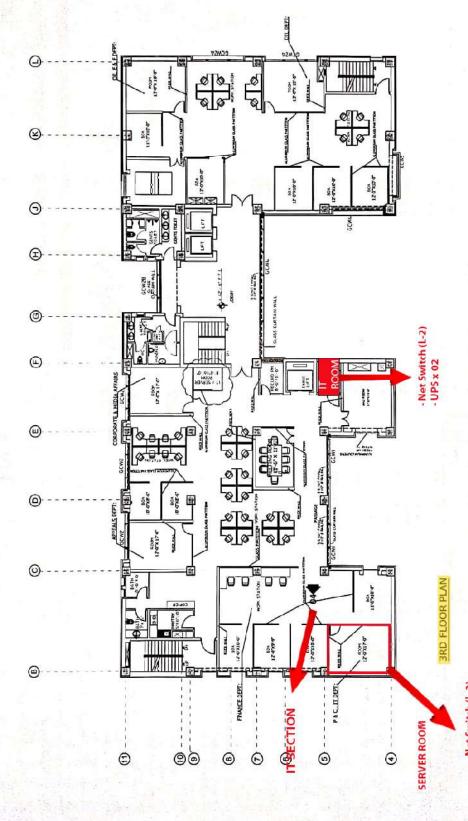


### FINANCIAL PROPOSAL

# TURN KEY SOLUTION OF IT WORKS i.e. DATA NETWORKING SYSTEM, SERVER ROOM EQUIPMENT & WIFI SYSTEM (WIRELESS LAN) etc. AT OGRA'S NEW HEAD OFFICE BUILDING, PLOT NO. 37 & 39, SECTOR G-10/4, MAUVE AREA, ISLAMABAD UNDER TENDER ENQUIRY No. 09 OF 2022

SOLUTION OF IT WORKS	Amount (PKR)
Data networking system, Server room equipment & WIFI system (wireless lan) etc.	/-
Labour Charges.	/-
GST	/-
Grand Total (PKR) (including taxes) In words: (Rupees	/-





- Net Switch (L-3) - Net Switch (PoE) for Wifi - Wifi Access Controller

