

General instructions:

Selected supplier will be contracted in order to install complete set of network installations, certified on category 6 that supports up to 10GBps (250 MHz), with cross talk and system noise reduced in accordance with Category 6 requirements. All cables and network modules should be compliant with Cat 6.

Offer shall be submitted by stating single connection unit price multiplied by total number of connections (14+7+37+35+34+24=.151 connections) in accordance with the scheme below. All additional costs should be incorporated in connection unit price

Each floor will have structured cabling infrastructure with certified 1GBps transfer
List of the new goods that should be used for the installation is provided below.
List of the equipment that the supplier shall provide (to be reused) is provided below.
Set of active equipment will be provided upon the completion of passive infrastructure.

Visit to the site will be organised minimum 4 days before the deadline for the submission.
Offerors are encouraged to express their interest for visit through email srpc.procurement@unops.org through short e-mail notification subjected: “Visit to new office premises – LAN Installation”

All clarifications can be required both during the site visit or via email on srpc.procurement@unops.org.

List of required new equipment

Brand new items (installed in rack cases)

- International Brand name Cat 6 Patch panel 48 ports (Pcs. 6) with RJ 45 modules
- Power panel (pcs 4)
- International brand name power panel with battery/surge protection with min 300W power (pcs 5)
- Cooling fan (pcs 7)
- Rack case patch cables 50 cm (pcs 20)

Brand new passive equipment (terminal passive equipment)

- Cable to correspond with category 6
- A/C cable for extending A/C plugs with plugs and jacks
- PVC Cable trunks of adequate profile
- Terminal RJ45 jacks, modules and carrying boxes for modules
- Cable protectors
- Fittings, curves and terminators of PVC trunks
- Patch cables
- Cat6 upload links.

List of equipment that will be reused

Reusable items

Basement Rack

- Rack Case size 12U - To be mounted on brick wall in the basement, and to serve as distribution case for telephone and data installation. PBX mounted out of the rack. Configuration of the PBX not needed.
- Network switch International brand name manufacturer; 10/100/1000T x 24 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply
- Shelf for non-racked devices
- AC Power cord

Ground floor Rack

- Rack Case size 6U - To be mounted on brick wall in the basement, and to serve as floor distribution case for data and phone installation.
- Network switch; 10/100/1000T x 10 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply;
- Shelf for non-racked devices
- AC Power cord

1st floor Rack

- Rack Case size 9U - To be mounted on brick wall in the basement, and to serve as floor distribution case for data and phone installation.
- Network switch; 10/100/1000T x 24 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply;
- Shelf for non-racked devices
- Access point

2nd floor Rack

- Rack Case size 9U - To be mounted on brick wall in the basement, and to serve as floor distribution case for data and phone installation.
- Network switch; 10/100/1000T x 24 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply;
- Shelf for non-racked devices
- Access point

3rd floor Rack

- Rack Case size 9U - To be mounted on brick wall in the basement, and to serve as floor distribution case for data and phone installation.
- Network switch; 10/100/1000T x 24 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply;
- Shelf for non-racked devices
- Access point

4th floor Rack

- Rack Case size 6U - To be mounted on brick wall in the basement, and to serve as floor distribution case for data and phone installation.
- Network switch; 10/100/1000T x 24 ports; 1RU form factor; Fully managed, Auto MDI/MDI-X on all ports; Transparent for VLAN packs; Internal power supply;
- Shelf for non-racked devices

- Access point
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Special installation instructions

Installation of PVC trunks as per the scheme attached, with minimal damage to the building, and in consultation with UNOPS dedicated person. Ultimate goal is preparation of fully structured network for the reliable data functioning.

Certification

- All network connections will be certified to category 6 upon installation. Certificates to be provided by supplier.

Upload links

- The supplier will install two upload links from each of the floors to the server room in basement. Cat 6 with 10GBs data transfer to be supported through uplinks
- The supplier will be in position to check the existing backbone for telephone installations and use it for the purpose of telephone services. Otherwise – supplier will install sufficient number of wired pairs to connect each floor with the basement rack where analog PBX device is installed. On every floor – local network will be used for telephony, so RJ 45 connectors shall be applied to twisted pairs for telephony.

Telephony

- PBX system – Panasonic KX-T100D will be reused. No significant configuration is needed, only minor adjustments
- Office phones will be connected to analog Panasonic PBX KXT100D. Voice panel with links from floor installations shall be configured and installed in server room rack (basement).
- Incoming external telephone lines to be brought to server room rack (basement)/PBX

PVC Trunk channels with corners, ends, fixtures and mounting elements (installation in accordance with scheme attached)

- PVC channels should be in accordance with national law and security standards and all national security regulations.
- Module jacks should be produced by international brand name manufacturer
- Both channels and network module boxes shall be installed by drilling (no silicon glue or trunk channels with self-adhesive tape will be allowed)
- Where specified – electrical extension cords shall be prepared from the wall plug to the end user. In open areas network and power cables shall be protected with floor cable protectors (capacity up to 8 network cables and 4 AC power cables) – 1 meter length tolerance for terminal users in open space shall be provided. The implementer will decide on whether to use single trunk with the separation panel between network and power cables, or separate channels for power cords

4 x Floor racks (Floors 1-4)

- Cooling fan
- Active network equipment (Switch, access point, power supply)
- Shelf for non-racked devices