Summarized specifications for ELV work at 2^{nd} and 3^{rd} floor – Majlis Extension Building

- $40 \times 4 + 1 \times 8$ drops of Category 6 (total no. of drops =~ 170).
- ~ 300 Category 6 patch cords of varying lengths.
- Network switches enough to accommodate all required connections.
- 8 x wireless access points positioned according to RF reception.
- All configuration to be done by People's Majlis.

Detailed specifications for ELV work at 2^{nd} and 3^{rd} floor – Majlis Extension Building

- Network drops
 - o 4 drops to each cube
 - o All horizontal cabling to be trunked in conduit.
 - All drops to be terminated into keystone jack. Dual or single faceplates depending on location. WAP drops to be terminated to keystone jacks above the ceiling.
 - o Wiring closet to be done using high-quality 24-port patch panels.
 - All existing horizontal cable managers to be removed and each existing switch to be moved in between patch panels.
 - o Existing 24-port switches to be removed.
 - o All items in the rack to be shifted so that no gaps are present.
 - All permanent links (patch panel to keystone) to be tested for continuity.
 Certification is not mandatory. Any continuity issues discovered by
 People's Majlis after project completion to be handled within retention period.
 - All drops to be labeled in a similar syntax to current port labeling standard.
 - All cables to be laid in adherence to structured cabling guidelines and best practices.

• Patch cords

- o 6-inch Category 6A patch cords to be used connecting patch panels to each 48-port switch.
- Either 15-foot or 10-foot Category 6 patch cords depending on use-case for drop.
- o WAPs to be connected to keystones via Category 6A patch cords.
- No rubber boots of any kind on any patch cord. Patch cords should have snag-less boots made from plastic.
- o Slim patch cords preferable for workstations and printers.

Network switches

- Quantity as required for completing project.
- o Accepted brands: Aruba, Juniper, Arista
- o At least 40 x 1000BASE-T PoE+
- o At least 8 x 1/2.5/5/10G ports PoE Class 6
- o 4 x SFP+/SFP28
- o Layer 3 (OSPFv2, VRRP).

- o Minimum of 500 routes.
- o 3 years parts and service.
- o Included four transceivers of 10GBASE-LR per switch. Can be high-quality 3rd party coded transceivers.
- o Switches to be racked between patch panels.

• Wireless access points

- o Accepted brands: Aruba, Arista
- Any existing access point in the vicinity to be removed and the existing ceiling cutout to be re-used.
- o Four access per floor (2nd and 3rd). Quantity can be adjusted if bidder proposes RF survey detailing the required number and locations.
- o 802.11ax (Wi-Fi 6).
- o 802.3bt High Power PoE.
- o OFDMA and MU-MIMO.
- o Internal antennae.
- o Ability to work with or without dedicated controller.

Configuration

- o All configuration will be done in-house by People's Majlis ICT.
- Latest recommended firmware to be provided by bidder for APs and switches.
- o Configuration and authentication details will not be provided to the bidder for security purposes.
- Any questions or clarifications to be directed by email to <u>it@majlis.gov.mv</u> cc'd to <u>procurement@majlis.gov.mv</u>.
- Bidders are required to survey the site and gather any information required.