# ANNEX A Term of reference Wireless infrastructure structured cabling

### Introduction

This Term of Reference (TOR) document outlines The General Secretariat of Organization of American States (GS/OAS) requirements and expectations for the cabling of the modernization of the wireless infrastructure. The provider must include all labor and material required for this TOR. Additionally, all work must be performed within GS/OAS buildings, GSB Building, MNB Building, ADM Building, Museum, and Casita.

The General Secretariat Building (GSB): 1889 F St, NW, Washington, DC 20006

The Administration Building (ADM): 1809 Constitution Ave. NW, Washington, DC 20006

The Main Building (MNB): 200 17th Constitution Av NW, Washington, DC 20006

**Museum:** 201 18th Street NW. Washington DC 20006 **Casita:** 1744 C Street NW. Washington DC 20006

### **Current Network Wireless infrastructure**

GS/OAS wireless infrastructure was deployed almost 10 years ago, it is one of the most critical areas to be modernized. Currently there are two Cisco Wireless LAN Controller (WLC) 5508 located at GSB building and 100 access points (AP3702I, AP3802I, AP1142N) throughout GS/OAS buildings. Additionally, the current CAT 6 structured cabling is fully operational for the existing 100 access points. We anticipate the potential for reuse, unless in your proposal you suggest otherwise.

# **Objective and Requirements**

This Wireless modernization project involves the deployment of a new Wireless infrastructure and 262 new wireless access points (APs), switches, and other networking equipment to provide wireless connectivity within the defined areas mentioned above. The cabling aspect of the

project is critical to ensure the reliable and high-speed transmission of data between these components.

The primary objectives of this cabling project are as follows, but not limited to:

- 1. GSB Building: Furnish and install 88 new Cat6 CMP blue cables, install 88 new APs provided by The GS/OAS and install 43 new APs provided by The GS/OAS using existing Cat6 cables.
- 2. Main Building: Furnish and install 40 new Cat6 CMP blue cables, install 40 new APs provided by The GS/OAS and install 24 new APs provided by The GS/OAS using existing Cat6 cables.
- 3. ADM Building: Furnish and install 48 new Cat6 CMP blue cables, install 48 new APs provided by The GS/OAS and install 7 new APs provided by The GS/OAS using existing Cat6 cables.
- 4. Museum: Furnish and install 7 new Cat6 CMP blue cables, install 7 new APs provided by The GS/OAS and install 1 new AP provided by The GS/OAS using existing Cat6 cables.
- 5. Casita: Furnish and install 4 new Cat6 CMP blue cables and install 4 new APs provided by The GS/OAS.
- 6. All cabling will use Superior Essex, CommScope, Belden, or an equivalent quality brand of Category 6 cable.
- 7. New cables will be routed within walls and terminated on a wall faceplate, systems furniture device plate when possible, or surface mounted wiring can be used with GS/OAS approval and supervision.
- 8. New cables will be terminated with Cat6 jacks in a surface mount box at the AP location, and existing or new Cat6 patch panels will be used in the Telecom Room. The patch cords must be Panduit Cat 6 UTP Patch Cord, 0.150-inch (3.8mm) diameter, with a blue cord constructed of 28 AWG, unshielded, twisted pair, or a similar quality brand and diameter.
- 9. The station runs will be labeled on both ends of the cable, on the patch panel, and on the device faceplate once terminated.
- 10. All cables will be tested and certified after completion using IEEE standards and a compliant test unit (such as Fluke or an equivalent brand). A test report will be provided. No standard cable run shall exceed 300 feet.
- 11. The cabling system should be designed to provide scalability for future network expansions.

# Scope of Work

The scope of work for this cabling project includes, but it is not limited to:

- 1. Develop a comprehensive project plan, including timelines, milestones, and resource allocation.
- 2. Assessment and planning of cabling requirements, considering the layout and design of the environment provided by The GS/OAS and walkthrough for each location.
- 3. Installation of structured cabling solutions to connect wireless access points, switches, and other networking equipment.
- 4. Selection of appropriate cabling and material types based on the network's requirements.
- 5. Implementation of cable management and labeling for easy identification and maintenance.
- 6. Testing and certification of cabling to ensure optimal performance.
- 7. Documentation of cabling diagram, testing reports and as-built records.

## **Proposed schedule**

The implementation of this new structured cabling is critical and needs to be finalized by early 2024. It constitutes a vital component within the broader GS/OAS IT infrastructure modernization project.