# **APPENDIX 1**

#### **TERMS OF REFERENCE**

## 1. Introduction

The General Secretariat of the Organization of American States (GS/OAS) through The Department of Information and Technology Services (DOITS) seeks a response for this RFP from an Internet service provider (ISP) to provide dedicated Internet service at GSB building and ADM building, DNS hosting as well as point to point connections between OAS buildings in Washington, DC for a period of 36 months.

GS/OAS current Internet and connectivity solution is based on a combination of Ethernet connections creating a point-to-point architecture within headquarters buildings allowing path diversity. The nature of this architecture is to maintain a stable and reliable LAN infrastructure in the event one of the paths is compromised. Additionally, OAS has two dedicated Internet access (DIA) circuits over GSB and ADM buildings respectively, which play a critical role in the Organization's daily operation. GS/OAS current Internet service provider services also offers a free DNS hosting solution as part of the package.

## 2. Description of existing services

# 2.1. Internet dedicated access (DIA) and E-line connections:

## GSB Building - 1889 F St NW.

This location has a robust path diversity due to its role and importance in the IT landscape. In this building is where the main data center is located whereby several paths, dual devices, dual entrance and dual PoP (Point of Presence) are deployed.

One of the DIA circuit (500Mbps) is configured here and provide the Internet egress point for the whole OAS network and additionally main VPN gateway connection. Moreover, web services, cloud services, backup services also rely on this DIA circuit. This circuit allocates a /23 IP network for our external IP addresses.

# ADM Building – 1801 Constitution Ave NW.

This building has one of the E-line of 1 Gbps (point-to-point from GSB) and the second DIA circuit (also 500Mbps). From this building there is a direct fiber connection with the MNB building. This fiber path (1 Gbps) is owned by OAS.

# MNB building – 200 17<sup>th</sup> St NW.

This building has the other E-line of 1Gbps as well coming from the GSB building and the other end of the OAS fiber connection coming from the ADM building.



Figure 1 Current Services Architecture. PDF files provided as OAS Net\_Annex 1

# 2.2. DNS Hosting:

This is a complimentary service that combines an array of provider's servers as primary authoritative nodes and OAS servers as secondary authoritative nodes where all domains (zones) are managed on the provider's infrastructure.

# 3. Objective and Infrastructure Requirements

The main objective of this RFP is to deploy a high-permanence network architecture to fulfill GS/OAS requirements in terms of DNS hosting, DIA circuits in two of the buildings and point-to-point connectivity within buildings.

The new design and architecture must leverage on a well-defined architecture with:

- ✓ Robust path diversity in all services.
- ✓ Cost-effective solution with multi point of presence (PoP).
- ✓ Aim to a high availability of minimum of four 9s (99.99%).
- ✓ Well-defined QoS, CoS, Data Cap and Traffic shaping parameters if apply.

- ✓ Monitoring tools (SNMP) to validate uptime and utilization performance.
- ✓ DNS Hosting service that combines an array of provider's servers as primary authoritative nodes and OAS servers as secondary authoritative nodes where all domains (zones) will be managed on the provider's infrastructure. This service also could be considered 100% hosted by bidder's infrastructure.
- ✓ 24x7 monitoring and technical support from ISP.
- ✓ Two (2) DIA circuits with a minimum speed of 500 Mbps, terminated with a Gigabit Ethernet or 10 Gigabit Ethernet port in the data centers of the OAS locations:
  - 1. GSB building 1889 F St NW (this circuit must allocate a /23 public IP address network pool for our external IP addresses).
  - 2. ADM building 1801 Constitution Ave NW (this circuit must provide at least a /30 public IP addresses).
- ✓ An E-Line (dedicated point-to-point connection) with a minimum speed of 1Gbps, terminated with a Gigabit Ethernet or 10 Gigabit Ethernet port in the OAS data centers, between OAS locations: GSB building 1889 F St NW and ADM building 1801 Constitution Ave NW.
- ✓ An E-Line (dedicated point-to-point connection) with a minimum speed of 1Gbps, terminated with a Gigabit Ethernet or 10 Gigabit Ethernet port in the OAS data centers, between OAS locations: GSB building 1889 F St NW and MNB building 200 17th St NW.

Additionally, every bidder must assure enough infrastructure capacity and flexibility to allow adjustments not just in services initially contracted, but also the possibility to add new services through the span of the whole RFP (36 months).

## 4. Optional Infrastructure and Services

Considering all requirements described above, every bidder must offer an optimal solution where enhancements could be considered. It is critical to note that GS/OAS has a limited budget for the fulfillment of the implementation and deployment of new architecture and services.

The following design can be considered, but not limited to, as an optimal solution since there are enhancements in terms of path diversity and more robust Internet services in the GSB building.



Figure 2 New DIA & path diversity. PDF files provided as Optimal OAS Net \_ Annex 2