

**EMBASSY OF THE UNITED STATES OF AMERICA**  
**U.S. Department of State**  
**The General Services Office (GSO)**  
**Bogotá, Colombia**

The General Services Office (GSO) at the U.S. Embassy in Bogotá has a requirement for PR9744481; all elements should meet the following minimum requirements:

<b>Conditions of proposal</b>	To be considered for evaluation and award you must comply with the following: <ul style="list-style-type: none"> <li>⇒ Prices should be in Colombian Pesos (COP).</li> <li>⇒ Unite price, tax percentage, tax amount ant total amount should be stipulated in the quote.</li> <li>⇒ Submit with the quotation the Technical information sheet per model/reference.</li> <li>⇒ Your offer must meet or exceed ALL requirements specified in this advertisement. If pictures are included they are used as an example, your offer must meet the technical description provided.</li> <li>⇒ Offer must be valid for six (6) months. Period of performance will be six (6) months</li> <li>⇒ We will contact you to clarify or request additional information during the evaluation process, if required.</li> </ul>
<b>Questions</b>	Should you have any question regarding this request please send an e-mail to <a href="mailto:RiveraS@state.gov">RiveraS@state.gov</a> before <b>March15, 2021 at 4:00 PM</b> (Bogota, Colombia - local time). Please refer to PR9744481
<b>Deadline to submit your offer</b>	Offers are due by <b>March 31, 2021 at 4:00 PM</b> (Bogota, Colombia - local time) via e-mail to <a href="mailto:RiveraS@state.gov">RiveraS@state.gov</a> . All responsible sources may submit an offer that shall be considered.
<b>Delivery Place</b>	American Embassy in Bogotá, Colombia. The vendor will coordinate with IRM representative.
<b>Payment Terms</b>	EFT net 30 calendar days, payments will be made upon receipt and acceptance of delivery.

Please note that this is a combined synopsis/solicitation for a commercial item, prepared in accordance with the format FAR 12.6, as supplemented with additional information included in this notice. This announcement constitutes the only solicitation; offers are being requested and a written solicitation will not be issued. The solicitation number is PR9744481 and is issued as a Request for Quotation. The solicitation/contract will include all applicable provisions and clauses in effect through FAC 2005–45 Items to be acquired as stated in the above list.

## SCOPE OF WORK FOR TELECOMMUNICATIONS SERVICES

### INFORMATION SYSTEMS CENTER (ISC)

#### AMERICAN EMBASSY, BOGOTA

The local Telecommunication's Internet Service Provider (ISP) contracting firm must provide internet services and dedicated leased line channels for connecting American Embassy Bogota and remote U.S. Embassy Annex locations data links as shown below in this technical paper.

This is the list of required services:

<b>Service Type</b>	<b>Service Name</b>	<b>Bandwidth</b>
Internet Leased Line	OpenNet - VPN	200 Mbps.
Point-to-Point/Clear Channel	OpenNet - Cartagena	50 Mbps.
Point-to-Point/Clear Channel	OpenNet - ICASS/INL Warehouse	50 Mbps.
Point-to-Point/Clear Channel	OpenNet - INL Aravi	30 Mbps.
Internet Leased Line	DIN - Embassy - Agencies	100 Mbps.
Internet Leased Line	Internet DCR	60 Mbps.
Internet Leased Line	Internet CMR	60 Mbps.
Internet Leased Line	Internet VAU-DCR	60 Mbps.
Internet Leased Line	Internet APHIS	10 Mbps.
Internet Leased Line	Internet FCS	10 Mbps.
Internet Leased Line	Internet DTS-PO Bogota	500 Mbps.
Internet Leased Line	Internet DTS-PO Cartagena	6 Mbps.
Internet Leased Line	Internet DTS-PO Bogota 2 (Backup)	6 Mbps
Internet Leased Line	Internet RSO Cartagena	12 Mbps
Internet Leased Line	Internet DTS-PO USS	12 Mbps

#### **IMPORTANT NOTE:**

Section 889 of the National Defense Authorization Act (NDAA) prohibits use or procurement of services provided or telecommunication equipment manufactured by ZTE, Huawei, and Xiaomi (or any subsidiary or affiliate of such entities) in support of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes.

Such-branded products are defined as any information security products, solutions, and services supplied, directly or indirectly, by said manufacturers, to include, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

These products and services are strictly prohibited from connecting to any federal government or Department of State system or network (including Dedicated Internet Networks (DINs)) used to process, store or transport government data of any kind. This restriction also applies to telecommunications equipment used in the provision and transport of government services and data within the local country.

**Service: OpenNet - VPN**

**Name:** OpenNet (VPN through the Internet) at the U.S. Embassy Bogota.

**Description:** One (1) dedicated Internet channel at minimum of 200 Mbps providing fault tolerance in the last mile. HSRP protocol is required.

**Type of Service:** Dedicated Internet Channel

**Location:** U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

The provided Internet Service must comply with the following requirement(s):

**Internet Service(s) description and Quality**

- Internet Service Provider (ISP) must provide dedicated leased channel high-speed access to the Internet; data transport media must be fiber optic. Twenty-four (24) hours uplink. Post Internet Service Provider (ISP) connection must be "always on", and must not require the installation of any custom software on the client side.
- The awarded ISP must have direct connection capability with major United States of America (U.S.A) telecommunication providers (ISPs) at Internet tier 1 level, like NAP Americas (ARCOS), NAP Sprint (MAYA), or any other available backbone paths shall be available.
- The awarded ISP must have redundancy for the Internet connection to the Internet backbone (Tier 1) between Colombia and USA.
- The awarded ISP must have direct connection with the Colombian Network Access Point (NAP). All local traffic going to and coming from Colombian sites must be routed through the Colombian NAP connection.
- Internet Service Provider (ISP) must provide a detailed network topology map that shows all possible paths that (ISP) uses for the internet traffic between ISP hub in Bogota and the ISP hub in USA, as well as for the traffic between the ISP and the Colombian NAP.
- The awarded ISP must provide a detailed technical diagram of the proposed solution.
- Internet Service Provider (ISP) must provide fault-tolerance Fiber Optic connectivity from 2 different Bogota's ISP nodes to the very end at the U.S. Embassy Bogota compound Telecommunications Service Entrance Facilities (TSEF) Room. Embassy ducts entrances are: Puente-Aranda and Esperanza Avenue.
- Internet Service Provider (ISP) digital bandwidth is the amount or volume of data that may be sent through the channel, measured in megabits per second (mbps), without distortion. Required Bandwidth connection is defined in each service description.
- For Internet Services the Internet Service Provider (ISP) must guarantee full contracted bandwidth availability 24X7X365 from the originator side to the ISP's internet gateway. Bandwidth sharing between other non-Embassy customers is not allowed. Connection Ratio must be 1/1.

- Internet Service transmission from the originating information server towards an end server is referred to as downstream; and a transmission from an end user towards the remote server is referred as upstream; Post Internet Service Provider (ISP) Contention Ratio (downstream / upstream) must be symmetric 1:1 /1:1.
- Internet Service Provider (ISP) must provide excellent Quality of Service (QOS) for the connection, that represents the level of consistent download capacity provided, must be the higher QOS percentage possible but, at minimum or greater than 99.8% or the highest possible quality of service connection reaching 100%.
- Internet Service Provider (ISP) Round Trip Time (RTT) reports the total time in milliseconds (ms) time to send a small data packet and obtain a reply back; must be at least equal or faster than 100ms for the Round Trip Time (RTT) for internet services located in the United States ([www.state.gov](http://www.state.gov)). Also, RTT must be equal or faster than 30ms for local data services; for instance: point-to-point channels or web pages accessed through the Colombian Network Access Point (NAP). These values will be measured via ping end-to-end and will use the average result from a one thousand (1000) packets test.
- Internet Service Provider (ISP) must permit the transit of all Internet Protocol (IP) protocols (especially IPSec), all User Datagram Protocol (UDP) protocols, and all Transmission Control Protocol (TCP) protocols. Filters or sniffers must not be established, connected, or introduced by the ISP for any Embassy channels. If there are any existing filters, sniffers, restrictions, or proxies, they must be identified, and removed prior lease line circuit installation.
- Internet Service Provider must perform equipment installations in a clean and organized way. Equipment and Wires must be properly identified.
- The Internet leased line must be tested and or monitored for a period of 24 hours before it is placed into production. No packets lost neither CRCs are allowed over the router's WAN interface.
- The Embassy is free to perform its own tests over the Internet channel(s).

### **Network Identification**

- Internet Service Provider (ISP) must provide a block of thirty two (32) public internet static IP addresses on a single subnet for Internet services.
- Internet Service Provider (ISP) must provide IP addresses used to identify the single subnet address in Classless Inter-Domain Routing address specification (Network IP address / 27) or, equivalently, its subnet mask 255.255.255.224, and ISP Gateway IP addresses (HSRP - virtual IP address).
- ISP must provide Domain Name Service (DNS) servers (primary and secondary) IP addresses for Internet resolution.

### **Network Devices**

The network devices shall comply with the following characteristics:

- Services provided by the Internet Service Provider (ISP) must be delivered with RJ-45 interface connectors with a 10/100/1000baseT interface.
- Internet Service Provider (ISP) must provide routers and Data media converters or transmission devices in all cases.
- Power standard sources must be dual voltage (110v/60hz and 220v/50hz)

- Devices must be Rack mountable in a standard Commercial off-the-shelf (COTS) rack.
- One separate or individual physical interface connector is required per service.
- Wireless support must be disabled over all of the ISP's provided device.
- Router is/are required. The Router must be capable of supporting 1000Mbps Small Form-Factor Pluggable (SFP) modules

### Service Support and contingencies

- The awarded ISP must warrant service support 7X24X365.
- The vendor must warrant service support on site if necessary 7X24X365, services must be coordinated directly with Embassy's Contracting Office Representative (COR) or Information Technology (IT) representative from the Embassy Information Systems Center (ISC).
- Expected service availability and reliability must be at minimum of 99.8%.
- The awarded vendor must install a redundant cable or Fiber Optic infrastructure known as backup line with channel state inspection mechanism, in order to verify service connectivity and provide immediate lease line backup connectivity services to the Embassy.
- The awarded ISP must provide on line web access data traffic analysis graphs capabilities. Graphs must be updated on a daily basis. Graphs must retain traffic history behavior for at least one year.
- The awarded ISP must provide on line web access to an incident reporting tool. Incidents must capture opening date/time, closing date/time, reporting person, action(s) taken, who took the action to resolve the issue. The Embassy's IT representative must have 24X7X365 access to the Tool. Incidents status must be updated by the ISP. Incidents history must be retained for a period of one year.
- The awarded ISP must provide a central Information Technology (IT) point of contact (POC) in order to promptly coordinate technical issues during the initial installation process.
- The awarded ISP must provide technical support number(s) as well as scalability times and points of contacts to the Embassy's Information Technology (IT) representative or Contracting Office Representative (COR).

<b>Service:</b>	<b>OpenNet - ICASS/INL Warehouse</b>
<b>Name:</b>	OpenNet Plus at the U.S. Embassy INL Warehouse
<b>Description:</b>	One (1) dedicated data channel point-to-point between the U.S. Embassy Bogota and the U.S. Embassy ICASS/INL Warehouse; digital bandwidth must be a minimum of 50 Mbps
<b>Type of Service:</b>	Point-to-Point / Clear channel.
<b>Location:</b>	<b>Site A:</b> U.S Embassy Bogota located at Cra. 45 No. 24b – 27, Bogota, D.C.

**Site B:** STATE/INL Warehouse located at Calle 23B No. 32 – 62 Bogotá.

<b>Service:</b>	<b>OpenNet - Cartagena</b>
<b>Name:</b>	OpenNet Plus at the U.S. Embassy branch office in Cartagena.
<b>Description:</b>	One (1) dedicated data channel point-to-point between the U.S. Embassy Bogota and the U.S. Embassy branch office in Cartagena; digital bandwidth must be a minimum of <b>50 Mbps</b>
<b>Type of Service:</b>	Point-to-Point / Clear channel.
<b>Location:</b>	<b>Site A:</b> U.S Embassy Bogota located at Cra. 45 No. 24b – 27, Bogota, D.C. <b>Site B:</b> U.S. Embassy branch office in Cartagena located at Calle 13b No. 26-78 Piso 5 Edificio Inteligente Chambacú., Cartagena.

<b>Service:</b>	<b>OpenNet - INL Aravi</b>
<b>Name:</b>	OpenNet at the U.S. Embassy INL Aravi Office
<b>Description:</b>	One (1) dedicated data channel point-to-point between the U.S. Embassy Bogota and the U.S. Embassy INL Aravi Office; digital bandwidth must be a minimum of <b>30 Mbps</b> .
<b>Type of Service:</b>	Point-to-Point / Clear channel.
<b>Location:</b>	<b>Site A:</b> U.S Embassy Bogota located at Cra. 45 No. 24b – 27, Bogota, D.C. <b>Site B:</b> INL ARAVI Office located at Bogotá, Autopista Norte, Kilómetro 16, Vía Guaymaral – Hangar2, piso 2, INL Office.

Above mentioned Data services / data point-to-point connections (**OpenNet – ICASS/ INL Warehouse, OpenNet – Cartagena and OpenNet INL Aravi**) must comply with the following requirements:

#### Data Services Requirements and Quality definitions

- Internet Service Provider (ISP) must provide dedicated leased Point-to-Point / Clear channel; data transport media must be fiber optic. Twenty-four (24) hours uplink. Post Internet Service Provider (ISP) connection must be "always on", and must not require the installation of any custom software on the client side.

- Internet Service Provider (ISP) digital bandwidth is the amount or volume of data that may be sent through the channel, measured in megabits per second (mbps), without distortion. Required Bandwidth connection is defined in each service description.
- Internet Service Provider (ISP) must provide a detailed network topology map that shows all possible paths that (ISP) uses for the data traffic.
- The awarded ISP must provide a detailed technical diagram of the proposed solution.
- The awarded Internet Service Provider (ISP) must guarantee full contracted bandwidth availability 7X24X365 from the originator side (Site A) to the destination side (Site B). Bandwidth sharing between other non-Embassy customers is not allowed. Connection Ratio must be 1/1.
- Internet Service Provider (ISP) Round Trip Time (RTT) reports the total time in milliseconds (ms) time to send a small data packet and obtain a reply back; must be equal or faster than 20ms for the Round Trip Time (RTT) for data services for connections in Bogota and faster than 40ms for connections Bogota – Cartagena. These values will be measured via ping end-to-end and will use the average result from a one thousand (1000) packets test.
- Internet Service Provider (ISP) must permit the transit of all Internet Protocol (IP) protocols (especially IPsec), all User Datagram Protocol (UDP) protocols, and all Transmission Control Protocol (TCP) protocol. Filters or sniffers must not be established, connected, or introduced by the ISP for any Embassy channels. If there are any existing filters, sniffers, restrictions, or proxies, they must be identified, and removed prior lease line circuit installation.
- Internet Service Provider (ISP) must have redundancy in its data backbone between Bogota and Cartagena.
- Internet Service Provider (ISP) must provide Fiber Optic connectivity to the very end at the U.S. Embassy Bogota compound Telecommunications Service Entrance Facilities (TSEF) Room. Embassy's Puente-Aranda or Esperanza Avenue ducts can be used to up to TSEF room.
- Internet Service Provider must perform equipment installations in a clean and organized way. Equipment and Wires must be properly identified.
- The Internet leased line must be tested and or monitored for a period of 24 hours before it is placed into production. No packets lost neither CRCs are allowed over the WAN (transceiver, router or switch) interface.
- The Embassy is free to perform its own tests over the Internet channel(s).

### **Network Devices**

The network devices shall comply with the following characteristics:

- Services provided by the Internet Service Provider (ISP) must be delivered with RJ-45 interface connectors with a 10/100/1000baseT interface.
- Internet Service Provider (ISP) must provide routers and Data media converters or transmission devices in all cases.
- Power standard sources must be dual voltage (110v/60hz and 220v/50hz)
- Devices must be Rack mountable in a standard Commercial off-the-shelf (COTS) rack.
- One separate or individual physical interface connector is required per service.
- No router is required.

### **Service Support and contingencies**

- The awarded ISP must warrant service support 7X24X365.

- The vendor must warrant service support on site if necessary 7X24X365, services must be coordinated directly with Embassy's Contracting Office Representative (COR) or Information Technology (IT) representative from the Embassy Information Systems Center (ISC).
- Expected service availability and reliability must be at minimum of 99.8%.
- The awarded vendor must install a redundant cable or Fiber Optic infrastructure known as backup line with channel state inspection mechanism, in order to verify service connectivity and provide immediate lease line backup connectivity services to the Embassy.
- The awarded ISP must provide on line web access data traffic analysis graphs capabilities. Graphs must be updated on a daily basis. Graphs must retain traffic history behavior for at least one year.
- The awarded ISP must provide on line web access to an incident reporting tool. Incidents must capture opening date/time, closing date/time, reporting person, action(s) taken, who took the action to resolve the issue. The Embassy's IT representative must have 24X7X365 access to the Tool. Incidents status must be updated by the ISP. Incidents history must be retained for a period of one year.
- The awarded ISP must provide a central Information Technology (IT) point of contact (POC) in order to promptly coordinate technical issues during the initial installation process.
- The awarded ISP must provide technical support number(s) as well as scalability times and points of contacts to the Embassy's Information Technology (IT) representative or Contracting Office Representative (COR).

<b>Service:</b>	<b>DIN – Embassy</b>
<b>Name:</b>	Dedicated Internet Network for all Embassy Agencies at the U.S. Embassy Bogota.
<b>Description:</b>	One (1) dedicated Internet channel at minimum 100 Mbps.
<b>Type of Service:</b>	Dedicated Internet Channel
<b>Location:</b>	U.S Embassy Bogota located at Cra 45 No. 24B – 27, Bogota, D.C.

Above mentioned service(s) (**DIN – Embassy**) Dedicated Internet connection(s) must comply with the following requirements:

#### **Internet Service(s) description and Quality**

- Internet Service Provider (ISP) must provide dedicated leased channel high-speed access to the Internet; data transport media must be fiber optic. Twenty-four (24) hours uplink. Post Internet Service Provider (ISP) connection must be "always on", and must not require the installation of any custom software on the client side.

- The awarded ISP must have direct connection capability with major United States of America (U.S.A) telecommunication providers (ISPs) at Internet tier 1 level, like NAP Americas (ARCOS), NAP Sprint (MAYA), or any other available backbone paths shall be available.
- The awarded ISP must have redundancy for the Internet connection to the Internet backbone (Tier 1) between Colombia and USA.
- The awarded ISP must have direct connection with the Colombian Network Access Point (NAP). All local traffic going to and coming from Colombian sites must be routed through the Colombian NAP connection.
- Internet Service Provider (ISP) must provide a detailed network topology map that shows all possible paths that (ISP) uses for the internet traffic between ISP hub in Bogota and the ISP hub in USA, as well as for the traffic between the ISP and the Colombian NAP.
- The awarded ISP must provide a detailed technical diagram of the proposed solution.
- Internet Service Provider (ISP) must provide Fiber Optic connectivity from its Bogota's node(s) to the very end at the U.S. Embassy Bogota compound Telecommunications Service Entrance Facilities (TSEF) Room. Embassy ducts entrances are: Puente-Aranda and Esperanza Avenue.
- Internet Service Provider (ISP) digital bandwidth is the amount or volume of data that may be sent through the channel, measured in megabits per second (mbps), without distortion. Required Bandwidth connection is defined in each service description.
- For Internet Services the Internet Service Provider (ISP) must guarantee full contracted bandwidth availability 24X7X365 from the originator side to the ISP's internet gateway. Bandwidth sharing between other non-Embassy customers is not allowed. Connection Ratio must be 1/1.
- Internet Service transmission from the originating information server towards an end server is referred to as downstream; and a transmission from an end user towards the remote server is referred as upstream; Post Internet Service Provider (ISP) Contention Ratio (downstream / upstream) must be symmetric 1:1 /1:1.
- Internet Service Provider (ISP) must provide excellent Quality of Service (QOS) for the connection, that represents the level of consistent download capacity provided, must be the higher QOS percentage possible but, at minimum or greater than 99.8% or the highest possible quality of service connection reaching 100%.
- Internet Service Provider (ISP) Round Trip Time (RTT) reports the total time in milliseconds (ms) time to send a small data packet and obtain a reply back; must be at least equal or faster than 100ms for the Round Trip Time (RTT) for internet services located in the United States (www.state.gov). Also, RTT must be equal or faster than 10ms for local data services; for instance: point-to-point channels or web pages accessed through the Colombian Network Access Point (NAP). These values will be measured via ping end-to-end and will use the average result from a one thousand (1000) packets test.
- Internet Service Provider (ISP) must permit the transit of all Internet Protocol (IP) protocols (especially IPSec), all User Datagram Protocol (UDP) protocols, and all Transmission Control Protocol (TCP) protocols. Filters or sniffers must not be established, connected, or introduced by the ISP for any Embassy channels. If there are any existing filters, sniffers, restrictions, or proxies, they must be identified, and removed prior lease line circuit installation.
- Internet Service Provider must perform equipment installations in a clean and organized way. Equipment and Wires must be properly identified.

- The Internet leased line must be tested and or monitored for a period of 24 hours before it is placed into production. No packets lost neither CRCs are allowed over the router's WAN interface.
- The Embassy is free to perform its own tests over the Internet channel(s).

### **Network Identification**

- Internet Service Provider (ISP) connection must provide a block of one hundred twenty eight (128) static IP Addresses on a single subnet.
- Internet Service Provider (ISP) must provide IP addresses used to identify the single subnet address in Classless Inter-Domain Routing address specification (Network IP address / 25) or, equivalently, its subnet mask 255.255.255.128, and ISP Gateway IP address.
- ISP must provide Domain Name Service (DNS) servers (primary and secondary) IP addresses for Internet resolution.

### **Network Devices**

The network devices shall comply with the following characteristics:

- Services provided by the Internet Service Provider (ISP) must be delivered with RJ-45 interface connectors with a 10/100/1000baseT interface.
- Internet Service Provider (ISP) must provide router(s) and Data media converters or transmission devices in all cases.
- Power standard sources must be dual voltage (110v/60hz and 220v/50hz)
- Devices must be Rack mountable in a standard Commercial off-the-shelf (COTS) rack.
- One separate or individual physical interface connector is required per service.
- Wireless support must be disabled over all of the ISP's provided device
- Router is required. The Router must be capable of supporting 1000Mbps Small Form-Factor Pluggable (SFP) modules.

### **Service Support and contingencies**

- The awarded ISP must warrant service support 7X24X365.
- The vendor must warrant service support on site if necessary 7X24X365, services must be coordinated directly with Embassy's Contracting Office Representative (COR) or Information Technology (IT) representative from the Embassy Information Systems Center (ISC).
- Expected service availability and reliability must be at minimum of 99.8%.
- The awarded vendor must install a redundant cable or Fiber Optic infrastructure known as backup line with channel state inspection mechanism, in order to verify service connectivity and provide immediate lease line backup connectivity services to the Embassy.
- The awarded ISP must provide on line web access data traffic analysis graphs capabilities. Graphs must be updated on a daily basis. Graphs must retain traffic history behavior for at least one year.
- The awarded ISP must provide on line web access to an incident-reporting tool. Incidents must capture opening date/time, closing date/time, reporting person, action(s) taken, who took the action to resolve the issue. The Embassy's IT representative must have 24X7X365 access to

the Tool. Incidents status must be updated by the ISP. Incidents history must be retained for a period of one year.

- The awarded ISP must provide a central Information Technology (IT) point of contact (POC) in order to promptly coordinate technical issues during the initial installation process.
- The awarded ISP must provide technical support number(s) as well as scalability times and points of contacts to the Embassy's Information Technology (IT) representative or Contracting Office Representative (COR).

<b>Service:</b>	<b>Internet DCR</b>
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**Name:** Dedicated Internet Channel for DCR

**Description:** One (1) dedicated Internet Channel. Digital bandwidth must be at a minimum of 60 Mbps.

**Type of Service:** Dedicated Internet Channel

**Location:** Carrera 1 Este # 72A-52 Apt. 304 Torre 2 - SANTA MARIA DE LOS CERROS. Bogotá, Colombia.

<b>Service:</b>	<b>Internet CMR</b>
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**Name:** Dedicated Internet Channel for CMR

**Description:** One (1) dedicated Internet Channel. Digital bandwidth must be at a minimum of 60 Mbps.

**Type of Service:** Dedicated Internet Channel

**Location:** Carrera 3 No. 78 – 00 Bogotá, Colombia.

<b>Service:</b>	<b>Internet VAU-DCR</b>
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**Name:** Dedicated Internet Channel for CMR

**Description:** One (1) dedicated Internet Channel. Digital bandwidth must be at a minimum of 60 Mbps.

**Type of Service:** Dedicated Internet Channel

**Location:** Calle 88 # 9a – 44, Apto. 803., Bogotá, Colombia

Above mentioned services (**Internet DCR and Internet CMR**) Dedicated Internet Services connections must comply with the following requirements:

#### **Internet Service(s) description and Quality**

- Internet Service Provider (ISP) must provide dedicated leased channel high-speed access to the Internet; data transport media must be fiber optic. Twenty-four (24) hours uplink. Post Internet Service Provider (ISP) connection must be "always on", and must not require the installation of any custom software on the client side.
- The awarded ISP must have direct connection capability with major United States of America (U.S.A) telecommunication providers (ISPs) at Internet tier 1 level, like NAP Americas (ARCOS), NAP Sprint (MAYA), or any other available backbone paths shall be available.
- The awarded ISP must have redundancy for the Internet connection to the Internet backbone (Tier 1) between Colombia and USA.
- The awarded ISP must have direct connection with the Colombian Network Access Point (NAP). All local traffic going to and coming from Colombian sites must be routed through the Colombian NAP connection.
- Internet Service Provider (ISP) must provide a detailed network topology map that shows all possible paths that (ISP) uses for the internet traffic between ISP hub in Bogota and the ISP hub in USA, as well as for the traffic between the ISP and the Colombian NAP.
- The awarded ISP must provide a detailed technical diagram of the proposed solution.

- Internet Service Provider (ISP) must provide Fiber Optic connectivity from its Bogota's node(s) to the very end at the U.S. Embassy Bogota's external site's Telecommunications Service Entrance Facilities (TSEF) Room.
- Internet Service Provider (ISP) digital bandwidth is the amount or volume of data that may be sent through the channel, measured in megabits per second (mbps), without distortion. Required Bandwidth connection is defined in each service description.
- For Internet Services the Internet Service Provider (ISP) must guarantee full contracted bandwidth availability 24X7X365 from the originator side to the ISP's internet gateway. Bandwidth sharing between other non-Embassy customers is not allowed. Connection Ratio must be 1/1.
- Internet Service transmission from the originating information server towards an end server is referred to as downstream; and a transmission from an end user towards the remote server is referred as upstream; Post Internet Service Provider (ISP) Contention Ratio (downstream / upstream) must be symmetric 1:1 /1:1.
- Internet Service Provider (ISP) must provide excellent Quality of Service (QOS) for the connection, that represents the level of consistent download capacity provided, must be the higher QOS percentage possible but, at minimum or greater than 99.8% or the highest possible quality of service connection reaching 100%.
- Internet Service Provider (ISP) Round Trip Time (RTT) reports the total time in milliseconds (ms) time to send a small data packet and obtain a reply back; must be at least equal or faster than 100ms for the Round Trip Time (RTT) for internet services located in the United States (www.state.gov). Also, RTT must be equal or faster than 10ms for local data services; for instance: point-to-point channels or web pages accessed through the Colombian Network Access Point (NAP). These values will be measured via ping end-to-end and will use the average result from a one thousand (1000) packets test.
- Internet Service Provider (ISP) must permit the transit of all Internet Protocol (IP) protocols (especially IPSec), all User Datagram Protocol (UDP) protocols, and all Transmission Control Protocol (TCP) protocols. Filters or sniffers must not be established, connected, or introduced by the ISP for any Embassy channels. If there are any existing filters, sniffers, restrictions, or proxies, they must be identified, and removed prior lease line circuit installation.
- Internet Service Provider must perform equipment installations in a clean and organized way. Equipment and Wires must be properly identified.
- The Internet leased line must be tested and or monitored for a period of 24 hours before it is placed into production. No packets lost neither CRCs are allowed over the router's WAN interface.
- The Embassy is free to perform its own tests over the Internet channel(s).

### **Network Identification**

- Internet Service Provider (ISP) connection must provide a block of sixteen (16) static public IP Addresses on a single subnet.

- Internet Service Provider (ISP) must provide IP addresses used to identify the single subnet address in Classless Inter-Domain Routing address specification (Network IP address / 28) or, equivalently, its subnet mask 255.255.255.240, and ISP Gateway IP address.
- ISP must provide Domain Name Service (DNS) servers (primary and secondary) IP addresses for Internet resolution.

## **Network Devices**

The network devices shall comply with the following characteristics:

- Services provided by the Internet Service Provider (ISP) must be delivered with RJ-45 interface connectors with a 10/100/1000baseT interface.
- Internet Service Provider (ISP) must provide router(s) and Data media converters or transmission devices in all cases.
- Power standard sources must be dual voltage (110v/60hz and 220v/50hz)
- Devices must be Rack mountable in a standard Commercial off-the-shelf (COTS) rack.
- One separate or individual physical interface connector is required per service.
- Wireless support must be disabled over all of the ISP's provided device
- Router is required. The Router must be capable of supporting 1000Mbps Small Form-Factor Pluggable (SFP) modules

## **Service Support and contingencies**

- The awarded ISP must warrant service support 7X24X365.
- The vendor must warrant service support on site if necessary 7X24X365, services must be coordinated directly with Embassy's Contracting Office Representative (COR) or Information Technology (IT) representative from the Embassy Information Systems Center (ISC).
- Expected service availability and reliability must be at minimum of 99.8%.
- The awarded vendor must install a redundant cable or Fiber Optic infrastructure known as backup line with channel state inspection mechanism, in order to verify service connectivity and provide immediate lease line backup connectivity services to the Embassy.
- The awarded ISP must provide on line web access data traffic analysis graphs capabilities. Graphs must be updated on a daily basis. Graphs must retain traffic history behavior for at least one year.
- The awarded ISP must provide on line web access to an incident reporting tool. Incidents must capture opening date/time, closing date/time, reporting person, action(s) taken, who took the action to resolve the issue. The Embassy's IT representative must have 24X7X365 access to the Tool. Incidents status must be updated by the ISP. Incidents history must be retained for a period of one year.

- The awarded ISP must provide a central Information Technology (IT) point of contact (POC) in order to promptly coordinate technical issues during the initial installation process.
- The awarded ISP must provide technical support number(s) as well as scalability times and points of contacts to the Embassy's Information Technology (IT) representative or Contracting Office Representative (COR).

Internet APHIS	
<b>Name:</b>	Dedicated Internet Chanel for Animal and Plant Health Inspection Service
<b>Description:</b>	One (1) dedicated Internet Chanel. Digital bandwidth must be at a minimum of <b>10 Mbps</b> .
<b>Type of Service:</b>	Dedicated Internet Channel
<b>Location:</b>	U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

Internet FCS	
<b>Name:</b>	Dedicated Internet Chanel for Foreign Commercial Service
<b>Description:</b>	One (1) dedicated Internet Chanel. Digital bandwidth must be at a minimum of <b>10 Mbps</b> .
<b>Type of Service:</b>	Dedicated Internet Channel
<b>Location:</b>	U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

<b>Service:</b>	<b>Internet DTS-PO Bogota</b>
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**Name:** Dedicated Internet Chanel for DTS-PO in Bogota

**Description:** One (1) dedicated Internet Chanel. Digital bandwidth must be at a minimum of **500 Mbps**.

**Type of Service:** Dedicated Internet Channel

**Location:** U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

<b>Service:</b>	<b>Internet DTS-PO Cartagena</b>
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**Name:** Dedicated Internet Chanel for DTS-PO

**Description:** One (1) dedicated Internet Chanel. Digital bandwidth must be at a minimum of **6 Mbps**.

**Type of Service:** Dedicated Internet Channel

**Location:** U.S. Embassy branch office in Cartagena located at Calle 13b No. 26-78 Piso 5 Edificio Inteligente Chambacú., Cartagena

<b>Service:</b>	<b>Internet DTS-PO Bogota 2 (Backup)</b>
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**Name:** Dedicated Internet Chanel for DTS-PO

**Description:** One (1) dedicated Internet Chanel. Digital bandwidth must be at a minimum of **6 Mbps**.

**Type of Service:** Dedicated Internet Channel

**Location:** U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

<b>Service:</b>	<b>Internet RSO Cartagena</b>
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**Name:** Dedicated Internet Chanel for RSO

<b>Description:</b>	One (1) dedicated Internet Channel. Digital bandwidth must be at a minimum of <b>12 Mbps</b> .
<b>Type of Service:</b>	Dedicated Internet Channel
<b>Location:</b>	U.S. Embassy branch office in Cartagena located at Calle 13b No. 26-78 Piso 5 Edificio Inteligente Chambacú., Cartagena

<b>Service:</b>	<b>Internet DTS-PO USS</b>
<b>Name:</b>	Dedicated Internet Channel for DTS-PO USS
<b>Description:</b>	One (1) dedicated Internet Channel. Digital bandwidth must be at a minimum of <b>12 Mbps</b> .
<b>Type of Service:</b>	Dedicated Internet Channel
<b>Location:</b>	U.S Embassy Bogota located at Cra. 45 No. 24B – 27, Bogota, D.C.

Above mentioned services (**Internet APHIS, Internet FCS, Internet DTS-PO Bogota, Internet DTS-PO Bogota 2 and Internet DTS-PO Cartagena**) dedicated Internet leased lines must comply with the following requirements:

#### **Internet Service(s) description and Quality**

- Internet Service Provider (ISP) must provide dedicated leased channel high-speed access to the Internet; data transport media must be fiber optic. Twenty-four (24) hours uplink. Post Internet Service Provider (ISP) connection must be "always on", and must not require the installation of any custom software on the client side.
- The awarded ISP must have direct connection capability with major United States of America (U.S.A) telecommunication providers (ISPs) at Internet tier 1 level, like NAP Americas (ARCOS), NAP Sprint (MAYA), or any other available backbone paths shall be available.
- The awarded ISP must have redundancy for the Internet connection to the Internet backbone (Tier 1) between Colombia and USA.
- The awarded ISP must have direct connection with the Colombian Network Access Point (NAP). All local traffic going to and coming from Colombian sites must be routed through the Colombian NAP connection.
- Internet Service Provider (ISP) must provide a detailed network topology map that shows all possible paths that (ISP) uses for the internet traffic between ISP hub in Bogota and the ISP hub in USA, as well as for the traffic between the ISP and the Colombian NAP.
- The awarded ISP must provide a detailed technical diagram of the proposed solution.

- Internet Service Provider (ISP) must provide Fiber Optic connectivity from its Bogota's node(s) to the very end at the U.S. Embassy Bogota designated Telecommunications Service Entrance Facilities (TSEF) Room.
- Internet Service Provider (ISP) digital bandwidth is the amount or volume of data that may be sent through the channel, measured in megabits per second (mbps), without distortion. Required Bandwidth connection is defined in each service description.
- For Internet Services the Internet Service Provider (ISP) must guarantee full contracted bandwidth availability 24X7X365 from the originator side to the ISP's internet gateway. Bandwidth sharing between other non-Embassy customers is not allowed. Connection Ratio must be 1/1.
- Internet Service transmission from the originating information server towards an end server is referred to as downstream; and a transmission from an end user towards the remote server is referred as upstream; Post Internet Service Provider (ISP) Contention Ratio (downstream / upstream) must be symmetric 1:1 /1:1.
- Internet Service Provider (ISP) must provide excellent Quality of Service (QOS) for the connection, that represents the level of consistent download capacity provided, must be the higher QOS percentage possible but, at minimum or greater than 99.8% or the highest possible quality of service connection reaching 100%.
- Internet Service Provider (ISP) Round Trip Time (RTT) reports the total time in milliseconds (ms) time to send a small data packet and obtain a reply back; must be at least equal or faster than 100ms for the Round Trip Time (RTT) for internet services located in the United States (www.state.gov). Also, RTT must be equal or faster than 10ms for local data services; for instance: point-to-point channels or web pages accessed through the Colombian Network Access Point (NAP). These values will be measured via ping end-to-end and will use the average result from a one thousand (1000) packets test.
- Internet Service Provider (ISP) must permit the transit of all Internet Protocol (IP) protocols (especially IPsec), all User Datagram Protocol (UDP) protocols, and all Transmission Control Protocol (TCP) protocols. Filters or sniffers must not be established, connected, or introduced by the ISP for any Embassy channels. If there are any existing filters, sniffers, restrictions, or proxies, they must be identified, and removed prior lease line circuit installation.
- Internet Service Provider must perform equipment installations in a clean and organized way. Equipment and Wires must be properly identified.
- The Internet leased line must be tested and or monitored for a period of 24 hours before it is placed into production. No packets lost neither CRCs are allowed over the router's WAN interface.
- The Embassy is free to perform its own tests over the Internet channel(s).

### **Network Identification**

- Internet Service Provider (ISP) connection must provide a block of eight (8) public static IP Addresses on a single subnet per service.
- Internet Service Provider (ISP) must provide IP addresses used to identify the single subnet address in Classless Inter-Domain Routing address specification (Network IP address / 29) or, equivalently, its subnet mask 255.255.255.248, and ISP Gateway IP address.

- ISP must provide Domain Name Service (DNS) servers (primary and secondary) IP addresses for Internet resolution.

### **Network Devices**

The network devices shall comply with the following characteristics:

- Services provided by the Internet Service Provider (ISP) must be delivered with RJ-45 interface connectors with a 10/100/1000baseT interface.
- Internet Service Provider (ISP) must provide router(s) and Data media converters or transmission devices in all cases.
- Power standard sources must be dual voltage (110v/60hz and 220v/50hz)
- Devices must be Rack mountable in a standard Commercial off-the-shelf (COTS) rack.
- One separate or individual physical interface connector is required per service.
- Wireless support must be disabled over all of the ISP's provided device
- The Router must be capable of supporting 1000Mbps Small Form-Factor Pluggable (SFP) modules

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