

SERVICE AGREEMENT

Between

The Maryland Department of Information Technology and

Customer

For

DoIT SIP Trunking Service

This Service Agreement forms a part of the Memorandum of Understanding between the Maryland Department of Information Technology (“DoIT”) and the Serviced Customer. The parties agree as follows:

I. Service Description

Session Initiation Protocol (SIP) trunking is a service offered by DoIT to provision Voice over IP (VoIP) connectivity between an agency owned/managed VoIP enabled phone system and the public switched telephone network (PSTN). The service is offered as a cost effective replacement for legacy PBX Trunks (e.g. PRI Trunks). DoIT SIP Trunking is provided to agency locations over a single or redundant networkMaryland connection. SIP Trunking terminates in the agency’s CPE (Customer Provided Equipment) gateway. A **Session Border Controller (SBC)** is the recommended termination point for all SIP trunking services for agencies to secure VoIP calls to the PSTN.

A. Standard Service:

The following components are included with the standard service:

1. Ability to combine voice and data over a single IP network (i.e network Maryland)
2. DoIT hosted and managed Session Border Controllers for increased security and routing of calls.
3. Ability to increase or decrease the aggregate number of call paths more quickly than legacy voice trunking
4. Predictable and lower cost local and long distance calling rates
5. Telephone Number Portability - DoIT assists subscribers with ordering new phone numbers for SIP Trunking or for porting existing telephone

numbers to the SIP Service (subject to LNP regulatory guidance and constraints)

6. Emergency Calling to 911 as defined by subscriber location.
7. Emergency Call Verification - SIP Trunking subscribers can dial 933 to test the Emergency Calling Information that is transmitted to the 911 Emergency Call Center; 911 calls are routed to the PSAP (Public Service Answering Point) call handling agents for the Telephone number of the caller or calling location
8. FAX service is supported using G.711 Codecs. T.38 protocol fax is not supported.
9. The DoIT SBC defines and monitors the Quality of Service (QoS) status for all sessions, ensuring callers will actually communicate with each other and emergency calls are delivered correctly and prioritized above all other calls

B. Service Exclusions:

The following elements are excluded from the standard service offering:

1. Programming and configuration of non-DoIT managed VoIP and SIP communication equipment.
2. Installation of premise wiring
3. Modification of any non-DoIT equipment that is directly connected to the Customer's network
4. Service quality on the Agency network if not managed by DoIT.

Auxiliary services may be available upon request at an additional cost. These costs are not included in the budgeted services that DoIT provides and shall be the responsibility of the requesting agency. For any work requested in this area, DoIT will not be able to proceed until fully funded by the requester through a funds certification document.

The following services are add-ons that may be requested. Costs for these items are variable and will be clearly defined and agreed to before moving forward with the request.

1. Agency Session Border Controllers
2. Fully encrypted SIP Trunking services
3. Custom VoIP call routing features

II. **Service Dependencies**

To ensure the service described herein is delivered consistently and in accordance with state standards, the customer must meet the following requirements:

| | |
|-----------------------|--|
| DoIT Services: | <ul style="list-style-type: none"> ● Subscribe to network Maryland VPRN services designed for VoIP Support ● SBC engineering & consulting for DoIT Session Border Controller configuration |
| Technical: | <ul style="list-style-type: none"> ● DoIT adheres to E.164 formatted numbers in INVITEs sent to your equipment. <i>Ex: +13035551212.</i> ● Agency SIP Gateway equipment must send 10, 11 or E.164 formatted digits to DoIT for PSTN calling. 7 digit dial plans are unsupported. ● DoIT utilizes IP Port 5060 for all standard SIP signaling ● DoIT uses the IP Port range 10,000 - 20,000 for RTP (even numbers) and RTCP (odd numbers). If you use a firewall you will need to allow these ranges at a minimum and additional ranges per CPE requirements. ● DoIT will always send RTP to the address indicated in the SDP received. ● DoIT recommends a Diversion Header on all forwarded calls that includes the original called number in compliance with rfc5806. Various problems may occur if Diversion is not included when forwarding calls ● The SIP REFER method is unsupported. ● Registration is unsupported for SIP Trunking ● Digest authentication is unsupported. ● DoIT SIP Trunking does not support: <ul style="list-style-type: none"> ● SIP Registration ● Codec negotiation - the service delivers all calls in the G.711 codec format only. ● Early Media ● Progress Inband ● NAT traversal |
| Non-Technical: | <ul style="list-style-type: none"> ● The agency must provide 24 x 7 x 365 points of contact to DoIT for coordinating outages, emergency maintenance/restoration, and change management ● Subscriber must adhere to the Number porting process. ● Standard number porting requires 30 days upon LOA Letter of Authorization completion by the agency and submission to DoIT. |

III. Responsibility Model

The following contains a non-exhaustive list that describes the responsibilities for both DoIT and the customer and may be updated periodically. Updates will be considered effective 14 calendar days from the posting date of the new service agreement.

A. DoIT Responsibilities for Customer (Enterprise)

DoIT shall be responsible for the following activities in coordination with the Customer receiving DoIT enterprise managed services:

1. Provide the SIP Trunking, number porting, and other configuration worksheets required to implement the service.
2. Maintaining all SIP Trunking service elements and infrastructure managed by DoIT.
3. Providing SIP Infrastructure maintenance, patching and update changes.
4. Coordinate all carrier Change Orders and Service Requests
5. Providing all Local and domestic Long Distance calling usage included with the service.

B. DoIT Responsibilities for Customer (Non-Enterprise)

DoIT shall be responsible for the following activities in coordination with the Customer for which DoIT does not provide enterprise managed services:

1. Provide the SIP Trunking, number porting, and other configuration worksheets required to implement the service.
2. Providing SIP Infrastructure maintenance, patching and update changes for DoIT managed service elements.
3. Coordinate all carrier Change Orders and Service Requests
4. Providing all Local and domestic Long Distance calling usage included with the service.

Customer Responsibilities

The Customer shall be responsible for the following activities:

1. Provide a SIP Ready Session Border Controller or gateway device capable of supporting SIP Trunking via an MPLS connection over networkMaryland.
2. Provide DoIT CCP (Concurrent Call Path requirements).
 1. **Note: CCP is equal to the number of simultaneous calls at any point in time.**
3. Validating all provided network information is correct
4. Properly securing their own network
5. Ensuring all agency controlled firewall and network settings are properly configured to pass voice traffic and the DoIT SOC is informed of any required managed firewall changes.
6. Arranging meetings or completing other required coordination activities with the agency's third-party vendors as required
7. Supporting the data network and troubleshooting VoIP issues up to the network demarcation (DMARC)
8. Ensuring that all LNP (number porting) information is up to date and accurate

IV. Service Level Agreements (SLA's)

A. Availability

Service availability includes the duration of time the service is operational during a calendar month and the level at which the service functions. The table below further outlines DoIT's service targets.

| Category | Measure |
|--------------|---|
| Availability | 99.99% uptime (monthly) |
| Capacity | Each Concurrent Call Path requires available network capacity of up to 144 kbps |
| Reliability | |

B. Maintenance

DoIT may modify the service without degrading its functionality or security features.

1. Scheduled Maintenance

Regular maintenance must be performed to maintain availability and reliability standards and includes replacing hardware, upgrading software, applying patches, and implementing bug fixes.

1. Scheduled maintenance will be performed outside of normal business hours (8 pm - 6 am Monday - Friday; weekends and holidays)
2. The customer will be notified no less than five (5) business days prior to the scheduled activity.
3. Within twenty-four (24) hours after the completion of the scheduled activity, the Customer will be notified.

2. Unplanned Maintenance

1. DoIT will attempt to notify the Customer of any unplanned maintenance activities no less than two (2) hours prior to commencement. Note: Emergency activities requiring immediate remediation may reduce or eliminate this window.
2. Within twenty-four (24) hours after the completion of unplanned maintenance activity, the Customer will be notified.

C. Service Delivery

DoIT will deliver the requested services to the customer in a timely manner according to the following standards.

| Category | Measure |
|----------|---------|
|----------|---------|

| | |
|--|---|
| Initial Ticket Response and Customer Contact | 3 business days |
| Service technical data gathering documents | Upon execution of a SIP Trunking Service SOW (Statement of Work) Note: If more than one location is involved, a separate Data Gathering form and Carrier LOA (Letter of Authorization) must be completed. |
| Implementation and delivery | Once the quantity of concurrent call paths and bandwidth requirements have been determined, the agency customer is responsible for ordering any network services required to support the design. In some cases a phased implementation may be desirable. This will depend on the complexity of the agency's VoIP network. |
| Number Porting | A carrier LOA (Letter of Authorization) must be completed by the requesting agency and accompanied by the CST (Customer Service Record for the telephone billing. The number porting to SIP Services is a 30-day reservation process |

V. Support and Service Management

A. Support

DoIT will provide support via telephone, email, or in-person according to the SLA's outlined above.

1. The DoIT Service Desk is available twenty-four (24) hours a day, seven (7) days a week, to provide Tier 1 telephone support.
2. Tier 2 support will be provided during regular business hours (8 am - 5 pm) Monday thru Friday, excluding state holidays and state closings.
3. Tier 3 support will be provided as needed to address further escalations
4. DoIT will serve as the primary support provider of the service outlined herein except when third-party vendors are employed.

B. Incident Management

Incidents reported to the DoIT Service Desk will be triaged and managed based on priority as follows*:

| Priority (P) | Description | Response Time | Target Resolution |
|--------------|--|---------------|-------------------|
| P1 | An incident that results in a total cessation of service across the Customer | [2] hours | [24] hours |
| P2 | An incident that results in a partial cessation or | [4] hours | [2] business |

| | | | |
|--|--|-------------------|-------------------|
| | disruption of service, administrative access issues, or loss of other essential business functions. | | days |
| P3 | Disruption of service for of non-essential functionality, service questions, and administrative requests such as account creation, deletion, and changes | [2] business days | [5] business days |
| *Note: At times, it may be necessary to contact a vendor for assistance, thereby lengthening response times. | | | |

C. Request Management

Requests to move, add, or change service shall be handled as follows:

1. **New Service(s)**

Entities seeking to utilize the service or deploy optional services outlined herein must:

1. Submit a request via email to doit.intake@maryland.gov explaining the business needs or challenges.
 - a. DoIT will evaluate the request to ensure that the service meets the entity's business needs.

2. **Service Modifications**

To increase, decrease, or alter existing service, the Customer must:

1. Submit a request via email to doit.intake@maryland.gov
 - a. Service modifications include increasing or decreasing quantity of Concurrent Call Paths (CCP), relocation of service, or network re-configurations.
 - b. DoIT will log the request and assign it to the appropriate team for fulfillment.
 - c. Requests that involve increases to costs will result in billing changes to the agencies which will require a Statement of Work and fund certification to make the change.

C. Outages

DoIT will notify the Customer via email of any outages or service degradation resulting from maintenance, fault isolation, or other disruptions.

D. Support and Service Management Exclusions:

While DoIT strives to tailor support and maintenance activities to match the customer's mission, there may be limitations that hinder our ability to satisfy changing business needs. As such, support and service management activities do not include:

1. Development or management of customer applications
2. Repairs or services for the customer's third-party technologies.

3. Spearheading Customer initiatives
4. Project management

VI. Costs for Service

DoIT provides this service via a shared service model, which allows the state to recognize reduced pricing based on economies of scale.

- A. The Customer charges budgeted for the current fiscal year are outlined in the DoIT Shared Services Annual Invoice.
 1. The unit of measure for which charges are derived for this service is per CCP (Concurrent Call Path) which is the maximum simultaneous voice calls inbound and outbound to the PSTN.
 2. Session Border Engineering is billed at the rate published in the current fiscal year Rate Sheet
 3. Reference the current fiscal year Rate Sheet for additional information
- B. All services delivered by DoIT under this agreement are done so on a 100% reimbursable model and therefore costs will be evaluated and adjusted annually to account for fluctuations in the number of shared services used and the underlying costs to deliver that service.

VII. Termination of Service

This service will automatically be renewed unless the customer and DoIT mutually agree in writing to adjust or discontinue.

- A. The customer must provide ninety (90) days advance written notice to terminate services. Due to the nature of the state financial system budgeting for IT services, terminations will only be effective at the end of the fiscal year following the conclusion of the ninety (90) day notice period.

VIII. Warranty, Limitations, and Exclusions

- A. The Availability Service Level for this Service is 99.99% per month.
 1. Service is considered "Unavailable" if Customer is unable to initiate outbound or receive inbound calls for reasons other than an Excused Outage.
 2. An Unavailability event is measured from the time Customer opens a trouble ticket with the DoIT Service Desk until the affected service is restored.
 3. 911 Service May be Limited or Not Available over SIP Trunks during an outage..

4. All SIP Trunking Services are subject to the terms and restrictions contained in the State of Maryland SIP Trunking Services agreement contained in the CONTRACT BETWEEN THE MARYLAND DEPARTMENT OF GENERAL SERVICES AND CENTURYLINK COMMUNICATIONS, LLC UNDER - MiCTA MASTER SERVICE AGREEMENT 195AN MTTISAFBOS2022 0827

B. Emergency Calling Service/E911 will not be available if via SIP Trunking during a major outage or if broadband/interconnect connection has failed or is disconnected

1. Your electrical power is disrupted
2. The current location of your handset has not been registered with DoIT
3. If you are unable to immediately complete a 911 call, PLEASE USE THE EMERGENCY PHONE NEAREST YOU.