

NWN SUNCOM Communication Services SIP Trunking Service Description

This Service Description Document (SDD) describes offer-specific terms of the Unified Communications Services made available by NWN Corporation to our customers (“Subscriber,” “you” or “your”).

NWN is a technology solution provider that works with customers to understand their current environments and the challenges they face in those environments to then design and deliver technology solutions that address those challenges and deliver positive business outcomes. We organize those technology solutions around 5 core offerings: Unified Communications, Contact Center, End User Devices, Connectivity, and Security. We leverage deep expertise and experience in advanced networking, data center and connectivity technologies to deliver these offerings, and we provide a flexible delivery model that enables customers to consume these offerings based on their preference, whether that is on-premises or hybrid, public cloud or private cloud.



These Terms shall adhere to the SUNCOM Communication Services contract.

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1. NWN Unified Communications Essential & Complete Offering

1.1. NWN SIP Trunking Service Overview

NWN's SIP Trunking Offering is a solution as a service that integrates PSTN and SMS communications with the customer's existing calling or contact center environment to create a unified end user experience.

NWN's SIP Trunking service provides enterprise-ready telecommunications that can easily integrate into a premise or cloud unified communications or contact center platform. It is built on Bandwidth's industry leading SIP service which offers:

- Voice and SMS services
- Communication APIs
- Enterprise and Remote Worker 911
- Phone number management

1.2. Telecom (PSTN) Services Packages

NWN Centralized PSTN services can be purchased individually as required in four different models:

- User Bundle
- Committed Bundle for Toll Free and International
- Pay as You Go (Per Minute)
- Standalone Centralized SIP Trunking

1.2.1. User Calling Bundle

1.2.1.1. Standard User Calling Bundle

Part Number	Description
UC-AAS-CIR-STDC	Standard Calling User

Features Included:

- 1 DID
- Unlimited Local & Long Distance in 48 Continental United States Minutes per [PSTN Utilization Policy](#)
- E911

NWN Deliverables:

- Provision and Activate New or Ported DID

Customer Responsibilities:

- Each Common Area and Calling User must have Standard Calling Bundle

Assumptions: Extension-to-Extension Calls within the Customer account never incur any usage fee and are

unlimited, except to the extent that such calls are forwarded to another number that is not on the Customer account.

Additional Calling Credits may be purchased through the Auto-Purchase feature, which can be selected for automatic purchase in various increments on the Administrative Portal. Auto-Purchase is triggered when the combined usage of all End Users on an Account exceeds the total Calling Credits or when End Users make calls with additional fees (e.g., 411).

Minute Bundles and Calling Credit Bundles expire at the end of month and cannot roll over to the following month. Auto-Purchased Calling Credits expire twelve (12) months from date of purchase. Bundles may not be sold, transferred, assigned, or applied to any other customer. NWN reserves the right to charge reasonable overage fees when Customer exceeds the usage limits on Services that have such limits during two consecutive billing cycles.

[Please see PSTN Assumption Section](#)

1.2.2. Committed Minute Bundles

1.2.2.2. Toll Free Minutes

Part Number	Description
UC-AAS-CIR-TFDDID	Toll Free DID
UC-AAS-CIR-TF1000	1,000 Minutes of Toll-Free
UC-AAS-CIR-TF10K	10,000 Minutes of Toll-Free

NWN Calling User Bundle does not include toll-free calling. Toll-Free access services are available for use with the NWN Unified Communication Service at the applicable rates. The Toll Free Bundles are billed monthly. There is no monthly roll-over. Customer must request from NWN the ability to use Toll Free Services. Applicable Toll-free Rates are posted [HERE](#)

Features Included:

- Toll Free DID
- Monthly Minutes based on the Toll-Free Minute Calling Bundle purchased (1,000, or 10,000).

NWN Deliverable:

- Provision and activate Toll Free DID and
- Bill Customer at the applicable Rates

Customer Responsibilities:

- Request from NWN Toll Free Services via pre-sales engagement or through a change order during the assess or support phase of the service contract

Assumptions:

- If customer purchases a Toll-Free DID they must purchase a Toll-Free Minute Calling Bundle

- Customer will be billed for overages at the applicable rates monthly in arrears.
- [Please see PSTN Assumption Section](#)

1.2.2.3. International Minutes

Part Number	Description
UC-AAS-CIR-INTL1000	1,000 Minutes of International Calling – Committed per Month
UC-AAS-CIR-INTL10K	10,000 Minutes of International Calling – Committed per Month
UC-AAS-CIR-INTLM	1 Minute of International Calling – Overage

Features Included:

- International PSTN Service to available countries on the published rate tables

NWN Deliverable:

- Enable International Services
- Bill Customer at the applicable Rates Monthly based on Usage (1,000 or 10,000)
- Overage per minute above the committed rate (UC-AAS-CIR-INTLM)

Customer Responsibilities:

- Request from NWN Sales or Customer Success International Services via sales engagement or support ticket
- Through a change order during the assess phase of the project
- During their support service contract

Assumptions

International Calling Credit Bundles can be purchased in addition to any base amount included with the purchased tier. International External Calls are charged based on per minute usage on the Account per destination rates [OUTSIDE USA: Outbound calling rates will be applied based on the rate in effect at the time of use.] Currently effective rates are available [HERE](#)

1.2.3. SIP Trunking

Part Number	Description
UC-AAS-CIR-SIPTRUNK	Dedicated SIP Trunk (20 Call Paths)

Some customer may require replacement of PRIs when converting to Standard IP telephony. SIP Trunking services

are available to directly connect customers collaboration endpoints and users to the PSTN. Trunking services are available as monthly as a service charge for the length of the contract.

Features Included:

- 3,000 Local & Long Distance Minutes a Month of PSTN Services per Trunk

NWN Deliverables:

- Configure (1) SIP Trunk between NWN's Centralized SIP Services and Customer's Communications Manager.

Customer Responsibilities:

- See Appendix C for Customer Requirements and Assumptions

NWN Assumptions:

- See Appendix C for Customer Requirements and Assumptions
- See Appendix E for PSTN Requirements and Assumptions

1.2.4. Additional DIDs

Part Number	Description
UC-AAS-CIR-DID	Standard DID (New or Ported)
UC-AAS-CIR-DIDSPARE	Spare DID not in use (New or Ported)

NWN provides Direct Inward Dial Telephone Numbers (DID/TN) services for customers that would like a standalone DID to reserve for future growth purposes such as new: end users, devices, or services.

Features Included:

- 1 DID New or Ported
- E911 service not included

NWN Deliverable:

- Activation of 1 DID
- Internal routing of DID to non-E911 location (UC-AAS-CIR-DID only)

Customer Responsibilities:

- Request DID from NWN

Assumptions:

The Following services are NOT included:

- Local or Long Distance
- Toll Free Service
- International Service

- Emergency Service (Not Active when Unassigned)

[PSTN Assumption Section is listed here](#)

1.2.5. Overage Minutes

Part Number	Description
UC-AAS-NWNFL-LLDOVR	Local and long distance per minute charge for exceeding a commitment plan

Features Included:

- One minute of local or long distance service through NWN's SIP trunking service that exceeds the customer's commitment level. Usage is based on number of minutes per call rounded up to the nearest minute.

1.2.6. DID Activation Request (Enter total # of New/Port Requests)

Part Number	Description
UC-PRO-DID-ACT	New DID Activation Request (Enter total # of New/Port Requests)

Features Included:

- Professional services to activate new or ported numbers onto Customer's Centralized PSTN Services.

NWN Deliverables:

- Activate and enable Customer DIDs either New or Ported onto Customer's Centralized PSTN Services
- Coordinate with Carriers to obtain new or ported numbers
- Coordinate with FCC and follow all State, Local, and Federal regulations

Customer Responsibilities:

- Submit accurate paperwork and documentation to NWN Telecom team in a timely manner and in accordance to the project plan.

Assumptions:

- For Each Request to obtain new or ported numbers (Active New Service before or during a Service Contract) Customer's may be charged the Activation fee.

Where permitted in the US Mainland, Customer may port telephone numbers to Bandwidth.com, NWN's SIP Provider, from another carrier and may request another carrier to port a telephone number from Bandwidth. There are mandated rules and regulations regarding the porting of numbers to and from Bandwidth.

With the purchase of DID Service SKUs, there is no separate charge for the porting of telephone numbers to NWN. Customer must advise NWN of its request to port existing telephone numbers to NWN, and NWN will process the request as required with the other carrier.

Customer may port existing telephone numbers assigned to Customer for use with its NWN Service to another carrier. Customer's new carrier must interconnect and receive ported telephone numbers in the same Local Calling Area with which the ported-out telephone numbers are normally associated. Customer must contact their new carrier and request that their NWN/Bandwidth telephone number be ported to the new carrier, and the new carrier must process the customer's request as required by NWN.

2. Appendix A. Provisioning and Onboarding Methodology

2.1. Project Management Methodology

NWN manages projects with a documented and proven methodology that aligns with our customer's specific needs. Our project delivery methodology is consistent with the Project Management Institutes PMBOK guidelines.

NWN will assign a Project Manager to manage all aspects of project delivery. The assigned Project Manager will leverage the NWN project methodology, to ensure the successful delivery of the project and will be in contact to coordinate project kickoff activities within two weeks of execution of the Service Contract.

2.1.1. Assigned Project Manager

The following outlines the roles and responsibilities of the NWN Project Manager:

- Act as a single point-of-contact
- Conduct project kick-off activities and ensure thorough project communication with project stakeholders and team members
- Schedule and facilitate weekly project status meetings with all relevant parties and stakeholders
- Prepare, distribute & communicate weekly status reports, action item, opened and closed issues, critical paths and related project reports
- Develop & maintain a detailed project plan, task plan, schedule & communications plan
- Manage project scope and respond to change requests through the Project Change Request (PCR) process
- Define and manage the escalation process
- Review all project documentation and deliverables
- Oversee knowledge transfer

In addition, a designated NWN Customer Experience Manager will be assigned. Their role is to work hand-in-hand with your designated contacts as your advocate and to initiate activities that allow for a smooth transition from project activities to support activities.

2.1.2. Assigned Customer Experience Manager

The following outlines the roles and responsibilities of the NWN Customer Experience Manager (CEM):

- Customer advocate for any questions and concerns that may arise during project activities
- Supports onboarding activities (establishing operating process, contacts for support)
- Assures a smooth transition from integration/provisioning phases into the support phases of the project

2.1.3. Project Management Process

To deliver the highest quality project implementation, NWN brings a tightly controlled, comprehensive project management process that emphasizes detailed up-front discovery and design to help avoid costly, time-consuming missteps later in the deployment cycle. This approach has a proven track record of success.

2.1.4. Major Milestones /Deliverables

Our documented and proven methodology includes:

- **Initiate** Project Kick Off meetings to review the scope with the project team and develop the project management plan
- **Assess** Current Target Infrastructure
- **Design, Validate, Test and Pilot** the New Environment
- **Prepare** Build the Initial Unit
- **Execute** Production Integrations/Migrations, Cut Over, and Train Users
- **Transition** your New Platform to Customer Support, Knowledge Transfer

2.1.5. Project Work Breakdown Structure and Timeline

The Project work breakdown structure and timeline is planned and managed in Microsoft Project and is included in the Microsoft Project Task Plan.

2.1.6. Requirements Management Process

The overall requirements management process is focused on handling the requirements after they have been initially approved. This includes maintaining changes or additions to the requirements throughout the entire project and tracking the requirements throughout the lifecycle.

Name	Requirements Management Responsibilities
NWN Project Manager	Manages scope change requirements through leadership of the effort to communicate project requirements, document adjustments to project requirements and facilitates scope change management activities for all approved changes to requirements.
Project Team	Contributes to the identification of project requirements.

2.1.7. Risk Management Process

The methodology utilized by NWN for risk management includes a progressive approach. As a project begins, many elements of the project are unknown. As the project progresses, more information is gained and project

risks become more visible. Performing an initial Risk Assessment will be the responsibility of the Project Manager. The Project Manager will determine the most appropriate method for executing the initial risk assessment. Identified Risks are tracked reviewed throughout project execution.

Funding for risk management is contained in the overall project budget. Changes in Scope due to risk mitigation activities will require change management.

Roles and Responsibilities

Name	Risk Management Responsibilities
NWN Project Manager	Identifies project related risk, documents project risks, leads the effort to mitigate risk, and leads the effort to communicate project risk.
Project Team	Contributes to the identification of project risks. Assist in the mitigation of risks.

Rules and Procedures

Communication

Communication regarding risk will follow the project communications plan.

Tracking

Tracking of risk elements and activities should be documented in the Risk Management Worksheet.

Risk Impact Analysis Approach

The assigned Project Manager will utilize the initial Risk Assessment to determine the appropriate next steps in analyzing the project risk. The PM will document details regarding the project risks, the probability of occurrence, the anticipated impact to the project, the likely exposure and an agreed upon mitigation plan.

2.1.8. Change Management Process

The NWN Project Manager will utilize the Change Management Process to manage the lifecycle of all changes. All Change Requests will be documented, assigned and tracked for progress.

Roles and Responsibilities

Name	Change Management Responsibilities
NWN Project Manager	Documents project change requests, facilitate change request review and decision making, leads the effort to communicate change request and their status, escalates if change cannot be resolved by the review team and supports re-baselining activities if necessary
Project Team	Contributes to the identification of project risks. Assist in the mitigation of risks.

Rules/Procedures

Any team member may submit a change request to the Project Manager. The requested change will be clearly documented and will explain any impact that the change will have on the project and associated deliverables. The project manager will review the request and determine if the change is appropriate. If so, it will be forwarded to the project sponsor for final decision.

Change Impact Analysis Approach

Analysis of all requested changes will be performed to identify the impact of the change on the Project Costs, Risks, Schedule and Resources. The results of this analysis will be documented in the NWN Change Control Worksheet.

2.1.9. Communications Management Process

Properly communicating on a project is a critical success factor for managing the expectations of all stakeholders. This includes reporting from the project team to the Project Manager and reporting from the Project Manager to all stakeholders. The assigned Project Manager is the project communication steward for all project related information exchanges.

The sample Communications Matrix below provides an example of a project's communications. To keep the communications relevant and timely, we also include plans for collecting and responding to feedback.

Communication Item	Description / Purpose	Frequency	Audience
Project Kick-off Meeting	Meeting to describe a high level view of project, introduce project team members & their roles, communicate project structure & initial high-level business needs & setup future meetings	One-time	Customer, NWN
Project Team Status Meetings	Review project plan, progress & status, log & prioritize Constraints / Assumptions / Issues / Risks items, Critical Path (determine if any obstacles to completing critical tasks, escalate obstacles for resolution), share completed deliverables, discuss topics	Weekly throughout Implementation	Customer, NWN
Design Review Meetings	Team review of specification or technical design, satisfy that all issues are resolved & deliverable contents are complete	As Needed	Customer, NWN
Turnover Meetings	Formal handoff among NWN departments / disciplines	As Required	Project Stakeholders
Lessons Learned Meeting	Review opportunities for improvement & reinforcement of best practices	One-time	Project Stakeholders

2.1.10. Time Management Plan

The time management plan must describe the process for controlling the proposed schedule and how the achievement of tasks and milestones will be identified and reported. The plan must also detail the process to identify, resolve, and report resolution of problems such as schedule slippage. The time management plan will include:

Time Management Process

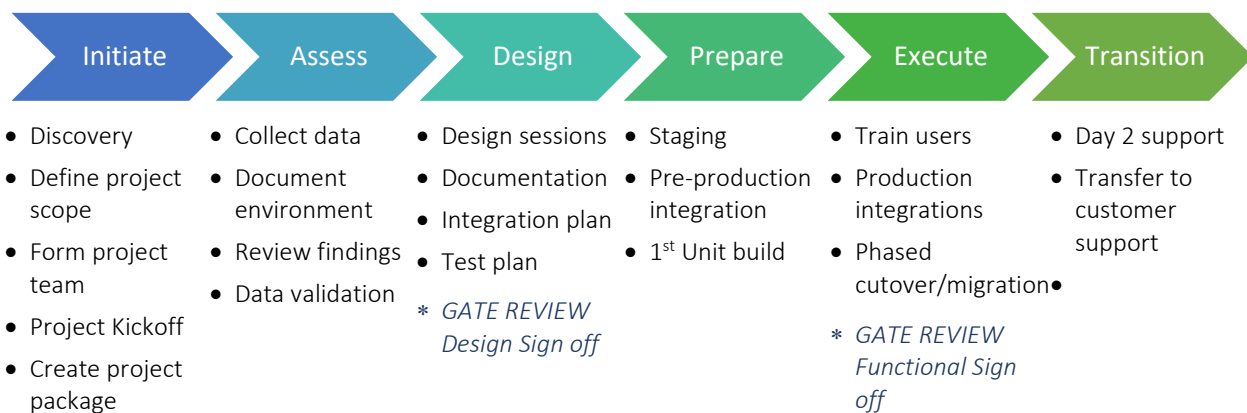
The NWN Project Manager is responsible for breaking down the implementation into measurable tasks and milestones. The work breakdown structure is applied to the project schedule and allows the Project Manager to closely monitor project timelines to avoid schedule overruns. Project Timeline health is reviewed in weekly status meetings to allow for timely identification of schedule slippage. If schedule slippage occurs, The Project Manager is responsible for planning steps for resolution with the Project Team and communicating the plan and progress.

Role and Responsibilities

Name	Time Management Responsibilities
NWN Project Manager	Responsible for Time Management during the implementation phase of the SOW.

2.2. Provisioning Process

Project Provisioning Flowchart



2.2.1. Initiate Phase

Form Project Team – NWN will organize project team including project management, engineering and support resources.

Project Kickoff (Internal & External) – NWN will host a Project Kickoff meeting with the customer to review project timeline, requirements, goals, and customer stakeholders in order to have a successful implementation. The Customer is required to have the correct stakeholders in the Project Kickoff meeting. It is highly suggested the following customer stakeholders attend this meeting:

- Project Sponsor

- IT (Voice/Collaboration) Administrator
- Network Administrator
- Project Team

Scheduling Design & Status Meetings - NWN and client will work together to identify resources for project and coordinate schedules for the Design and Status meetings

Milestones & Deliverables:

1. Project Kickoff Meeting Notes, including communication plan
2. Schedule for Design & Status Meetings
3. Project Work Schedules & Related Meetings

2.2.2. Assess Phase

End User Requirement Definition and Configuration Database Gathering – NWN will provide User Database form to be completed by the Customer and reviewed at the Design Meeting. These topics will include:

- Coordinate with Customer to plan, design, and implement all station and telephone programmable features.
- Perform Customer interview and key-sheet preparation/configuration database of end-user station requirements to be used for system programming and station deployment.
- Create worksheets to guide Customer representatives to plan and design features such as line appearances, hunt groups, pick-up groups, etc.
- Port, Device Count and/or Location Information - Customer is to provide detailed, accurate, and current information to avoid delays in the above schedule which may require a Change Request correction.

Milestones & Deliverables:

1. End User Requirement Definition

2.2.3. Design Phase

Circuit design overview & planning – NWN will work with the Customer to integrate any contracted circuits into the network topology. The Client will be included on communication and planning events including:

- Scheduling and completion of vendor site survey
- Installation of circuit
- Extension of point of demarcation
- Installation and testing of Out-of-Band access solution.

Network Design Meeting – Review with Customer the network infrastructure requirements document and answer any Customer questions that have arisen. See Customer Expectations “Assumptions, Requirements, and Terms” section below.

NWN Unified Communications Design Meeting(s) – After the completion of the network design meetings, NWN and Customer’s team will hold a series of design meetings to discuss the technical aspects of the NWN Unified Communications Solution. NWN expects the Customer will come prepared with documentation and resources necessary to cover all topics. These topics will include:

- Architecture and software version features review
- Unified Communications device compatibility check
- Migration strategies
- User database review
- Auto-Attendants and specialized voice-mail options
- Call flows
- Dial Plan
- Discussion of downtime and risks
- Customer responsibilities
- Fax over IP current and future design
- Integration into other systems
- Application and voice gateway co-existence planning
- End-user training requirements and training plan.

Existing Telephony Integrations – NWN will work with Customer’ IT staff to integrate the existing telephony solutions with NWN’s hosted environment. A plan will be created that outlines system will co-exist in both environment (if possible) during the migration period.

Vendor Communications – Once cutover strategy is defined, NWN and Customer will meet with NWN Contracted 3rd party vendors to establish, review and agree on cutover plan, if required. If other 3rd party vendors need to involved, then the Customer must coordinate the schedules for those vendors.

“Fallback Plan” – NWN and Customer will build into the design a fallback plan for each stage of the migration. Being that the rollout will be a phased migration, dial plans and network connectivity will be in place for the migration, thus making a fallback plan easier to execute on.

Gate Review – At the end of this Design meeting, NWN has gathered enough information to create final design document for the installation of the equipment. The design document will include configuration parameters specific to the install and any key technical decision made during design. The design will conform to Cisco guidelines and recommendations and the completed design document will be submitted for customer approval prior to proceeding with the install.

Milestones & Deliverables:

1. Design meeting and updated project plans for implementation of the Hosted Communications Solution.
2. Design Document(s) and Acceptance

2.2.4. Prepare Phase (Implementation and Testing)

Provisioning – NWN will provision the Solution which and all of its applications in NWN’s Datacenters. The NWN Solution will include the following components:

- Call Control Servers - These will provide call processing.
- Voicemail with Unified Messaging Server(s) – This will provide unified messaging services.
- Enhanced 911 Notification Server(s) – This will provide E911 services.
- Optional – Instant Messaging Server(s) – This will provide Instant Message and Presence
- Optional - HCS-CC Server(s) – This will provide contact center services.
- Optional – Paging and Emergency Notification Server(s) / Gateway(s) – this will provide paging services
- Cisco ISR routers for PSTN connectivity – to be located in the customer Data Centers.
- Establish MPLS Communication between Customer site(s) and Data Center.

- NWN's service assurance, monitoring and management suite

Standard Phone Features - NWN will configure and test all station equipment. The list below is a sample of the features NWN will configure. The final list of features and configurations are determined during the design phase. The following is a sample of the features that will be implemented:

- Multiple line appearances on phone - Fast Transfer: Blind or Consult
- Busy Lamp Field
- Call Forward: <Busy, No Answer> Voicemail - Call Forward: <All> Restricted Access
- Standard Ring-Tones
- I-Divert active/inactive)
- Call waiting (yes/no)
- Internal Caller ID
- External Caller ID (as supported by carrier) - Last Number Redial
- Corporate Directory
- Station Speed Dial with configuration changes from IP phone - Call Park
- Meet-Me
- Call Detail Records
- Out of "The Box" Music On Hold
- Single Number Reach " Find Me, Follow Me"
- As sited in Customer's Hosted VoIP Project.

Milestones & Deliverables:

1. Provision Solution and Applications in NWN Datacenters
2. Configure, Test and Label Station Equipment

2.2.5. Execute Phase (Cutover and Training)

Phased implementation – NWN, working with the Customer's technical team, will implement the new solution in phases as defined in the Design Phase

On Premises Equipment – Below is a list of NWN owned equipment that may be installed on the Customer's premises. This will vary based on contracted services SKUs

- MPLS Routers
- Voice / SRST Gateways
- Analog Voice Gateways
- Endpoints
- Analog Telephony Adapters (ATA)

Train the Trainer / End User Training - The training to be provided as part of this project in the form of "self-paced user training" for which NWN will be responsible for:

- Provide Customer with the training material in the form of Quick User Guides and/or Web Based Tutorial for future use.

Administration Training – NWN will provide training for each implementation. The exact type of training required will be determined during Service Contract negotiations.

Network/System Troubleshooting – NWN will troubleshoot and diagnose technical issues associated with this project. Any issues that arise from Customer provided or owned devices and/or configurations related to the NWN Solution will require a change order and may affect the schedule of events planned for this project. NWN will work with Customer to isolate and identify network/system issues as well as provide assistance within reasonable boundaries. Any issues outside the scope of this project are the responsibility of Customer.

GATE REVIEW: Production readiness acceptance – NWN will review the production cutover and implementation with the customer to verify that the solution is functioning in their environment as presented in this scope and the detailed design from the earlier Gate Review.

First Day in Service Support – NWN will remain on site to help address and diagnose any problems that arise during the Unified Communications deployment within the scope of this project. NWN will troubleshoot configuration and integration issues arising from this project. NWN will review the production cutover and implementation with the customer to verify that the solution is functioning in their environment as presented in this scope and the detailed design from the earlier acceptance task. First Day Support does not include additional Moves, Adds, or Changes. NWN and the Client will formalize a detailed list of open items. Open items within the scope of this project will be addressed and resolved. Open items deferred due to Client availability will require a change order to complete.

Milestones & Deliverables:

1. Delivery of the detailed Bill of Materials (BOM) equipment &/or software components as identified in the Reference Materials section of this document
2. Installation and Configuration of the NWN Solution based on parameters referenced in the approved Design Document
3. Train the Trainer / End User Training
4. Solution Goes Live, Start Transition to Post Cut Over, Start of Invoice Date
5. First Day Support

2.2.6. Transition (Transition to Support)

- A. Day 2 Support – NWN provisioning team remains on site to address and diagnose any problems that arise due to the migration to the new environment. NWN works with assigned persons as noted in “Assumptions and Requirements” section below to troubleshoot issues. Once the new system is agreed to be stable by NWN and Customer Designation Staff, NWN will start the process to finalize the documentation for the project.
- B. Knowledge Transfer – NWN’s technical team on the project conducts a solution orientation session and knowledge transfer with the Customer Designated Staff. This does not replace manufacturer specific technical training on the specific equipment but provides a solid overview of the final design and configuration and how to manage the environment using NWN’s hosted collaboration administrative portal. Details of this session are:
 - o One session with up to four Customer staff at the Customer or NWN location.
- C. Transition Meeting to Support – NWN conducts a provisioning phase review, gains customer acceptance and transitions to the support phase of the SOW.

Milestones & Deliverables:

1. Project documentation, to include:
 - a. Action item list & Issues reports
 - b. Support ‘Welcome Letter’

Onsite engineering is now complete. Engineers will be focused on completing technical documentation and a review with the support team. The Project Manager will verify approval for final billing, schedule and complete Project Review, and Closure meetings with Customer to acquire final Approval Signatures.

The project now enters into the Support and Management phase for the duration of the Service Contract.

3. Appendix B. Ongoing Management and Support

3.1. Management and Support Onboarding Process

NWN's setup (or on-boarding) process for management & monitoring support services starts with the Transition phase of the Project (See Appendix A.) NWN begins supporting customers early during by providing Day 2 support services first and ramping monitoring and pro-active support services up as the project completes Transition. The NWN Project Manager will coordinate with NWN Assigned Customer Experience Manager (CEM) to transition the project to support with a Welcome Email

The NWN project team works closely with the customer support team to document and understand the operating environment.

3.2. Assigned Customer Experience Manager

The following outlines the roles and responsibilities of the NWN CEM:

- Schedules monthly meetings which include the following:
 - Review SLA reports
 - Review all tickets that have been open and closed during a month
 - Review any tickets that remain open
 - Review changes to the "Customer's" environment that may affect our service
 - Review upcoming upgrades and new features/functionality they may provide
 - Review upcoming scheduled maintenance or upgrades
- Manage new customer orders
- Program management of the contact between the "Customer" and NWN
- Manages change orders and completion sign-offs
- Manages customer relationship
- Provides overall service/support management

3.3. Assigned Solution Engineer

A Solution Engineer is a level 2 engineer with a broad set of experiences. For all levels of support, a Solution

Engineer is assigned to your environment to facilitate a deeper understanding of your environment to assist in troubleshooting issues. In addition, they represent an additional point of contact into the managed services organization and a single point of escalation. In addition to a Solutions Engineer, a Backup Solution Engineer is assigned to every environment.

3.4. Monitoring and Incident Support

NWN will monitor the health and performance of the NWN Solution and NWN-managed devices on Customer network. NWN will respond to alerts according to the Incident support information below. Examples of incidents NWN will resolve include:

- Communications Manager/Unity hosted solution performance issues
- Gateway faults or performance issues
- Connectivity incidents or performance issues
- SIP or PRI Telco Connectivity
- User Administration (Moves, Adds, Changes and Deletes)
- RMA Processing (for covered devices)

Incidents are escalated based on Severity. Severity is defined in the below “Services Level Agreement” section.

Priority Level	Definition
Priority 1	<ul style="list-style-type: none"> • A critical system or service is unavailable, causing a severe impact on operations. There is no alternative, redundant or back up to this system or service.
Priority 2	<ul style="list-style-type: none"> • A critical system or service is slowed or interrupted, however a work-around is in place so that operations can continue. • A service interruption is occurring on a non-critical system or service.
Priority 3	<ul style="list-style-type: none"> • The functionality of a non-critical system or service has been degraded. • An error has been detected that is not affecting service performance or availability.

- Should a Level 1 issue be identified, NWN will focus an engineer or team of engineers to fix the problem.
- Vendor escalation will, many times, be immediate. For Level 2 and Level 3 situations, the Customer and NWN will agree upon an action and escalation plan based upon criticality and resource availability.
- Customer will designate a list of authorized callers that NWN will validate for security purposes upon opening a new case. It is Customer’s responsibility to notify NWN should this contact list change. Notifications should be emailed and all urgent changes should be followed up via a phone call to the NWN Command Center.
- For Customer-managed devices and applications that are part of the voice infrastructure (notably, switches & cabling), it is the Customer’s responsibility to resolve incidents and to ensure compliance

with individual vendor's requirements regarding version supportability. If NWN is asked to assist in troubleshooting Customer-managed devices and applications, additional hourly charges may apply.

- The Customer or desktop support partner will be responsible for physical movement, return, and replacement of handsets as well as providing appropriate switch connectivity and PoE for handsets.

3.5. MACD Definitions

Priority Level	Definition
MACD	Move, Add, Change or Deletion (MACD) process is intended for sites that are already deployed. MACD is related to the following: Physical device or "soft" device (Jabber, IP Communicator) End user (including voicemail PINs and passwords) Site based numbers (Extensions, Direct Inward Dial numbers and Auto Attendants). MACD SLA is for up to five users or end user devices and is intended for those sites that are already deployed
MACD - Move	A programmatic relocation of a device, end user or number. Examples: Move a phone from Location A to Location B Move an end user from Location A to Location B Move a DID or DN from Location A to Location B
MACD - Add	A programmatic addition of a device, end user or number. Examples: Add a phone and/or end user to Location Add Extension Mobility to an end user Add a VM box to an end user
MACD - Change	A programmatic manipulation of existing configuration of a device, end user or number. Examples: Change a phone model for an existing device Change a VM box PIN Change where an inbound DID or DN terminates
MACD – Delete	A programmatic removal of existing configuration. Examples: Delete a phone Delete an end user Delete a DID or DN
Priority 3 - MACD	All Move, Add, Change or Deletions

3.6. Monthly Management Reporting

Tracking and reporting are key components of the support services. On a monthly basis, NWN will provide a summary report of the work performed on the customer's behalf. This will include:

- Service Availability
- Incident Management

- MACDs
- Change & Service Request Management

3.7. Monthly Analysis Reports

On a monthly basis, the Customer will receive an analysis report of NWN's performance against agreed upon Service Level Agreements (SLAs). NWN reviews monthly performance and YTD trending information.

3.8. Notification Process

3.8.1. Scheduled System Maintenance

NWN will perform maintenance on the Hosted Solution and supported client devices in order to keep the system healthy, backed up, and functioning optimally. Should a scheduled system maintenance activity result in system unavailability, NWN will perform that maintenance during an off-hours window and will provide a minimum of 1-week notice to Customer designated contacts.

NWN has industry standard defined and documented change windows. These windows are subject to change but can be reviewed with the customer at any time during the term of this SOW.

3.8.2. System Upgrades

NWN will schedule to upgrade the Customer environment for Major Releases within 18 months of release. Allowances may be made for 3rd party applications that are integrated with the Customer environment. Customers will upgrade integrated Customer environments to compatibility to major OEM releases within 24 months. NWN will upgrade Customer environments to Minor Releases upon agreement and as necessary.

3.8.3. Emergency System Maintenance (Un-scheduled)

NWN reserves the right to perform emergency maintenance on the Hosted Solution and supported client devices in order to keep the system operational and functioning optimally. Should an emergency maintenance activity be required to either prevent or resolve an emergency, NWN will notify the appropriate customer contacts as soon as possible before actions are taken.

3.9. Supported Devices

Devices not supported by the Cisco powered solution will not be supported by NWN's Contact Center solution.

4. Appendix C. General Customer Requirements & Assumptions

1. **Customer's Designated Representatives.** Customer to assign a Dedicated Representative(s) for the following activities:
 - Project Implementation – Responsible for coordinating installation activity with the NWN dedicated Project Manager. Customer will provide NWN with their current and accurate information as well as other contact(s) necessary for access to Customer's Premises.
 - Transition Phase – Responsible for coordinating activities of transition and will have Troubleshooting Knowledge of Network, Software Applications and End User Devices.
 - Support Phase – Responsible for coordinating activities of support of solution during the SOW term. Customer will provide a list of authorized callers that NWN will validate for security purposes upon opening a new case. It is Customer's responsibility to notify NWN should this contact list change. The Customer is also responsible for providing business hours and other information in an effort to collectively identify escalation and customer notification procedures.
2. **Customer-Managed Devices and Applications.** For Managed Devices and Applications that are part of the voice infrastructure (notably, switches & cabling), the Customer is responsible to resolve incidents and to ensure compliance with individual vendor's requirements regarding version supportability before implementation starts and during the support of the SOW.
3. **Premises.** Customer will maintain the Premises and any other location where System may be located in a safe and secure manner, in accordance with recommended industry standards and conditions, and in a manner as required by the specifications accompanying the System and/or as may be advised by NWN. Such requirements include but are not limited to ensuring use of the appropriate power requirements, data communications equipment, network and/or using cabling.
4. **Work Place and Use of System.** Customer will provide NWN with a safe place to work. Customer will comply with any and all Local, State, and Federal work place laws and regulations regarding the working conditions on the Customer Premises and use of System. System may not be used for any purpose other than that for which it is provided to Customer under this SOW. Customer may require any NWN personnel to leave its premises provided that if Customer has not provided reasonable grounds for requiring the personnel to leave, then NWN shall not be liable of its obligations under the Agreement to the extent it is delayed in performing them by reason of the removal.
5. **Hold Harmless.** Customer agrees it will not engage in the following activities and will hold NWN harmless in the event that the Customer or one of the Customer's users:
 - Utilize the service to commit a fraud upon another party
 - Unlawfully uses the service
 - Abuses or misuses NWN's network or service
6. **Customer Equipment.** Customer shall notify NWN promptly of any changes in Customer's hardware or software that may affect Service provided by NWN.
 - Customer will not permit any person other than Customer's Designated Representative to rearrange, disconnect, remove, relocate, attempt to repair, or otherwise tamper with any System without the prior written consent of NWN.

- If Customer wishes to relocate System, Customer shall provide written notice (subject to NWN approval) thirty (30) day prior written notification to NWN. Relocation may only occur within the country of original delivery.
7. **Access.** Customer will allow, or will secure permission, for NWN and its underlying suppliers, sub-contractors or agents to access Premises and/or System for the installation, maintenance, repair, replacement, relocation, inspection, monitoring, identification, or repossession of the System and performance of the Service from time to time as may be determined is necessary or desirable by NWN. NWN will use commercially reasonable efforts to notify Customer regarding timing and implementation of any replacement System (hardware or software) that will occur on the Premises.
 8. **Work Area.** Customer to provide a work area for NWN to use during on-site activities to include Internet and public phone network access including but not limited to:
 - Parking passes and adequate parking for the NWN project team.
 - Outside phone and Internet access, at no additional charge, for all NWN staff when onsite
 9. **Notices.** Each party shall appoint a Designated Representative(s).
 10. **Work Hours.** Normal working hours for implementation services are normal business hours (8:00 am to 5:00 pm in local time zone), Monday through Friday with no limitations of access to the workplace. Work performed after normal business hours will be billed at an additional charge.
 11. **Pre-Implementation.** Customer will come prepared with documentation and resources necessary to cover all topics including but not limited to:
 - **Port information that is accurate and complete before NWN can properly schedule Implementation. Inaccurate and/or Incomplete Port data can lead to delays with implementation.**
 - Quality of Service (QoS) and Security Best Practices
 - Accurate, Complete, and Documented
 - Hardware/Software versions
 - IP Routing and IP Addressing
 - VLAN Layout
 - WAN Circuit Design and Sizing
 - PSTN Connectivity Design
 - Existing Application Server and Gateway Design.
 - Design/technical components as part of the delivery of this project:
 - Provide current network design.
 - Provide IP address schema and design specs.
 - Participate in all design and planning sessions and be prepared to sign off on all milestones.
 - Third party delays are recognized and accounted for

- Customer provided information is correct and current
- Provide the best possible prints and floor plans for use during the installation. These prints and floor plans will become the property of NWN.
- Customer will perform and/or provide the following requirements as part of the delivery of this Solution:
 - IT environment in place and configured to secure and establish proper network and endpoint connectivity, including but not limited to:
 - Existing switch, router and firewall configuration work needed to establish properly secured connectivity in this scope of work unless otherwise noted in this SOW. If NWN assistance is requested a change order will be required.
 - Structured wiring and structured wiring components are in place and operational to support the efforts in this project.
 - Adequate electrical power, UPS, and surge protection are in place and operational to support hardware and software listed on this project.
 - Equipment racks, shelves, and environmental requirements such as heating and cooling are the responsibility of Customer. NWN will provide Customer with these requirements upon request.
 - All hardware, software, licensing, maintenance or other required resources not explicitly listed on the Bill of Materials and subsequent Purchase Order.
 - Acceptable PSTN connectivity on the Customer premises if SRST functionality is part of the Solution.
 - The Customer will provide space, power, network and internet connectivity for each NWN-provided device needed to deliver the Solution.
 - Customer will Rack, Stack and Cable any network elements of the solution unless otherwise noted.

4.1. Devices (Customer Premise Equipment) Assumptions

4.1.1. Endpoint that are End of Sale and End of Life

End of Sale (EOS) - Means the equipment is no longer available from the manufacturer. Manufacturer support may be reduced or no longer available directly by the manufacturer or through NWN.

End of Life (EOL) - Means the equipment is no longer available from the manufacturer and is no longer supported directly by the manufacturer or through NWN.

Customers may continue to use devices that have reached their EOS date; however, to support continued use of NWN Services, Customer shall promptly disconnect and replace EOL Endpoint(s) with Supported Endpoint(s). Disconnect fees may apply.

EOL Endpoints may stop working at any time, including after a Service upgrade or patch. Customer's continued use of EOL Endpoints shall not receive any upgrades, patches, or maintenance from NWN. The Service is provided AS IS without warranty of any kind. Customer shall not receive any reduction or credits to their

Monthly Recurring Charge for any disruptions to Service Availability caused in whole or in part by Customer's use of any EOL Endpoint(s).

4.1.2. Shipping

Customer may order Equipment from NWN for use with the Services by entering into a Service Contract with NWN. Customer shall pay all shipping and related charges unless otherwise stated in a Service Agreement. All Equipment shipments are F.C.A. (free carrier), and title and risk of loss or damage shall pass to Customer upon delivery to the carrier. Customer shall be deemed the importer of Equipment for all purposes, and shall be liable for any applicable customs, import/export duties, clearance charges and other Taxes (including VAT), in connection with international shipments. NWN may refer Customer to a local or regional Equipment vendor for Customer Locations outside the Primary Market.

4.1.3. Warranty and Returns

NWN shall pass through to Customer a 12-month warranty on Equipment provided by NWN (or, if applicable any extended warranty procured by NWN), if permitted by the manufacturer. NWN will replace defective equipment covered by warranty at no charge and will pay the return shipping costs, provided Customer returns equipment in its original packaging or equivalent and obtains a return authorization number from NWN prior to returning Equipment. For equipment procured outside of NWN, it is the responsibility of the customer to manage returns and warranties.

4.1.4. Hardware Maintenance

Maintenance on Hardware is not included and may be purchased in addition to any hardware purchased. It is the customer responsibility to manage maintenance renewals for the hardware. Please visit Cisco Smartnet for more information: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/smart-net-total-care/datasheet-c78-735459.html>

4.1.5. Lost, stolen, altered or broken equipment

During the Term, Customer shall not modify the equipment in any manner without the express written consent of NWN and shall only use the equipment in connection with the Services. Customer shall be responsible for all lost stolen or broken equipment (except to the extent covered by warranty) and shall promptly notify NWN of any such loss or theft and cooperate with NWN as reasonably requested to prevent unauthorized use of lost or stolen equipment.

4.1.6. Equipment Leasing Companies

NWN may refer Customer to one or more unaffiliated companies that have agreed to provide equipment-leasing options to NWN customers (a "Leasing Company"). The terms of any such leasing arrangement shall be governed solely by Customer's contract with the Leasing Company. NWN does not endorse, guarantee the services of, or have control over such Leasing Companies and disclaims all liability in connection with their services. The use of any financial information, Personal Data and other information disclosed to or collected by Leasing Companies is governed by such Leasing Company's own privacy policies and not by NWN's Privacy

Policy.

4.1.7. Unsupported Devices

Customer shall be responsible for ensuring that any equipment acquired from a third-party vendor is in reasonable working condition and configured in accordance with NWN's technical requirements. Customer shall not access or use the Services with any equipment or devices other than supported equipment. NWN shall have no liability whatsoever for Customer's access or use of the Services with any equipment or device that is not supported by NWN (an "Unsupported Device"). Refer to Section 1.3 for a list of supported equipment.

4.2. Unsupported Services

Notwithstanding anything the contrary herein, neither NWN nor any of its designated Affiliates shall be required to provide technical support for, and NWN disclaims all service level commitments, representations and warranties as to the performance of, Services that are either (a) used for a purpose or in a manner inconsistent with the Documentation (for example, as part of an alarm or paging system), (b) used with Unsupported Devices or with supported equipment that does not comply with Section 1.3; or (c) accessed in an Environment for which the Customer has waived a network assessment or failed to make requested adjustments under Section 4.3 above (the Services described in clauses (a) through (c) are referred to collectively as "Unsupported Services").

4.3. Company Administrator

Customer must appoint a Company Administrator and delegate to that Administrator the authority to act on behalf of the Customer as the single point of contact with respect to the Customer's NWN Service. If the Customer has purchased NWN at multiple Sites, the Customer can appoint an Administrator for each Site. Customer may also designate one or more alternate Administrators in the event that the lead Administrator is absent or unavailable; the alternate will have the same responsibilities and authority as the Administrator. The Customer's Administrator and designated alternate shall be responsible for the following:

- Acting as the single point of contact for all matters related to the Customer's NWN Cloud service.
- The Administrator has the authority and responsibility for any matters related to NWN Cloud and NWN can rely on the Administrator's decisions and actions related to NWN.

4.4. Security Configuration Requirements

NWN Service is provided as a service and provides customer management space. Infrastructure controls are specifically designed to compartmentalize customer data. Communications between one customer environments to another is not permitted other than through traditional PSTN connections or third-party video bridging services such as Cisco WebEx CMR.

The system and security requirements for the NWN Services include:

- Physical Security - NWN Services is located in highly secure, reliable, and geographically redundant NWN core data centers.
- Communications Protection - NWN Services does not examine the contents of conversations, which

include voice, text, video, and file sharing. To further protect the transmission from unlawful interception, all conversations, chat conversations may be optionally encrypted and sent over secure communication channels using current networking standards.

- Infrastructure - NWN Services infrastructure provides operating, monitoring, and managing the network and its elements. The environment has 3 distinct security zones:
 - Management Network - A separate physical interface for connecting to network management systems
 - Secure Environment - Provide the NWN Services application and customer data storage, are firewall protected from the other networks, including the Internet, by IP Border Elements. Network traffic is load balanced, via redundant hardware, to provide workload distribution, increased performance, and automatic rerouting in the event of a communications or server failure.
 - Customer Network - The majority, if not all, of the network components are in the NWN Cloud and not on the customer premises. Customers access the Cloud via an NWN data service, an NWN VPN, or via an Internet Service Provider (ISP) of their choice.
- Role-based Privileges - Each User ID and Password (for End-Users, Customer Administrators, NWN Customer Care, and NWN Network Management) is associated with a role that defines and restricts which privileges or rights are available to an individual user for accessing to communication channels and to data storage areas.
- Data Protection - NWN Services allows only the owner of any account data to access or manage them (password / role-based access). This includes creating, renaming, deleting and editing associated metadata. Customer data is never examined nor processed during normal procedures.
- Data Storage Security - NWN Services segregates stored data for each individual user.
- Investigative Support - NWN monitors all accesses and changes to its managed environment. Information is logged for auditing and troubleshooting purposes.

4.5. Customer Not Ready

If NWN is unable to perform scheduled on-Site work that causes NWN to re-dispatch an NWN Technician/Engineer due to a Customer Not Ready reason, billing for NWN or any impacted NWN component may commence on the scheduled due date. Customer Not Ready reasons include, but are not limited to: 1) lack of physical access to the Site; 2) Local Site Contact not available to assist with the installation; 3) the Customer provided inside wiring is not operational; and/or 4) Lack of adequate power and environmental conditions as specified by equipment manufacturer.

4.6. Network Readiness

Prior to placing an order for NWN Services, it is highly recommended that the Customer conduct a Network Assessment at each location, which NWN Public Cloud Calling will be installed. It is a requirement that each location meet the minimum Network Requirements. [Link to Network Requirements](#) Failure to do so may result in blocked calls or poor quality service if requirements are not met.

It is the Customer's responsibility to resolve any Customer environment (i.e. LAN, network) issues before, during, or after Test and Turn up of NWN Public Cloud Calling Services.

Customer may purchase additional network assessment or consulting services from NWN to assist with meeting Network Requirements. All additional services will be executed as a change order to this contract.

4.7. Customer Network Responsibility

Customer shall be responsible for ensuring that its Internet connection, any local network equipment, hardware and software used in connection with the Services, and all related configurations (collectively, “Environment”), adhere to the minimum standards and technical requirements specified in applicable Documentation. Customer agrees to: (a) grant NWN access to Customer’s personnel, facilities and other resources under Customer’s control as NWN may reasonably request in order to perform its obligations under the Customer Agreement; (b) allow NWN, upon reasonable request and subject to compliance with Customer’s security policies, to conduct an initial assessment of Customer’s network; and (c) make any adjustments to Customer’s Environment that NWN reasonably determines necessary to satisfy the minimum technical prerequisites specified in the applicable Network Requirements

5. Appendix F. PSTN Service Assumptions

5.1. PSTN Deployment Configurations

The NWN Unified Communications service facilitates connections to Customer provided PSTN access for agreed upon deployment configuration options on a per site basis. The available deployment configuration option categories are:

- Central PSTN access (PSTN connections are typically terminated at the NWN Unified Communications data centers via SIP Trunking).
- Local Break out (LBO) PSTN access via a customer premises Voice Gateway with or without Survivable Remote Site Telephony (SRST) serving that location as a dedicated solution.
- Third-party SIP connection terminating at the customer’s premises. PSTN services is supported via the Cisco Unified Border Element (CUBE) (also known as Session Border Controller - SBC). NWN Unified Communications is generally only compatible with SIP services that are capable of interoperating with Cisco Unified Communications Manager based deployments.

5.1.1. Customer Responsibilities

Customer is responsible for Third-party vendor SIP Contracts, connectivity and related configuration.

The Customer is responsible for completing the following tasks:

- Configure Customer managed CUBE Enterprise at the Customer’s location.
- Procuring the SIP trunk service from the third-party vendor.
- Obtain and maintain appropriate SBC hardware, technology licenses, and SBC licenses.
- Providing connectivity between the CUBE Enterprise and SIP trunk service provider.
- Collect the required data to support inter-working CUBE Enterprise with SIP Trunk service provider.

NWN will provide a comprehensive Solution Architecture Design Document that will convey the overall solution architecture (including: customer locations, WAN transport, and ancillary products/services required for an end-to-end solution) for a project. This Solution Architecture Design Document will also define the scope for the deployment of NWN Unified Communications related on-premises equipment by the NWN Services Delivery team. NWN Deployment Services are included as part of the Infrastructure and Deployment Services Packages. Additional Deployment Services can be contracted and purchased separately. The NWN deployment services are detailed within the Physical Implementation section of the Solution Architecture Design Document.

The Physical Implementation section of the Solution Design document will include, among other details, an initial phase of work to capture the site detail/detailed station review necessary to develop a Dial Plan and map phone type and users to the overall project. The information is necessary for NWN to establish initial Service Delivery order flows for the NWN Unified Communications programming phase. Subsequent phases of work are based on the deployment scenarios and may include phone placement, voice router installation/configured as well as test and turn up responsibilities. Coordination with equipment procurement is another factor that must be considered in describing the appropriate plan for the particular solution approach for the project.

5.2. Public Telecommunications Numbering Plan

In order to properly configure Direct Inward Dial Telephone Numbers (DID/TN), customers shall provide existing or separately obtained telephone number blocks for configuration to the NWN Unified Communications Service for all locations.

The Customer administrator shall be required to assign NPA NXXs to authorized End Users based on the site where NWN Unified Communications users are located and to reassign an accurate NPA NXX number to NWN Unified Communications users who move from one site to another.

5.3. SIP URI Dialing

NWN Unified Communications supports dialing using directory Uniform Resource Identifier (URI) for call addressing.

- Directory URIs are a string of characters that can be used to identify a directory number. Directory numbers are assigned to devices connected to Cisco Communications Manager that can route calls to that device using the directory URI. Directory URIs appear as an email address and follow the username@host format where the host portion is an IPv4 address or a fully qualified domain name.
- URI dialing is available for SIP and SCCP Endpoints that support directory URIs.
- SIP URI dialing supports:
 - Intra-company calls:
 - Dial using SIP URI between Endpoints registered to same CUCM
 - Dial using SIP URI between Endpoints registered to different Call Agent same company (CUCM or VCS)

5.4. Dial Plan Setup

NWN will develop and present to Customer an Enterprise-level dial plan based on the Cisco HCS Type 4 plan and on information provided to NWN by Customer. The dial plan will indicate the routing of telephone calls based on the digits dialed and may include alternate PSTN routing if main routes are inoperable or busy, depending on the implemented design.

The standard dial plan developed by NWN will use “9” for external trunk access, access to the PSTN.

While some customization is possible it would need to be handled on a case by case basis and would require additional Deployment and Engineering Services, beyond what is included on the NWN Unified Communications standard service offerings.

5.5. PSTN Acceptable Use Policy

NWN reserves the right to charge reasonable overage fees as needed. The following guideline apply to usage of NWN’s PSTN services

The Services (including any device, system, network, or account used in connection with the Services, or the NWN Network) may not be used to:

- **Illegal activity.** Violate any applicable law, including U.S. federal, state, or local laws or regulations, or any applicable law or regulation of any foreign jurisdiction, including applicable laws regarding the recording of communications.
- **Infringing activity.** Infringe, misappropriate, or otherwise violate NWN’s or anyone’s rights (including intellectual property, privacy, personality, publicity, or otherwise; or display or use NWN’s marks without consent or in violation of NWN policies.
- **Auto-dialing; trunking; traffic pumping.** Perform auto-dialing or “predictive dialing” in an abusive manner; trunk or forward your NWN phone or fax number to other numbers that handle multiple simultaneous calls or to a private branch exchange (PBX) or a key system; traffic pumping or access stimulation of calls through the Services or the NWN Network.
- **Minors.** Exploit or harm minors (e.g., expose them to inappropriate content; ask for personally identifiable information without parental consent).
- **Interference; transmit viruses.** Interfere, inhibit, compromise, or otherwise harm the Services or the NWN Network (regardless of intent or knowledge); transmit any material that contains viruses, time or logic bombs, Trojan horses, worms, malware, spyware, or any other programs that may be harmful or dangerous.
- **Objectionable activity.** Act in an indecent, offensive, threatening, harassing, defamatory, libelous, fraudulent, malicious, disruptive, tortious, or other objectionable manner; or create a false caller ID identity (i.e., ID spoofing), forge addresses or headers, or otherwise mislead others about a sender’s identity or origin.
- **Driving; safety.** Use while driving or otherwise in an unsafe manner.
- **Harvest information; spam; bulk messages.** Harvest or collect information about third parties or End Users without consent; send bulk communications or other content without the recipient’s consent.
- **Excessive or unauthorized use.** Use any device, system, network, account, plan, or the Services in an unauthorized manner or in excess of reasonable business use.

- **Circumvent compliance or security.** Take advantage of, bypass, exploit, defeat, disable, or otherwise circumvent limitations of the Services, security mechanisms, or compliance with this AUP or any law.
- **Interception.** Intercept, capture, sniff, monitor, modify, emulate, decrypt, or redirect any communication or data for any purpose.

5.6. N11 and other Calling

Operator Assisted Calling, 311, 511 and other N11 Calling. NWN Unified Communications does not support 0+ or operator assisted calling (including, without limitation, collect calls, third party billing calls, 900, or calling card calls). The Services may not support 211, 311, 411, 511 and/or N11 calling in one or more service areas. Additional charges may apply for these calls.

5.7. Emergency 911 Assumptions and Definitions

5.7.1. Emergency Calling Services Limitations

NWN Unified Communications Service utilizes a digital technology called Voice over Internet Protocol (VoIP), which allows voice calls to be made from a device using a broadband connection, including a wired connection, a Wi-Fi connection, or a wireless data plan purchased in connection with a wireless service. This Section provides important information for Customer about emergency calling, including 911/E911 services in the US. In some instances, the customer's emergency calling service may not be available or may be disabled when using a VoIP service or may be limited in comparison with traditional PSTN telephony service including, but not limited to, the following situations:

- 9-1-1 or emergency services is dialed from a location other than the Registered Location last provided or the location to which the user's device is registered;
- The broadband connection (wired, wireless and/or Wi-Fi) has been disrupted or impaired;
- The data service upon which the broadband connection is dependent is terminated or is disrupted or impaired;
- Loss of electrical or battery power;
- Customer or User terminal equipment is not configured correctly;
- Applicable equipment set-up instructions are not properly followed;
- Delays have occurred in processing a newly updated Registered Location;
- Use of non-native telephone number;
- At the time a call to 9-1-1 or emergency services is made, the Customer's WAN/LAN network has insufficient VoIP bandwidth to support any additional calls and/or the capacity of the Customer's PSTN service has been exhausted;
- Customer has not provisioned and connected PSTN service for one or more locations;
- Endpoint has been turned off or has gone into energy saving sleep mode and requires hardware or software initiation and/or warm up period before being operational.

Because of these availability constraints and limitations, Customer and Users should always have available

alternate means of accessing 911/E911 or other emergency calling services. Customer should inform all Users of the Service of these limitations (including but not limited to, the distribution and posting of labels as discussed in the "Notification/Warning Labels", below) and of available alternate means of accessing 911/E911, or other emergency calling services.

Failure to update Registered Location information may result in emergency calls being routed to the incorrect PSAP, preventing or delaying emergency response.

5.7.2. Registered Location

When 911 is dialed over an Interconnected VoIP Service, the Registered Location is used for PSAP routing (i.e., it determines which PSAP will receive the 911/E911 call) and forms the basis of the ALI delivered to the PSAP that the PSAP uses to identify the calling party's actual location. Bandwidth routes the 911 call to a PSAP based on the Registered Location information provided by Customer or User.

Prior to the initial activation of NWN at any Site, Customer must provide NWN the correct Registered Location information for each User. If NWN is unable to validate the Customer-provided Registered Location, the device used with the Service cannot be used at that location because 911 may not route properly.

Failure to update Registered Location information may result in emergency calls being routed to the incorrect PSAP, preventing or delaying emergency response. Customer or User can update the Registered Location in the EMP Control portal.

There may be delay between the time that a new Registered Location is provided by Customer or User and the time that the new Registered Location populates into the appropriate databases. The duration of such delay will vary with the service, and can range from the typical minutes, to hours or days.

When a User without a dialable 10-digit number (extension only User) originates a 911 call, NWN through Bandwidth directly routes the call to the appropriate local PSAP associated with the User's provisioned Location, however, the caller ID information presented to the PSAP is the Customer-designated location caller ID number for the provisioned location of the User. The User's extension number will NOT be passed to the PSAP. Customer must advise Users of the importance of providing their name and exact location to the emergency operator. It is also important that the location caller ID for the Customer location be a telephone number that is answered by someone who can immediately assist the PSAP in identifying the caller needing emergency services. Therefore, the location caller ID can never be: (1) an Auto Attendant telephone number; or, (2) the lead number of a Contact Center queue; or, (3) an "unmanned" station; or, (4) a telephone number that is used to access voicemail.

Customer or Customer's User, as applicable, is responsible for updating the Registered Location. Customer is solely and continuously responsible for ensuring the accuracy of the Registered Location information to ensure emergency calls are routed to the appropriate PSAP. Customer is fully liable, and shall indemnify NWN, for all losses, claims and damages that may result from any inaccurate Registered Location information.

5.7.3. Configuration and Service Outage

In the event of a power outage, Customer or User may be required to reset or reconfigure Customer's CPE and/or NWN CPE used for NWN Services prior to being able to use the local calling functions, including for 911 dialing purposes. 911/E911 service will fail to operate properly when used at a location that is not a Registered Location.

Customer use of Uninterruptable Power Supplies (UPSs) for CPE supporting NWN services may help to prevent

service disruptions during short power failures.

5.7.4. Additional 911/E911 Assumptions

In addition to the limitations above, calls made by Customers or Customer end-users on NWN Unified Communications Voice to 9-1-1 who are not subscribing to NWN Advanced E911 service, will be routed through the site's PSTN service provided by the Customer. In these cases:

- The NWN Unified Communications Service 911/E911 calling capability is dependent on the 911/E911 capability of the Customer's PSTN trunking and calling plan service.
- When a 911 or E911 call is made using NWN Unified Communications, NWN will use the standard protocols and processes to route the call over the PSTN service provided by the customer. These standards may use the calling party's telephone number to look up the end user's physical location or may use the mailing address associated with the PSTN service circuit termination point. NWN Unified Communications Voice will facilitate the appropriate routing of 9-1-1 calls by including the customer specified Caller ID number information on calls to 9-1-1 as well as route these calls to the customer specified PSTN service connection for each customer location.
- If Customer wishes to have the individual User's address and call back information available to the PSAP, the customer must either subscribe to NWN Unified Communications Advanced E911 service or make independent arrangements with the PSAP and the PSTN Service provider used for calling 9-1-1 services. Depending on the service the Customer procures, the Customer may also need to keep the location information within the PSAP database updated with each End User's accurate location information.

5.7.5. Customer Non-Standard Call Routing for Emergency Calls and Corresponding Limitations

All NWN Unified Communications North American dial plans will connect End Users who dial 9-1-1 or 9 (PSTN Breakout)-9-1-1 to 911 via the customer's PSTN service provider. In most cases, a secondary dial tone will be heard after dialing the initial 9. After dialing the initial 9, End Users can complete an emergency call by dialing either 1-1 or 9-1-1.

If Customer requests that NWN implement a non-standard emergency call routing plan at a Customer Site, Customer shall provide NWN with a written request detailing such non-standard call routing plan for each potential Site. NWN shall review the non-standard call routing request and implement such plan as directed by Customer at a given Site in NWN's sole discretion.

Customer understands that non-standard emergency call routing plan introduces certain risks, including the potential for delay in contacting emergency responders. Customer assumes all such risk. Customer further understands and agrees that Customer is responsible for ensuring all non-standard call routing plans comply with applicable law and regulation.

Customer understands that NWN's implementation of a non-standard call routing plan at a given site is provided on an "AS IS" basis with no warranties, express or implied, of any kind.

Customer understands and agrees that Customer is responsible to ensure that all calls to emergency dialing service numbers are routed over appropriate facilities to ensure completion provided by that local service provider, or other provider. Customer agrees to indemnify and defend NWN and its affiliates from and against any and all third-party claims and related loss, liability, damage and expense, arising from or related to Customer request to use, and use of an alternate arrangement or non-standard call routing plan.

NWN reserves the right to discontinue supporting independent arrangements or non-standard call routing plans at any time if NWN reasonably believes the independent arrangement or non-standard call routing plan is inconsistent with applicable law or regulation.

In no event shall NWN or its affiliates be liable to Customer, Customer affiliates or third parties claiming through Customer for monetary damages of any kind, including direct, indirect, incidental, special, reliance or consequential damages, expenses arising from Customer's deployment or use of the Call Routing Plan, or lost profits or revenues, arising out of any breach or alleged breach of this Addendum.

5.7.6. Advanced E911 Service Definitions

Cisco Emergency Responder (CER) is an application that automates and simplifies Advanced E911 management. It provides secure and reliable 9-1-1 support for the NWN Service including automatic IP phone tracking, onsite security desk routing and notification, reporting and management capabilities.

Endpoint is a hardware device or software instance that can receive and/or make voice calls.

Emergency Response Location (ERL) is the specific customer location to which an Endpoint may be mapped, which may include more granular location information defined in addition to the municipal address, like building name, wing, floor number and/or suite number.

Public Safety Answering Point (PSAP) is the public 9-1-1 operator center that has been designated to receive 9-1-1 calls for a geographical area and dispatch emergency service personnel.

5.7.7. Advanced E911 Option for NWN Unified Communications Service

The NWN Advanced E911 service is an optional NWN Unified Communications feature for U.S. based sites subject to the terms and conditions set forth herein. The Advanced E911 Solution enables a NWN Customer to access an Enhanced 9-1-1 ("E911") database, to load, change, or update ERL information for NWN Endpoints and map it to Endpoint specific criteria based upon Layer 3 (IP Addresses) for device tracking. The NWN customer may also configure via the web interface security desk notification, security desk participation in 911 calls, as well as other Advanced E911 centric features.

When a Customer adds/removes/changes Endpoints covered by an existing subscription in a location where it has provisioned Advanced E911, the CER automatically discovers the location of the subscribing Endpoint (e.g., IP phones, soft phones, wireless phones, etc.) provided that the Customer has existing ERL information and mapping criteria for that location. CER discovered location information will determine the routing of the 9-1-1 call to the most appropriate PSAP.

A minimum of two additional DIDs are required per ERL resulting in additional charges per ERL.

Customer shall be responsible for identifying Endpoint information as follows:

- Customer will designate an authorized representative responsible for all communications between NWN and Customer with regard to implementation of the Service ("Customer Project Manager"). Customer Project Manager shall manage and control installation of the Customer-provided hardware and software, the gathering and input of appropriate data, and coordination of all database upload and testing activities. Customer Project Manager shall have responsibility for the implementation tasks and schedule and shall have the authority to make decisions and commitments for the Customer. Customer Project Manager shall be responsible for timely transfer of information to and from NWN, and shall ensure the accuracy and completeness of all data in the database. Customer

shall mutually agree on an implementation Schedule with NWN.

- In a format designated by NWN, Customer will propagate the network map template required for CER provisioning holding the association between network elements and ERLs for all Customer subscribing locations. Network element supported by NWN is Layer 3 subnets.
- If Customer expands or add locations (e.g., add new floors, new buildings), Customer is responsible for providing the ERL information for the new location(s), and establishing the Endpoint-specific criteria that will be used for device tracking (Layer 3 Subnets). Additional subscriptions may be required.
- In the event that either Customer or NWN becomes aware of any security vulnerability that arises from the use or configuration any NWN Advanced E911 Solution component, the parties agree that they will provide all reasonable cooperation to promptly address such vulnerabilities.
- Customer shall notify NWN promptly of any circumstances of which Customer has knowledge relating to any unauthorized use of the Service by any person or entity. Customer shall take, at Customer's expense, any legal action necessary to prevent or stop the unauthorized access or use of the Service by any third-party.

NWN shall manage the CER to the manufacture's specifications to function appropriately and facilitate Customer access to the web interface provisioning and reporting functions.