

Service Description

# Universal Calling Plans

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## List of abbreviations

Abbreviation	Meaning
Business-Days	NTT Business-Days start on Monday and finishes on Friday
CLI	Calling Line Identifier: The phone number used by a calling party using the PSTN
Contract	Means the agreement concluded between NTT and Client pursuant to which NTT provides Client with the Services described in this Service Description
Client	Means the Party contracting with NTT for purchasing the Service(s) described in this Service Description
Datacenter	A Datacenter is a facility used to house computer systems and associated components, such as telecommunications and storage systems
DDI	Stands for "Direct Dial In" and means the PSTN E.164 numbers as supplied by NTT as part of its Calling Plans Service
Dispatchable Location	Dispatchable Location for 911 calls, as defined by the Federal Communication Commission (USA), includes the physical address of the caller as well as additional location information, such as room or floor number, necessary to locate the caller more adequately in case of an emergency call.
Emergency Call Services	Means calls requesting emergency services giving the calling party fast and easy means of giving information about an emergency to the appropriate Emergency Services Centers which are routed to the emergency services in accordance with applicable regulations.
Emergency Maintenance Window	Exceptional maintenance operation required to react to a critical issue that need to be remedy promptly.
Emergency Services Centers	Means fire department, police, ambulance and other government backed entities
Go Live Date	Means the date that NTT declares the service is being delivered to Client and the date from which billing will commence.
Key Performance Indicators	Means a quantifiable measure used to evaluate the success of the Services
MACDs	Moves, Adds, Changes and Deletes requests
Off-net calls	PSTN call being terminated to a phone number through external PSTN carriers networks
On-net calls	PSTN call between phone numbers directly connected with NTT Cloud Voice network
PSTN	Public Switched Telephone Network
Scheduled Maintenance Window	Maintenance operations scheduled in advance by NTT to implement a specific change on the NTT infrastructure.
Service-Desk	Service-Desk means a single point of contact (SPOC) for communication between NTT and its clients and business partners.
Self-Care	Self-Care means the provisioning portal which permits Client to administrate its solution and its options
SIP	Means "Session Initiation Protocol" and is a signaling protocol used for initiating, maintaining, and terminating real-time sessions
SLO	Stands for "Service Level Objectives" and is a set of service-level targets metrics

Abbreviation	Meaning
SKU	Stands for Stock Keeping Unit and is a distinct type of item for sale
SOF	Stands for Service Order Form
Special Numbers Destinations	Special Numbers are PSTN destinations only reachable within a country and for which a specific tariff applies.
Tenant	A Tenant is a group of Users who share a common access with specific privileges.
TTD	Time To Deliver is the NTT' objective for delivering a service expressed in Business Day(s)
UCaaS	Means Unified Communications as a Service, a cloud-based UC solution permitting end-users to use features such as Instant Messaging, Meetings and Calling
User	Means a Client's employee, partner or another person having an account declared on a UCaaS platform or any communication platform connected to Cloud Voice services. This is sometimes referred to as "end-User".
User Number	Means a phone number from a national PSTN numbering plan meant to be assigned to a physical person as its personal business phone number
WAN	Wide Area Network is a telecommunications network that extends over a large geographic area for the primary purpose of computer networking.

## Document history

Issue	Date	Comments
1.0	April 1 <sup>st</sup> , 2020	Initial document
1.1	July 31 <sup>st</sup> , 2020	Update specifics with regards to Australia, New-Zealand and Japan User Numbers as well as update to the countries included in the International Calling plan
1.2	January 31 <sup>st</sup> , 2021	<p>Coverage expansion to Brazil, South Africa, Romania and Czech Republic</p> <p>Additional specs for Japan and Domestic 180 pooling mechanisms</p> <p>Timelines and specifics added for numbers ordering and porting</p> <p>List of codecs removed and replaced by a pre-requisite to support G.711 A or U law</p> <p>Added compatibility with Fax over IP and supported RFCs</p> <p>Added compatibility with NTT Global Networks-based WAN or SD-WAN solutions</p> <p>Added specs for SLAs</p> <p>Added mention that SLOs do not grant access to Service Credits</p> <p>Added specs on TLS encryption settings</p>
1.3	July 10 <sup>th</sup> , 2021	<p>Coverage extended to Croatia, Cyprus, Estonia, Greece, Hungary, Lithuania, Malaysia, Slovakia and Slovenia</p> <p>Japan: added limitations on access to Short-codes from 050/VoIP numbers</p> <p>USA: Hawaii added to UCP US coverage</p> <p>Support of new emergency calls routing features in the USA and Canada (Dynamic 911)</p> <p>Specs of supported CLI-Manipulation scenarios</p>
1.4	April 15 <sup>th</sup> , 2022	Coverage extended to Preview countries: Argentina, Chile, Costa-Rica, El Salvador, Israel, Latvia, Panama and Peru,

Issue	Date	Comments
1.4.1	December 15 <sup>th</sup> , 2022	<p>Columbia added as Preview country</p> <p>Update of the Incident Management section</p> <p>SLA section update</p> <p>Removal of MTRS paragraph</p> <p>Added "Reporting" section</p>
1.4.2	June 15 <sup>th</sup> , 2023	<p>Adjusted Porting timelines and minimum numbers to be ordered</p> <p>Clarification on CLI Presentation for domestic outbound calls</p> <p>Clarification on Call Queues and Auto-Attendant and use of User Numbers for call management apps</p> <p>Update of Service Use Policy</p> <p>Added description of GIOG service desk</p> <p>Update of the Monthly Service Availability SLA description</p> <p>NTT MOS Degradation QoS KPI added</p> <p>Description of Default Cloud Voice setup fees</p> <p>Local billing: Minimum Monthly Commit at BA level</p>
1.5	December 15 <sup>th</sup> , 2023	<p>Added definitions of off-net and on-net calls</p> <p>Removed Introduction section</p> <p>Removed limitations for porting Panama Landline numbers</p> <p>Added support of On-net Calls</p> <p>Added description of BYON feature</p> <p>Added specs around local business hours and number porting</p> <p>Compliance with National regulation added in Roaming limitations paragraph</p> <p>Added specifics on CLI Manipulation rules in the context of Call Forwarding</p> <p>Added specifics for Microsoft Phone System</p> <p>Added specifics for Cisco Webex Calling CCP</p> <p>Removed support of "Refer" in the default SIP methods</p>
1.5.1	January 30 <sup>th</sup> , 2024	<p>Added China to list of covered countries</p> <p>Added further specs on the BYON limitations</p> <p>Added Privacy Waiver for US/Canada emergency calls routing specifics</p> <p>Additional specs added to local Billing section</p>
1.5.2	March 15 <sup>th</sup> , 2024	<p>Added Cisco CCP specifics</p> <p>Updated Public Internet Access Points</p>

Issue	Date	Comments
1.6	August 15 <sup>th</sup> , 2024	New NTT Data formatting Additional specs for on-net calls routing Update of SLA section Update of Billing section Default call setup and increments set to 30 seconds



# 1. Universal Calling Plans

Universal Calling Plans are full PSTN-replacement cloud-based calling plans working with leading real-time communication and UCaaS platforms.

This Service is available in a growing number of countries and consists in providing a User Number (a personal phone number), collecting inbound calls from the PSTN network and routing them to the appropriate User following a given policy.

This Service also includes the CLI presentation to called parties.

Universal Calling Plans are provided in 4 different plans providing various call packages ("Domestic per Minute", "Domestic 180 minutes", "Domestic Unlimited" and "Domestic and International").

All these plans include following features:

- One local User Number
- CLI-Presentation and CLI-Restriction
- Emergency Call Services
- Toll-Free Destinations calling
- Reception of inbound calls to the User Number
- Access to pay-as-you-go service (ability to place outgoing calls to domestic and international PSTN destinations)

## 1.1. Geographic coverage

For regulatory compliance purposes NTT only provides this service in the Available Countries as listed in the below table and in accordance with National Numbering Plan regulation.

The availability of the Services and features may vary by location due to regulatory and other restrictions. Client understands that these country specifics may evolve over time for reasons outside of NTT's control.

N.B. The below information is given for informational purposes and may be subject to change over time.

Country name	User Numbers availability	Country specifics
Argentina*	All mainland Geographic numbers	Porting of landline numbers is not allowed in this country
Australia	All mainland Geographic numbers	
Austria	All mainland Geographic numbers	
Belgium	All mainland Geographic numbers	
Brazil	Main local numbering areas available. Upfront availability study recommended.	Coverage includes São Paulo and Rio de Janeiro areas as well as 75% of cities with population above 100,000 inhabitants
Canada	All mainland Geographic numbers	
Chile*	All mainland Geographic numbers	Limitations to porting of landline numbers may apply in this country

Country name	User Numbers availability	Country specifics
China*	All mainland Geographic numbers (excl. HK and Macau).  N.B. China User Numbers are only available for Clients located outside of China	Porting of landline numbers is not available. Emergency Calls services are not available in China Directory services are not available.
Colombia*	All mainland Geographic numbers	Porting of landline numbers is not allowed in this country
Costa Rica*	Mainland Geographic numbers	Porting of landline numbers is not allowed in this country
Croatia	Mainland Geographic numbers	Coverage of main cities numbering areas
Cyprus	Mainland Geographic numbers	Coverage of main cities numbering areas
Czech Republic	All mainland Geographic numbers	
Denmark	All mainland Geographic numbers	
El Salvador*	All mainland Geographic numbers	
Estonia	National numbers	Outbound calling to Estonia Premium rate numbers is not supported International inbound calls to national numbers are not guaranteed
Finland	All mainland Geographic numbers	
France	All mainland Geographic numbers except French overseas departments/territories	
Germany	All mainland Geographic numbers	
Greece	Mainland Geographic numbers	Coverage of main cities numbering areas
Hong-Kong	All mainland Geographic numbers	
Hungary	Mainland Geographic numbers	Coverage of main cities numbering areas
Israel*	Mainland Geographic numbers	Coverage of main cities numbering areas Before service activation, Client shall provide a letter signed by the end-user confirming engagement of services was carried out through authorized signatories of the subscriber and is legally binding on the subscriber.
Ireland	All mainland Geographic numbers	
Italy	All mainland Geographic numbers	Legal Company Name Local Company Information Local Contact Number

Country name	User Numbers availability	Country specifics
Japan	050 (national VoIP) and 03B-J (Tokyo area) numbers	Ordering of 03B-J numbers requires a company registration certificate and a proof of address. Access to Japanese Short-Codes from VoIP numbers is on best-effort basis as some restrictions on inbound calls from VoIP numbers may be in place for targeted call-centers. Emergency Calls services are not available in Japan using this Product.
Latvia*	All mainland Geographic numbers	
Lithuania	Mainland Geographic numbers	Coverage of main cities numbering areas Proof of address required
Luxembourg	All mainland Geographic numbers	Legal Company Name Local Contact Number
Malaysia	All mainland Geographic numbers	Porting of landline numbers is not possible in this country Proof of address required
Mexico	All mainland Geographic numbers	
Netherlands	All mainland Geographic numbers	Legal Company Name
New-Zealand	All mainland Geographic numbers	
Norway	All mainland Geographic numbers	
Panama*	All mainland Geographic numbers	
Peru*	All mainland Geographic numbers	
Poland	All mainland Geographic numbers	Legal Company Name Local Company Information
Portugal	All mainland Geographic numbers	Numero de Indentificacao Fiscal (NIF) Portability validation code (CVP) (generated automatically based on the NIF - cannot be modified)
Puerto Rico	All mainland Geographic numbers	
Romania	All mainland Geographic numbers	Proof of address required
Singapore	All mainland Geographic numbers	
Slovakia	Mainland Geographic numbers	Coverage of main cities numbering areas
Slovenia	Mainland Geographic numbers	Coverage of main cities numbering areas Customer shall inform end-users of the existence and importance of the single European emergency number "112" and the single European missing children hotline number "116000"

Country name	User Numbers availability	Country specifics
South Africa	All mainland Geographic numbers	
Spain	All mainland Geographic numbers	
Sweden	All mainland Geographic numbers	
Switzerland	All mainland Geographic numbers	
United Kingdom	All mainland Geographic numbers (does not include Channel Islands, Isle of Man and overseas territories) and 033 Non-Geographic Numbers.	
USA	All mainland Geographic numbers and Hawaii	

\* Countries available as Preview. SLAs and standard delivery times are best effort only.

## 1.2. Available plans

### 1.2.1 Domestic per Minute plan

This plan does not include any PSTN call consumption minutes and all outgoing calls will be rated on a per minute basis.

### 1.2.2 Domestic 180 plan

The Domestic Calling Plan 180 includes the following features:

- Pooled bundle of 180 minutes of outgoing PSTN Calls to Domestic destinations (outside of Special Numbers and Toll-Free numbers)

The number of minutes allocated in each Domestic 180 Calling Plan are pooled together on a per-county basis. These per-country pools of minutes are computed monthly and do not propagate from one month to another. On-net calls are included in this plan on an unlimited basis (subject to Service Use Policy).

In example, if Client has subscribed 10 Users to the “UK Domestic 180 Calling Plan”, a shared pool of 1 800 UK minutes is each month available for these 10 Users.

### 1.2.3 Domestic Unlimited plan

The Domestic Unlimited Calling Plan includes unlimited PSTN calls towards Domestic destinations, subject to the Service Use Policy defined in this document.

On-net calls are included in this plan on an unlimited basis (subject to Service Use Policy).

### 1.2.4 Domestic and International plan

The Domestic and International Calling Plans includes all the features of the Domestic Unlimited Plan as well as the following features:

- Contribution of 250 minutes of outgoing PSTN Calls to international destinations (outside of Special Numbers) to the International Pool of minutes (one pool globally)

## Geographic coverage of International plan

The International component of the Domestic and International Calling Plan covers the below countries for both fixed and mobile destinations:

Alaska	Hawaii	Peru
Argentina	Hong Kong	Poland
Australia	Hungary	Portugal
Austria	Iceland	Puerto Rico
Bangladesh	India	Romania
Belgium	Indonesia	Russian Federation
Brazil	Ireland	Singapore
Canada	Israel	Slovakia
Chile	Italy	Slovenia
China	Japan	South Africa
Colombia	Korea (South)	Spain
Costa Rica	Latvia	Sweden
Croatia	Lithuania	Switzerland
Cyprus	Luxembourg	Thailand
Czech Republic	Malaysia	United Kingdom
Denmark	Mexico	USA
Estonia	Netherlands	Viet Nam
Finland	New Zealand	
France	Norway	
Germany	Panama	
Greece	Pakistan	

*Countries included in the International Calling Plan*

## International Pool of minutes

The number of international minutes allocated in each Domestic and International Calling Plan are pooled together globally and is shared across all subscribers.

In example, if Client has subscribed 10 Users to the “UK Domestic and International Calling Plan” and 10 Users to the “USA Domestic and International Calling Plan”, a shared pool of 5,000 minutes is each month available for these 20 Users for International calls.

### 1.2.5 Domestic Calling Destinations included

The below table describes the geographic availability of Domestic destination types included in the Domestic Calling Plan 180 and Domestic Unlimited Calling Plan:

Country name	Domestic calling destinations included
Argentina	Argentina Fixed and Mobile
Australia	Australia Fixed and Mobile
Austria	Austria Fixed and Mobile
Belgium	Belgium Fixed and Mobile
Brazil	Brazil Fixed and Mobile
Canada	Canada <sup>(1)</sup> and USA <sup>(2)</sup>
Chile	Chile Fixed and Mobile
China	China Fixed and Mobile
Costa Rica	Costa Rica Fixed and Mobile
Croatia	Croatia Fixed and Mobile
Cyprus	Cyprus Fixed and Mobile
Czech Republic	Czech Republic Fixed and Mobile
Denmark	Denmark Fixed and Mobile
El Salvador	El Salvador Fixed and Mobile
Estonia	Estonia Fixed and Mobile
Finland	Finland Fixed and Mobile
France	France Fixed and Mobile
Germany	Germany Fixed and Mobile
Greece	Greece Fixed and Mobile
Hong-Kong	Hong-Kong Fixed and Mobile
Hungary	Hungary Fixed and Mobile
Israel	Israel Fixed and Mobile
Ireland	Ireland Fixed and Mobile
Italy	Italy Fixed and Mobile
Japan	Japan Fixed and Mobile
Latvia	Latvia Fixed and Mobile
Lithuania	Lithuania Fixed and Mobile
Luxembourg	Luxembourg Fixed and Mobile
Malaysia	Malaysia Fixed and Mobile
Mexico	Mexico Fixed and Mobile

Country name	Domestic calling destinations included
Netherlands	Netherlands Fixed and Mobile
New-Zealand	New-Zealand Fixed and Mobile
Norway	Norway Fixed and Mobile
Panama	Panama Fixed and Mobile
Peru	Peru Fixed and Mobile
Poland	Poland Fixed and Mobile
Portugal	Portugal Fixed and Mobile
Puerto Rico	Puerto Rico and USA <sup>(2)</sup>
Romania	Romania Fixed and Mobile
Singapore	Singapore Fixed and Mobile
Slovakia	Slovakia Fixed and Mobile
Slovenia	Slovenia Fixed and Mobile
South Africa	South Africa Fixed and Mobile
Spain	Spain Fixed and Mobile
Sweden	Sweden Fixed and Mobile
Switzerland	Switzerland Fixed and Mobile
United Kingdom	United Kingdom Fixed and Mobile
USA	USA <sup>(2)</sup>

*Table 1. Availability of Calling Plan types per country*

<sup>(1)</sup> Does not include Northern Territories

<sup>(2)</sup> Does not include Alaska and Puerto Rico

N.B. “Fixed” destinations includes calls towards Geographic and Toll-Free numbers, as well as any other destination of the national numbering plan that NTT considers assimilable to Geographic numbering tariffs.

### 1.3. Unassigned DDIs

Unassigned User Numbers (also referred to as “Unassigned DDIs”) allocated to Client are stored and kept available by NTT. These numbers are available at any time for Client to assign them on its communication platform(s).

### 1.4. Bring Your Own Numbers (BYON)

#### 1.4.1 Description

NTT Cloud Voice BYON permits Client to register external Phone Numbers (sourced from a Voice Carrier different than NTT) onto NTT Cloud Voice network.

In such case Client keeps its contract with its local Voice Carrier but benefits from NTT Cloud Voice integration with leading Cloud Communications platforms.

- Inbound calls get routed on-net throughout NTT Cloud Voice network towards destination Cloud Communications platform.
- Outbound calls from Cloud Communication platform can be routed towards NTT PSTN carrier-set and benefit from NTT Global Price-List.
- Calls between BYON and other NTT provided User Numbers or CX Numbers are considered as on-net and will be rated as such.

Registered external Phone Numbers will be behaving the exact same way as NTT Phone Numbers from a functional standpoint.

## 1.4.2 Pre-requisites

BYON requires Client (or its underlying Voice Carrier) to deploy SIP trunking integration with NTT Cloud Voice network.

## 1.4.3 Limitations

In most countries, routing of outbound domestic calls will have to be done through Client's BYON Voice Carrier for preserving some features (such as Call Termination, CLI-Presentation, etc.)

Limitations may apply with regards to Cloud Communication platform integration and CLI handling depending on country and number-type, Feasibility study should be sought from NTT as presales stage.

By using this BYON solution, NTT does not become the local Voice Carrier of Client for the relevant calls, and NTT shall not be liable to comply with any related local Telecommunications provider's obligations. Emergency calls routing shall be handled by Client's Voice Carrier.

## 1.5. Calling Plans subscriptions management

Client can update the Calling Plan assignments made to his/her User Numbers and Unassigned DDIs at any time.

Such changes are taken into account in the month when the change is made and will apply moving forward.

For Unassigned DDIs, Calling Plan assignment is automatically made on first successful use of the Unassigned DDI (first SIP200 header received on such DDI – whether inbound or outbound PSTN call).

By default, the Calling Plan automatically assigned is the most affordable one that Client has subscribed to in a given country.

## 1.6. Outbound calls - Pay-as-you-go

The Pay-as-you-go service permits to place outgoing calls to worldwide PSTN destinations. The Pay-as-you-go service works in conjunction with Universal Calling Plans. Calls will be charged on a per-minute basis and according to the NTT Pay-as-you-go rate-card.

Pay-as-you-go service includes the below features:

- CLI-Presentation and CLI-Restriction
- Toll-Free Destinations calling

## 1.7. Number Ordering and Porting

### 1.7.1 New numbers ordering

NTT offers Client to order new numbers in the local area(s) of its choice.



Feasibility study must be conducted prior to assignment of local numbers to Client. This is due to the facts that NTT does not hold stock in every possible numbering areas but also because local numbering resources are becoming scarce in dense areas and regulators tend to provide new resources by small incremental subsets. Therefore, NTT recommends Client to keep a minimum stock of unassigned DDIs in chosen local areas, aside of a foreseen ramp-up period.

N.B. NTT will aim at providing consecutive numbers as much as possible but such consecutive numbering resources may not always be available.

## 1.7.2 Number Porting

<b>Description</b>	This Service permits Client to keep using its existing User Numbers. When porting Numbers is allowed and supported in a given country, Client may be entitled to port-in Numbers from other operators to NTT' network. Unless otherwise stated in writing, the date and time for the transition to NTT will happen at the go live date, as agreed between the parties.
<b>Limitations</b>	For regulatory compliance purposes NTT only provides this service in the available countries listed in the Specific Terms. The Numbers Porting is subject to feasibility study and may not be available depending on the telecommunication operator owning Client's current Numbers. Out-of-range numbers are especially unlikely to be ported.

## 1.7.3 Timelines and country specifics

Timelines for each country vary depending on whether the enquiry is for new numbers ordering or porting of existing numbers. These timelines may also vary over time as practices or regulation may change in a given country.

When it comes to porting, default figures as may be provided by NTT are assuming standard porting operations during local business-hours and which can vary on a per-country basis.

Timelines provided by NTT always apply "post-order validation", meaning once NTT has received and validated the order and all necessary documents (including Letter of Authorization).

Ordering new numbers can extend timelines beyond initially communicated values should stocks in required local numbering area be empty. NTT recommends discussing foreseeable needs in terms of local numbering resources as early as possible.

Below table is giving an estimate of Porting delays and minimum number of User Numbers to be ordered.

Country name	Numbers porting – Min. TTD	Min. numbers per order
Argentina*	N/A	1
Australia	6 weeks	1
Austria	6 weeks	1
Belgium	6 weeks	1
Brazil	6 weeks	1
Canada	6 weeks	1
Chile*	N/A	1
China	N/A	1 (main numbering areas only)
Colombia	N/A	1
Costa Rica*	N/A	1

Country name	Numbers porting – Min. TTD	Min. numbers per order
Croatia	6 weeks	1
Cyprus	6 weeks	1
Czech Republic	6 weeks	1
Denmark	6 weeks	1
El Salvador*	6 weeks	1
Estonia	6 weeks	1
Finland	6 weeks	1
France	6 weeks	1
Germany	6 weeks	10
Greece	6 weeks	1
Hong-Kong	6 weeks	1
Hungary	6 weeks	1
Israel*	6 weeks	1
Ireland	6 weeks	1
Italy	6 weeks	1
Japan	6 weeks <sup>1</sup>	10
Latvia*	6 weeks	1
Lithuania	6 weeks	1
Luxembourg	6 weeks	1
Malaysia	N/A	1 (main numbering areas only)
Mexico	6 weeks	1
Netherlands	6 weeks	1
New-Zealand	6 weeks	1
Norway	6 weeks	1
Panama*	6 weeks	1
Peru*	6 weeks	1
Poland	6 weeks	1
Portugal	6 weeks	1
Puerto Rico	6 weeks	1
Romania	6 weeks	1
Singapore	6 weeks	10

Country name	Numbers porting – Min. TTD	Min. numbers per order
Slovakia	6 weeks	1
Slovenia	6 weeks	1
South Africa	6 weeks	1
Spain	6 weeks	1
Sweden	6 weeks	1
Switzerland	6 weeks	1
United Kingdom	6 weeks	1
USA	6 weeks	1

#### Timelines for User Numbers porting

<sup>1</sup> Porting available in Tokyo only with respect to the below conditions:

- Numbers must be from the “Shirahige” local numbering area only
- Numbers must be currently owned by NTT East or West
- Numbers must be authentic ISDN numbers (not already used in the context of VoIP)
- 050 (VoIP) numbers cannot be ported.

\* Countries available as Preview. SLAs and standard delivery times are best effort only.

Time to Deliver figures are given for indicative purposes and apply for a limited number of User Number ranges and sites. NTT recommends placing a specific enquiry to get most accurate and up-to-date figures.

## 1.7.4 Non-standard porting operations

By default, porting operations are conducted by NTT:

- During local business-hours
- Covering 1 customer site at a time
- Range(s) from 1 losing carrier at a time

Should Client however request to have porting operations conducted outside of local business-hours, or have several sites, from several losing carriers ported at one time, this can be studied on a case-by-case basis and managed via NTT Professional Services teams.

Additional charges for non-standard porting operations apply.

## 1.8. Emergency Call Services

### 1.8.1 Registration based Emergency Call Services

#### Description

In all countries where NTT provides User Numbers, Users can reach local Emergency Call Services for free.

In the USA, our service also supports the Automatic Location Identification (ALI) feature, enabling an automatic display of information defining a geographical location of the telephone used to place a call to 911.

## Client responsibilities

Client agrees to respond to Supplier's reasonable request according to applicable law or carrier's request and accordingly shall provide Supplier with all the information necessary to enable the Emergency Call Services, including but not limited to the complete postal address of each User and the fixed location of the User's terminal equipment. Client and authorizes Supplier to disclose it to third-party service providers, including without limitation, call routers, call centers, Emergency Service Centers and Public Service Answering Points ("PSAPs"), for the purpose of dispatching emergency services personnel to User location and/or subject to any additional specific country requirements. Where the Client has a reasonable expectation, or has been informed, that the Service will be accessed by the User from multiple locations, the Client must recommend that the User register the new address whenever accessing the Service from a new location and provide any such new address received from the User to the Supplier.

Client agrees and commits to provide Supplier written notice of any change of such Address Declared information in a timely manner in order to ensure the accuracy of the relevant Emergency Call Services database and shall be solely responsible for any consequence caused by failure or delay in providing or updating the information. Client acknowledges that in case of modification of the User's information, Supplier will modify the Address Declared as soon as possible in a timely manner from the request. The timeframe may depend on the relevant country. It is Client's sole responsibility to take into account this timeframe as, during this period, the Emergency Call Services will only be available for the concerned User number based on the previously provided Users information. It is Client's liability and responsibility to inform Users beforehand of this temporary unavailability.

Client acknowledges that Supplier will not be able to accurately convey calls to the correct location of the caller, including Emergency Calls, if the information is not provided in accordance with this clause.

Subject to supplemental conditions relating to Dynamic or Nomadic rules, Client recognizes and acknowledges that the Emergency Calls Services are limited to Users: (i) with a geographical address located in one of the Available Countries; (ii) with a DID corresponding to the national and local dialing plan of the country where the User is declared; and (iii) who are, when dialing to reach an Emergency Service Center, physically located at the Address Declared.

Client understands and acknowledges that the use of Services from a location other than the Address Declared ("Nomadic Usage") is possible but does not permit the accurate supply of Emergency Calls Services unless the Address Declared is updated to the address from which the Service is accessed. Client shall therefore (i) inform its Users at the time of subscription about the non-availability of the Emergency Call Services in case of a Nomadic Usage of the Services; and (ii) clearly inform the Users at the time of subscription that each User must use another communication mean for reaching Emergency Service Centers when located at a different address than the Address Declared.

Client recognizes and agrees that when a User uses the Emergency Call Services, the Calling Line Identifier ("CLI") is unconditionally displayed to the Emergency Services Center.

Client is responsible to ensure that a valid CLI is provided within the SIP signaling of an emergency call, according to the specifications detailed in the Service Description of Cloud Voice Services, and that the CLI is a User Number provided by Supplier to the Client as part of the Services, and that the required information for emergency services registration has been previously provided by Client to Supplier. Client acknowledges that the Services, including Emergency Call Services, may not function correctly or at all, (i) in case of occurrence of a Force Majeure event as defined by the applicable Agreement; (ii) in the event of absence of power, access to the Internet, network congestion or outage that is outside the control of Supplier, its suppliers or its network operators, misconfiguration of Client's network, equipment malfunction or other general failures associated with the Services or (iii) in the event of Emergency Services Center failure.

CLIENT SHALL ENSURE USERS HAVE ACCESS TO A REGULAR TELEPHONE LINE ENABLING ROUTING OF EMERGENCY CALLS WHEN NOT PHYSICALLY LOCATED AT THE ADDRESS DECLARED. CLIENT SHALL BE RESPONSIBLE TO INFORM ANY USER OF THE LIMITATIONS OF THE EMERGENCY CALL SERVICES AND SUGGEST AS A GOOD PRACTICE eg. TO OBTAIN FROM EACH USER WITH AN ACKNOWLEDGEMENT OF ANY EMERGENCY CALL SERVICES LIMITATION IN WRITING PRIOR TO

USER'S FIRST USE OF THE SERVICES AND TO BRING TO USER ATTENTION WITH A MESSAGE SIMILAR TO THE FOLLOWINGS: *"IMPORTANT – this service may have limitations with emergency services – you should always have an alternative connection available for this purpose"*.

## 1.8.2 Countries specifics with regards to emergency calling

### US and Canada

#### Different routing solutions

Client understands and acknowledges that Supplier's 911 Service capabilities are different than those offered by traditional providers of local telephone services. The Services are not intended to support Emergency Calling, and you should maintain an alternative means of Emergency Service Calling. Client therefore agrees that the following limitations to the Emergency Call features of the Services apply:

If the address of User is not validated due to errors (for example a post code that is not matching the street name), then the correction of these errors shall not be done in real-time. The Emergency Call Services may therefore not be correctly supplied when the correction is being made.

If the primary method of routing of emergency calls is not available for the entire territories of United States or Canada, Supplier and its underlying suppliers shall utilize a second routing solution according to the applicable regulatory framework. Client understands and agrees that the following limitations to Emergency Call Service features will apply in case the emergency call is routed via this second solution:

- When the User places the Emergency Call, this may be routed to an Emergency Services Center, rather than to the Public Service Answering Point ("PSAP") that would normally receive the emergency call placed from the User location.
- The User's physical location and CLI will not be presented to the Emergency Services Center.
- If the User cannot speak, no information will be provided to the Emergency Services Center utilized to contact Supplier to obtain information that could allow them to dispatch emergency services to the User's location.

#### Differences with traditional 911 Emergency Services

Cloud Voice is a VoIP telephony service. VoIP telephony services allow people to make or receive telephone calls over the Internet to or from the public switched telephone network. The nature of VoIP telephone calls, while appearing similar to traditional telephone calling services, creates unique limitations and circumstances, and Client understands and agrees to the differences between traditional telephony service and VoIP telephony services. Client also understands and agrees that VoIP telephone services may not provide the most timely or accurate location data if used for the Emergency Call Services, and there are certain circumstances under which the Emergency Call Services may not be available through VoIP telephony services or may be limited by comparison to traditional 911 service. Such circumstances include, but are not limited to, relocation of the User's IP-compatible Client Premises Equipment ("CPE") (i.e. laptop, PC, IP Phone, etc.), use by the User of a non-native telephone number, broadband connection failure, loss of electrical power, and delays that may occur in making an Address Declared available in or through the Automatic Location Information ("ALI") database. Supplier will not be liable for such resulting errors or delays.

Client acknowledges and agrees that it is solely responsible for informing its Users of the differences between traditional telephony service and VoIP telephony services, including the lack of traditional 911 Emergency Services. Prior to establishing access to the Services for User, Client must provide Users with a conspicuous notice as allowed by Applicable Law regarding the 911 service limitations. Additional details of those requirements can be found at <https://www.fcc.gov/consumers/guides/voip-and-911-service>. If Client or its Users are not comfortable with the limitations on VoIP 911 dialing, Client and Users should have an alternative means of accessing traditional 911 services.

Client acknowledges and agree that if User experiences a power outage, Service outage or any other network disruption, Cloud Voice's Emergency Calling features will not work. Outages of User's electricity or problems with a User's connectivity, including network congestion, will disrupt the Services and the User will not be able to use it for Emergency Calling. If User experiences a service outage due to a suspension of Customer's or User's account due to billing issues or for any other reason, User will not be able to use any Service calling features, including making Emergency Calls.

## Placing 911 calls

When a 911 Emergency Call is made, Cloud Voice will attempt to automatically route the call to an Emergency Service Center, which will then route the call to a PSAP based on registered address information provided by Client. The Emergency Service Center is different from the PSAP that would answer a traditional 911 call which has access to automatically generated user address information. Consequently, User may be required to provide the Username, address, and telephone number to the Emergency Service Center answering the User's 911 call. Cloud Voice will attempt to automatically provide the Emergency Service Center dispatcher or other operator with the registered name, address and telephone number associated with the Client account and associated phone number from which the call is made. However, for technical reasons, the dispatcher receiving the call may not be able to capture or retain User's name, phone number, or physical location. Therefore, when making a 911 emergency call, User must immediately inform the dispatcher of his or her location (or the location of the emergency, if different). If the User is unable to speak, the dispatcher may not be able to locate the User if the location information associated with the Client account and associated phone number is not up to date.

## Types of communication platforms

Cloud Voice provides the Dispatchable Location for 911 calls for all the standard communication platforms it is compatible with.

The Dispatchable Location for 911 calls setting applies at customer site level for the entire site.

In the case of "fixed-devices" systems (i.e. on-premises legacy IP-PBX systems), Client is responsible for providing accurate Dispatchable Location information and timely updates should a change be made.

NTT will store such dispatchable location information in its databases and have it communicated with the relevant emergency services centers.

In the case of "non fixed-devices" (UCaaS based solutions such as MS Teams), our solution is compatible with the Presence Information Data Format – Location Object (PIDF-LO) SIP based technology to dynamically transmit location-based information to emergency services centers. Emergency calls made without PIDF-LO information natively embedded are routed to the US national emergency center. In the case of UCaaS platforms (or "non-fixed devices" as per the FCC), Client is responsible for maintaining the Dispatchable Location information up-to-date on its platform(s).

Calls failing to provide adequately documented emergency address in the USA and Canada will incur a one-time charge per call. This charge covers for the costs of having the call being manually taken care of by a professional operator. This operator will verbally determine the location of the caller and have it forwarded to the most appropriate emergency center.

Such charge is listed as part of NTT standard regulatory rates, available on demand to NTT sales representative.

## Disconnections

Users must not disconnect the 911 emergency call until told to do so by the dispatcher as the PSAP or Emergency Services Centers may not have the User's number or contact information. If the User is inadvertently disconnected, the User must reiterate its call immediately.

## Connection Time

For technical reasons, including network congestion, a 911 emergency call may produce a busy signal or may take longer to connect than a traditional 911 call.

## Privacy waiver

The 911 calling party waives any privacy afforded by non-listed and non-published service to the extent that the Telephone Number (TN), address and name associated with the originating access line location are furnished to the PSAP. Client must instruct end Users not to block their TN number on their handsets when calling 911.

## Japan

When providing the outgoing call routing service in Japan and when such routing service relates to Emergency Calls for 03B-J numbers only:

Client acknowledges that the information of end-user may cause a misidentification of the user of the Emergency Call. Client therefore agrees that Emergency Calls service may be restricted, disabled or that Emergency Calls cannot be used. When Emergency Calls cannot be supported, alternative to Emergency Calls should be used by the end-user, Users should always have access to another solution for calling emergency services (i.e. Mobile phone line).

## China

Emergency calling is not available in China. Alternative means to place Emergency Calls should be used by the end-user, Users should always have access to another solution for calling emergency services (i.e. Mobile phone line).

### 1.8.3 Other limitations

#### Remote Workers

By default, NTT will configure the emergency address of the official business location of Remote Workers. Should Client elect to assign Remote Worker's home address as the official emergency address, then an additional add-on fee may apply.

#### Roaming

When the Universal Calling Plan service is used while roaming in a foreign country, emergency calling should not be used as these calls would be placed to the officially assigned Emergency Address of the end-user (Home country address).

Client understands that all such use of resources from National Numbering Plans in roaming circumstances must be done in a lawful manner.

### 1.8.4 End-user information responsibility

Client shall inform its Users of above limitations to Emergency Call Services, if required by Applicable Law, so as to make sure of its employee end-users' awareness.



## 1.9. Call Routing capabilities

### 1.9.1 Call-Forwarding

#### Description

Client can enable call-forwarding settings on a per-phone-number basis.

N.B. Call-Forwarding calls will be rated using the 2 legs of the call (Inbound Call + Outbound Call) and respective charges be applied as overage if applicable.

#### Limitations

The Call-Forwarding service is only available from and to countries where Cloud Voice services are available, including Pay-as-you-go service.

The Call-Forwarding service may present limitations in some jurisdictions, notably for fraud protection reasons. Limitations often involve CLI-manipulation rules to prevent identify theft and other fraudulent behavior. Such CLI-Manipulation rules may end-up erasing the Original CLI.

NTT Cloud Voice does not populate the Redirecting Number (Diversion Header) when setting up Call-Forwarding.

Feasibility study should be sought from NTT at Presales stage to understand specific impact of Call-Forwarding to CLI handling.

### 1.9.2 On-net call routing

NTT Cloud Voice natively enables on-net call routing and rating for Universal Calling Plans.

All calls between 2 Phone Numbers registered on NTT Cloud Voice network will be routed as being an on-net call and rated as such.

NTT will rate calls as being “on-net” in the below use-cases:

From / To	Off-net PSTN number	On-net non-registered number <sup>1</sup>	NTT number EX	BYON EX	NTT number CX	BYON CX
Off-net PSTN number	N/A	N/A	Incl.	Incl.	CX Dial-in	CX Dial-in
On-net non-registered number <sup>1</sup>	Dial-out	Dial-out	Dial-out	Dial-out	On-net CX DI	On-net CX DI
NTT number EX	Dial-out	N/A	On-net DO	On-net DO	On-net CX DI	On-net CX DI
BYON EX	Dial-out	On-net DO	On-net DO	On-net DO	On-net CX DI	On-net CX DI
NTT number CX	Dial-out	N/A	On-net DO	On-net DO	On-net CX DI	On-net CX DI
BYON CX	Dial-out	On-net DO	On-net DO	On-net DO	On-net CX DI	On-net CX DI

<sup>1</sup> Number on-net from a VoIP/SIP trunking standpoint but not registered/unknown to NTT Cloud Voice systems



List of rates classification:

- N/A: Not Applicable
- Incl.: No charges associated
- CX Dial-in: Dial-in PAYG rate for Service Numbers (Cloud Voice for CX)
- Dial-out: PAYG rate for outgoing PSTN calls and rated according to Client subscription
- On-net DO: On-net per minute rate for outgoing calls
- On-net CX DI: On-net per minute rate for incoming calls to CX numbers

## 1.10. VoIP specifics

### 1.10.1 CLI-Presentation

CLI must be formatted using E.164 global format. This CLI should normally be placed in the FROM header of the SIP INVITE which initiates the call. Any calls where a valid CLI is not set, may be classified as a spoofing attempt and blocked.

For Domestic outbound calls NTT guarantees the CLI being delivered provided end-users are not using CLI-Restriction methods.

For International outbound calls, NTT cannot guarantee the CLI being delivered to called party but ensures transmitting it, provided end-users are not using CLI-Restriction methods.

For International inbound calls, NTT cannot guarantee the validity of the CLI presented.

Client use of CLI-Presentation must, at all times, be in accordance with local rules and regulation.

### 1.10.2 CLI-Manipulation

NTT does not provide a CLI-Manipulation service but ensures transmitting manipulated CLI(s) when the desired CLI to be presented belongs to Client and is supplied by NTT.

Should Client require to present a CLI other than one of the User Numbers held by Client, then advice should be sought from NTT regarding the specific requirements as the capabilities and obligations vary by country.

### 1.10.3 CLI-Restriction

If Client wishes to apply CLI-Restriction (CLIR) when an outbound call is sent, then Client should configure its communication platform (e.g. IP-PBX or Session Border Controller) to use the privacy header (as described in RFC 3325).

To set CLI-R, Client should manipulate signaling on an outbound call so that:

1. The privacy header is set to privacy: id
2. The FROM header is set to [sip:anonymous@anonymous.invalid](#)
3. The valid CLI should be set in the P-Asserted Identity header

### 1.10.4 Directory Services Registration

<b>Description</b>	Directory Services Registration means a national directory listing that publishes Users information of a telephone number upon User request and might also provide reverse query and/or enquiry services regarding this information.
<b>Prerequisites</b>	Client must provide accurate information for Directory Services Registration (and its modifications) of Users to NTT. Client will fully indemnify NTT of every cost, fees and other expenses paid by NTT as a consequence of inaccuracy of the Directory Information transmitted by Client.
<b>Limitations</b>	Client understands and acknowledges that the Directory Services as defined below published in the universal directory of the country where the Number was

allocated may also be transferred to other commercial directory services providers of the country. NTT reserves the right to refuse to publish Directory Information in the applicable directory of a specific country:	
<ul style="list-style-type: none"><li>• in case information is missing or are incorrect in applicable mandatory fields</li><li>• if the address of the User linked to the number does not meet all applicable regulatory requirements of that specific country, including but not limited to the relevant local address requirement that imposes the address of the User to correspond to the relevant geographic zone of a telephone number.</li></ul>	
Directory Services Registration is not available in China.	

### 1.10.5 Caller ID Name (CNAM)

<b>Description</b>	The Caller ID Name Service (or CNAM Service) is a service allowing Client to offer to its Users the possibility of receiving CNAM data from the calling party that enabled the emission of such service. The CNAM data means the calling name information and/or other identification information of a User as associated to a specific User Number.
<b>Prerequisites</b>	Client must order all targeted numbers from NTT to benefit from the CNAM option.
<b>Limitations</b>	This service is only available in the USA and is subject to feasibility study as some very specific locations in the USA are not available to date.

### 1.10.6 Voice codecs

As a prerequisite, Client must support the G.711 PCMU and/or PCMA codecs.  
By default, audio transcoding is not supported as a standard feature.

### 1.10.7 SIP-level failover mechanisms

Cloud Voice provides SIP Hunting capabilities which permit the definition of a set of failover SIP routes to reach the main SIP target.  
This mechanism requires customer's SIP estate to support SIP Options Ping requests.

## 1.11. Standard compatibility with UCaaS platforms

Our Cloud Voice services are compatible with the below listed Global UCaaS platforms. Benefitting from Cloud Voice services with standard UCaaS platforms does not require to build a dedicated SIP trunk prior to rolling out the services.

### 1.11.1 Microsoft Teams Phone System Features

Universal Calling Plans are fully compatible with MS Teams Phone System features.  
The service is natively available on both Direct Routing as a Service and Operator Connect.  
Should Microsoft provide feature updates to Phone System, NTT will aim at adding such new features as early as possible.  
Preview countries are only available via Direct Routing as a Service.  
N.B. Appropriate Microsoft licensing is required for Client to benefit from Microsoft Teams Phone System capabilities.

### 1.11.2 Cisco WebEx Calling Voice Features

Cloud Voice services are fully compatible with the Cisco WebEx Calling PBX features through Cloud Connected PSTN framework (CCP).

Preview countries are not available on CCP.

N.B. As an exception to the above description around Dynamic Emergency Calls routing in USA and Canada, NTT is not providing this feature as it is natively covered by the vendor – Please refer to Cisco's Webex Service Description for further details on this feature.

N.B. Appropriate Cisco licensing is required for Client to benefit from Webex Calling capabilities.

## 1.12. Standard compatibility with Client specific platforms

Benefitting from Cloud Voice services with standard real-time communications platforms dedicated to Client platforms does require to build a dedicated SIP trunk prior to rolling out the services.

### 1.12.1 List of standard platforms validated

Our Cloud Voice services solution has been tested and validated with the below platforms:

- Skype for Business CCE appliances
- Skype for Business Server 2015
- CISCO Cube
- Audiocodes Mediant session border controllers
- Oracle Communications session border controllers
- Ribbon session border controllers

### 1.12.2 SIP trunking specifics

Client's SIP trunking peering equipment must be compatible with NTT SIP Profile and SIP exchange, as described in this document.

Audio Real time traffic doesn't tolerate high network latencies (quality drops after 150ms).

NTT recommends that the following requirements are met:

Criteria	Thresholds
One-way delay	< 150 ms to ensure a good level of quality for most conversations
Jitter	< 40 ms
Packet Loss	< 2%

Client is required to share information describing the brand, model and hardware or software version of the SIP peering device(s) which terminates the SIP trunk(s) to NTT.

### 1.12.3 SIP features

NTT SIP profile is compliant with SIPv2 standards and a large variety of SIP features. Features out of below lists can be studied upon request.

#### Number formatting

The default numbering format is international +{E.164}.

## SIP signaling

RFC Standard	Control Plan	Supported
[RFC3261]	IETF RFC 3261 "Session Initiation Protocol (SIP)"	Yes
[RFC2327]	IETF RFC 2327 "Session Description Protocol (SDP)"	Yes
[RFC3264]	IETF RFC 3264 "An Offer/Answer Model with the Session Description Protocol (SDP)"	Yes
[RFC3311]	IETF RFC 3311 "The Session Initiation Protocol (SIP) UPDATE Method"	Yes
[RFC4028]	IETF RFC 4028 Session Timers in the SIP	Yes

## Media coding

RFC Standard	Media	Supported
[ITU-T G.711]	ITU-T Recommendation " Pulse code modulation (PCM) of voice frequencies"	Yes
[RFC2833]	IETF RFC 2833 Telephone Events	Yes
[RFC4733]	IETF RFC 4733 "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals"	Yes

## Fax over IP

NTT CC Cloud Voice network is natively compatible with a subset of Fax over IP protocols when used with Audiocodes Mediapacks' ATA. The equipment used to terminate or originate fax calls should be configured to support T.38 fax, and G.711 pass-thru as a secondary option.

Any other fax configuration requires bespoke PS engagement and needs to be discussed with our Advanced Services teams.

Our Cloud Voice network is compatible with below specs:

RFC Standard	Media	Supported
[RFC3362]	IETF RFC 3362 Real-time Facsimile (T.38)	Yes
[RFC6913]	IETF RFC 6913 Indicating Fax over IP Capability in the Session Initiation Protocol (SIP)	Yes

## Transport protocol

- UDP 5060: Default
- TCP: Supported

## SIP methods

Method name	Supported
Invite	Yes
Re-Invite	Yes
Update	Yes
Ack	Yes
Bye	Yes
Cancel	Yes
Options	Yes

## SIP response codes

SIP	Answers	Supported
1xx	100 Trying	Yes
	180 Ringing	Yes
	183 Session Progress	Yes
2xx	200 OK	Yes
3xx	302 Moved	Yes
4xx	400 Bad Request	Yes
	401 Unauthorized	Yes
	403 Forbidden	Yes
	404 Not Found	Yes
	405 Method Not Allowed	Yes
	406 Not Acceptable	Yes
	408 Request Timeout	Yes
	413 Request Entity Too Large	Yes
	414 Request-URI Too Long	Yes

SIP	Answers	Supported
	415 Unsupported Media Type	Yes
	416 Unsupported URI Scheme	Yes
	480 Temporarily Unavailable	Yes
	481 Call/Transaction Does Not Exist	Yes
	482 Loop Detected	Yes
	483 Too Many Hops	Yes
	484 Address Incomplete	Yes
	486 Busy Here	Yes
	488 Not Acceptable Here	Yes
	487 Request Terminated	Yes
6xx	600 Busy Everywhere	Yes
	603 Decline	Yes
	604 Does Not Exist Anywhere	Yes
	606 Not Acceptable	Yes

### 1.12.4 Load-balancing

NTT can deliver below load-balancing routing options:

- Main-Backup/Top-Down routing
- Round-Robin (i.e., 50/50) routing

## 1.13. Network access to the service

### 1.13.1 Public Internet

By default, Cloud Voice is available over the Internet and connectivity is made secure thanks to SIP-TLS and Secure RTP based encryption.

The below Cloud Voice clusters are enabled for Public Internet access:

- Atlanta
- Chicago
- London
- Paris
- Singapore
- Tokyo
- Sydney
- Melbourne

### 1.13.2 Dedicated Network connectivity

The Cloud Interconnect service can also be used, both single and dual access options, to consume our Cloud Voice services.

In case of dual-access, both the Main/Back-up and the Load-Balancing methods are available.

### 1.13.3 NTT Global Network services

Client can consume Cloud Voice services directly from its NTT Global Networks-based WAN or SD-WAN solutions without the need to purchase Cloud Interconnect service.

### 1.13.4 Hybrid network access

The service can be accessed using a mix of the above access types.

## 1.14. Limitations

### 1.14.1 User Numbers and phone-system applications

By default, User Numbers are designed to be assigned to physical persons. As such Client may only assign a User Number to one and only one physical person. Phone system applications such as Call Queues, Auto-Attendants and Reception-Desk, can be configured with Service Numbers, which are numbers specifically designed to cater for important number of concurrent calls.

Contact-center/CX applications are not supported and NTT Cloud Voice for CX must be subscribed.

### 1.14.2 Geographical assignment of Universal Calling Plans

Due to the uncertainty of the legal status of the use of the Services abroad in certain countries, which is not clearly either prohibited or authorized, any use of the Services in such countries on a permanent basis, will be at Client's own risk without any warranty of any kind.

In addition, Client shall not resell or distribute the Services or any licenses thereof.

### 1.14.3 Service Use Policy

NTT maintains a Service User Policy detailing more specifically the limitations of its Cloud Voice services.

NTT's Universal Calling Plans are designed to support personal business use of telephony services and are plan specific, to be used by a single user. Normal, reasonable use on NTT's plans must be in accordance with this Service Use Policy, our Terms of Service and consistent with the types and levels of usage by typical customers on the plan. Unauthorized, fraudulent or excessive use beyond that normally experienced by business customers may result in service suspension or termination.

Users shall use the Services pertinently, reasonably, and legitimately. Accordingly, Users undertake not to (i) access, use, encourage, promote, facilitate and allow other persons to access or use Services in an illegal, harmful or damaging manner; (ii) transmit, store, display, distribute or make available illegal, damaging, or harmful content or data.

Universal Calling plans cannot, under any circumstances, be used for, amongst other examples:

- Call-in lines
- Call centers
- Continuous or extensive call forwarding
- Autodialing (including automatic outbound dialing systems or call distribution systems)
- Transcription services
- High volume, spamming, robot or multi-person calling purposes

- Calls to numbers (individual, sequential, or automatic) outside individual communications, in order to generate income for the Client or for any third party (example: spam calls)

Based on the above examples or beyond, NTT may determine that abnormal, unreasonable, or impermissible usage is occurring, and may take appropriate steps, including but not limited to suspension or termination of service.

The following practices are also considered as non-legitimate uses of the Services:

1. The resale or distribution of Services enabling the generation of any income therefrom
2. Access to or use of Services and equipment in breach of the applicable laws and regulations or any third-party right including but not limited to
  - i. the use or transmission without authorization of data protected by an intellectual property rights
  - ii. the use or transmission of equipment, Services or software constituting a threat or breaching applicable export control laws
3. The transmission of obscene, offensive, defamatory, or anyway reprehensible content
4. Access to or use of Services in order to:
  - i. damage the security or integrity of any network, computer or communications system, software application, or any connected hardware
  - ii. obtain or attempt to obtain unauthorized access to an account or password of other clients or Users
  - iii. harm the access capacity of other clients

Client is responsible for immediately alerting NTT should Client identify a breach of NTT Service Use Policy.

#### 1.14.4 Suspension of services

If Client's use of the Services is suspended for any reason under the Agreement (including, without limitation) for breach of payment obligations or violation of Applicable Laws), NTT DATA is, during such Suspension Period, entitled (among any other rights otherwise reserved) to limit Client's access to the Services to only receiving inbound calls and dialing emergency calls.

Client understands and agrees that in the event Services are terminated pursuant to the Contract, Users will not be able to access Emergency Service Centers from the User's Phone Number.

#### 1.14.5 Concurrent Calls capacities

NTT allows up to 3 concurrent calls (IN+OUT) handled at the same time on a User Number.

Should this capacity be overridden at one point in time, NTT reserves the right to throttle such overage calls.



## 2. Service Operations

### 2.1. Scope

Support for the Customer's own communication platform (e.g. IPPBX, Contact-center, UCaaS solutions) is not included when the Customer only subscribes to *Cloud Voice services*.

The scope of the support provided as part of Cloud Voice services is limited to the elements under NTT' control. These elements include:

- NTT' backbone network
- NTT' voice infrastructures
- NTT' connectivity to partner carriers
- NTT' connectivity to UCaaS platforms listed in this Service Description

### 2.2. Global Integrated Operations Centre (GIOC) service-desk

The NTT Global Integrated Operations Centre operates currently as a single virtual team with engineers based in Barcelona (Spain) and South Africa.

The NTT Global Integrated Operations offers English language support on a 24hours/365 days basis.

The NTT Global Integrated Operations Centre is responsible for:

- Being the first point of contact for Customer Authorized Administrator
- Tracking, managing and completing Services and Incident Requests
- Responding to phone calls and service portal requests
- Manage requests with other vendors and internal escalation teams.

N.B. Service requests and incidents must be raised by a Customer Authorized Administrator.

Customer Authorized Administrators are one or more named individuals or a named Service Desk that are authorized to log cases to NTT.

### 2.3. High Availability

Conscious of the importance of providing a highly reliable Cloud Voice service, NTT has made strong investments in effectively deploying a highly redundant Cloud Voice network relying on a fully meshed high-speed L2VPN backbone network.

#### 2.3.1 In-DC N+1 redundant design

The Cloud Voice network relies on high availability clusters: Our VoIP platforms are all made on-site redundant. These clusters offer high availability service delivery with stateful failover which allows preservation of calls in-progress in many failover scenarios.

#### 2.3.2 Geo-Redundancy

In case of a full DC outage, our Cloud Voice network platforms provide alternate routes via different locations to reach a destination, notably thanks to multi-homing of upstream carriers' connectivity, and multi-homing of connectivity to Cloud Voice platforms.

### 2.4. Service Monitoring

The Cloud Voice network is monitored on a 24/7 basis by our globally distributed NOC/L2/L3 teams.

SIP service state is monitored using SIP Options requests.

In case of standalone deployments (i.e., on-premises platforms), Client must answer to SIP Options request to benefit from this monitoring service. As per Failover implementation, SIP service will continue even if one network link is down.

In the case of Cloud Interconnect or NTT Global Network services type of accesses are used, then BGP-peering state is monitored.

## 2.5. Incident Management

Incidents are defined as “unplanned interruption to service or reduction in the quality of service provided”.

### 2.5.1 Incident logging

Client can log incidents on a 24/7 basis via either NTT portal or Phone. Several mandatory information are required to log an incident, which may vary depending on the incident type.

### 2.5.2 Incident priority definition

Incidents are prioritized according to the below matrix table:

	Large scale	Medium scale	Small scale
High impact	P1	P1	P3
Medium impact	P2	P2	P3
Low impact	P2	P3	P3

Request for Information (RFI) are classified as P4

**Large scale:** Entire Site impacted / Several groups of end-users. A site is a company business office.

**Medium scale:** Group of several end-users. Can be a business department, a site floor, several users in different sites.

**Small scale:** A couple of users or Remote Workers.

**High impact:** Service not available (i.e. no calling / one-way audio)

**Medium impact:** Service partially available (i.e. Unable to reach some PSTN destinations, some outbound calls are failing, etc.)

**Low impact:** Poor service quality (i.e. Voice quality is not good, Ringback tone is strange, etc.)

### 2.5.3 Incident priority matrix

Incident priorities are defined according to the below matrix table:

Incident Priority	Response Target (Auto)	Ticket Status Update	Time to Restore
P1	15 mins	2 Hours	4 Hours
P2	30 Mins	4 Hours	12 Hours
P3	4 Hours	24 Hours	72 Hours
P4	N/A	N/A	N/A

## 2.6. Monthly Service Availability Service Level Agreement (SLA)

### 2.6.1 Description

NTT Cloud Voice Monthly Service Availability SLA applies from within Cloud Voice service boundaries (notably the NTT Cloud Voice network, its connectivity to our ingress PSTN carriers and the interconnection with standardized EX cloud platforms). Any outage outside of this perimeter will not be taken into account to compute this SLA (i.e. the terminating operator's network or the Client's real-time communication platform).

Monthly Service Availability is computed using the following formula:

$$\text{MSA} = (\text{Total Monthly Minutes} - \text{Valid Downtime}) / \text{Total Monthly Minutes}$$

Valid downtime includes, and is limited to the below events:

- End-user is unable to receive PSTN calls (IN)
- End-user is unable to place domestic PSTN calls (OUT)<sup>1</sup>
- End-user does not have access to emergency calls

<sup>1</sup>For Domestic and International Calling plans subscriptions: Coverage is extended to international destinations included in this plan

Valid Downtime excludes downtime linked to Standard, Emergency and Scheduled Maintenance Windows. Downtime linked to these events shall be excluded from the calculation of the Monthly Service Availability. Downtime starts from the point at which a relevant priority incident is logged to the Service-Desk and ends when Client is notified that the incident has been resolved.

### 2.6.2 Scope

The Monthly Service Availability is calculated on a per subscription basis (i.e. per Universal Calling Plan basis). Unassigned DDIs are not included in this SLA.

For example, should Client have 100 Universal Calling Plans assigned and the service becomes unavailable for 10 Universal Calling Plans users during 100 minutes, Then 1 000 minutes (10 x 100) would be counted as Valid Downtime and withdrawn from the Total Monthly Minutes of 43 920 x 100 = 4 392 000 minutes.

Resulting MSA would be 99.97%.

## 2.7. Patch Management

NTT implements critical and security patches in a maximum 30-days timeframe from the release of the vendor.

## 2.8. Data Management

Data Management specifics are detailed in the NTT Fact Sheet for Cloud Voice.

## 2.9. Data security policies

### 2.9.1 Datacenter security policies

NTT hosts its platforms in 3<sup>rd</sup> party Datacenters where a set of certifications such as SSAE16 (Statement on Standards for Attestation Engagements) and ISO 27001 are available. This guarantees the implementation of a rigorous set of global standards covering physical, logical, process, and management controls.

### 2.9.2 Remote access to Cloud Voice network management layer

Remote access to Cloud Voice network management layer is prohibited. Accesses are only permitted from within the NTT CC's internal network and secure remote access facilities with multi-factor authentication.

### 2.9.3 Vulnerability scanning and penetration testing

NTT performs external and internal vulnerability scanning on a monthly basis. Risk based reviews are performed based on scan results and are addressed in accordance with NTT Group policy. In addition, annual penetration tests are performed to evaluate the security of the NTT' external cloud footprint. The penetration tests are scoped to include all identified external IP ranges and align with testing based on industry standard methodology.

### 2.9.4 Traffic encryption

For Internet-based accesses to the service, NTT TLS encryption settings are the below ones:

- TLS version 1.2
- TLS Key: 2048 bits
- Encryption algorithm: AES-256 (256 bit key, 128 bit block)

Authentication mode: encrypted credentials (login/password) and SSL Certificate.

### 2.9.5 At-rest data encryption

All at-rest Personal Data stored by NTT for a period over 1 hour are encrypted using the AES-256 (256 bit key, 128 bit block) algorithm.

### 2.9.6 Backup policies

NTT operates and maintains a data protection infrastructure to prevent loss of data and permit timely restoration of services in the case of a disaster or catastrophic system failure.

### 2.9.7 Limitations and Exclusions

Cloud Communication's data protection infrastructure is NOT meant to maintain a versioned history of data.

Restoration of Client data shall be at Client's sole cost and expense unless the need for the restoration was due solely to a failure or error of NTT.

NTT shall delete all information related to a User from its databases as soon as a User is deleted by Client on the Self-Care.

## 2.10. Personnel Security

NTT implements a security policy framework influenced by ISO/IEC 27001. The security policies are communicated and made available for all NTT' employees. The policies are reviewed by the Security Officer on a yearly basis.

## 3. Security and fraud management

Our Cloud Voice product is fully featured with state-of-the-art Fraud Management systems to protect our clients against the main voice fraud schemes.

### 3.1. Main fraud schemes managed

Amongst the various fraudulent activities which may occur in voice networks, the below listed ones are usually quite impactful for enterprises. Our solution is designed to prevent such frauds.

#### 3.1.1 Toll-Free fraud/Toll-Free traffic-pumping

Toll-Free fraud involves making multiple calls to a Toll-Free number—and staying on the call as long as possible, often navigating the automated IVR prompts and avoiding connecting to a live operator.

#### 3.1.2 Call transfer fraud

In this scenario, the fraudster hacks into a PBX and uses that PBX's services to make free long-distance calls. By instructing the compromised PBX to transfer the call to the hacker's own phone service, subscribers to the fraudster's phone service can speak to their international destinations through the hacked PBX.

#### 3.1.3 Telecom denial-of-service (TDOS)

Telecom denial-of-service (TDoS) attacks are typically made of a huge number of phone calls to one organization's set of User Number(s), keeping them up for long durations, and overwhelming the capacity of an organization's phone network.

#### 3.1.4 Wangiri fraud

Wangiri, in Japanese, means "one and cut." That is, one ring and a cut off phone call. A Wangiri phone fraud scheme relies on this single ring method. A fraudster will set up a computer to dial many phone numbers at random. Each rings just once, then hangs up. This leaves a number as a missed call on the recipients' phone. Users often see the missed call and believe a legitimate call was cut off, or are simply curious as to who called, so they dial the missed number. The number turns out to be a premium rate number.

#### 3.1.5 Revenue sharing fraud

Revenue share fraudulent activities are those which abuse carrier interconnect agreements. The fraudster's goal is to pair up with a destination that can charge high rates, and then inflate traffic to his numbers at little or no cost to himself. It often involves compromising a PBX or an auto-attendant system. These types of schemes can occur within a country, or across international borders.

### 3.2. Security and Fraud management mechanisms

Several mechanisms have been put in place to prevent fraudulent activities such as the ones described above.

#### 3.2.1 SIP Proxy: Real-time traffic patterns monitoring

Traffic patterns are monitored in real-time with call attempts, call minutes and costs compared to thresholds to detect fraudulent activities.

In case of an unusually high volume of calls to a destination, within a short period of time, or an unusually high call duration for calls to a destination, can be detected in real-time and may result in calls to that destination

being suspended temporarily (60 minutes by default on a per destination-basis – can be customized on a per Client-basis as a PS engagement).

### 3.2.2 Central Black and White-lists management system

NTT subscribes to live fraud protection data, updated multiple times per day, which dynamically adjusts blacklists and whitelists with high-risk phone numbers compiled from research, industry sources, and national numbering plans.

NTT also maintains its blacklists and whitelists based on monitoring telephony services across its network. Lastly, the 24/7 NOC and support teams are able to make changes to this in near real-time when appropriate based on reports from the outbound routing system, and incidents.

### 3.2.3 SIP Analytics

The SIP Analytics technology permits to detect and automatically block telecom fraud attacks without impacting legitimate calls. By analyzing SIP messages before the call is set up, the system can quickly detect an attack—much faster than other systems that use call detail records (CDRs), which are typically created after calls are completed.

SIP Analytics include the following tools:

- TDoS mechanisms
- SIP normalization and protocol validation
- Back-to-Back User Agent (B2BUA)

### 3.2.4 IP White-listing

At IP level, all SBC public interfaces are configured with white-listing of trusted peers.

### 3.2.5 STIR/SHAKEN

These acronyms stand for:

- STIR: Secure Telephony Identity Revisited. A framework for authenticating and verifying caller ID.
- SHAKEN: Secure Handling of Asserted information using toKENs. A specific framework built on top of the STIR framework that details how tokens should be used.

In a nutshell, this technology allows for verification that calls are coming from a real caller ID instead of a spoofed or fake caller ID .

STIR/SHAKEN is actively being used by NTT in USA and Canada.

## 3.3. Client Obligations

Although NTT makes every effort to detect and block fraudulent calls on its network, Client must always:

- Ensure that only authorized people use the Cloud Voice connected phone system to make and receive calls
- Take sensible precautions regarding security and access to systems, such as enforcing the use of strong passwords and PINs where applicable, to prevent unauthorized usage.

Additionally, NTT requires that Client use a valid CLI in the FROM or P-Asserted Identity headers on outbound calls. Generally, this CLI must be one of the User Number DDIs provided by NTT and presented in E.164 format. If Client originates outbound calls without a valid CLI, or with a CLI which is not among Client's assigned User Numbers, NTT may block the call as this scenario may be considered by PSTN carriers as an attempt to "spoof" a CLI. It may be possible to present a different CLI, by arrangement with NTT.

## 4. Reporting and QoS

By default, Client gets access to a set of online reporting elements on NTT's selfcare portal via the "Digital Collaboration Services" app.

Here-below are the main reporting elements provided with current release:

- Usage, Consumption and Quality of Service dashboards
- Custom reports (with ability to generate and download these reports)

NTT also measures several KPIs to track QoS, including the below:

### 4.1. Mean Opinion Score (MOS)

NTT measures the quality of speech by monitoring calls placed on the Cloud Voice network. This measurement provides a qualitative indicator between 1 (lowest perceived quality) and 4.5 (highest perceived quality possible). The maximum values obtained highly depend on the Codec being used for the call. For example PSTN calls using the G.711 codec (most commonly used codec for PSTN calls) have a maximum value for MOS of 4.4.

The Mean Opinion Score (MOS) will be measured as the average of all qualitative indicators for the calls placed on the Cloud Voice Network during the month.

The targeted Mean Opinion Score (MOS) for Cloud Voice (G.711) is  $\geq 4.1$

### 4.2. NTT MOS Degradation

The NTT MOS Degradation is a KPI measuring the impact of NTT Cloud Voice network on the end-to-end Mean Opinion Score of a PSTN phone-call.

This KPI is computed on a per-CDR basis and covers the call path between the NTT Cloud Voice ingress SBC to the NTT Cloud Voice egress SBC.

The targeted NTT MOS Degradation score for Cloud Voice is  $< 0.4$ .

### 4.3. Post Dialling Delay (PDD)

Post Dial Delay ("PDD") is the time interval between the end of user or terminal equipment dialling and the reception of the appropriate network response.

Post Dialling Delay can be influenced by Client dialling behaviour and/or the types of network, e.g. variable number lengths, that are interconnected, and in some cases, by the type of service that is being carried on the end-to-end telecommunication networks.

NTT measures the average monthly PDD on its Cloud Voice network.

NTT commits on an **average PDD  $\leq 4$  seconds**

## 5. Billing

### 5.1. Standard Charges types

The Cloud Voice Service as described in this document is structured with the flowing SKU's:

SKU name	Description	Charge type
<b>Domestic Per-minute Calling Plan</b>	Charge applied to all registered Users of the solution benefiting from a Domestic Per-minute Calling Plan	Monthly Recurring Charges
<b>Domestic 180 Calling Plan</b>	Charge applied to all registered Users of the solution benefiting from a Domestic 180 Calling Plan	Monthly Recurring Charges
<b>Domestic Unlimited Calling Plan</b>	Charge applied to all registered Users of the solution benefiting from a Domestic Unlimited Calling Plan	Monthly Recurring Charges
<b>Domestic and International Calling Plan</b>	Charge applied to all registered Users of the solution benefiting from a Domestic and International Calling Plan	Monthly Recurring Charges
<b>Unassigned DDI rate (per country)</b>	Charge being applied to all phone numbers not being covered by a service subscription	Monthly Recurring Charges
<b>Pay-as-you-go Consumption based</b>	Per minute charges for overage outgoing calls consumption to the PSTN	Per-Minute Charges Consumption

*List of billing charges*

### 5.2. Billing Cycles

NTT billing cycles start on the first calendar day of the month and ends on the last calendar day of the month. Monthly Recurring Charges (i.e. Universal Calling Plans) and overage per-minute pay-as-you-go communication charges are computed on the last calendar day of the Month for invoicing (i.e. Communications of December 2023 are rated on December 31<sup>st</sup> and invoiced by mid-January 2024). NTT does not provide pro-rated charges but rather full month rating and invoicing.

### 5.3. One-Time Charges

#### 5.3.1 Default Cloud Voice setup fee

The default Cloud Voice setup fee covers the below items:

- Creation of Client's in NTT administration systems for selfcare, support and billing
- Provide Client with required porting data collection forms
- Review of port or net new number submission form, as submitted by Client, to ensure all fields are completed
- Port submission with updates on port status
- Net new number acquisition: Ordering of new phone numbers is a streamlined process. Delays in obtaining phone numbers may vary from one country to another and are subject to local numbering resources availability.
- Upload and routing of Client DDIs within NTT's systems

#### 5.3.2 Other One-Time Charges

Additional One-Time Charges are to be charged only once and following conditions described in the SOF or in the SoW if Professional Services (PS) activities are also included.



In case of the latter, the detailed description of what is covered by such charges shall be described in the PS Statement of Work.

## 5.4. Monthly Recurring Charges

### 5.4.1 Universal Calling Plans charges

Billing of Monthly Recurring Charges for Universal Calling Plans occurs every month and is based on the observed number and type of Universal Calling Plans on the last calendar day of the month.

Changes made to an Unassigned DDI license (Calling Plan allocation) is taken into account immediately.

Should changes be made to a Calling Plan subscription already attached to one User Number during the course of the billing cycle, then the new subscription assigned to the DDI on the last calendar day of the month is the one which will be taken into account, moving forward in the next billing cycle.

Should a Calling Plan assignment be removed during the course of the current billing cycle, then the entire month is due. The "Unassigned DDI" charge will start in the next billing cycle in replacement of the Calling Plan previously assigned.

### 5.4.2 DDI renting fees

#### Unassigned User Numbers

Client shall pay NTT for unassigned User Numbers DDIs on a monthly basis.

Prices for renting unassigned User Numbers DDIs are defined on a per-country basis.

## 5.5. Pay-as-you-go consumption charges

### 5.5.1 Call Termination charges

Outgoing PSTN calls not included in the Users Calling Plan will be considered as overage consumption and shall be charged by NTT to Client as Pay-as-you-go service.

Client shall pay to NTT charges calculated using a rate per minute as described in Appendix "Outgoing Calls rate-card" for all calls routed via the NTT Network including calls routed via NTT' carriers.

Calls are billed in 30 seconds increments. Per CDR charges are rounded to the nearest upper two (2) decimal places (for currencies not featuring decimals rounding is done to the nearest upper integer place).

Minimum call duration is 30 seconds, and all calls will be rated accordingly.

NTT will update its Outgoing Calls rate-card at least once a year to reflect exchange rate fluctuations.

## 5.6. Minimum Monthly Commitment

Client understands and agrees that NTT is entitled to charge a Minimum Monthly Commitment (MMC) as defined in the Service Order Form (SOF).

Said MMC shall only be charged should the total amount of Monthly Recurring Charges and the Per-minute overage consumption due over a monthly period be inferior to this MMC amount. In such case the MMC only will be charged to Client superseding the sum of the other Cloud Voice charges (excluding One-Time charges). The MMC is computed at the Billing Account level.

## 5.7. Other charges

For all charges not listed in SOF, Client must refer to its NTT Account Manager. Should the provisioning of services not listed in the SOF be effective, NTT shall charge such services using its standard Price-List, available on-demand from Client's Account Manager.

## 5.8. Billing and Invoicing capabilities

By default, NTT will invoice Client centrally in-country as initially agreed between the two parties.

### Specifics

Billing is not available in all countries, nor in all currencies. Feasibility must be checked upfront.  
Invoicing of China Calling Plans must be done outside of China.