SERVICE SPECIFIC TERMS AND CONDITIONS FOR TEAMS DIRECT ROUTING

1. APPLICATION

1.1 The Service Schedule, which contains a description of the Direct Routing Service form part of this Agreement entered into between the Parties for the provision of the Direct Routing Service.

1.2 Definitions and interpretations that are specific to this Schedule are set out in **Annex 1** and apply in addition to the definitions and interpretations set out in **Schedule 1 (Definitions)** of the Agreement.

2. SERVICE DESCRIPTION

2.1 FirstNet shall provide the Customer with the ability to enable PTSN calling and a range of additional call control features for Microsoft Teams, providing VOIP connectivity for Phone System, allowing inbound and outbound telephony through the Customer's Network for termination of both national and international destinations.

2.2 The Direct Routing Service provides SIP signalling as a method for the End User to inter-connect with the Customer's VoIP network supporting calls to/from the PSTN.

2.3 Access to the Direct Routing Service is via the Internet and connectivity options include the following;

2.3.1 where provided by the Supplier, asset out in the Order in accordance with **Schedule 3.2 (Internet Services)** or

2.3.2 via a Third Party Supplier.

unless otherwise stated in the Order, the Customer shall be responsible for the provision of the Internet Services necessary for the Supplier to deliver the Direct Routing Service.

3. CUSTOMER OBLIGATIONS

3.1 The Customer is required to obtain and maintain the following components to enable the Direct Routing Service:

3.1.1 Microsoft 365 or Office 365 licence including Teams for Microsoft 365;

3.1.2 Microsoft Phone System add-on or Business Voice (without a calling plan) add-on, and;

3.1.3 an Internet connection as per paragraph 2.3 above.

3.2 Unless otherwise stated in the Order, the Customer shall be responsible for the provision of Microsoft 365 licenses necessary for the Supplier to deliver the Direct Routing Service. Where the Supplier, as stated in the Order, provides the Customer will Microsoft 365 licenses.

3.3 Where the Customer wishes to port numbers to the Supplier, the Customer shall:

3.3.1 provide full and accurate details of the numbers to be ported, including but not limited to a letter of authority to port the numbers to a new provider and confirmation of ownership;

3.3.2 be responsible for reaching any commercial agreement with the supplier of the services to which those numbers apply, including termination of those services and payment of all associated charges.

4. SERVICE CONDITIONS

DIRECT ROUTING

4.1 Direct Routing Service is a solution available to Microsoft 365 customers who wish to use their preferred voice carrier to enable their users to make and receive PSTN calls in Microsoft Teams. The Supplier operates a cloud based model, whereby Microsoft certified session border controllers are deployed as a bespoke architecture with the Supplier's network, for interconnection to Microsoft Phone System for PTSN breakout.

4.2 Phone System is the feature description used by Microsoft as the PBX replacement or voice component of Microsoft Teams, which allows internal (within Microsoft Teams) and external (PSTN) voice calls and a range of call control features.

4.3 The following features can be supported by the Supplier:

4.3.1 Calling Line Presentation (CLIP)

4.3.2 Calling Line Restriction (CLIR)

4.3.3 Emergency Call Divert

4.3.4 Fraud Alert

4.3.5 CLI Flexibility

4.3.6 Call Barring

4.3.7 DTMF Support

4.3.8 Emergency, Non-Emergency and other short code Calls

ARCHITECTURE

4.4 Direct Routing provides the Customer with a resilient solution, offering two geographically diverse networks, each hosted in a separate co-locations space, and connected with an existing Point of Presence and traffic is load-shared across the two diverse sites.

4.5 Each of the two resilient connections are defined by several session border controls, interfacing on the public side to the Microsoft Teams (in Azure), which has multiple connections of its own for resilience. The session border controls will route calls to and from specific Tenant Sub-Domains in Microsoft Teams, which serve as the SIP interface between Microsoft 365 network and the PSTN.

4.6 The elements of the architecture are described below:

MICROSOFT CERTIFIED SBC'S

4.6.1 cloud deployment model for Direct Routing Service requires Microsoft certified session border control into the FirstNet network.

CUSTOMER SBC'S

4.6.2 each service to the Customer will be terminated on a PSTN connected session border control, to enable FirstNet to provision and manage the Direct Routing Service via its portal and PSTN calling.

NETWORK RESILIENCE MODEL

4.6.3   Distributed Microsoft certified SBC clusters are deployed on the network, for geographic resilience, and for load-balancing traffic, on both the public and private sides of the interface between the hosted infrastructure and Microsoft 365.

4.6.4   the SBC's will be connected to geographically distributed, load-balanced SBC clusters in the hosted core network, for SIP connectivity and PSTN breakout.

SIGNALLING AND MEDIA

4.6.5   Signalling in Direct Routing Service will never be exchanged directly between the Microsoft Teams client and the Microsoft certified SBC's on the network, but always indirectly, via a "Call Controller" component of Microsoft 365.

4.6.6   A "SIP Proxy" component of Microsoft 365 network exchange SIP signalling with the Microsoft certified SBC's on the edge of the network, this in turn exchanged between the Microsoft SBC's and interconnected SBC's on the Supplier's core network, on which Microsoft Teams endpoints will be built using the Supplier's Portal, enabling signalling and media to be exchanged within the PSTN.

SIGNALLING AND MEDIA ENCRYPTION

4.6.7   Microsoft will only initiate and accept signalling connections secured by TLS 1.2.

4.6.8   this applies to the communication path between the End User and Microsoft 365 network. It also applies to the path between the Microsoft 365 network and the Microsoft certified SBC's deployed on the Supplier's network.

4.6.9   Media will be encrypted using SRTP.

CUSTOMER TENANT

4.7   A tenant will need to be created in Microsoft 365 for the Customer and FirstNet shall be responsible for the creation of the Customer's Tenant Sub-Domain, which is where:

4.7.1   individual Users are added;

4.7.2   licences and numbers needed for voice telephony are assigned, and;

4.7.3   the connection with the Supplier is configured for routing.

4.8   Two (2) fully qualified domain names (FQDN's) will need to be registered in the Customer's Tenant, a process which includes a verification step. These FQDN's are sub-domains of the domains of the domains of the SBC's on the Supplier's network. The FQDN's will be used by the Microsoft Phone System for routing calls between End Users and the SBC's on the Supplier's network. FirstNet reserves the right to charge the Customer for registering the FQDN's in the Customer Tenant, where the Customer has not registered the FQDN's.

DEMARCATION OF RESPONSIBILITIES

4.9   Unless specified otherwise in the Order, FirstNet shall not be responsible for any aspect of the supply, administration, provisioning, security or support of the Customer's Microsoft 365 environment, beyond providing a guide to the required initial configuration of the Customer's Microsoft Tenant, in order to enable connectivity to the Network and performance of service acceptance testing. Responsibility for performing this configuration will lie with the Customer.

4.10   Unless specified otherwise in the Order, FirstNet shall not be responsible for any of the following aspects of the Customer's Microsoft 365 environment;

4.10.1   Microsoft Phone System configuration and management;

4.10.2   Microsoft Teams configuration and management;

4.10.3   Microsoft 365 configuration and management; or

4.10.4   End User data in the Customer Microsoft 365 Tenant

similarly, FirstNet shall not be responsible for any third party internet access that the Customer may choose to procure for the purpose of enabling access to the Microsoft 365 network. The Supplier reserves the right to charge the Customer for any configuration carried out on the Customer's Microsoft 365 environment necessary for provision of the Direct Routing Service.

EXCEPTIONS

4.11   FirstNet does not support video calling using the PTSN, from the Microsoft Teams environment. Microsoft Teams has a video calling facility that operates separately to any traffic traversing on the Third Party Supplier Network.

4.12   FAX is not supported.

4.13   FirstNet does not accept any Dialler traffic and will take efforts to remove such traffic if/when detected. This is based on the operational need to safeguard the Network and ensure that optimum service levels remain available to all customers across the Network. In addition, following FirstNet guidelines regarding nuisance, silent and abandoned calls it is considered to be a regulatory requirement which must be adhered to.

5. SERVICE CHARACTERISTICS

ENDPOINTS

5.1 An Endpoint represents the interface for a Microsoft Phone System Tenant.

NUMBER PRESENTATION

5.2 An Endpoint represents the interface for a Microsoft Teams Phone System.

5.3 It is a requirement of the Direct Routing Service that the calling party ("**A-Number**") be validated to confirm the format and ensure that the number is hosted on the platform, so that emergency services have an accurate record of the calling customer.

5.4 The Customer is responsible for supplying both A-Numbers and B-Numbers in a valid format, not containing alpha characters, spaces, hyphens, full stops, etc.

5.5 Only numbers allocated to the Endpoint should be used to make outbound calls by End Users to ensure that in the event that an End User makes a call to the Emergency Services, the number they present is associated with a valid and current address in the records held against that number by the Emergency Services. It is the responsibility of the Customer to ensure that the address information for all numbers allocated to the Endpoint remains current.

5.6 If the A-Number is a number that has not been allocated to the Endpoint or where it is missing a valid numerical CLI, it will be automatically overwritten with an agreed default number. This default number is known as the Network CLI and will be the number allocated to the Endpoint.

5.7 In the event that the Customer wishes to present an A-Number that is not allocated to its Endpoint, the following provisions apply;

5.7.1 the Customer must procure that the A-Number is of a national significant format, is allocated to it and it possesses all necessary permissions in respect of the lines in question;

5.7.2 the Customer must procure that where the A-Number is not allocated to it, it has written consent from the allocated owner for its use as an A-Number and that such consent has not been withdrawn;

5.7.3 the Customer must procure that under the terms of the CLI code of practice the A-Number must be a number that is allocated to the Customer, is in use, connected to a terminal and capable of receiving calls;

5.7.4 the Customer acknowledges that FirstNet has the right to suspend or withdraw use of the Direct Routing Service if it is subsequently found that the Customer is in breach of paragraphs 5.7.1 through to 5.7.3 and hereby indemnifies FirstNet

against any claims arising as a result of any such breach, and;

5.7.5 the Customer shall upon reasonable request from FirstNet provide all reasonable evidence as FirstNet may require so as to audit and monitor the Customer's adherence with this paragraph 5.7.

5.8 For security reasons FirstNet shall set limits for the maximum calls per second (CPS). Limits will default to five (5) CPS. Any request to increase this level will be considered in line with FirstNet's process. If this constraint is reached the Supplier will log and reject calls.

6. NUMBER AVAILABILITY

6.1 Customer can request numbers from any range assigned to FirstNet by ICASA,

7. SERVICE CARE LEVELS

7.1 FirstNet shall use reasonable endeavours to repair a Service Fault in accordance with the Service Care Level stated on the FirstNet Rapid Response Guide

SERVICE AVAILABILITY

7.2 FirstNet does not guarantee that the Direct Routing Service will be continuously available or free from service failures, however the Supplier makes certain commitments as to the Direct Routing Service as set forth in paragraphs 10.3 through to 10.7 below.

7.3 FirstNet shall use all reasonable endeavours to ensure that Service Availability is as follows:

Availability Measurement Period: 1 calendar month

	Core (1)	Non-Core (2)
Microsoft Teams Direct Routing Endpoint	99.95%	99.9%

7.4 Core functions are defined as switching infrastructure, transmission equipment and core network, the service that supports call routing and termination.

7.5 Non-Core functions include FirstNet support systems, access to the internet and feature based services such as Call Divert.

7.6 Service Availability is calculated as follows:

Total number of minutes in the measurement period – unplanned downtime x 100

Total number of minutes in the measurement period

7.7 If the Direct Routing Service is partially available the Unplanned Downtime shall be calculated in equal proportion i.e., if the Direct Routing Service is 50% available then the unplanned downtime will be calculated as 50% x elapsed period of the incident.

ANNEX 1 - DEFINITIONS

A-Number means the number presented by the calling party on outbound calls;

Call means a signal, message or communication that is silent, spoken or visual;

Call Bundle means a bespoke pricing package, where Tariffs are fixed price and are inclusive of minutes as set forth in the Order;

CDR means call detail record;

CLI means calling line identity;

CPS means calls per second. The maximum number of new call attempts per second;

Customer Tenant means a unique identifier allocated by Microsoft to the Customer in relation to its Microsoft 365 License

Customer Tenant Sub-Domain means the sub-domain, as allocated by the Supplier to the Endpoint on behalf of the Customer to enable the routing of calls;

Direct Routing Service means the services set forth in this Schedule

DNS is the unique reference FQDN Fully Qualified Domain Name;

End Users means anyone permitted by the Customer to use or access the Direct Routing Service;

Endpoint means the unique reference given to the instance of the Direct Routing Service and used to identify the Customer in the Supplier's Portal;

Emergency Services Address Information means the address information pertaining to each End User, provided to the Supplier by the Customer and relayed by the Supplier to the Emergency Services so that they can ascertain the caller's address in the event of an emergency call failure;

FQDN means fully qualified domain name;

General Conditions means FirstNet's standard terms and conditions for the provision of the Services as set forth on the Supplier's website at www.firstnet.co.za/legal-notices and which form part of this Agreement;

Installation Charges means those Charges as set forth in the Order in relation to the installation of the Direct Routing Service or any Customer Equipment, Hardware, Software or Ancillary Equipment as applicable;

Internet Connection means a connection to the global data network comprising interconnected networks using the TCP/IP protocol suite;

Internet Protocol or IP means a communication protocol for devices connected to the Internet that specifies the format for addresses and units of transmitted data;

IP Address means a unique number on the internet or a network card or controller that identifies a device and is visible by all other devices on the Internet;

Microsoft means Microsoft South Africa;

Microsoft 365 is a line of subscription services offered by Microsoft as part of the Microsoft Office product line. The brand encompasses plans that allow use of the Microsoft Office software suite over the life of the subscription, as well as cloud-based software as service products for business environments, such as hosted Exchange Server, Skype for Business Server, and SharePoint.

Microsoft Teams is the unified communications environment which Microsoft 365 uses to create and share content and communicate in multiple ways (e.g., messaging, chat, voice and video);

PBX means private branch exchange;

Phone System means the PBX replacement or voice component of Microsoft Teams, which allows internal (within Microsoft Teams) and external (PSTN) voice calls and a range of call control features;

Point of Presence means a location where dedicated core internet connectivity is located;

PSTN means public switched telephone network;

Recurring Charges means the Charges for the Direct Routing Service or applicable part thereof, which is invoiced repeatedly in every billing period as set out in the Order;

Service Availability means the ability of the Direct Routing Service to perform its required function over a stated period of time. It is reported as a percentage of time that the Direct Routing Service is available for use by the Customer within the agreed service hours;

Service Care Levels means the repair options as set forth in paragraph 10 above;

SIP means session initiation protocol. A signalling protocol for internet conferencing, telephony, presence, events, notification and instant messaging;

Termination Charges means any compensatory charges payable by the Customer to FirstNet on termination of this Agreement;

Usage Charges means the Charges, if any for the Direct Routing Service or applicable part thereof that are calculated by multiplying the number of units (voice minutes) for the Direct Routing Service that the Customer has used or incurred in a billing period with the relevant Tariff, which are made outside of or which exceed usage, or a Call Bundle as set forth in the Order;

Unplanned Downtime means downtime as a result of a fault and not related to planned or essential maintenance;

User Subscription means the subscription allocated to an End User of the Microsoft Teams Customer Tenant Sub-Domain who will have a) a compatible Microsoft 365 license and b) a DDI allocated by FirstNet to the Endpoint;

VoIP means voice over IP;