REVISION HISTORY

DATE	AMENDMENT	DESCRIPTION OF AMENDMENT

SERVICE DESCRIPTION 1-8: MMS DELIVERY SERVICE

1 THE SERVICE

The MMS Delivery Service is a service for the carriage of MMS Messages via a TCP/IP connection to the MMSC of the Access Provider, as further defined by the terms of this Service Description and by 3GPP TS 22.140 and 3GPP TS 23.140 specifications.

Available to: Public telecommunications operator with an individual MNO licence.

Traffic: MMS Messages originating from and terminating to users in Bahrain only.

Reciprocal Service: A reciprocal delivery service is required.

2 **DEFINITIONS**

Capitalised terms not defined in this Service Description are defined in the Dictionary. Terms defined in this Service Description are specific to it.

Access Provider means the party which operates a Mobile Network directly connecting the Messaged Party.

Access Seeker means a party which operates the Mobile Network directly connecting the Messaging Party.

Messaging Party means an Access Seeker Customer who initiates an MMS Message to a Messaged Party.

Messaged Party means an Access Provider Customer to whom an MMS Message is sent

MMS Link means the ability for MMS Messages to pass between the parties' MMSCs, using a VPN or GRX services as agreed by the parties.

MMS means Multi-Media Message Service.

MMS Message means a text, audio, video and/or data message of up to 100 kilobytes in size or as agreed by the parties.

MMS Message Delivered means a message in respect of which the Access Provider's MMSC has received an acknowledgment from the mobile station currently serving the Messaged Party that the MMS Message has been received.

MMSC means a party's MMS centre that controls MMS Messages in a store-and-forward fashion and forms part of that party's MMS Network.

MMS Network means a party's system or series of systems that carries, or is capable of carrying MMS Messages by means of guided or unguided electromagnetic or optical energy.

MNO means a mobile telecommunications License granted by the Regulator to a Mobile Network operator.

Testing SIMs means 4 SIM cards (two each in respect of pre-paid and post-paid platforms).

VPN means a virtual private network that provides a secure connection between two networks over the Internet.

3 TERMS

3.1 Prerequisites

A party (the first party) shall not be obliged to supply the MMS Delivery Service unless and until:

- (a) the parties have first established connectivity between their mobile networks as contemplated by the Mobile Terminating Access Service Description;
- (b) each party has established the MMS Link;
- (c) the parties have successfully completed any pre-commissioning testing requirements set out in the Joint Working Manual; and
- (d) the other party can supply the first party with the MMS Delivery Service on a reciprocal basis on terms and conditions of the Supply Terms.

3.2 Application

This Service Description applies to the supply of MMS Delivery Service for MMS where the Messaging Party is directly connected to the Access Seeker's Network and the MMS Message terminates on the relevant device of:

- (a) an Access Provider Customer; or
- (b) an overseas roaming party on the Access Provider's Network, where the Access Seeker has the appropriate agreements with the roaming party's home network.

3.3 MMS Message Handling

MMS Messages shall be handled in accordance with the following summary of steps:

- (a) MMS Messages originating from the mobile handset used by the Messaging Party are received by the Access Seeker's designated MMSC;
- (b) the Access Seeker's MMSC forwards the MMS Message to the MMS Link to be sent to the Access Provider's MMSC; and
- (c) the Access Provider's MMSC delivers the MMS Message to the mobile handset used by the Access Provider's customer.

3.4 MMS Link

Each party will bear its own costs of connection to a GRX service or the cost of the VPN equipment and internet connectivity, as the nature of the MMS Link requires.

3.5 Service Limitations

- (a) The MMS Delivery Service is only for a message size of 100 kilobytes or as agreed by the Parties.
- (b) The Access Provider may review and amend this Service Description prior to the introduction of mobile number portability.
- (c) MMS Messages must be sent from the Messaging Party's MMSC to allow A-party billing.

3.6 Numbering

The MMS Delivery Service requires that the address of both the Messaging Party and the Messaged Party are within agreed number ranges.

3.7 **Testing SIMs**

- (a) A party shall supply the other party with Testing SIMs to be used solely for the purpose of ongoing fault diagnosis for a period of time agreed between the parties and each party shall return the Testing SIMs at the end of that term.
- (b) MMS Messages to and from Testing SIMs shall be reimbursed by the using party at the supplying party's retail charges.

3.8 Flow Control

The parties agree to develop and document an MMS traffic management and control plan to be incorporated in the Joint Working Manual.

3.9 Maximum MMS Traffic Flow

The parties acknowledge that the provisions of clause 19 of the Supply Terms (Forecasting Procedures) shall apply for MMS capacity, subject to the following conditions:

- (a) unless otherwise agreed as part of settling a Forecast, the maximum MMS capacity at launch being sent by the Access Seeker using the MMS Delivery Service shall be 20,000 MMS Messages per busy hour.
- (b) If the traffic level exceeds the limits set out in subparagraph (a), or otherwise agreed as part of a Forecast, then notwithstanding clause 19.10 of the Supply Terms, the Access Provider shall use reasonable endeavours to continue to provide the MMS Delivery Service but may take reasonable steps to moderate and manage the overload traffic.

3.10 Unsolicited MMS

The parties acknowledge that spamming and other unsolicited MMS Messages sent by Access Seeker Customers may cause disruptions to the services provided to and received by the Access Provider Customers. Each party agrees to liaise with the other party in good faith in order to manage such disruptions where commercially and technically feasible.

3.11 **Priority and Retry**

- (a) Each party shall deliver MMS Messages from the other party's MMSCs with equal priority and urgency as those originating from within its own network.
- (b) Each party shall use the same retry algorithms as are used for MMS Messages which originate and terminate within its own network, provided that retry attempts are at least 50 seconds apart.

3.12 Customer Billing

The Access Seeker is responsible for billing the Messaging Party for the end-to-end MMS Message Delivered using the MMS Delivery Service.

3.13 Charges

The Access Seeker shall pay to the Access Provider the relevant Charges determined in accordance with Schedule 3 of this Reference Offer.