

VIVA Bahrain

REFERENCE INTERCONNECTION OFFER (RIO)



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Annex A – Definitions and Glossary of Terms

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Definitions

A-number The calling line identification number of the

originating Subscriber of a Voice Call, SMS message

or MMS message.

A-Party The Party which initiates or transit a Voice Call, SMS

message or MMS message.

B-number The calling line identification number of the

receiving Subscriber of a Voice Call, SMS message or

MMS message.

B-Party The Party which receives a Voice Call, SMS message

or MMS message.

Billed Party The Party receiving an invoice from the Billing Party.

Billing Information Information provided by the Billing Party, as set out

in this RIO, in support of invoices issued by the

Billing Party to enable the Billed Party to validate

the other's invoice.

Billing Party The Party providing the relevant Interconnection

Service or rendering the relevant invoice.

Billing Period The stated interval at which billing takes place

under this RIO.



Billing Unit The appropriate stated unit in which the service is

to be charged. All relevant Billing Units are indicated

in Annex C to this RIO.

Billing Verification The process of assessment of the Billing Information

and invoices provided by the Billing Parties.

Business Day A working day other than a Friday, Saturday or

Public Holiday and other types of holidays in the

Kingdom of Bahrain.

Day A calendar day, which includes days falling on

weekends, Public Holidays and other types of

holidays in the Kingdom of Bahrain.

Calendar Month The inclusive period from the start of the first day of

a given Gregorian month to the end of the last day

of the same.

Chargeable Voice Termination Any successfully Voice Call termination handed over

from one Party's Network to the other Party's

Network.

Chargeable MMS Any successfully delivered MMS message handed

over from one Party's Network to the other Party's

Network.

Chargeable SMS Any successfully delivered SMS message handed

over from one Party's Network to the other Party's

Network.

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Parties who participates in the work of the joint

Technical Review Committee.

Data Management Amendment Such data reconfiguration of the VIVA Network or

the OLO's Network as is necessary for the access,

routing and charging of calls.

Disclosing Party A Party disclosing information to a Receiving Party

under this RIO.

Dispute A failure by Service Providers to agree on (a) the

terms and conditions of interconnection (b) access

to, or quality of, telecommunications service

provided by one to the other or (c) any other matter

which is in the jurisdiction of the TRA with respect

to interconnection.

Dispute Resolution The process by which a Dispute is resolved between

the Parties.

Invoice Due Date The date which is 30 Days after the Invoice Issue

Date of a VIVA invoice, by which date payment is

required.

Grade of Service (GoS)

The Grade of Service during busy hours is the

percentage of calls blocked during the Network

busy hour where: Blocking probability =

Unsuccessful call attempts/Total call attempts



Interconnection Link A link connecting a VIVA Interconnection Node and

another Party's Interconnection Node passing

through a Point of Interconnection.

Interconnection Usage Report A report stating the actual level of utilisation of the

Interconnection Services provided under the

Interconnection Agreement.

Interconnection Agreement An agreement based on this RIO and entered into

between VIVA and an OLO for the purposes of

Interconnection.

Interconnection The physical and logical linking of

Telecommunications Networks used by different Parties in order to allow the users of one Party to communicate with users of another Party, or to access the facilities and/or services of another

Party.

Interconnection Service A service provided as part of this RIO and detailed in

Annex B (Service Schedules).

Interconnection Technical A technical manager from within either of the

Manager Parties who participates in the work of the joint

Technical Review Committee.

Invoice Issue Date

The date on which an invoice is dated by VIVA.

Licensee Any Person authorized or granted a Licence to

provide Telecommunications Services or operate a

Telecommunications Network or both within the

Kingdom of Bahrain.



MMSC 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 Interconnection Link

An Interconnection Link (or logical part thereof) to

carry MMS messages between the Parties' MMSCs

using VPN or GRX services as agreed by the Parties.

MMS Termination Service A service for the carriage of MMS Messages from

Subscribers of an Other Licensed Operator using a

TCP/IP connection to a mobile device associated

with a Subscriber on VIVA's Network.

Network Alteration A change (other than a Data Management

Amendment) to a Party's Network, which requires a

change to be made to the other Party's Network to

allow the continuance of the conveyance of Voice

Calls, SMS and MMS across a Point of

Interconnection pursuant to the Interconnection

Agreement.

Network Operations Centre (NOC) The operation centre within the VIVA network

which manages the day to day operations of the

VIVA network on a 24/7 basis and which deals with

fault reporting and management.



Network Plan The specific agreement of the characteristics of

reciprocal Interconnection Services between VIVA

and the OLO including, but not limited to, target

grade of service, traffic routing principles, active

number ranges, capacity and traffic forecasts.

Network The VIVA Telecommunications Network or the

OLO's Telecommunications Network as the case

may be and/or indicated by the context.

Network Termination Point The physical point at which a Subscriber is provided

with access to a Telecommunications Network and

that physical point is identified by means of a specific

network address, which may be linked to the

telephone number or name of a Subscriber.

Non Service Affecting Fault A fault which does not adversely affect the Voice Call

or message handing capacity of the Network to

complete the interconnected Voice Calls or

messages.

Numbering A serial numbering pattern used by Service

Providers to identify designated Network

Termination Points in Telecommunications

Networks, including the necessary information for

routing, billing and the identification of Subscribers,

January 2019

Licensees and telecommunications services.

Party A party to the Interconnection Agreement.



Point of Interconnection (POI) The physical or virtual point on an Interconnection

Link between the Service Providers, through which

the Interconnection Services are provided and

which marks the boundary for the regulatory

purposes between the Telecommunications

Networks of the Service Providers.

Price List The charges for the Interconnection Services as

shown in Annex C.

Receiving Party A Party receiving information from a Disclosing

Party under this RIO.

Service Affecting Fault A fault which may cause service interruption to

customers when interconnected Voice Calls or

messages conveyed between the Networks

encounter difficulty in completion.

Service Provider Any Party licensed by the TRA that (a) provides a

telecommunications service to the public; or (b)

operates a Telecommunications Network used by

that person or by another person to provide a

telecommunications service to the public, or both.

Service Schedule The description, terms and procedures and other

matters relevant to an Interconnection Service

which is set out in Annex B.

SMSC A Party's SMS centre that controls SMS messages in

a store-and-forward fashion and forms part of that

Party's SMS Network.



SMS Interconnection Link An Interconnection Link (or logical part thereof)

used to carry SMS messages.

SMS Termination Service A service for the transmission of SMS Messages

originated on or transiting through an Other

Licensed Operator Network from an agreed Point of

Interconnection to a mobile device associated with

a Subscriber on VIVA's Network.

Subscriber A customer of a Service Provider.

Successful Call A chargeable Voice Call which has passed across a

POI and received an answer signal returned by the

other Party's network.

Switch Media Gateway The telecommunications apparatus within a public

Telecommunications Network which performs

switching, routing and connecting of calls and other

network events, having the ability to connect to two

or more destinations.

commercial representatives from VIVA and the OLO

which will manage the interconnection

arrangements between the respective Parties.

Telecommunications A network permitting the conveyance of messages,

Network sound, visual images or signals between defined

termination points by wire, radio, optical or other

electro-magnetic means.

VAT The tax amount that is collected in accordance with

Decree No. 48 of 2018 promulgating Value Added

Tax Law.



Voice Call The use of a transmission path through

Telecommunications Systems for the interchange of

information in the voice band, 300Hz to 2,300Hz,

between Subscribers but excluding information

related to CCITT No 7 Signaling or alphanumeric

strings containing text and/or graphics.

Voice Call Termination Service A service for the transmission of Voice Calls

originated on or transiting through an Other Local

Operator Network from an agreed Point of

Interconnection to a mobile device associated with

a Subscriber on VIVA's Network.



<u>Acronyms</u>

Call Detail Record (CDR) A record of the details associated with a call or

message which is produced by the network

equipment (such as a switch). Details include date,

time and duration of the call.

ITU-T The Telecommunications Standards Bureau of the

International Telecommunication Union.

Multimedia Message Service

(MMS)

A text, audio, video and/or data message of up to

400 kilobytes in size or as agreed by the parties.

National Numbering Plan (NNP) The numbering plan prepared by the TRA to specify

the scheme of numbers used to access various

telecommunications services in the Kingdom of

Bahrain.

CLI Calling Line Identification as defined by the ITU-T.

Other Licensed Operator (OLO) Any Party, other than VIVA, licensed by the TRA that

(a) provides a telecommunications service to the

public, (b) operates a Telecommunications Network

used by that person or by another person to

provide a telecommunications service to the public,

or both.

Reference Interconnection Offer

(RIO)

A Reference Interconnection Offer (RIO) is a

published document pursuant to Section 57(a) of

the Telecommunications Law.



Short Message Service (SMS) Mea	ins of sending messages of limited size to and
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from GSM/UMTS/LTE mobiles. As defined in the

latest 3GPP TS 23.040 V12.1.0 (2013-09)

Telecommunications The Telecommunications Law promulgated by the

Law Kingdom of Bahrain Legislative Decree No. 48 of

2002.

Telecommunications Regulatory The Telecommunications Regulatory Authority

Authority (TRA) established by Article 2 of the Telecommunications

Law

VLR Visitor Location Register

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