

# Access and Interconnection Agreement

## Sub Annex C-MA 01 National Roaming

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Access and Interconnection Agreement – Omantel – Ooredoo

Sub Annex C-MA 01 \_ National Roaming Service

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## 1 General

- 1.1 This Sub Annex sets out the National Roaming Services offered to the Requesting Party.
- 1.2 The Roaming Customers of the Requesting Party will be granted an access to the Services on the Omantel Mobile Network within the specific geographical area at any time during the Term.
- 1.3 The Parties may change the technical solution for the provision of the Services in accordance with Clause 3, 4 and 5 of this Sub Annex with the objective of having the most optimal solution for the Services.
- 1.4 The Roaming Customers shall be in possession of terminals enabling them to use the Services on the Omantel Mobile Network.
- 1.5 For the avoidance of doubt, the current RAIO is based on the instruments issued by the TRA or other appropriate authorities to date. Therefore, this offer may be amended, subject to appropriate TRA approvals, to take into account the provisions of Clause 6 of Annex 3.4 of the A&I Regulation whereby the National Roaming Agreement to be entered into shall take into account any terms and conditions as may be specified in any authorization, license, decision, direction, order or other relevant instrument issued by the Authority.
- 1.6 Omantel will make the LAC/TAC information available to the Requesting Parties by technology in the form of maps as and when required. For the avoidance of doubt, the LAC/TACs will not be changed or amended at the request of the Requesting Party.

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## 2 Definitions

- 2.1 The definitions in Annex L shall apply to this Sub Annex in addition to the definitions defined under each Clause in this Sub Annex.
- 2.1.1 National Roaming - a functionality whereby the Requesting Party rents Services in the Omantel Network.
- 2.1.2 Retail Minus - means the principle for calculating the Tariffs described in Clause 11 of this Sub Annex.
- 2.1.3 Roaming Customer - means a customer of the Requesting Party who is roaming on the Omantel Mobile Network.
- 2.1.4 Roaming Traffic means - traffic generated by Roaming Customers.
- 2.1.5 Services - shall mean the telecommunications services that are offered at any time by Omantel in connection with National Roaming. The Services currently on offer are listed in Clause 4 of this Sub Annex.
- 2.1.6 Network – 2G, 3G,4G etc; Before offering newly launched future technology to the Requesting Party, Omantel will approach the TRA to discuss the modalities of introducing future technologies to be part of the RAIO offered services. Omantel will offer the services once the TRA decides on the inclusion of such service as part of the RAIO services.

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### 3 Implementation of National Roaming

#### 3.1 Network Implementation

- (a) Omantel agrees to give the Requesting Party National Roaming on the Omantel Mobile Network during the Contract Term.
- (b) Omantel further agrees that there shall be no withdrawal of the Requesting Party access to the Omantel Mobile Network during the Contract Term except in accordance with instructions of the TRA or as per the commercial agreement between the Parties.
- (c) The Requesting Party can request Omantel to close the Requesting Party access to specific areas with three months' prior written notice.
- (d) The Requesting Party shall be entitled to display or hide Omantel Mobile as the visited network in the terminals at its own discretion.
- (e) The Parties agree that they shall hold quarterly progress meetings during the Contract Term to review the proper implementation of this Agreement. The Parties might also agree not to meet unless there is a necessity.

3.2 Omantel will offer the Service in locations where mandated by the TRA, subject to technical feasibility, or otherwise commercially agreed between the Parties. If the result of the feasibility study is that the order shall be rejected, Omantel will justify that conclusion and share the reasons with the Requesting Party in writing.

3.3 Omantel has the right to reject the Requesting Party request for roaming services where Omantel might encounter problems due to the spectrum capacity.

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## 4 National Roaming Services

### 4.1 General


- 4.1.1 The Omantel Mobile Network supports and offers the Services listed below with respect to the Requesting Party Roaming Customers. In general, availability of the Services to Roaming Customers necessitates co-operation of the Requesting Party and Omantel in relation to their Networks. Omantel shall provide the Services in accordance with generally accepted ETSI/3GPP standards in relation to interoperability of ETSI/3GPP networks. For provision of the Services in compliance with the ETSI/3GPP standards this means that the Requesting Party Network must support the MAP interface between the Requesting Party Network HLR and Omantel Mobile MSC/VLR.
- 4.1.2 For a number of the Services, the functional split between the Requesting Party Network and the Omantel Mobile Network is determined by the characteristics of the relevant Service, in which case implementation of the Services according to ETSI/3GPP standards is assumed and shall depend on the agreed solution designed by both Parties.
- 4.1.3 The conditions and the quality of the Services offered by Omantel to Roaming Customers shall not differ from those Omantel provides to its own Customers. For the avoidance of doubt, Omantel shall not discriminate between Roaming Customers and its own Customers in the provision of the Services, save and except for in accordance with Clause 13.
- 4.1.4 Each Party agrees to give the other Party prior notice of any required change, which would have or would be likely to have an impact on National Roaming in accordance with the provisions of Clause 25 of the Main Body of the Agreement. No such change will occur without approval in accordance with the provisions of Clause 25 of the Main Body of the Agreement.
- 4.1.5 It is acknowledged that each Party at its own discretion shall have the right to implement new Services, or to change its existing Services for the benefit of said Party's own Customers. If such a change requires a change of Services offered to the Roaming Customers, it shall not occur without approval in accordance with the provisions of Clause 25 of the Main Body of the Agreement.

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- 4.1.6 Following notification of a proposed change, both Parties agree to discuss the impact of such change for the Roaming Customers including the Roaming Customers' access to these Services and implement any agreed actions to be performed, e.g. testing or administrative activities. No such change will occur without approval in accordance with the provisions of Clause 25 of the Main Body of the Agreement.
- 4.1.7 If the Requesting Party offers new services to its Customers and corresponding services are already available to Omantel Customers, Omantel shall not unreasonably withhold availability of such new services to Roaming Customers on the Omantel Mobile Network. The Tariffs for such new services shall be negotiated in good faith by the Parties.
- 4.1.8 The Services enabled by Omantel and available to the Requesting Party will be subject to the Requesting Party Network support.
- 4.1.9 The Parties shall act in accordance with rules and procedures for number portability on mobile networks as agreed between themselves and as notified to the TRA.
- 4.2 ETSI/3GPP CS Services Provided for Roaming Customers
- 4.2.1 The following Tele Services shall be provided from the Commencement Date.

Tele Services
Speech telephony Speech, emergency calls (with or without SIM cards); and Short Messages Services (SMS).

- 4.2.2 The following Supplementary Services shall be provided from the Commencement Date and will be subject to additional charges if additional costs are identified by Omantel at the time of the offering and implementation. Any such additional charges shall be based on specific requirements by the Requesting Party, and/or which could not be reasonably foreseen. Any such charges shall be objectively justified and shall be subject to TRA approval.

  
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### Supplementary Services

Calling line identification presentation (CLIP)  
 Calling line identification restriction (CLIR)  
 Call forwarding unconditional (CFU)  
 Call forwarding on mobile subscriber busy (CFB)  
 Call forwarding on no reply (CFNRy)  
 Call forwarding on mobile subscr. not reachable (CFNRc)  
 Call waiting (CW)  
 Call hold (HOLD)

- 4.2.3 The following Bearer Services shall be provided from the Commencement Date, and will be subject to additional charges if additional costs are identified by Omantel at the time of the offering and implementation. Any such additional charges shall be based on specific requirements by the Requesting Party, and/or which could not be reasonably foreseen. Any such charges shall be objectively justified and shall be subject to TRA approval.

### Bearer Services

Circuit Duplex asynchronous (CDA), transparent/ non-transparent,  
 MO/MT, 9.6kbits/s  
 HSCSD  
 GPRS  
 EDGE

- 4.2.4 The Parties shall negotiate in good faith regarding the services.
- 4.2.5 During implementation of the Bearer Services, the Parties shall agree on the changes that might impact the Tele Services and the Supplementary Services.
- 4.2.6 In addition to the above services, Omantel shall also offer those services stipulated in the Annex 3.5 (Sixth section) of the A&I Regulation.

- 4.3 Frequency and Bands:

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4.3.1 Omantel will offer the Service on frequency bands allocated and used by Omantel subject to feasibility.

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## 5 National Roaming Characteristics

### 5.1 General

5.1.1 National Roaming is defined as a functionality whereby a Party rents capacity and required associated functionality in the other Party's mobile network from one point (point of interconnection) to another point, the radio interface. National Roaming is based on Omantel and the Requesting Party National Roaming Test Cases and GSM Ph. 2 standards and its principles. Additional tests such as GSMA IR32 v3.3.3 part 1&2, IR50 v4.0, IR60 v4.0, IR24 v7.0 can be also used for this purpose.

5.1.2 This Agreement gives the Requesting Party access to National Roaming in the Omantel Mobile Network. National Roaming shall be allowed for IMSI numbers allocated to the Requesting Party and its mobile resellers (the Requesting Party's MNC).

5.1.3 It is the responsibility of the Requesting Party to control and in this respect to provide its Roaming Customers with a valid subscription to roam on the Omantel Mobile Network.

### 5.2 Location Update

5.2.1 When a Customer of the Requesting Party who is not already registered in Oman Mobile's VLR attempts to make a location update in the Omantel Mobile Network, the attempt will be acknowledged provided triplets are received from the Requesting Party HLR.

5.2.2 Subsequent location update attempts and on the availability of triplets from the Requesting Party HLR, Omantel GMSC shall route the call to the Requesting Party GMSC and further the Requesting Party has to make sure that the Requesting Party's Customer is connected to the "B" party.

5.2.3 Failure of recognizing an IMSI of the Requesting Party as legitimate or signaling failure of one or the other network may result in rejection with cause value #11 to be sent to the Requesting Party Roaming Customer's Mobile Station. In that case the Customer will have to manually force the Mobile Station to make a new attempt once the IMSI is (re-) activated in the HLR or the signaling problem has been resolved.

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5.2.4 In areas where the National Roaming is not allowed, the Parties shall reject the location update attempts by the other Party's Customers by sending cause value #13 to such Customers.

### 5.3 Security

5.3.1 It is the ambition by the Parties to cooperate and set-up a national CEIR in order to blacklist IMEI. Mobile stations blacklisted by their IMEI in the prospective CEIR will not be allowed to use any services in the Omantel Mobile Network. In the event of deployment of a national CEIR, the Requesting Party is responsible for blacklisting mobile stations by reports to the CEIR.

### 5.4 Quality of Service (QoS)

5.4.1 The QoS in terms of rejected call rate and dropped call rate experienced by Roaming Customers in the Omantel Mobile Network should not differ from those provided to Omantel's own Customers. Omantel shall not differentiate between Roaming Customers and Omantel's own Customers in relation to the provision of Services under this Agreement on the Omantel Mobile Network.

5.4.2 Calls that have been initiated by Roaming Customers while National Roaming on the Omantel Mobile Network shall not be dropped in the event that the Roaming Customer moves into an area where coverage is provided on the Requesting Party Network. At the end of such call, there shall be a location update.

### 5.5 Routing of Calling Party

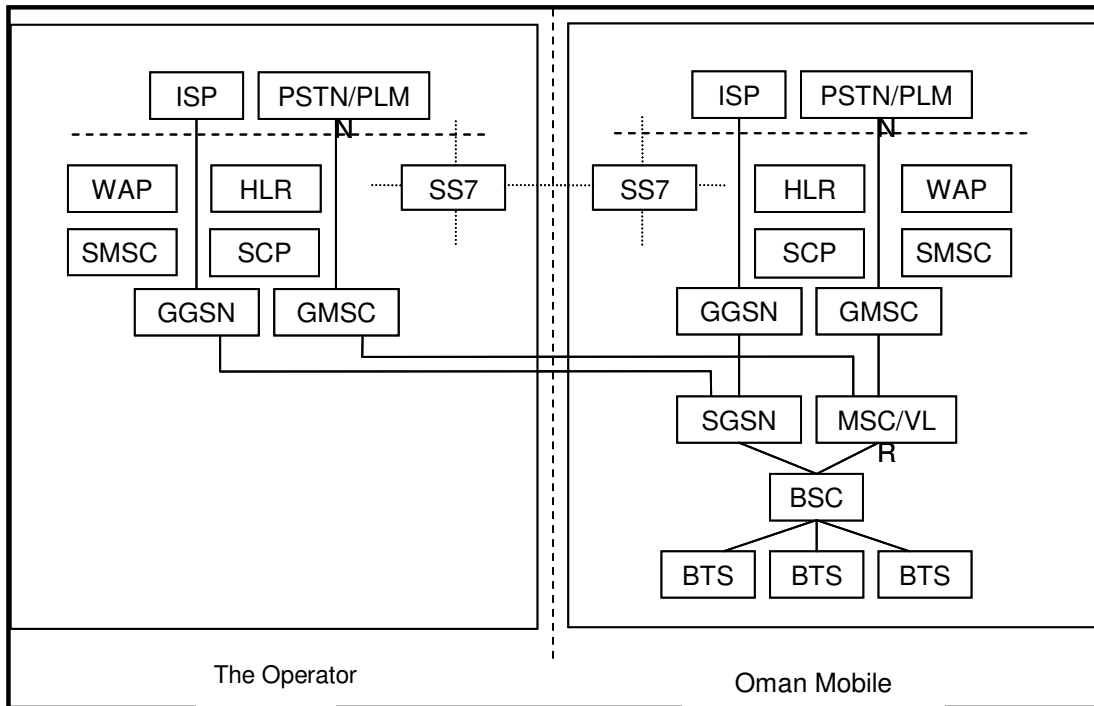
5.5.1 National Roaming with the Requesting Party will be based on the IMSI routing (also called A-number or HPMN routing) principle of the calling Party.

5.5.2 All traffic generated by a Roaming Customer will be routed directly to the Requesting Party after receiving triplets from the Requesting Party HLR.

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- 5.5.3 Calls to emergency numbers shall be routed to the Public Alarm Centre directly. Omantel Mobile will provide same Quality of Service to the Requesting Party Customers as for Omantel's own Customers.
- 5.6 In the ISUP signaling Omantel has to send the CLI (Calling Line Identification), the category, the redirecting number and the forwarding indicator.
- 5.7 National Roaming Traffic Exchange Points
- 5.7.1 Transmission links for exchange of traffic between the Requesting Party Network and the Omantel Mobile Network shall be connected to Omantel Mobile's Media Gateway at locations in Azaiba (GMGW04) and Nizwa (GMGW06). In case if there is any change to these points, the Requesting Party will be notified accordingly.
- 5.7.2 Dimensioning and managing of the procurement process of transmission capacity between the Networks is the responsibility of the Requesting Party.
- 5.8 Sketch of the Technical Solution
- 5.8.1 Network external interfaces are indicated by dashed lines and Physical interfaces are indicated by solid lines. In general, signaling interfaces are not shown. Within and across the Networks signaling traffic is carried by SS7 network.
- 5.8.2 The Requesting Party shall acquire its own MNC and own MSISDN number series. All traffic, MT and MO, assumed to pass through the Requesting Party Network. The Requesting Party may have more service platforms than shown.
- 5.8.3 The Requesting Party requirements as to where and how billing data shall be generated may impact architecture and billing functionality of network nodes.



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## 6 Contract Term and Termination

- 6.1 The Contract Term of this Service is up to three (3) years following the launch of Requesting party services in the Sultanate, unless otherwise mandated by the TRA in the license of the Requesting Party.
- 6.1.1 Omantel has the right to suspend the Service in accordance with Clause 17 of the Main Agreement in case the Requesting Party is in breach of its obligation under this Agreement.
- 6.1.2 Termination of the Service by the Requesting Party before the expiration of the Contract Term is subject to early Termination Fee per terminated site equal to Setup Fee for the same site as defined in Annex M. Once the initial term has concluded, and the agreement has been renewed, no Early Termination fees shall be applicable. If either Party wishes to terminate the contract, it shall inform the other party in writing twelve (12) months in advance of its intent to terminate the Contract. The Providing Party shall not terminate the Contract without the prior approval of the TRA. If no such notice is provided, the Contract will be automatically renewed for the same Contract Term.
- 6.1.3 The termination process provided herein shall prevail over any other contrary provision provided under the Agreement

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## 7 Operation and Maintenance

### 7.1 General

7.1.1 Operation and Maintenance is handled according to Annex H in addition to the following Clauses and other Clauses in this Sub Annex.

### 7.2 Notification Procedures for General Operational Issues.

7.2.2 The communication between the operational teams of the Parties shall be handled through notifications.

7.2.3 All notifications shall be associated with a reference number. This reference number shall be used in all responses and subsequent exchange of information on the issue described in the notification. The reference number is proposed to be the date followed by a serial number: [yyyy-mm-dd ##].

7.2.4 Single points of contact exist for each Party for the purpose of notifications. Omantel prefers e-mail as the means to notify to the Requesting Party faults and resolution of faults in the Omantel Mobile Network.

7.2.5 When events require that the Parties' regional or local personnel work directly with one another, the contact point shall provide the necessary contact information.

7.2.6 Email notification and reporting can be used as long as the serial number and date/time is included in the email.

### 7.3 Planned Outages

7.3.1 Omantel and the Requesting Party shall give advance notice to each other prior to commencement of planned work and preventive maintenance that may specifically affect National Roaming.

7.3.2 Each Party shall give at least three (3) working days' notice before the work is due to commence.

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- 7.3.3 Subsequent notices shall be sent when the planned work begins and when it is finished.
- 7.3.4 If a Party is not able to finish planned work within the expected time frame the other Party shall as soon as possible be notified of the time when it is expected that the work will be completed.
- 7.3.5 Reduced periods of notice may be agreed on a case by case basis. At every instance acceptance of a reduced period of notice shall be communicated in writing through the contact points.
- 7.3.6 Emergencies shall be communicated verbally and followed with a written communication.
- 7.4 Faults in Network
- 7.4.1 Fault in Own Network
- 7.4.1.1 If the Requesting Party discovers a fault in its Network or on the connecting links which may have an effect on its Roaming Customers in the Omantel Mobile Network, the Requesting Party shall as soon as practicable inform Omantel of the fault through the agreed responsible contact point, according to the notification procedure. Information of the fault being resolved shall be communicated by the Requesting Party to Omantel through the same contact point.
- 7.4.1.2 If Omantel discovers a fault in its Network which may have an effect on the Requesting Party's Roaming Customers in Omantel Mobile Network, Omantel shall as soon as practicable inform the Requesting Party of the fault through the agreed responsible contact point, according to the notification procedure. Information of the fault being resolved shall be communicated by Omantel to the Requesting Party through the same contact point.
- 7.4.1.3 If the Requesting Party without reasonable basis or in bad faith reports a fault in Omantel Network, and after Omantel fault correction efforts, it turns out that the reported fault was not caused by conditions in the Omantel Network, the Requesting Party shall pay Omantel for the work reasonably required for fault finding which has been performed in vain and which Omantel agrees will be stopped immediately once it is found the reported fault was not caused by conditions in the Omantel Network.

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## 7.5 Test Numbers

7.5.1 The Parties will make test numbers (MSISDN) available to one another for the purpose of call tests to be performed.

7.5.2 Each Party may request test numbers (MSISDN) from the other Party for the purpose of call tests. The request shall be in writing and shall specify the number of test numbers required for the purpose of the tests, the description of the tests to be performed and the service type for each test number. The service types are pre-paid and post-paid.

7.5.3 Such requested test numbers will not be unreasonably withheld or delayed by the -Providing Party.

7.5.1 Protection against unauthorized use

7.5.2 The Parties confirm that they shall comply with the Data Privacy Regulations/Laws applicable in Oman.

7.5.3 The Parties shall co-operate in good faith concerning fraudulent or unauthorized use of the Service by Roaming Customers.

7.5.4 The Parties shall co-operate in good faith to ensure that each Party can comply with its obligations to the legal authorities in relation to this Agreement.

7.5.5 Omantel shall not utilize the Requesting Party's SIM Cards with the objective of generating roaming traffic volume or causing commercial harm to the Requesting Party nor procure any third party to do the same. The Parties shall not engage in any artificial inflation of traffic and will use their reasonable endeavors to detect and identify any artificial inflation of traffic and in particular any resultant distortion of billing which has or may occur and which has been caused by actual or suspected fraudulent actions, artificial inflation of traffic by either of the Parties, or any other similar abuse by third parties. The Parties shall share such information with each other and shall further use reasonable efforts to pursue with each other the appropriate actions in order to prevent any such artificial inflation of traffic, distortion of billing and/or fraudulent actions or abuses.

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## 8 Billing

8.1 Billing defined in Annex B shall apply to this Sub Annex in addition to the conditional explained in this Sub Annex.

8.1.1 The Parties agree that all Roaming Traffic will be transited through the Requesting Party Network to enable the Requesting Party to produce CDRs, unless the Parties mutually agree on a more cost effective solution.

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## 9 Customer Care

- 9.1 The Requesting Party shall handle all Customer Care Obligations to the Roaming Customers.
- 9.2 The Requesting Party shall not at any time refer his customer to Omantel Mobile Customer Care, or any other Omantel Mobile entity, when a Customer has complaints, inquiries or any other matter regarding the Services offered under this Agreement.

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## 10 Ordering and Delivery

10.1 Ordering and Delivery defined in Annex H shall apply to this Sub Annex.

10.2 The delivery timelines will be negotiated by the parties, or otherwise directed by the TRA.

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## 11 Prices

- 11.1 The up to date prices for the services can be found in Annex M.
- 11.2 The cost of additional product features, specialized billing, systems and/or network interfaces, non-standard connectivity and associated configuration, integration and testing are not included in the published tariffs. Such cases will be dealt with on a case-by-case basis against mutual agreed timelines and charges. Omantel shall inform the TRA accordingly, and obtain the necessary approvals from it. For the avoidance of doubt, the cost of integration and testing of standard orders is included in the published NRC/set-up fee for the corresponding service and any such charges shall apply to items that could not reasonably be foreseen or in respect to special requirements from the Requesting Party during the provisioning of the services.

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## 12 Fault Management

12.1 Fault Management shall be handled according to Annex H.

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## 13 Forecasts

### 13.1 General

13.1.1 Forecast defined in Annex F shall apply to this Sub Annex in addition to the conditional explained in this Sub Annex.

### 13.2 Forecast Process

13.2.1 For voice traffic, the Requesting Party shall provide Omantel with traffic forecasts for

- (a) Outgoing Minutes from Roaming Customers, excluding item (c) below;
- (b) Incoming Minutes to Roaming Customers; and
- (c) Minutes originating from Roaming Customers terminating to Omantel Mobile's customers and its Mobile Resellers.
- (d) All type of SMS and MMS.
- (e) Data usage divided between 2G, 3G, 4G and future standards.

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