

# Reference Access and Interconnection Offer

## Sub Annex C-FA 23 Dark Fiber

## Table of Contents

<b>1</b>	<b>General .....</b>	<b>3</b>
<b>2</b>	<b>Definitions .....</b>	<b>4</b>
<b>3</b>	<b>Dark Fiber Service.....</b>	<b>5</b>
<b>4</b>	<b>Terms and Conditions .....</b>	<b>8</b>
<b>5</b>	<b>Database.....</b>	<b>11</b>
<b>6</b>	<b>Ordering and Delivery .....</b>	<b>12</b>
<b>7</b>	<b>Prices .....</b>	<b>13</b>
<b>8</b>	<b>Fault Management.....</b>	<b>14</b>
<b>9</b>	<b>Forecasts.....</b>	<b>15</b>

## 1 General

- 1.1 This Sub Annex sets out the Omantel offer for Dark Fiber Service.
- 1.2 Omantel through this Service enables the Requesting Party to establish dark fiber connection between two Omantel POPs, both in Oman.

## 2 Definitions

2.1 The definitions in Annex L shall apply to this Sub Annex in addition to the following definitions:

2.1.1 POP – Point of Presence

2.1.2 Service – Dark fiber service

2.1.3 Contract Term – the contract period of the Service provisioning starting from the Service provisioning date.

### 3 Dark Fiber Service

- 3.1 Omantel offers the Requesting Party the possibility to establish dark fiber connection between two Omantel POPs, both in Oman.
- 3.2 Request for this Service shall be initiated by the Requesting Party.
- 3.3 The exact location or the endpoints will be mutually agreed between both Parties after a joint site-survey. The cost of performing the survey shall be charged in accordance to Clause 7 of this Sub Annex.
- 3.4 Omantel's Dark fiber network consists of multiple ILA (In-Line Amplifier) sites and multiple add-drop points at regular intervals between the two endpoints.
- 3.5

The diagram below is a generic representation of the Dark Fiber service. Actual setup may vary depending on the locations in the specific request. During technical feasibility, parties shall agree on the requirements that Omantel can fulfill as part of the order.

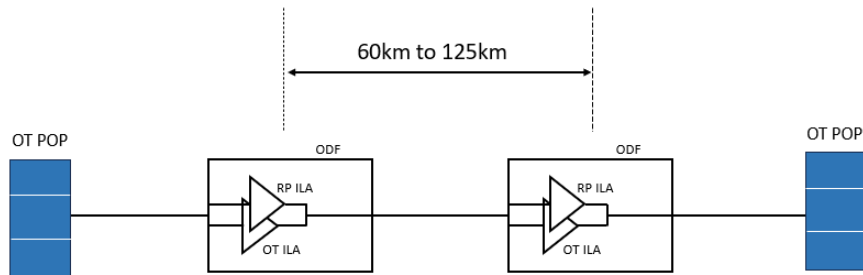


Figure 1: Generic representation of the Dark Fiber service

- 3.6 The ILAs support bidirectional periodic amplification of the signal to enable long-distance transmission as it propagates along the fiber-optic cable. The ILAs are typically placed 60-125 Km apart along the length of the fiber, and are placed in racks inside the ILA sites. The line side fiber coming in from either direction terminate on the ODFs within each ILA site.

- 3.7 The cost of ODF and rack at each ILA site shall be shared between the Requesting Party and Omantel.
- 3.8 The Power Utilization Efficiency (PUE) at each of the ILA sites and at add-drop sites is 3.0. This PUE figure shall be applied when calculating power charges at the ILA sites and add-drop sites.
- 3.9 The Requesting Party shall provide its own ILAs and be responsible for the functioning those ILAs. The Requesting Party's ILAs shall be installed in in the same rack as Omantel's ILAs.
- 3.10 Omantel shall perform technical feasibility at each ILA site and at each add-drop site. The costs of performing the technical feasibility shall be charged to the Requesting Party. The supporting documents will be shared with the Requesting Party and the TRA upon request.
- 3.11 Omantel shall extend the Requesting Party's network from its nearest exchange to Omantel's POP (end location). The charges will be calculated as equal to cost plus 16%.
- 3.12 Omantel shall provide the number of fibers ordered by the Requesting Party – subject to feasibility - and shall retain all the remaining fibers.
- 3.13 Omantel shall inform the Requesting Party about the results of the technical feasibility and availability. In case it is not possible to offer this Service at the requested location, Omantel may propose an alternative solution.
- 3.14 Omantel shall, where feasible, allow the Requesting Party to install its own ILAs and offer collocation at ILAs as ancillary to the Dark Fiber service.
- 3.15 Omantel will assess the Requesting Party requirements taking into consideration the following:
- 3.15.1 Omantel's reasonably anticipated requirements in the next five (5) years for Dark Fiber service for the provision to itself and its Customers;
- 3.15.2 Omantel's reasonably anticipated requirements in the next five (5) years for Dark Fiber service for operation and maintenance purposes;

- 3.15.3 Omantel and other third party requirements (including operation and maintenance purposes) that have been ordered but not yet delivered or that have been provided;
- 3.15.4 security and confidentiality requirements imposed on Omantel by Governmental Agencies;
- 3.15.5 In case Omantel plans to decommission some submarine capacity within fifteen (15) years from the date of the request.

## 4 Terms and Conditions

### 4.1 Service Provisioning:

4.1.1 The Service provision shall be subject to a technical feasibility study. 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.

4.1.2 Omantel shall remain owner of the Service. The Requesting Party shall not sublease, resell, pledge, assign, swap or transfer the services listed in this Sub Annex to any national or international carrier, operator, content provider or an affiliate irrespective of the nature of their relationship. Subleasing the Service to any other third party will be considered as breach to this Agreement.

4.1.3 The Requesting Party shall not use this Service for the purposes of transiting international traffic.

4.1.4 Omantel will be responsible to maintain the Service and shall ensure that the Services offered to the Requesting Party are at the same level of quality as those to Omantel's own Customers.

4.2 Where certain site preparation is to be carried out by Omantel, the Requesting Party shall pay all the reasonable costs incurred by Omantel in carrying out this activity plus a markup percentage specified in Annex M.

4.3 If the Requesting Party requires Omantel to perform additional tasks, Omantel may offer to perform those additional tasks, subject to feasibility. The Requesting Party should request in writing for Omantel to perform such additional tasks. In such cases, Omantel will charge the Requesting Party on a cost plus a markup percentage specified in Annex M.

### 4.4 The Requesting Party Responsibility:

4.4.1 The Requesting Party shall request the Service.

- 4.4.2 The Requesting Party shall pay Omantel the charges specified in Clause 7 below from the date of providing the Service.
- 4.4.3 Requesting Party shall request for space, power, cooling and backup generator at each ILA site and at each add-drop site. The charges for space, cooling, power and backup generator will be charged separately after approval from the TRA.
- 4.4.4 Requesting Party shall take all necessary measures to ensure the safety of Omantel and Omantel's other wholesale customer's equipment, cables and materials at the sites. Notwithstanding the foregoing, in case of any damage, the Requesting Party will be liable to pay for the damages and the business loss to the impacted party.
- 4.5 Contract Terms and Termination:
- 4.5.1 The minimum Contract Term is ten (10) Years.
- 4.5.2 If either Party wishes to terminate the contract after the completion of the Contract Term, it shall inform the other Party, in writing, three (3) months before the completion of Contract Term, of its intent to terminate the Contract. The Requesting Party shall be responsible of the consequences if it terminated the Service with active Customer on its network.
- 4.5.3 If no notice is provided at least three (3) months before the completion of Contract, the Contract will be automatically renewed with the same Contract Term.
- 4.5.4 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.
- 4.5.5 Termination of the Service by the Requesting Party before the expiration of the Contract Term is subject to early Termination Fee equal to the charges of the remaining period of the Contract Term. 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 three (3) 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.

4.5.6 The termination will be in accordance with the procedures in Annex H.

## 5 Database

5.1 Omantel will install and keep updated a database consisting of all active and ordered Dark fiber links of the Requesting Party. The database will consist of at least the following parameters:

- (a) Operator Name
- (b) actual bandwidth
- (c) A end and B end
- (d) order date
- (e) actual delivery date
- (f) installation fee
- (g) monthly fee
- (h) length of line in Km

## 6 Ordering and Delivery

- 6.1 Ordering and delivery is handled according to Annex H in additional to the following Clauses.
- 6.2 Omantel shall target a delivery time of 70 Working Days subject to feasibility, cooperation of the Requesting Party and any other third Party and that there will be no delays caused by factors outside Omantel's control such as, for example, due to the delay arising from the involvement of governmental entities.
- 6.3 Omantel shall inform the Requesting Party once the link is activated. The Requesting Party shall test the link and within three (3) Working Days return back to Omantel for any issues. In case the Requesting Party does not report issues within (3) Working Days, Omantel has the right to charge the Requesting Party from the date the link is activated.
- 6.4 Omantel may reject a request for this Service if the pre-conditions for providing this Service have not been provided at the date of request.
- 6.5 If Omantel rejects the request, Omantel shall inform the Requesting Party on the reasons, which shall be objectively justifiable such as technical feasibility problems.

## 7 Prices

- 7.1 The up to date prices for the Services can be found in Annex M.
- 7.2 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.
- 7.3 Any additional costs for repair, replacement or maintenance shall be borne by the Requesting Party as per Annex M. Omantel shall provide all the documentation at reasonable degree of acceptance to support the work carried out by Omantel or by its contractors.
- 7.4 Charges will be based on per meter of the actual length of the dark fiber.

## 8 Fault Management

- 8.1 Fault Management is handled according to Annex H in additional to the following Clauses.
- 8.2 The Requesting Party shall ensure to carry out the initial tests in respect of any fault in customer connection in order to validate that the fault is not from the Requesting Party Network. In case the fault is not at the Requesting Party Network, the Requesting Party shall make available all reasonable and complete test details when reporting the fault to Omantel.
- 8.3 In case no Fault is found from Omantel's side, Omantel shall charge the Requesting Party a Fault handling fee.

## 9 Forecasts

### 9.1 Forecasting shall be handled according to Annex F.