

## Reference Offer for Leased Line and Ethernet Services

### Schedule 2: Service

#### 1 The Services

- 1.1 The Services to which this Agreement applies are set out and further described in the Appendix to this Schedule 2. Services that may be ordered by the CP pursuant to the terms of this Agreement are:
- (a) Data Direct Access Service
  - (b) Ethernet Direct Access Service
  - (c) Data Connect Access Service
  - (d) Ethernet Connect Access Service
  - (e) External CableConnect Service
  - (f) Optical Wave Access Service including filter
- 1.2 Data Direct Access Service, Ethernet Direct Access Service, Data Connect Access Service, Ethernet Connect Access Service and Optical Wave Access Service including filter provide connections between two or more specified locations available for use on an unlimited basis at a specified transport rate. External CableConnect provides a passive connection between the CP Compliant Equipment located in a Specified Floor Area in a CP Equipment Room in a WFLLA Site and the CP's Network located within the curtilage of the same WFLLA Site or at a specified location within 100 metres of the curtilage of the same WFLLA Site.
- 1.3 Data Direct Access Service, Ethernet Direct Access Service, Data Connect Access Service, Ethernet Connect Access Service and Optical Wave Access Service including filter demarcate on Network Terminating Equipment (NTEs) supplied by KCOM. The NTEs are located on the CP Site and/or End User Site. The access port on the NTE is the point of demarcation to the Service. The CP or End User is responsible for connecting to this port.
- 1.4 External CableConnect Services demarcate at the Point of Handover.
- 1.5 Detailed information regarding the Services and the applicable Charges are set out in the Price

List. Further information regarding the operation of the Services are set out in the Service Operations Manual that will be issued to the CP separately by KCOM.

## **2. Ordering and Provision**

- 2.1 The CP will provide KCOM with details of the CP Order Correspondence Contact(s) and the CP Operational Contact(s) and their details shall be set out in the Customer Service Plan. KCOM will only accept Orders placed by the CP Order Correspondence Contact(s) named in the Customer Service Plan and KCOM shall only address incidents raised by the CP Operational Contact(s) set out in the Customer Service Plan.
- 2.2 The CP must place Orders by following processes set out in the Service Operations Manual. KCOM will process all Orders in the order in which they are received. Upon receipt of an Order, KCOM will process the Order in accordance with the Service Operations Manual. Orders will be completed by KCOM on or prior to the Proposed Start Date or the date by which the CP requires the Services to commence, whichever is the later.
- 2.3 There may be technical or geographical limitations that inhibit the installation of the Services. The CP acknowledges that the provision of the Service will be subject to survey and/or feasibility checks to ensure that the Service can be provided. Following survey and/or feasibility checks, KCOM will advise the CP of any limitations affecting the provision of the Service and in such circumstances where the Service cannot be provided KCOM will:
  - (a) advise of Excess Construction Charges to be incurred; or
  - (b) use reasonable endeavours to identify if alternative KCOM products may possibly be used instead; and
  - (c) notify the CP and close the Order.
- 2.4 KCOM will use reasonable endeavours to identify any technical or geographical limitations prior to the Proposed Start Date for an individual Order.
- 2.5 The CP is responsible for:
  - (a) compliance with the terms of this Agreement and any instructions provided by KCOM in relation to the Service and;

- (b) the acts and omissions of its employees and agents in connection with the repair and/or any other alternative process set out in this Agreement and the Service Operations Manual.

2.6 In the case of External CableConnect, the CP will, within 10 Working Days of KCOM notifying the availability of the Point of Handover:

- (a) if necessary, extend its duct network to the Point of Handover; and
- (b) provide a length of cable at the Point of Handover sufficient to be pulled through to, and spliced within, the KCOM jointing chamber by KCOM.

If the CP fails to do so, the Service Standards in Schedule 3 shall not apply. If 20 Working Days elapse from the date of KCOM's notification and the CP has not undertaken the necessary work, KCOM may cancel the Order and cancellation charges as specified in the Price List will be payable

2.7 The CP shall ensure that any equipment connected to the Services:

- (a) is used and connected in accordance with any relevant instructions or laws;
- (b) is technically compatible with the Services;
- (c) shall not harm:
  - (i) the KCOM Network;
  - (ii) the Services;
  - (iii) the KCOM Equipment;
  - (iv) any Third Party's network or equipment;
- (d) is connected and used in accordance with any relevant standards including any standards that KCOM notifies to the CP from time to time in writing and, in the following order of precedence:
  - (i) any legal requirements imposed upon the parties including requirements arising from the General Conditions;
  - (ii) any relevant specification notified by Ofcom implementing the recommendations of the Network Interoperability Consultative Committee;
  - (iii) any relevant recommendations or standards of the European Telecommunications Standards Institute; and

- (iv) any relevant recommendations of the Telecommunications Standards Bureau (formerly the International Telegraph and Telephone Consultative Committee) of the International Telecommunication Union.

2.8 If the CP cancels an Order before the Proposed Start Date, the CP shall reimburse KCOM to the extent of the costs of any work done and for money spent in preparing to provide the Services. KCOM will take reasonable steps to mitigate the amount of such costs and expense. The CP will also be liable for any cancellation charges as specified in the Price List.

### **3. Site Access**

3.1 An engineering visit or a site survey (or both) will normally be required if new duct and fibre build work is required to provide the Services. KCOM will arrange all engineering visits and site surveys with the CP Operational Contact.

3.2 In the case of External CableConnect, attendance by the CP's employee or agent to agree the position of the Point of Handover is required at the same time as a site survey.

3.3 Where an appointment is agreed with KCOM for work at a CP Site and/or End User Site and KCOM is unable to carry out the work or if the appointment is cancelled by the CP or the CP's Operational Contact, KCOM may charge the CP a Missed Appointment Fee as specified in the Price List.

### **4. Incident Management**

4.1 KCOM will only accept fault reports directly from the CP. If the fault is not attributable to the KCOM Network the CP will be liable for Time Related Charges as set out in the Price List.

4.2 The CP will report all faults in accordance with the Service Operations Manual.

### **5 KCOM Liaison with End Users**

5.1 All communications between KCOM and End Users will be arranged via the CP except that if the Services are to be delivered to an End User Site, KCOM may contact End Users directly in the following circumstances:

- (a) where the CP has requested KCOM to contact the End User directly; or
- (b) in relation to all appointments, changes to appointments and access arrangements with the End User for engineering visits; or
- (c) to assist with fault diagnostics.

## APPENDIX 1

### 1 The Service

1.1 The Service is one of the following:

- (a) Data Direct Access Service
- (b) Ethernet Direct Access Service
- (c) Data Connect Access Service
- (d) Ethernet Connect Access Service
- (e) External CableConnect Service
- (f) Optical Wave Access Service including filter

### 2 Data Direct Access Service

2.1 The Data Direct Access Service comprises SDH/PDH point to point data circuits as described in CIP007, CIP008, CIP009, & CIP011 published on the KCOM Website at: <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/technical-interface-information/>.

2.2 The CP can only use the Data Direct Access Service to connect:

- (a) CP Site to End User Site
- (b) CP Site to CP Site
- (c) End User Site to End User Site

within the Hull Area.

2.3 The Data Direct Access Service cannot be used for connections which are outside the scope of those identified above, including:

- (a) where the usage is for the purpose of building or extending core network;
- (b) where the intent is to replicate core network; or
- (c) where there is onward connection to a point outside of the Hull Area.

2.4 Except for the connectivity allowed under this Agreement, the Data Direct Access Service must

not be used for directly cabled NTE to NTE connection with any other KCOM-provided service. KCOM will not be liable for any incidents, reduction in service performance or service failures which result from the Data Direct Access Service being connected in a directly cabled NTE to NTE configuration or if the Data Direct Access Service is connected within the CP Site in a NTE to NTE configuration.

### **3 Ethernet Direct Access Service**

- 3.1 The Ethernet Direct Access Service comprises ethernet point to point data circuits as described in CIP016 and CIP035 published on the KCOM Website at:  
<https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/technical-interface-information/>.
- 3.2 The CP can only use the Ethernet Direct Access Service to connect:
- (a) CP Site to End User Site
  - (b) CP Site to CP Site
  - (c) End User Site to End User Site
- within the Hull Area.
- 3.3 The Ethernet Direct Access Service cannot be used for connections which are outside the scope of those identified above, including:
- (a) where the usage is for the purpose of building or extending core network;
  - (b) where the intent is to replicate core network; or
  - (c) where there is onward connection to a point outside of the Hull Area.
- 3.4 Except for the connectivity allowed under this Agreement, the Ethernet Direct Access Service must not be used for directly cabled NTE to NTE connection with any other KCOM-provided service. KCOM will not be liable for any incidents, reduction in service performance or service failures which result from the Ethernet Direct Access Service being connected in a directly cabled NTE to NTE configuration or if the Ethernet Direct Access Service is connected within the CP Site in a NTE to NTE configuration.

## 4 Data Connect Access Service

- 4.1 The Data Connect Access Service comprises SDH/PDH point to point data circuits as described in CIP007, CIP008, CIP009 & CIP011 published on the KCOM Website at: <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/technical-interface-information/>.
- 4.2 The CP can only use the Data Connect Access Service to connect:
- (a) CP Site to End User Site
  - (b) CP Site to CP Site
- 4.3 The Data Connect Access Service cannot be used for connections which are outside the scope of those identified above, including:
- (a) where the usage is for the purpose of building or extending core network; or
  - (b) where the intent is to replicate core network.
- 4.4 KCOM has agreed to supply the Data Connect Access Service to the CP within the Hull Area. In the event that the CP wishes to connect to a CP Site or End User Site located outside of the Hull Area, KCOM will provide the Data Connect Access Service to a CP Site located within the Hull Area and the CP will be responsible for sourcing and connecting any capacity for connection from the CP Site to the Site outside of the Hull Area.
- 4.5 The CP may utilise equipment owned by a Third Party CP at the CP Site, subject to a separate agreement with the third party involved.
- 4.6 Except for the connectivity allowed under this Agreement, the Data Connect Access Service must not be used for directly cabled NTE to NTE connection with any other KCOM-provided service. KCOM will not be liable for any incidents, reduction in service performance or service failures which result from the Data Connect Access Service being connected in a directly cabled NTE to NTE configuration or if the Data Connect Access Service is connected within the CP Site in a NTE to NTE configuration.

## 5 Ethernet Connect Access Service

- 5.1 The Ethernet Connect Access Service comprises ethernet point to point data circuits as described in CIP016 and CIP035 published on the KCOM Website at:

<https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/technical-interface-information/>.

- 5.2 The CP can only use the Ethernet Connect Access Service to connect:
- (a) CP Site to End User Site
  - (b) CP Site to CP Site
- 5.3 The Ethernet Connect Access Service cannot be used for connections which are outside the scope of those identified above, including:
- (a) where the usage is for the purpose of building or extending core network; or
  - (b) where the intent is to replicate core network.
- 5.4 KCOM has agreed to supply the Ethernet Connect Access Service to the CP within the Hull Area. In the event that the CP wishes to connect to a CP Site or End User Site located outside of the Hull Area, KCOM will provide the Ethernet Connect Access Service to a CP Site located within the Hull Area and the CP will be responsible for sourcing and connecting any capacity for connection from the CP Site to a Site outside of the Hull Area.
- 5.5 The CP may utilise equipment owned by a Third Party CP at the CP Site, subject to a separate agreement with the third party involved.
- 5.6 Except for the connectivity allowed under this Agreement, the Ethernet Connect Access Service must not be used for directly cabled NTE to NTE connection with any other KCOM-provided service. KCOM will not be liable for any incidents, reduction in service performance or service failures which result from the Ethernet Connect Access Service being connected in a directly cabled NTE to NTE configuration or if Ethernet Connect Access Service is connected within the CP Site in a NTE to NTE configuration.

## **6 External CableConnect Service**

- 6.1 The External CableConnect Service provides a passive connection between the CP Compliant Equipment located in a Specified Floor Area in a CP Equipment Room in a WFLLA Site and the CP's Network located within the curtilage of the same WFLLA Site or at a specified location within 100 metres of the curtilage of the same WFLLA Site.
- 6.2 The External CableConnect Service consists of the following elements:



- (a) a fibre cable from the CP Compliant Equipment and terminating at the WFLLA Site as detailed in paragraph 6.1; and
  - (b) a KCOM handover box.
- 6.3 The CP will be responsible for providing ductwork from the CP Network to the KCOM handover box with sufficient fibre to reach and connect into the Cable Chamber.
- 6.4 The CP's external cable will be pulled in from the KCOM handover box and spliced to the KCOM-provided internal fibre cable.
- 6.5 The handover box and connecting ductwork, where required to be provided for the External CableConnect Service will be paid for by the CP and ownership passed to KCOM.
- 6.6 The CP agrees that ownership of that part of the cable on the KCOM side of the handover box passes to KCOM. For the avoidance of doubt, KCOM will be responsible for the connectivity between the Point of Handover and the CP Equipment Room.
- 6.7 The CP will be responsible for connection of the internal fibre cable to CP Equipment within the CP Equipment Room in the WFLLA Site.
- 6.8 The Service may only be used for the purpose of providing onward connectivity for services provided pursuant to the Reference Offer for the Provision of KCOM Wholesale FibreLine Local Access.
- 6.9 The External CableConnect Service cannot be used for connections which are outside the scope of those identified above, including:
- (a) where the usage is for the purpose of building or extending core networks; or
  - (b) where the intent is to replicate core network.

## **7 Optical Wave Access Service including filter**

- 7.1 The Optical Wave Access Service including filter comprises point to point Wavelengths and consists of a core 10Gb lit and managed Wavelength with the option for the CP to use additional Wavelengths between Sites using CP Equipment connected to the assigned ports on the NTE as described in CIP042 published on the KCOM Website at: <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/technical->

[interface-information/](#). KCOM shall provide the initial Wavelength(s) to light the fibre(s) and manage any KCOM-supplied Wavelength(s) on an end-to-end basis.

- 7.2 The CP can only use the Optical Wave Access Service including filter in a point to point configuration to connect:
- (a) CP Site to End User Site
  - (b) CP Site to CP Site
  - (c) End User Site to End User Site
- 7.3 The Optical Wave Access Service including filter cannot be used for connections which are outside the scope of those identified above, including:
- (a) where the usage is for the purpose of building or extending core network; or
  - (b) where the intent is to replicate core network.
- 7.4 KCOM has agreed to supply the Optical Wave Access Service including filter to the CP within the Hull Area. In the event that the CP wishes to connect to a CP Site or End User Site located outside of the Hull Area, KCOM will provide the Optical Wave Access Service including filter to a CP Site located within the Hull Area and the CP will be responsible for sourcing and connecting any capacity for connection from the CP Site to a Site outside of the Hull Area.
- 7.5 Except for the connectivity allowed under this Agreement, KCOM will not be liable for any incidents, reduction in service performance or service failures which result from the Optical Wave Access Service including filter being directly connected to non KCOM Equipment and configuration utilising the additional wavelengths with the CP Equipment.
- 7.6 The CP may order additional KCOM managed Wavelengths on an existing bearer. Any additional Wavelengths will incur Connection Charges and Rental Charges as specified in the Price List.
- 7.7 In order to ensure compatible amplification, the CP shall ensure that any CP Equipment operates within the ranges specified in the relevant CIP document. The CP will comply with the space, power and configuration requirements, as well as the additional space requirements detailed in the relevant CIP. The CP will meet the environment conditions detailed in the relevant CIP.
- 7.8 For the Optical Wave Access Service including filter standard configuration, the CP's connection would be to the KCOM provided wavelength transponder card. Where a distance limited resilience option as described in CIP042 is provided. a client patch panel is required. Connection to the

Optical Wave Access Service including filter would be directly onto the relevant client ports presented on the filter cards. In this scenario there is the potential for contaminated client interface cables to damage the optical connection within the WDM filter which may result in the need for complete service downtime to replace the WDM filter unit. For Optical Wave Access Service including filter bearers using 7U chassis configuration the CP's connection to the KCOM Wavelength service and the WDM filter would be via the KCOM provided client patch panel.

- 7.9 The CP shall ensure that all CP Equipment connected to Optical Wave Access Service including filter incorporates sufficient safety features to ensure that lasers cannot operate at optical powers greater than Class 1M even under fault conditions and are safe for live working. Under no circumstances should laser power levels above those detailed in the relevant CIP be applied to any part of the KCOM Network. KCOM may immediately isolate from the KCOM Network any laser power levels identified as being above the safe limit. This could cause an interruption to the Service, and KCOM may terminate the Services at KCOM's discretion. If the Services is terminated for the reasons detailed above KCOM will have no liability to the CP. The CP will be responsible for any loss or damage caused as a result of failing to comply with this paragraph 7.9.
- 7.10 The CP shall only use suitably qualified engineers to carry out the interface with Optical Wave Access Service including filter. Good industry working practice must be employed when connecting to any Optical Wave Access Service including filter optical ports. The CP will be responsible for any loss or damage caused to the KCOM Network caused by its engineers or Third Party engineers, including when this is provided to a Street Cabinet.
- 7.11 Optical Wave Access Service including filter Wavelength upgrades are on a cease and new provide basis as detailed in the Price List.