

## KCOM Ethernet Assured Service (EAS)

### Service description

KCOM EAS is an Ethernet based Virtual Private Network (VPN) that enables a customer to offer Ethernet based connectivity with Public Sector Network (PSN) compliance. KCOM provides the delivery platform, provisioning, installation, billing and fault management to the customer.

The service is provided with assurances of ISO27001 and CESG Assured Telecoms (CAS-T) certification.

The service includes Layer-2 Access Circuits between end customer sites and KCOM Points of Presence. The service is available over KCOM provided Ethernet circuits within the Hull Area (i.e. the Original License Area (OLA)) and can be provided by KCOM outside the Hull Area.

Connectivity between the KCOM Point of Presence and the Communication Provider's (CP) nominated site is provided using a 1Gbps or 10Gbps Aggregate Access Bearer. Where a CP's site is outside the Hull Area a backhaul bearer is also used.

Site-to-site connectivity is provided using Ethernet Virtual Connections on the Aggregate Bearer.

For interface specifications and logical configuration see the Customer Interface Publication (CIP), which sets out the technical characteristics of the service. KCOM EAS CIP 034 can be found at:

<https://www.kcomplc.com/media/1295/eas-cip-034-v103-customer-interface-publication-070717-ip.pdf>

### Connection charges

The KCOM EAS service has a range of Access Circuit connection options:

Standard – an Access Circuit with no resilience

Resilient Diverse – two Access Circuits to the same customer site that connect to different KCOM exchanges but share the same duct into the customer premises

Resilient Fully Diverse - two Access Circuits to the same customer site that connect to different KCOM exchanges and use different duct access into the customer premises

We will provide you with an AM or PM appointment for the installation of the circuits. Missed Appointment charges apply for any missed installation dates when you or your customer is not available to provide access.

|                                     | KCOM EAS – Up to 100Mbps<br>Ex VAT | KCOM EAS – Up to 1Gbps<br>Ex VAT   | KCOM EAS – Up to 10Gbps<br>Ex VAT |
|-------------------------------------|------------------------------------|------------------------------------|-----------------------------------|
| Access Circuits                     |                                    |                                    |                                   |
| Connection– Standard                | POA                                |                                    |                                   |
| Connection– Resilient Diverse       |                                    |                                    |                                   |
| Connection– Resilient Fully Diverse |                                    |                                    |                                   |
|                                     | KCOM EAS Backhaul 1Gbps<br>Ex VAT  | KCOM EAS Backhaul 10Gbps<br>Ex VAT |                                   |
| Backhaul Bearers                    |                                    |                                    |                                   |
| Connection (Per End)                | POA                                |                                    |                                   |

## Replacement hardware charges and upgrades

We will provide hardware to you, for you to use with the KCOM EAS service, you acknowledge that any free hardware provided shall remain the property of KCOM. If the service is cancelled you must allow us access to the premises to collect the hardware, if required.

You and your Customer must take reasonable care of the hardware whilst it is at the premises and, in particular, must protect it from accidental damage and theft. In addition, you must not allow anyone other than us to carry out any repairs or maintenance work on the hardware.

You will be responsible for the cost of repair or replacement hardware if it is lost or damaged as a result of accidental damage or you failing to take proper care of it. However, we will be responsible for any problems you experience with the use of the hardware that can be attributed to any defects with the materials or manufacture. We will repair or replace any defective items free of charge within warranty. A service charge to replace the NTU incorporating the Engineer site visit reconnection charge. The replacement NTU remains the property of KCOM.

You will be charged for any missing equipment that cannot be recovered by KCOM when the service is terminated.

| Service | KCOM EAS 100Mbps<br>Ex VAT                   | KCOM EAS 1Gbps<br>Ex VAT | KCOM EAS 10Gbps<br>Ex VAT |
|---------|--|--------------------------|---------------------------|
|         | Reconnection Charge including Engineer visit | POA                      |                           |

| Backhaul Bearers | KCOM EAS Backhaul 1Gbps<br>Ex VAT            | KCOM EAS Backhaul 10Gbps<br>Ex VAT |
|------------------|--|------------------------------------|
|                  | Reconnection Charge including Engineer visit | POA                                |

## Circuit upgrades & downgrades

| Service   | KCOM EAS 100Mbps | KCOM EAS 1Gbps | KCOM EAS 10Gbps |
|---|------------------|----------------|-----------------|
|   | Ex VAT           | Ex VAT         | Ex VAT          |
| Upgrade Charge including Engineer visit (if required)   | POA              |                |                 |
| Downgrade Charge including Engineer visit (if required) | POA              |                |                 |

| Backhaul Bearers  | KCOM EAS Backhaul 1Gbps | KCOM EAS Backhaul 10Gbps |
|---|-------------------------|--------------------------|
|   | Ex VAT                  | Ex VAT                   |
| Upgrade Charge including Engineer visit                 | POA                     |                          |
| Downgrade Charge including Engineer visit (if required) | POA                     |                          |

## Annual rental – Access Circuits

| Service                                    | Speed    |         | Contention  | Annual Rental |
|--|----------|---------|-------------|---------------|
|  | Download | Upload  |             | Ex VAT        |
| End User Circuits (100Mbps Access Circuit) |          |         |             |               |
| KCOM EAS 2Mbps                             | 2Mbps    | 2Mbps   | Uncontended | POA           |
| KCOM EAS 4Mbps                             | 4Mbps    | 4Mbps   | Uncontended |               |
| KCOM EAS 5Mbps                             | 5Mbps    | 5Mbps   | Uncontended |               |
| KCOM EAS 6Mbps                             | 6Mbps    | 6Mbps   | Uncontended |               |
| KCOM EAS 8Mbps                             | 8Mbps    | 8Mbps   | Uncontended |               |
| KCOM EAS 10Mbps                            | 10Mbps   | 10Mbps  | Uncontended |               |
| KCOM EAS 15Mbps                            | 15Mbps   | 15Mbps  | Uncontended |               |
| KCOM EAS 20Mbps                            | 20Mbps   | 20Mbps  | Uncontended | POA           |
| KCOM EAS 25Mbps                            | 25Mbps   | 25Mbps  | Uncontended |               |
| KCOM EAS 30Mbps                            | 30Mbps   | 30Mbps  | Uncontended |               |
| KCOM EAS 40Mbps                            | 40Mbps   | 40Mbps  | Uncontended |               |
| KCOM EAS 50Mbps                            | 50Mbps   | 50Mbps  | Uncontended |               |
| KCOM EAS 70Mbps                            | 70Mbps   | 70Mbps  | Uncontended |               |
| KCOM EAS 100Mbps                           | 100Mbps  | 100Mbps | Uncontended |               |
| End User Circuits (1Gbps Access Circuit)   |          |         |             |               |
| KCOM EAS 200Mb                             | 200Mbps  | 200Mbps | Uncontended | POA           |
| KCOM EAS 300Mb                             | 300Mbps  | 300Mbps | Uncontended |               |
| KCOM EAS 400Mb                             | 400Mbps  | 400Mbps | Uncontended |               |
| KCOM EAS 500Mb                             | 500Mbps  | 500Mbps | Uncontended |               |
| KCOM EAS 700Mb                             | 700Mbps  | 700Mbps | Uncontended |               |
| KCOM EAS 1Gb*                              | 1Gbps    | 1Gbps   | Uncontended |               |
| End User Circuits (10Gb Access Circuit)    |          |         |             |               |
| KCOM EAS 10Gb*                             | 10Gbps   | 10Gbps  | Uncontended | POA           |

Rental charges for Access Circuits that are local to an EAS enabled exchange are lower than those served off a non EAS enabled exchange.

\* Aggregate Bearers are only available on full 1Gbps and 10Gbps circuits. The 1Gbps bearers can support up to 64 Virtual Local Access Networks (VLANs) (remote sites) and 10Gbps bearers can support up to 512 VLANs (remote sites).

## Annual rental – optional backhaul bearers

| Service                             | KCOM Bearer Size  | Speed             |                   | Contention  | Annual Rental Ex VAT |
|-------------------------------------|-------------------|-------------------|-------------------|-------------|----------------------|
|                                     |                   | Download          | Upload            |             |                      |
| End User Circuits                   |                   |                   |                   |             |                      |
| KCOM EAS Backhaul 1Gbps             | 1Gbps             | 1Gbps             | 1Gbps             | Uncontended | POA                  |
| KCOM EAS Backhaul 1Gbps - Contended | 1Gbps - Contended | 1Gbps - Contended | 1Gbps - Contended | Contended*  |                      |
| KCOM EAS Backhaul 10Gbps            | 10Gbps            | 10Gbps            | 10Gbps            | Uncontended |                      |

\*Contended service only supports a maximum of 50% overbooking on to the 1Gbps service

## Service levels

| Service   | 10Gbps Access or Bearer Circuits  | Up to 1Gbps Access or Bearer Circuits |
|---|---|---------------------------------------|
| Technical Support                                 | UK-based<br>0800 (Freephone)<br>24 x 7 online and telephone fault logging   |                                       |
| Service Level Agreement the KCOM Business Promise | Repair time: 4 clock hour repair, excluding network outages or faults that require on-going monitoring.<br>90% of calls answered in <30 sec<br>95% of emails replied to within 1 working day<br>85% of issues fixed at first point of contact |                                       |
| Lead Time   | 75 days subject to survey   | 40 days subject to survey             |

## Other charges

| Service                               | Connection Charge |
|---------------------------------------|-------------------|
|                                       | Ex VAT            |
| Reconnection Fee – Internal shift     | POA               |
| Reconnection fee when moving premises | POA               |

## Early termination charges & notice

The Termination Payments are defined in the customer contract. They shall not exceed 100% of the aggregate annual charges paid, due or would have been payable under this service in the 12 months preceding the event giving rise to the liability (or if such event occurs during the first 12 months of the Term, the amount estimated to be paid in the first 12 months of the Term). A 90 day notice period of termination is required.