

KCOM Ethernet Point to Point

Ethernet Connect Access Service (ECAS)
Ethernet Direct Access Service (EDAS)
Expansion Area Leased Lines (EA)
Wholesale National Leased Lines

Ethernet services provide managed point to point ethernet delivery and are suitable to support all your next generation voice and data services. They are available throughout the KCOM network and nationally utilising our partner networks:

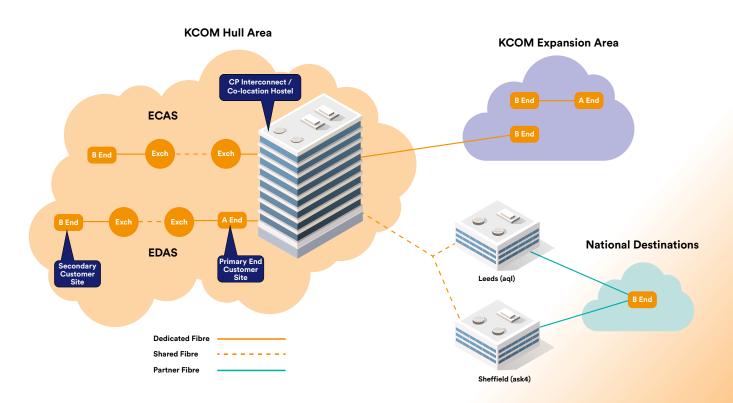
Hull Area

ECAS A End in Hull to KCOM Hull exchange for interconnection to a national delivery service or a CP Co-location Hostel; or

EDAS A End and B End in Hull Area.

National destinations

KCOM provides national coverage through its national partners including Lumen, Cityfibre and BT Wholesale



The network services provided have received accreditation against ISO270001. For more details on the ISO27001 standard, please refer in the first instance to:

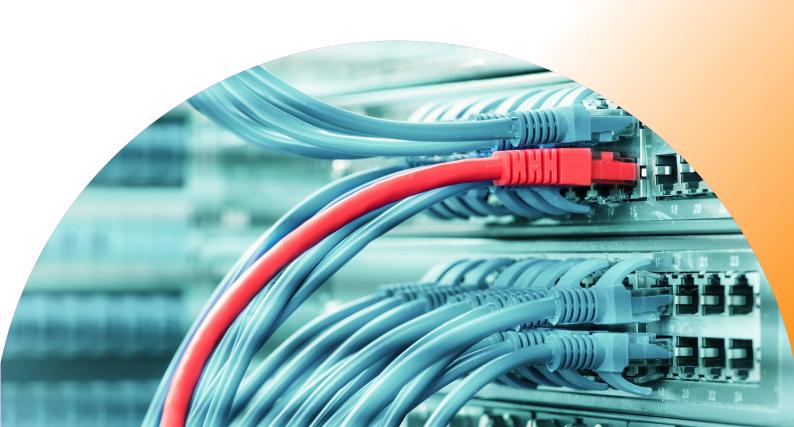
https://www.iso.org/isoiec-27001-information-security.html

Key Features

| Suitable for data applications requiring guaranteed speeds and assured uptime | | |
|---|---|--|
| Flexibility | Ubiquitous coverage of Hull area and material coverage in surrounding areas Nationwide reach | |
| Secure, uncontended data transmission | Between end user sites; or To a CP's point of interconnect Range of access bandwidths 10Mb/s – 100Gb/s | |
| Support | KCOM Field Engineering teams for Installation and Repair –local dedicated teams to ensure on time delivery and performance. Managed Customer Premise Equipment for prompt diagnosis and repair | |

Full technical specifications are recorded in the Customer Interface Publications:

CIP035 KCOM Ethernet Connect Access Service (ECAS) and Ethernet Direct Access Service (EDAS): 035_kch_cip_035_v12-ecas-edas.pdf (kcom.com)



| Equipment provided | Adva network termination equipment (robust carrier grade) | |
|--------------------------------------|---|--|
| | (robust carrier grade) | |
| KCOM Technical Support Team | Second line support on 0800 7022000 | |
| Installation Lead Times | 1Gb/s and below 42 Working Days 10Gb/s and above 75 Working Days | |
| Support | 24 × 7 × 365 CP Technical Support Desk | |
| Repair Time | 5 Clock Hour SLA 24 × 7 × 365 | |
| Service Level Guarantees | Documented compensation scheme for breach | |
| Availability | Hull, East Yorkshire and North Lincolnshire* | |
| Resilience | Available on request | |
| Minimum Contract Term | 12 Months | |
| Contractual documentation | | |
| > Hull Area | Data Connectivity Document page KCOM | |
| > Expansion Area / National services | Reseller Agreement for Non Reference Offer Ethernet Based Services | |

^{*}National coverage options available using our carrier partners

Other Features



Off net

Dedicated account team manage full service with partners

Interface Equipment

The CP connection is presented as standard as a Physical RJ45 copper connection with an additional option of a SFP based fibre at single-mode or multi-mode at 1000Mb. The port speed is as per the product description and ranges from 100Mb to 1Gb.

| Availability | ECAS / EDAS | | | | |
|------------------------|-------------|----------------|---|----------------------|---------------------|
| | | Expansion Area | | EA subject to survey | Not available in EA |
| Access Port Speed | 10Mb | 100Mbps | 1Gbps | 10Gbps | 100Gbps |
| Interface option(s) | 10BaseTX | 100BaseTX | 1000 BaseLX (SMF) 1000 BaseSX (MMF) 1000 BaseTX (RJ45) | 10GBASE (SMF) | |
| Connector | RJ45 | RJ45 | Dual LC (Fibre) RJ45 (Copper) | Dual LC (Fibre) | |



| Transmission Details | |
|--------------------------------------|---|
| Carrier grade solution | ADVA FSP 150 technology is designed for intelligent service demarcation at the edge of the network. Comprehensive assurance functions and precise timing capabilities ensure high levels of stability. |
| Universal use | Robust security - ADVA's ConnectGuard™ Ethernet provides a secure solution to protect data over untrusted networks. ADVA provides regular security updates to network elements. It operates a system where security vulnerabilities are investigated promptly with an impact analysis, risk assessment and recommended procedure to address the vulnerability. Its equipment can provide network layer encryption as a service enhancement. |
| ADVA ConnectGuard™ security | Robust security - ADVA's ConnectGuard™ Ethernet provides a secure solution to protect data over untrusted networks. ADVA provides regular security updates to network elements. It operates a system where security vulnerabilities are investigated promptly with an impact analysis, risk assessment and recommended procedure to address the vulnerability. Its equipment can provide network layer encryption as a service enhancement. |
| Service Level Monitoring | ADVA FSP 150 technology is designed for intelligent service demarcation at the edge of the network. Comprehensive assurance functions and precise timing capabilities ensure high levels of stability. |
| Timing excellence | Many business sectors are now demanding the support of network-based timing transport, and KCOM's network has been designed to meet this requirement with ADVA network elements that can deliver Synchronous Ethernet and Precision Time Protocol as a service. |
| Temperature environmentally hardened | The latest generation of ADVA FSP 150-XG400 Series equipment is designed to provide high-bandwidth capacity services with environmental hardening for streetside locations. FSP 150 devices offer fanless operations, ex-tended temperature range and low power consumption. |
| Ensemble management and control | KCOM service offerings leverage ADVA's FSP 3000 open optical networking technology portfolio. Deployed in KCOM's core network, this ensures service resilience over greater distances throughout East Yorkshire and surrounding areas. The core network is composed of multi-degree ROADM equipment, providing easy scale for up to 400Gbit/s coherent wavelengths, all managed by ADVA's Ensemble Controller network management solution with point-and-click provisioning of services |

Diversity

Diverse routing is available on a bespoke basis from different fibres to fully diverse site entries and diverse exchange routing. Please enquire further with your KCOM account representative.

Area Definitions

Hull Area

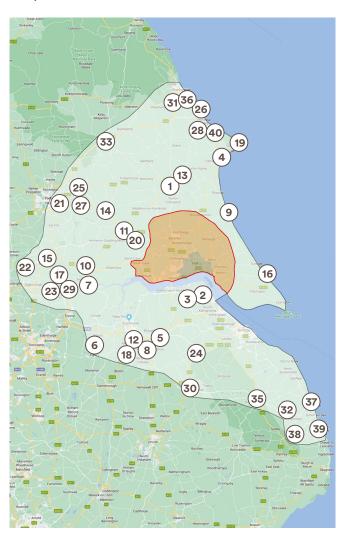
The Hull Area is defined as the 'Licensed Area' in the licence granted in November1987. Map 1 illustrates the exchanges within the licensed area.



Expansion Area

The Expansion Area constitutes those areas where KCOM has built its network outside the area defined as the 'Hull Area' above. This network is expanding and currently operates in the East Riding of Yorkshire and North East Lincolnshire as illustrated in Map 2.

Map2



| Phase 1 | | | | |
|---------|--------------------------------------|-------------------------|-----------|--|
| Order | Area | Released Property Count | Status | |
| 1 | Driffield | 6519 | Complete | |
| 2 | Barrow/Goxhill | 922 | Completed | |
| 3 | Barton | 3710 | Completed | |
| 4 | Bridlington | 16589 | Completed | |
| 5 | Brigg/Broughton | 5481 | Completed | |
| 6 | Epworth / Haxey / Crowle | 4001 | Completed | |
| 7 | Goole | 8863 | Completed | |
| 8 | Hibaldstow / Kirton in Linsey/Scawby | 2452 | Completed | |
| 9 | Hornsea | 4346 | Completed | |
| 10 | Howden | 2048 | Completed | |
| 11 | Market Weighton | 3272 | Completed | |
| 12 | Messingham | 1591 | Completed | |
| 13 | Nafferton | 1066 | Completed | |
| 14 | Pocklington | 4260 | Completed | |
| 15 | Selby | 8708 | Completed | |
| 16 | Withernsea | 2990 | Completed | |
| | Total | 76818 | | |

| Phase 2 | | | | |
|---------|----------------------------|-------------------------|-----------|--|
| Order | Area | Planned premise volumes | ETC | |
| 17 | Brayton | 1709 | 17-Jul-23 | |
| 18 | Scotter | 1339 | 23-Aug-23 | |
| 19 | Flamborough | 1395 | 29-Aug-23 | |
| 20 | Thorpe Willerby | 1818 | 17-Oct-23 | |
| 21 | Dunnington | 1450 | 17-Oct-23 | |
| 22 | Hambleton | 647 | 15-Nov-23 | |
| 23 | Snaith & Cowick | 1696 | 11-Dec-23 | |
| 24 | Caistor | 1444 | 12-Jan-24 | |
| 25 | Stamford Bridge | 1921 | 22-Jan-24 | |
| 26 | Filey | 5763 | 26-Jan-24 | |
| 27 | Wilberforss | 599 | 22-Feb-24 | |
| 28 | Hunmanby | 1674 | 23-Apr-24 | |
| 29 | Camblesforth | 258 | 17-May-24 | |
| 30 | Market Rasen | 3229 | 6-Jun-24 | |
| 31 | East Ayton | 1379 | 18-Jun-24 | |
| 32 | Withern | 214 | 20-Jun-24 | |
| 33 | Malton & Norton on Derwent | 9756 | 14-Aug-24 | |
| 34 | Seamer & Irton | 1389 | 21-Aug-24 | |
| 35 | Louth | 4500 | 10-Sep-24 | |
| 36 | Crossgates | 688 | 24-Oct-24 | |
| 37 | Mablethorpe & Sutton | 7064 | 13-Dec-24 | |
| 38 | Alford | 2037 | 22-Jan-25 | |
| 39 | Eastfield | 3410 | 19-Mar-25 | |
| 40 | Cayton | 1183 | 26-Mar-25 | |
| | Total | 56,562 | | |

For Point to Multi-point ethernet networks please see :

- > Ethernet Network to Network Interface (ENNI); or
- > Virtual Private LAN Services (VPLS)

For further information please contact our sales team at wholesalesales@kcom.com