

Wholesale Catalogue

Relating to the 2024 Regulatory Financial
Statements

BT Group


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1 Introduction

BT prepares and maintains this Wholesale Catalogue, in line with Condition 11.40 of Ofcom's Wholesale Fixed Telecoms Market Review 2021-2026 (WFTMR) and Wholesale Voice Markets Review 2021-26 (WVMR).

This Wholesale Catalogue identifies and describes each wholesale services, or basket included in markets BT has a regulatory financial reporting obligation.

The Openreach markets in which BT were deemed to have significant market power (SMP) during the year ended 31 March 2024 are:

- Physical infrastructure access
- Wholesale local access - Area 2
- Wholesale local access - Area 3
- Leased lines access - Area 2
- Leased lines access- Area 3
- Leased lines access - High network reach
- Inter-exchange connectivity - BT only exchanges
- Inter-exchange connectivity BT +1 exchanges
- Shared Ancillaries

The Wholesale markets in which BT were deemed to have significant market power (SMP) during the year ended 31 March 2024 are:

- Wholesale Call Termination
- Time Division Multiplexing Interconnection
- Internet Protocol Interconnection

Further technical specification on service offerings can be found within Supplier Information Notes (SIN), available on the Openreach website: [https://www.openreach.co.uk/cpportal/help/suppliers-information-notes-\(sins\)](https://www.openreach.co.uk/cpportal/help/suppliers-information-notes-(sins))

Further technical specification on service offerings can be found within Voice Services - Products & Services, available on the Wholesale website: [Voice Services - Products & services | BT Wholesale](#)

2 Physical infrastructure market

2.1 Introduction

Ofcom directs us to report physical infrastructure access to our duct and poles in a single, national market. This market includes all our duct and poles assets, along with associated costs, and is considered to be upstream of the active markets which leverage these assets. Active markets receive a charge for use of the duct and poles, recognised as a transfer charge.

2.2 Service offering

Services offered by the PI market are used internally, as well as purchased directly by third party communication providers (CPs). Internal offerings are presented under 'inputs to downstream services', and external offerings are presented under 'PI rentals'.

Inputs to downstream services

These services represent the revenues and costs associated with the use of physical infrastructure by downstream wholesale markets. The costs are the physical infrastructure consumed by active services calculated using current attributions methods. The revenues are calculated as the fully allocated cost (FAC) which includes Openreach WACC.

We have attributed the costs in the PIA market to PIA rentals and ancillaries using methodologies consistent with the approach used in Ofcom's pricing model and described and published in our Accounting Methodology Document. Internal PIA costs are then transfer charged to downstream markets using the attribution methodologies previously used for duct and poles.

PI rentals

Under this service, Communication Providers are able to install multiple cables, Blown Fibre Tubing (BFT) and/or sub duct in Openreach duct and joint chambers and to attach equipment and cables on Openreach poles. The service published in the RFS is an aggregation of various rental products offered under Openreach's PIA portfolio.

We publish the following services within the PI market:

Service code		Service name
Internal	External	
Inputs to downstream services		
M450S01	N/A	Lead-in duct
M450S03	N/A	Spine duct - 1 bore
M450S05	N/A	Spine duct - 2 bore
M450S07	N/A	Spine duct - 3+ bore
M450S09	N/A	Footway box - manholes
M450S11	N/A	Footway box - joint boxes
M450S13	N/A	Poles - multi-end-user attachments
M450S14	N/A	Poles - single-end-user attachments
M450S17	N/A	Pole top equipment
M450S19	N/A	Cable up a pole
PI rentals		
N/A	M450S02	Lead-in duct
N/A	M450S04	Spine duct - 1 bore
N/A	M450S06	Spine duct - 2 bore

Service code		Service name
Internal	External	
N/A	M450S08	Spine duct - 3+ bore
N/A	M450S10	Footway box - manholes
N/A	M450S12	Footway box - joint boxes
N/A	M450S16	Poles - multi-end-user attachments
N/A	M450S15	Poles - single-end-user attachments
N/A	M450S18	Pole top equipment
N/A	M450S20	Cable up a pole
Other		
N/A	M450S21	Ancillary charges (excl. network adjustments)
M450S22	M450S22	Network adjustments above financial limit

The following service offerings are available as both 'inputs to downstream services' and external 'PI rentals':

1. Lead-in duct

This service allows CPs to install a single cable in our lead-in duct. This is the final section of duct that leads from our distribution point to the end-user's home or business.

2. Spine duct: 1 bore; 2 bore; or 3+ bore

This service allows CPs to install up to 25mm of cables, blown fibre or sub-duct in our duct. The service is charged per metre of spine duct and there are different prices for single bore duct, two bore duct and three and greater bore duct.

3. Footway box: manholes; and joint boxes

This service allows CPs to install cables and equipment in our manholes and joint boxes. There are separate prices for hosting cables, cable coils and distribution joint/cable splices.

4. Poles: Multi-end-user attachments; Single-end-user attachments; Pole top equipment; and Cable up a pole

These services allow CPs to attach cables and equipment to our poles. There are separate prices for attaching single-user cables, multiple-user cables, for attaching equipment to the top of the pole and for cables that run up the pole.

5. Other PI rentals

These services are any PI rental services that do not fall into the above four categories.

Network adjustments above the financial limit

In some circumstances Openreach needs to make permanent adjustments to the physical infrastructure to enable CPs to use the network for building their own communication networks. Examples include clearing duct blockages, repairing joint boxes and replacing defective poles.

CPs are given a network adjustment allowance of £4,750 of duct related network adjustments per kilometre of spine duct. A charge is only raised on the costs incurred that fall above this limit.

There is no financial limit for pole work so network adjustments charges are never raised on poles.

Ofcom directs BT to disclose network adjustments above the financial limit in the RFS.

3 Wholesale local access - Area 2

3.1 Introduction

The WLA markets include the supply of wholesale access to telecoms physical infrastructure, via copper and fibre lines, for deploying a telecoms network in the UK, excluding the Hull Area. The infrastructure is used by CPs to connect end-users to voice or broadband nodes located in BT exchanges.

As per WFTMR, Area 2 is defined as 'postcode sectors in which there is, or there is likely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks'.

The list of postcode sectors for the purpose of identifying relevant WLA markets are set out in Schedule 2 of the WFTMR legal instruments.

3.2 Service offering

Service code		Service name
Internal	External	
M420S12	M420S11	MPF rentals (SML1) (charge controlled)
M420S10	M420S09	MPF other rentals
M420S02	M420S01	FTTC 40/10 rentals (charge controlled)
M420S04	M420S03	FTTC other rentals
M420S06	M420S05	FTTP 40/10 rentals (non-charge controlled)
M420S70	M420S71	FTTP 40/10 rentals (charge controlled)
M420S08	M420S07	FTTP other rentals
M420S27	M420S26	SOGEA 40/10 rental (charge controlled)
M420S29	M420S28	SOGEA other rentals
M420S35	M420S37	NGA Visit Assure
M420S39	M420S72	Special Faults Investigation
M420S40	M420S50	WLA Time Related Charges
M420S44	M420S41	Hard Ceases
M420S46	M420S47	GEA Cancel/Amend/Modify - CRD
M420S43	M420S42	Tie Cables
M420S56	M420S55	Ancillaries (£0 cap) (aggregated in a single line)
M420S52	M420S51	Other ancillaries (CPI-0%) ¹
M420S58	M420S57	GEA 40/10 (FTTC) PCP Only Install Connections
M420S60	M420S59	GEA Other (FTTC) PCP Only Install Connections
M420S64	M420S63	MPF New Provides
M420S13	M420S14	Other ancillaries
M420S23	M420S22	Other WLA services
M420S33	M420S31	IFRS15 SLG
M420S34	M420S32	IFRS15 deferred revenue

¹ Each ancillary service subject to a CPI-0% control with total revenue exceeding £5m should be reported on a separate row.

Metallic Path Facility (MPF) rentals

MPF rental service provide a copper line which connects the end-user premises to a CP's handover distribution frame within BT's exchange, allowing CPs to offer both voice and broadband services. The rental services are split into the following, and represents the annual rental charge raised on the line:

- **MPF rentals (SML1)** - these services are MPF rentals which include Service Maintenance Level 1, a two day repair obligation, and are subject to a charge control
- **MPF other rentals** - these services are the non SML1 MPF rentals, including standard MPF rentals and SML2 rentals

Fibre to the cabinet (FTTC)

Generic Ethernet Access Cablelink enables connection from servers or backhaul circuits to the Next Generation Access Optical Line Termination (OLT) point in that exchange.

FTTC rental services presented below represent the rental of GEA fibre to the cabinet:

- **FTTC 40/10 rentals** - FTTC rentals with a 40/10 speed
- **FTTC other rentals** - FTTC rentals that do not have a speed of 40/10

Fibre to the premise (FTTP)

GEA connections of fibre to the premise:

- **FTTP 40/10 rentals (non-charge controlled)** - FTTP rentals with a speed 40/10
- **FTTP other rentals** - FTTP rentals with a speed other than 40/10

SOGEA

Single order generic ethernet access (SOGEA) can offer customers a standalone hybrid fibre broadband line (VDSL or Gfast), without the voice service.

- **SOGEA 40/10 rental** - SOGEA rentals with a 40/10 speed
- **SOGEA other rentals** - SOGEA rentals with a speed other than 40/10

NGA Visit Assure

A chargeable appointed engineering visit to investigate the line at the end customer's premises.

Special Faults Investigation

Investigations undertaken on a customer's digital subscriber line (DSL).

WLA Time Related Charges

Cost of work that isn't included in standard terms of service, such as work beyond the network terminating point (NTP) or work carried out outside of normal hours.

Hard Ceases

The cease and physical removal of an MPF line.

GEA Cancel/Amend/Modify - CRD

Cancellation, amendment or modification of orders ahead of customer delivery date.

Tie Cables

This service links one frame to another, typically for joining voice communication frames inside an exchange.

Ancillaries (£0 cap) (aggregated in a single line)

Ancillary services subject to a £0 cap, such as MPF Soft Ceases.

Other ancillaries (CPI-0%)

Ancillary services subject to CPI-0% pricing. Where these services do not exceed £5m in revenue, they are aggregated into this line.

GEA 40/10 (FTTC) PCP Only Install Connections

Connections to GEA FTTC 40/10 which only require engineering activity at the cabinet rather than the customer premises.

GEA Other (FTTC) PCP Only Install Connections

Connections to GEA FTTC at all bandwidths except 40/10, which only require engineering activity at the cabinet rather than the customer premises.

MPF New Provides

Connections of MPF services.

Other ancillaries

This published service contains a range of services such as enhanced care and expedites which are not specifically required as a published services.

Other WLA services

This includes services that fall within the scope of the WLA Area 2 market, but are not separately reported in the RFS, such as:

- SMPF bulk migrations
- SMPF new provides

IFRS15 SLG

Service level guarantees (SLGs) set out specific compensation a customer would be entitled to if the agreed quality of service set out in a 'Service Level Agreement' (SLA) is not met. The associated negative revenues are presented in this service.

IFRS15 deferred revenue

Movement in revenue balances deferred under IFRS15, mainly from connection services. Where the minimum term extends beyond the financial year the connection was made, the relevant movements and balances are presented here.

4 Wholesale local access - Area 3

4.1 Introduction

The WLA markets includes the supply of wholesale access to telecoms physical infrastructure, via copper and fibre lines, for deploying a telecoms network in the UK, excluding the Hull Area. The infrastructure is used by CPs to connect end-users to voice or broadband nodes located in BT exchanges.

As per WFTMR, Area 3 is defined as 'postcode sectors in which there is not, and there is unlikely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks'.

The list of postcode sectors for the purpose of identifying relevant WLA markets are set out in Schedule 2 of the WFTMR legal instruments.

4.2 Service offering

Service code		Service name
Internal	External	
M430S12	M430S11	MPF rentals (SML1) (charge controlled)
M430S10	M430S09	MPF other rentals
M430S02	M430S01	FTTC 40/10 rentals (charge controlled)
M430S04	M430S03	FTTC other rentals
M430S70	M430S71	FTTP 40/10 rentals (charge controlled)
M430S06	M430S05	FTTP 40/10 rentals (non - charge controlled)
M430S08	M430S07	FTTP other rentals
M430S28	M430S27	SOGEA 40/10 rental (charge controlled)
M430S30	M430S29	SOGEA other rentals
M430S36	M430S35	NGA Visit Assure
M430S55	M430S56	Special Faults Investigation
M430S39	M430S38	WLA Time Related Charges
M430S20	M430S21	Hard Ceases
M430S40	M430S41	GEA Cancel/Amend/Modify - CRD
M430S42	M430S43	Tie Cables
M430S46	M430S47	Ancillaries (£0 cap) (aggregated on a single line)
M430S44	M430S45	Other ancillaries (CPI-0%) ²
M430S48	M430S49	GEA 40/10 (FTTC) PCP Only Install Connections
M430S50	M430S51	GEA Other (FTTC) PCP Only Install Connections
M430S57	M430S54	MPF New Provides
M430S15	M430S14	Other ancillaries
M430S24	M430S23	Other WLA Services
M430S31	M430S33	IFRS15 SLG
M430S32	M430S34	IFRS15 deferred revenue

Details on each service offering can be found in section 3.2 - Wholesale local access - Area 2.

² Each ancillary service subject to a CPI-0% control with total revenue exceeding £5m should be reported on a separate row.

5 Leased lines access - Area 2

5.1 Introduction

The LLA markets includes the supply of leased lines to provide users with high quality business connectivity services.

As per WFTMR, Area 2 is defined as 'postcode sectors in which there is, or there is likely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks'.

The list of postcode sectors for the purpose of identifying relevant LLA markets are set out in Schedule 3 of the WFTMR legal instruments.

5.2 Service offering

Service code		Service name
Internal	External	
Ethernet services basket		
M601S04	M601S03	Connections
M601S05	M601S06	EAD 1Gbps rentals
M601S07	M601S08	Other EAD rentals
M601S13	M601S12	EAD LA 1Gbps rentals
M601S02	M601S01	Other EAD LA rentals
M601S10	M601S09	Other rentals
M601S11	M601S16	Main link
Optical services basket		
M601S15	M601S14	Optical services - rentals
M601S20	M601S19	Optical services - connections
M601S18	M601S17	Optical services - main link
Other services and baskets		
M601S24	M601S23	Direct ECC basket
M601S26	M601S25	Time related charges
M601S22	M601S21	Other ancillaries
M601S27	M601S28	IFRS 15 Deferred revenue
M601S29	M601S30	IFRS 15 SLG

Ethernet services

Ethernet Access Direct (EAD) provides a point-to-point data connection between sites, it is mainly used for business connectivity. Ethernet is available at bandwidths of 10 Mbps, 100 Mbps, 1 Gbps and 10 Gbps. We report local access (LA) services separately from standard EAD, the difference being LA services have only one local end (operate via a single exchange). Conversely, main links represent the fibre that connects BT exchanges and represents the non-local portion of standard EAD services. Legacy WES & BES products are grouped in 'other rentals' underneath the ethernet basket, these products are in the process of being phased out.

Optical services

Optical Services provide a highly secure, flexible and cost-effective way of moving very large amounts of data between UK-wide locations via dedicated fibre links. They operate using Dense Wavelength Division Multiplexing (DWDM) technology delivered over an infrastructure provided by Openreach. These services are primarily used for data backhaul purposes. Optical services are offered at bandwidths from 2.5 Gbps to 100 Gbps. Because of the data backhaul use case, local access is very small for optical services and not reported separately. Many of the products within optical services represent highly bespoke projects such as rings and chains.

Other services and baskets

Excess Construction Charges (ECCs) cover the costs of either providing additional service or dealing with situations where the actual cost of providing service is in excess of that listed within the Openreach price list. ECCs are provided internally and externally. There are different aspects of ECCs. They include the fibre itself, ducting, tray work and labour costs. Miscellaneous costs such as road closures, traffic control and recovery of plant are also applied, where such works are required. This basket excludes the duct and fibre depreciation relating to ECCs.

Time Related Charges are raised to recover the cost incurred when our engineers repair faults, provide or rearrange services, where this work is not covered under the terms of the Openreach service. These services are provided internally and externally.

The other ancillaries published service contains a range of services such as projects and exempt ancillary services which are not specifically required as a published services.

The IFRS15 Deferred Revenue adjustment provides that revenue received for a connection in previous years that has a minimum term that runs into the current year, will report some of the revenue in the current year. Similarly, connections made in the current year that has a minimum term beyond the end of the year will not report all the revenue in the current year.

The IFRS15 SLG adjustment provides that cost received for a connection in previous years which has a minimum term that runs into the current year, will report some of the cost in the current year. Similarly, connections made in the current year that has a minimum term beyond the end of the year will not report all the cost in the current year.

Note: LLA products are offered with additional resilience options, these are not reported separately from the standard non-resilient products.

- RO1 is where a backup fibre path is provided to the same local serving exchange.
- RO2 is where a backup fibre path is provided to an alternative local serving exchange.

6 Leased lines access - Area 3

6.1 Introduction

The LLA markets includes the supply of leased lines to provide users with high quality business connectivity services.

As per WFTMR, Area 3 is defined as 'postcode sectors in which there is not, and there is unlikely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks.

The list of postcode sectors for the purpose of identifying relevant LLA markets are set out in Schedule 3 of the WFTMR legal instruments.

6.2 Service offering

Service code		Service name
Internal	External	
Dark fibre services		
	M600S02	Connections - single fibre
	N/A	Connections - dual fibre
	M600S00	Rentals - single fibre
	N/A	Rentals - dual fibre
	N/A	Main link
	M600S11	Patch panels - customer premises
	N/A	Patch panels - exchanges
	M600S12	Initial testing - single fibre
	N/A	Initial testing - dual fibre
	N/A	Initial testing
	N/A	Cessation charges
	N/A	Right when tested charges
Ethernet services basket		
M600S31	M600S30	Connections
M600S32	M600S33	EAD 1Gbit/s rentals
M600S34	M600S35	Other EAD rentals
M600S40	M600S39	EAD LA 1Gbit/s rentals
M600S29	M600S28	Other EAD LA rentals
M600S37	M600S36	Other rentals
M600S38	M600S43	Main link
Optical services basket		
M600S42	M600S41	Optical services - rentals
M600S47	M600S44	Optical services - connections
M600S45	M600S44	Optical services - main link
Other services and baskets		
M600S51	M600S50	Direct ECC basket
M600S53	M600S52	Time related charges

Service code		Service name
Internal	External	
M600S49	M600S48	Other ancillaries
M600S55	M600S56	IFRS 15 Deferred revenue
M600S57	M600S58	IFRS 15 SLG

Details on each service offering within the 'Ethernet services', 'Optical services' and 'other services and baskets' can be found in section 5.2 - Leased line access - Area 2.

Dark fibre services

Dark fibre service offers an uncontended, unmonitored, unlit optical path over an end to end maximum route distance of 86km between two qualifying BT Exchange sites. This is a passive service, with no equipment provided to light the fibre, and is available on routes between qualifying BT Exchanges.

- Connections services represent the fee charged for provision of a circuit, and are split between single fibre and dual fibre.
- Rentals represent the ongoing rental charge for use of the line, and are split between single fibre and dual fibre.
- Main link service are rental charges for the use of fibre between BT serving exchanges where the A-end and B-end customer sites are at different serving exchanges.
- Patch panels are required in order to provide dark fibre access. The costs include labour and material costs associated with equipment installation within an exchange, for the access seeker to utilise. The patch panels are used to act as the point of demarcation for the service supplied by Openreach.
- Initial testing represents part of the fibre jointing activity, when the end-to-end fibre and patch panels are in place with light through the route, the jointer will proceed to undertake the relevant route distance and light loss and quality tests including preparing the test information for the OTDR 'birth certificate'. They will record these tests to be made available as part of circuit handover.
- Cessation charges represent the circuit cease fee.
- Rights when tested charges represent a dark fibre fault where if a circuit is found to be working and the engineer arrives in the allocated time and ETA with no repair activities required then the fault will be closed as Right when Tested (RTW) and eligible for the charge.

7 Leased lines access - High network reach area

7.1 Introduction

The LLA markets includes the supply of leased lines to provide users with high quality business connectivity services.

As per WFTMR, High network reach area is defined as 'postcode sectors where there are two or more rival networks to BT in the provision of leased lines ('other' means other than the Central London Area, which we define as a separate market in which BT does not have SMP)'.

The list of postcode sectors for the purpose of identifying relevant LLA markets are set out in Schedule 3 of the WFTMR legal instruments.

7.2 Service offering

Service code		Service name
Internal	External	
Ethernet services basket		
M602S58	M602S57	Connections
M602S59	M602S60	EAD 1Gbit/s rentals
M602S61	M602S62	Other EAD rentals
M602S67	M602S66	EAD LA 1Gbit/s rentals
M602S56	M602S55	Other EAD LA rentals
M602S64	M602S63	Other rentals
M602S65	M602S70	Main link
Optical services basket		
M602S69	M602S68	Optical services - rentals
M602S74	M602S73	Optical services - connections
M602S72	M602S71	Optical services - main link
Other services and baskets		
M602S78	M602S77	Direct ECCs
M602S80	M602S79	Time related charges
M602S76	M602S75	Other ancillaries
M602S81	M602S82	IFRS 15 Deferred revenue
M602S83	M602S84	IFRS 15 SLG

Details on each service offering can be found in section 5.2 - Leased line access - Area 2.

8 Inter-exchange connectivity - BT only

8.1 Introduction

The IEC markets consists of the connections between BT exchanges in different geographic areas (such as between towns and cities). The IEC markets are defined based on competitiveness, which is the number of CP located at an exchange, giving rise to market definitions of “BT Only” i.e. no competitors at an exchange, “BT plus one” i.e. one competitor at an exchange.

The list of postcode sectors for the purpose of identifying relevant IEC markets are set out in Schedule 4 of the WFTMR legal instruments.

8.2 Service offering

Service code		Service name
Internal	External	
Dark fibre services		
N/A	M603S11	Connections - single fibre
N/A	M603S37	Connections - dual fibre
N/A	M603S10	Rentals - single fibre
N/A	M603S36	Rentals - dual fibre
N/A	M603S12	Main link
N/A	M603S47	Patch panels exchanges – customer premises
N/A	M603S48	Patch panels exchanges - exchanges
N/A	M603S63	Initial testing - single fibre
N/A	M603S64	Initial testing - dual fibre
M603S01	M603S00	Cessation charges
M603S15	M603S14	Right when tested charges
M603S72	M603S71	Dark Fibre IFRS 15 deferred revenue
M602S70	M603S69	Dark Fibre IFRS 15 SLG
Ethernet services basket		
M603S07	M603S06	Connections
M603S21	M603S20	EAD 1Gbps rentals
M603S23	M603S22	Other EAD rentals
M603S19	M603S18	EAD LA 1Gbps rentals
M603S05	M603S04	Other EAD LA rentals
M603S17	M603S16	Other rentals
M603S08	M603S09	Main link
N/A	N/A	Other services
Optical services basket		
M603S25	M603S24	Optical services - rentals
M603S29	M603S28	Optical services - connections
M603S27	M603S26	Optical services - main link

Service code		Service name
Internal	External	
Other services and baskets		
M603S33	M603S32	Direct ECC basket
M603S35	M603S34	Time related charges
N/A	N/A	Ancillaries ³
M603S31	M603S02	Other ancillaries
N/A	N/A	Other services
M603S65	M603S66	Ethernet IFRS 15 deferred revenue
M603S67	M603S68	Ethernet IFRS 15 SLG

Dark fibre services

Dark fibre service offers an uncontended, unmonitored, unlit optical path over an end to end maximum route distance of 86km between two qualifying BT Exchange sites. This is a passive service, with no equipment provided to light the fibre, and is available on routes between qualifying BT Exchanges.

- Connections services represent the fee charged for provision of a circuit, and are split between single fibre and dual fibre.
- Rentals represent the ongoing rental charge for use of the line, and are split between single fibre and dual fibre.
- Main link service are rental charges for the use of fibre between BT serving exchanges where the A-end and B-end customer sites are at different serving exchanges.
- Patch panels are required in order to provide dark fibre access. The costs include labour and material costs associated with equipment installation within an exchange, for the access seeker to utilise. The patch panels are used to act as the point of demarcation for the service supplied by Openreach.
- Initial testing represent part of the fibre jointing activity, when the end-to-end fibre and patch panels are in place with light through the route, the jointer will proceed to undertake the relevant route distance and light loss and quality tests including preparing the test information for the OTDR 'birth certificate'. They will record these tests to be made available as part of circuit handover.
- Cessation charges represent the circuit cease fee.
- Rights when tested charges represent a dark fibre fault where if a circuit is found to be working and the engineer arrives in the allocated time and ETA with no repair activities required then the fault will be closed as Right when Tested (RTW) and eligible for the charge

Ethernet services basket

Ethernet services within the IEC market offers multiple services collated under service types of rentals, connections and main link; EAD, BES, WES and EBD . The services are offered on the physical infrastructure that allows a CP to interconnect with out network at the Digital Local exchange.

These services are available at multiple bandwidths and we also report a variant for Local Access (LA) which is the same service as the standard EAD but with only one local end. Our published services also include variants for:

³ Each ancillary service with total revenue exceeding £5m should be reported on a separate row.

- Resilience option one where a backup fibre path is provided to the same local serving exchange.
- Resilience option two where a backup fibre path is provided to an alternative local serving exchange.

Rentals – the ongoing rental charged for the use of the line.

Connections – the fee charged for provision of a new circuit.

Main Link: rental charges for the use of fibre between BT serving exchanges where the A-end and B-end customer sites are at different serving exchanges.

Ethernet Access Direct

Further information about the EAD services are available in section 5.2 Leased line access - Area 2.

Ethernet Backhaul Direct

Ethernet Backhaul Direct (EBD) delivers permanently connected, uncontended bandwidth between a Communications Provider's (CP) Point of Presence (PoP) located in a designated Openreach Access Serving Node (ASN) in a BT Exchange (using CoLocation, NetLocate or BT Locate accommodation), and a CP's core network PoP located in either the designated Openreach Handover Point (OHP) or in the CP's own site, accessed using a Bulk Transport Link or alternative transport solution provided by the CP.

Wholesale Extension Services

Wholesale Extension Services (WES) provides the connection between an end user and a Communication Provider's (CP) network. The CP can connect that circuit to the far end (or just to the far edge of their network), and then use another WES to complete the end-to-end circuit.

Backhaul Extension Services

Backhaul Extension Services (BES) are high speed, permanently connected, point-to-point data circuits that provide a secure link between an exchange and a CP site or between an exchange and another exchange (Daisy Chain). BES enables applications to be transported at high speed such as email, web browsing, video and IP Telephony.

Optical services

Optical Services provide a highly secure, flexible and cost-effective way of moving very large amounts of data between UK-wide locations via dedicated fibre links. They operate using Dense Wavelength Division Multiplexing (DWDM) technology delivered over an infrastructure provided by Openreach. The combination of high bandwidth, low latency and the ability to aggregate large numbers of network connections, makes them flexible enough for a wide range of customer needs.

- Optical services - rentals: the ongoing rental charges for use of the line.
- Optical services - connections: the fee charged for provision of a new circuit.
- Optical services - main link: rental charges for the use of fibre between BT serving exchanges where the A-end and B-end customer sites are at different serving exchanges.

Other services and baskets

Direct ECC baskets - Excess Construction Charges (ECCs) cover the additional costs of either providing additional service or dealing with situations where the actual cost of providing service is in excess of that listed within the Openreach price list. ECCs are provided internally and externally.

There are different aspects of ECCs. They include the fibre itself, ducting, tray work and labour costs. Miscellaneous costs such as road closures, traffic control and recovery of plant are also applied, where such works are required. This basket excludes the duct and fibre depreciation relating to ECCs.

Time related charges (TRCs) - TRCs are raised to recover the cost incurred when our engineers repair faults, provide or rearrange services, where this work is not covered under the terms of the Openreach service. These services are provided internally and externally.

Other ancillaries

This published service contains a range of services such as Openreach CISBO projects and exempt ancillary services which are not specifically required as a published services.

Other services

This includes services that fall within the scope of the IEC - BT Only market, but are not separately reported in the RFS.

IFRS 15 deferred revenue

This service contains IFRS 15 deferred revenue adjustments for the markets. There will be separate internal and external services.

IFRS 15 SLG

Impact of IFRS 15 on the presentation of Service Level Guarantees (SLGs). This service adjusts revenue and costs presented in the RFS. There will be separate internal and external services.

9 Inter-exchange connectivity - BT+1 exchanges

9.1 Introduction

The IEC markets consists of the connections between BT exchanges in different geographic areas (such as between towns and cities). The IEC markets are defined based on competitiveness, which is the number of CP located at an exchange, giving rise to market definitions of “BT Only” i.e. no competitors at an exchange, “BT plus one” i.e. one competitor at an exchange.

The list of postcode sectors for the purpose of identifying relevant IEC markets are set out in Schedule 4 of the WFTMR legal instruments.

9.2 Service offering

Service code		Service name
Internal	External	
Dark fibre services		
N/A	M604S28	Connections - single fibre
N/A	M604S29	Connections - dual fibre
N/A	M604S30	Rentals - single fibre
N/A	M604S31	Rentals - dual fibre
N/A	M604S32	Main link
N/A	M604S37	Patch panels exchanges – customer premises
N/A	M604S38	Patch panels exchanges - exchanges
N/A	M604S39	Initial testing - single fibre
N/A	M604S40	Initial testing - dual fibre
M604S34	M604S33	Cessation charges
M604S36	M604S35	Right when tested charges
N/A	N/A	Dark Fibre IFRS 15 deferred revenue
M604S65	M604S46	Dark Fibre IFRS 15 SLG
Ethernet services basket		
M604S05	M604S04	Connections
M604S13	M604S12	EAD 1Gbps rentals
M604S15	M604S14	Other EAD rentals
M604S11	M604S10	EAD LA 1Gbps rentals
M604S03	M604S02	Other EAD LA rentals
M604S09	M604S08	Other rentals
M604S06	M604S07	Main link
N/A	N/A	Other services
Optical services basket		
M604S17	M604S16	Optical services - rentals
M604S21	M604S20	Optical services - connections
M604S19	M604S18	Optical services - main link

Service code		Service name
Internal	External	
Other services and baskets		
M604S25	M604S24	Direct ECC basket
M604S27	M604S26	Time related charges
N/A	N/A	Ancillaries ⁴
M604S23	M604S01	Other ancillaries
N/A	N/A	Other services
M604S41	M604S42	Ethernet IFRS 15 deferred revenue
M604S43	M604S44	Ethernet IFRS 15 SLG

Details on each service offering can be found in section 8.2 - IEC - BT Only.

⁴ Each ancillary service with total revenue exceeding £5m should be reported on a separate row.

10 Shared ancillaries

10.1 Introduction

Shared ancillaries consists of cablelink, accommodation and electricity charges.

10.2 Service offering

Service code		Service name
Internal	External	
M690S05	M690S02	Cablelink
M690S11	M690S01	Accommodation
N/A	M690S03	Electricity charges

Cablelink - this service represents the connection of a CP's equipment to other equipment located within the same MDF/ODF Site, or from a CP's equipment located within the same MDF/ODF Site to a fibre cable originating immediately outside an MDF/ODF Site.

Accommodation - this service represents the provision of space permitting a CP to occupy part of an MDF/ODF Site, facilitating the use of our network and allowing the connection of our electronic communications network with that of another CP at that location.

Electricity charges - this service represents the wholesale electricity charges we incur, plus an appropriate mark-up to reflect the related costs in setting up such charges.

11 Wholesale Call Termination

11.1 Introduction

This market reports wholesale charges for calls to BT fixed lines. These charges are for carrying the call to the BT terminating line from the nearest point in the network at which other CPs could interconnect.

11.2 Service offering

Service code		Service name
Internal	External	
M09S1	M09S2	Wholesale Call Termination

Wholesale Call Termination - Wholesale charge for a call terminating on a BT exchange line, covering the part of the network from the Local Exchange switch to the terminating line. Includes call set-up (establishing a network end to end path) and call duration (holding the path open for the time the link is open). Also includes an additional wholesale charge for a call that originated and terminated on a BT line and therefore does not interconnect with an external voice network. This service is provided internally and externally.

12 Time Division Multiplexing Interconnection

12.1 Introduction

This market reports the provision of the physical infrastructure that allows a CP to interconnect with our network at the Digital Local Exchange. This enables calls to travel between the two networks.

All Interconnect circuits are reported as external because they are set up between BT and other operators regardless of where the traffic originated. External circuit volumes therefore include: circuits that carry 100% CP originated traffic; circuits shared between BT and external CPs; and circuits that carry 100% BT originated traffic.

12.2 Service offering

Service code		Service name
Internal	External	
	M08S4	Wholesale IEC connections
	M08S5	Wholesale IEC rentals - fixed
	M08S6	Wholesale IEC rentals - per km
	M08S7	Wholesale Intra-Building circuits connections
	M08S8	Wholesale Intra-Building circuit rentals
	M08S11	Wholesale rearrangements

Wholesale Interconnect Extension Circuit (IEC) - These 2 Mbps circuits are used to extend the reach of an In-Span Interconnect (ISI) circuit so that a CP can interconnect to a non-adjacent BT local exchange.

Connections – a charge raised for the connection of a new 2 Mbps IEC circuit.

Rentals - fixed – an annual rental charge raised per 2 Mbps IEC circuit.

Rentals – per km – an annual rental charge incurred on the length of the circuit and charged per radial kilometre per 2 Mbps IEC circuit.

Wholesale intra-building circuits (IBC) - These 2 Mbps circuits are intermediate circuits that are required to connect the CP's interconnect circuit to the BT switch. IBCs are used to connect CSI, IEC and ISI interconnect circuits.

Connections – a charge raised for the connection of a new 2 Mbps IBC circuit.

Rentals – an annual rental charge raised per 2 Mbps IBC circuit.

Wholesale rearrangements - Rearrangement of Intra Building Circuits is necessary when an operator wishes to alter the actual routing of the circuit within the exchange (physical rearrangement) or the type of service offered over the circuit (software rearrangement). A change necessitating a 2 Mbps path being moved from one building to another building is not covered by rearrangement charges and requires cessation of the circuit and the provision of a new 2 Mbps Customer Sited Interconnect (CSI) Link

Wholesale CSI and Wholesale ISI services have been excluded as these services do not connect at the DLE

13 Internet Protocol Interconnection

13.1 Introduction

This market reports the charges which allow CPs with differing vendor, signalling and media options to interoperate with each other. This also includes the routing and connection of calls with the existing TDM based PSTN.

13.2 Service offering

Service code		Service name
Internal	External	
		IP Exchange - service set-up charges
		IP Exchange - Interoperability testing charges
		IP Exchange port charges

IP Exchange - service set-up charges – a non-reoccurring, cost orientated provision charge to cover all initial provisioning activities and service establishment.

IP Exchange - Interoperability Testing Charges – this charge will be applicable where a CPs call server equipment requires compatibility and interoperability testing with the BT service. This will be done prior to service set-up.

IP Exchange Port Charges – covers the bandwidth capacity, service interface, resilience level and management of CPs capacity e.g. capacity changes, number management and data build.