

# **Description of Cost Accounting System (DOCAS):**

Representing the Primary and Secondary Accounting Statements Together with Wholesale and Retail Catalogues

KCOM's NEW REGULATORY COSTING MODEL 18th December 2018

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## 1. Glossary

## General

| ABC            | Activity-based Costing   |
|----------------|--|
| Access Network | The part of the network extending from exchange building to customer premises  |
| AM             | Apportionment Methodology  |
| APS            | KCOM's billing system  |
| CCA            | Current Cost Accounting  |
| Core Network   | The part of the network connecting exchange buildings  |
| DOCAS          | Description of Cost Accounting System  |
| EYE            | East Yorkshire Expansion area – geographic areas of KCOMs network operated by the HEY Business Segment but which are not in the geographic area covered by the OLA     |
| FAR            | Fixed Asset Register   |
| FTE            | Full-time equivalent   |
| FTTH           | Fibre-to-the-Home  |
| GL             | General Ledger   |
| HEY            | Hull and East Yorkshire – a financial reporting segment used by KCOM   |
| Hull Area      | The geographic area in which Ofcom has found KCOM to have SMP and for which it is required to prepare RFS – also referred to as the OLA                                |
| IP             | Internet Protocol - a general term for the technologies that use the Internet Protocol's standards for transmitting data   |
| KCOM           | KCOM Group PLC   |
| New RFS Model  | The ABC model used by KCOM to prepare the RFS from 2018 (including restated 2017 results) onwards  |
| NGA            | Next Generation Access   |
| OLA            | Original Licensed Area - the geographic area in which Ofcom has found KCOM to have SMP and for which it is required to prepare RFS – also referred to as the Hull Area |
| Old RFS Model  | The ABC model used by KCOM to prepare the RFS prior to 2018  |
| RFS            | Regulatory Financial Statements  |
| RFS Markets    | Those markets which KCOM is required to report on in the RFS under its regulatory financial reporting obligations  |
| RRG            | Regulatory Reporting Group   |
| SDH            | Synchronous Digital Hierarchy - a standard technology for synchronous data transmission on optical media   |
| SG&A           | Sales, general and administrative expenses   |
| SMB            | Small, Medium Businesses   |
| SMP            | Significant Market Power   |
| TDM            | Time division multiplexing (TDM) – a technology for transmitting multiple digital signals over a common channel  |
| TSO            | KCOM's Technology, Service and Operations cost centres   |
| WACC           | Weighted average cost of capital   |

## Abbreviations used in KCOM's RFS Model

| AM     | Apportionment Methodology     |
|--------|-------------------------------|
| GFS    | Group Financial Services      |
| OH     | Overhead                      |
| NC     | Network Component             |
| NP     | Network Product               |
| NOC    | Network Operating Cost        |
| OOS BS | Out of Scope Balance Sheet    |
| OOS IS | Out of Scope Income Statement |
| PA     | Primary Assets                |
| PG     | Plant Group                   |
| SA     | Support Assets                |
| SC     | Support Costs                 |

## 2. Introduction

## Regulatory requirements

KCOM Group PLC ("KCOM"), has been classified by Ofcom as a telecommunications operator with Significant Market Power ('SMP') in certain telecommunications markets in the Hull area represented by the geographic area of KCOM's original licensed area ("OLA") (the "Hull Area").

In accordance with Ofcom's conditions and directions relating to its SMP findings, KCOM is required to prepare financial statements (the Regulatory Financial Statements' or "RFS") setting out, *inter alia*, its financial performance in certain of those markets which KCOM has been found to have SMP.

KCOM is required to prepare Regulatory Financial statements for those markets in the Hull Area shown in Table 1 (the 'RFS Markets').

Table 1 – RFS Markets for which KCOM financial reporting obligations

| Wholesale  |
|--|
| Analogue exchange line services  |
| ISDN2  |
| ISDN 30 exchange line services   |
| Call origination on fixed public narrowband networks                           |
| Asymmetric broadband origination   |
| Traditional interface symmetric broadband origination, at bandwidths up to and |
| including 8Mbit/s ('TISBO')  |
| Contemporary interface symmetric broadband origination ('CISBO')               |

This Description of Cost Accounting System ('DOCAS') describes the basis on which the RFS have been prepared.

The remainder of the documents is set out as follows:

- Section 3: KCOM's Organisational Structure and Financial Accounting system describes the organisational structure of KCOM and how that relates to the preparation of the RFS in relation to KCOM's activities in the Hull Area.
- Section 4: Accounting Separation Framework describes the basis on which the RFS have been prepared.
- Section 5: RFS Model Design sets out the overall design principles of the RFS activity-based costing model used to prepare the RFS.
- Section 6: Activity-Based Costing Model describes KCOM's activity-based costing model.
- Section 7: Cost Apportionment Methodologies provides details of how costs are apportioned in the RFS Model.
- Section 8: CCA Valuation Methodology explains the basis on which CCA asset values and associated costs are calculated.

- Section 9: Revenues and Transfer Charges provides details of how revenues and transfer charges reported in the RFS are calculated.
- Section 10: Preparation of RFS provides details of how the outputs of the ABC model are presented in the RFS.

The respective wholesale markets contain fully allocated costs, revenues, assets and liabilities relating to services provided to other licensed telecommunications operators or similar services provided to KCOM's retail business units. Network charges to other operators and KCOM's own retail business are based on their consumption of bundles of network elements (known as "components") in network services. The CCA cost of components is based on fully allocated costs of components including a cost of capital. This cost of capital has been determined by Ofcom to be 13.0%.

#### KCOM's 'New' RFS Model

In 2017, KCOM began a project to build a new regulatory costing model – the 'New RFS Model'.

This DOCAS is based on the New RFS Model.

The project to update the Old RFS Model was driven by several factors including:

- The age of the existing model (the 'Old RFS Model') which dated back to 2004 and which was constructed to focus on the main regulatory services at the time interconnection.
- The Old RFS Model had been extensively modified and was becoming increasingly difficult to maintain.
- The Old RFS Model had not been fully modified to reflect recent changes in network design and services (and the new Next Generation (NGA) Fibre-to-the-Home (FTTH) network in particular).
- The Old RFS Model had not been updated to reflect recent changes in organisational structure of the KCOM Group.
- The Old RFS Model needed to be updated to incorporate recent Ofcom regulatory requirements relating to new cost components.
- KCOM introduced a new accounting system, including general ledger and fixed asset register in 2015. The new accounting system introduced a new general ledger and fixed asset coding structure. However, the RFS model was not updated to incorporate data direct from the new accounting system. Instead the Trial Balance from the new system was mapped back onto the old codes which remained in use in the exiting model. This approach was becomingly increasingly difficult to apply as KCOM changed its organisational structure, network architecture and types of service offered. For example, the model relied on allocations to old codes based on fixed proportions of costs from previous years. These fixed proportions were less reliable over time as more changes occurred to KCOM's business.

KCOM's new RFS Model includes many changes to the Old RFS Model reflecting inter alia:

- Changes to KCOM's organisational structure.
- KCOM's current general ledger and fixed asset register coding.
- An updated set of fixed asset categories and network cost components based on KCOM's current network.
- New cost attribution methodologies based on available non-financial and financial data.
- Inclusion of NGA FTTH services.
- A new approach to calculating CCA asset values.

The extent of changes to the format and structure of the RFS Models means that it is not practicable, or meaningful, to prepare a reconciliation showing the impact of each change.

#### 2016/17 Prior Year Values

The new costing model used to prepare the 2017/18 RFS (the "2017/18 Model") was also used to prepare the 2016/17 prior year values shown in the 2017/18 RFS (the "2016/17 Model").

The refinement of the 2017/18 Model required a small number of changes compared to the 2016/17 Model. These changes were necessary to align the allocation of overhead corporate costs in the RFS to the cost recharging methodologies used in KCOM's management accounts and annual report. Other changes were needed to reflect changes in KCOM's organisational structure.

In addition, during the course of the review and audit of the 2017/18 RFS, a small number of inconsistencies were identified in the 2016/17 cost model which have been corrected for in the 2017/18 Model. A high-level reconciliation indicated that adjusting the 2016/17 model would have increased costs allocated to reported wholesale markets in 2016/17 by approximately £2-3m. The 2016/17 Model has not updated to address these inconsistencies.

## 3. KCOM's Organisational Structure and Financial Accounting System

KCOM Group PLC operates as a group of companies, and its annual report is based on the consolidated results of that group.

For completeness, the RFS Model is also based on the financial statements for KCOM Group PLC.

The remainder of this section describes the key organisational dimensions of KCOM Group, and how they are reflected in its financial reporting system.

## **Company Code**

The KCOM Group accounts comprise the consolidated accounts of different subsidiaries which are included in the RFS model for completeness. The company codes are shown in Table 2 below.

**Table 2: KCOM Group Companies** 

| Company                     |
|-----------------------------|
| KCOM Group Plc              |
| KCOM Holdings               |
| AISL                        |
| Eclipse (Dormant)           |
| Media (Dormant)             |
| <b>KCOM Contact Centres</b> |
| S421 (Dormant)              |
| Smart Tech Group (Dormant)  |
| Smart Integrator            |
| KCH (Holdings)              |
| CAR FA Only                 |
| KCOM CAR                    |
| Dormants                    |
|                             |

## Segments

KCOM business activities are organized into Operating Segments with costs and revenues recorded separately in the chart of accounts, as shown in Table 3 below. These segments are aggregated for the purposes of KCOM's statutory accounts which show results for the following Reporting Segments:

- Hull & East Yorkshire (HEY)
- Enterprise
- National Network Services
- Central

Table 3: KCOM Operating Segments

| Segment | Description            | Aggregated Reports<br>Segment |
|---------|------------------------|-------------------------------|
| S001    | Enterprise - Private   | Enterprise                    |
| S002    | Enterprise - Public    | Enterprise                    |
| S003    | Enterprise - Shared    | Enterprise                    |
| S009    | Enterprise - Recharges | Enterprise                    |
| S011    | Wholesale - Hull       | Hull & East Yorkshire         |
| S012    | Wholesale - National   | National Network Services     |
| S021    | Consumer               | Hull & East Yorkshire         |
| S029    | HEY - Recharges        | Hull & East Yorkshire         |
| S031    | SMB - Hull             | Hull & East Yorkshire         |
| S032    | SMB - National         | National Network Services     |
| S033    | SMB - Shared           | Hull & East Yorkshire         |
| S034    | NNS                    | National Network Services     |
| S039    | NNS - Recharges        | National Network Services     |
| S041    | Interconnect & Other   | National Network Services     |
| S098    | Intercompany           | Central                       |
| S099    | Shared                 | Central                       |

Services in the Hull Area for which the RFS are required are provided by the HEY Operating Segments - Consumer, Wholesale-Hull, SMB (Small and Medium Businesses)-Hull and SMB - Shared. The HEY - Recharges segment is used to provide the recharged costs from across the business support functions.

Services provided by these Segments cover both the Hull Area and adjoining areas which are outside of the licensed Hull Area and for which KCOM is not required to prepare RFS. These adjoining areas are referred to as the East Yorkshire expansion ("EYE") area.

The HEY segment receives support from other KCOM cost centres outside of that segment including:

- Technology, Service and Operations (TSO)
- Finance
- HR
- Legal & Risk
- Corporate
- IT
- Marketing & Communications

In addition, Sales, General & Administrative (SG&A) support for Wholesale-Hull services is provided by the Wholesale-National Segment.

Costs of these support activities are allocated to the HEY Segment using either a recharge in the statutory accounts, or an allocation methodology as set out in this DOCAS.

#### **Cost Centres**

Within each segment, SG&A costs are recorded based on the cost centres shown below.

**Table 4: KCOM Cost Centres** 

| Company                                 |  | Transit             |  |   |  |
|---|--|---------------------|--|---|--|
| ode                                     | Segment  | Sector              | Segment  | Cost Centre   | Cost Centre Name   |
| 1001                                    |  |                     |  | CAN DESCRIPTION OF THE PERSON |  |
|   | HEY  |                     |  |   | The second second second second second   |
| ****                                    |  | SMB Hull            | 2024   | 224222  | SMB Hull Sales   |
|   |  |                     | 8031   | 201002  |  |
|   |  |                     | 9031   | 201004  | SMB Hull Solutions   |
|   |  |                     | 9031   | 201005  | Safe At Home   |
|   |  |                     | 9031   | 201006  | Directories  |
|   |  | Consumer            |  | PROGRAMME   |  |
|   |  |                     | 9021   | 201012  | Customer and Technical Services  |
|   |  |                     | 9021   | 201016  | Consumer Sales & Engagement  |
|   |  | SMBCW Shared        |  |   |  |
|   |  |                     | 9033   | 201011  | Customer Insight   |
|   |  |                     | 9033   | 201022  | SMB/Con/Wsale Central Management   |
|   |  |                     | 9033   | 201017  | Customer Improvement   |
|   |  | HEY Recharges       |  |   | <b>国际上近回国际中国共和国共和国共和国共和国共和国共和国共和国共和国共和国共和国共和国共和国共和国</b>  |
| -Au-                                    |  |                     | 8029   | 201019  | HEY Recharges - Consumer   |
|   |  |                     | 3029   | 201009  | HEY Recharges - SMB  |
|   | NAMS   |                     |  |   |  |
|   | A STATE OF THE PARTY OF THE PAR | SMB National        |  | A TOTAL   | 2. 中枢对抗线性的原理性关系。1994年2月15日中华的  |
|   |  |                     | 9032   | 201041  | SMB National Sales   |
|   |  | Partners            |  |   |  |
|   |  |                     | S012   | 201031  | Partners   |
|   |  | NNS                 | Briston Cont   | E015 / E524   |  |
| *************************************** |  | 11174               | 9034   | 201045  | NNS  |
|   |  | NNS Recharges       |  | SPACE AND ADDRESS.  | PRODUCTION OF THE PROPERTY OF  |
|   |  | THIS TIEST STATE    | 9039   | 201049  | NNS Recharges  |
|   | Enterprise   | - KENDY ERVED       | 1 2 2 3 3 3  |   | The World State Upon College College College   |
| o'amazantaran ana                       | Lineipilae   | Enterprise          |  | 00000   | THE CONTRACTOR IN CONTRACTOR I |
|   |  | Citterbuse          | 3001   | 201102  | Sales - Principals   |
|   |  |                     | 8002   | 201112  | Sales - Central Government   |
|   |  | Enterprise Shared   | 3002   | 201912  | Sales - Celibal Government   |
|   |  | Enterprise analed   | 9003   | 201121  | Enterprise Central Practices   |
|   |  |                     | 8003   | 201124  | Sales - Bid Support  |
|   |  |                     | A CONTRACTOR OF THE PARTY OF TH |   | Sales - Bit Support<br>Sales - Client Principals   |
|   |  |                     | 9003   | 201125  |  |
|   |  |                     | 9003   | 201126  | Sales - Ops & Strategy   |
|   |  |                     | 8003   | 201201  | Sales - Support Desk   |
|   |  |                     | 8003   | 201202  | Pre-Sales  |
|   |  | Enterprise Recharge |  | reference to  | 是在1000mm的,但但是他们是是一个人的。   |
|   |  |                     | 8009   | 201299  | Enterprise Recharges   |

|                          | Shared Services  |  | LESS CONTROL OF | 100000000000000000000000000000000000000 |  |
|--------------------------|--|--|-----------------|---|--|
|                          |  | Pool   | A.S.Z.          |   |  |
| entranent led            |  | dell'este de l'acceptant de l'accept | 3099            | 201501                                  | Pool - Architecture  |
|                          |  |  | 5099            | 201502                                  | Pool - Programme Manager & Project Co-ordinat  |
|                          |  |  | 3099            | 201503                                  | Pool - Customer Service and Support  |
|                          |  |  | 3099            | 201504                                  | Pool - Design & Development  |
|                          |  |  | S099            | 201505                                  | Pool - Resource Scheduling   |
|                          |  | TSO  |                 |   | <b>【</b> 2017年19月1日 - 1017年19月1日 - 1017年19月1日 - 1017年19月1日 - 1017年1月1日 - 1017年1日 |
|                          |  |  | 3099            | 201301                                  | Contract Delivery  |
|                          |  |  | S099            | 201303                                  | Transformation Delivery  |
|                          |  |  | 3099            | 201305                                  | Platform Operations  |
|                          |  |  | 5099            | 201307                                  | Field Operations   |
|                          |  |  | 9099            | 201309                                  | Service Operations   |
|                          |  |  | 5099            | 201310                                  | CSOC   |
|                          |  |  | 3099            | 201312                                  | NFUM Onsite Team   |
| ****************         |  |  | S099            | 201313                                  | Smaller Customers Onsite teams   |
|                          |  |  | 9099            | 201314                                  | Client Services  |
|                          | ***************************************  |  | 9099            | 201315                                  | CSO Operations North   |
| *******                  | 4/2000 CONTRACTOR RESERVED.  |  | S099            | 201316                                  | TSO Central Management   |
|                          | 7,1,2,2  |  | 9099            | 201318                                  | CSO Operations South   |
|                          | and the content of th | PARTICIPATION AND ADDRESS OF THE PARTICIPATION OF T  | 8099            | 201319                                  | Engineering Operations   |
|                          | 4) radius to the publisher worthing you  |  | S099            | 201320                                  | Product & Propositions   |
|                          | ***************************************  |  | 3099            | 201321                                  | Innovation & Development   |
|                          |  |  | 3099            | 201322                                  | BT - Cost Collection   |
|                          |  | Corporate Centre   |                 |   |  |
|                          |  |  | 9099            | 201401                                  | IT CIO   |
|                          |  |  | 3099            | 201403                                  | IT Infrastructure  |
|                          |  |  | 3099            | 201404                                  | IT Saas  |
|                          |  |  | 9099            | 201405                                  | IT BED   |
|                          | and the same of the same   |  | 3099            | 201406                                  | IT CXS   |
|                          |  |  | 3099            | 201407                                  | IT BSS   |
|                          |  |  | 3099            | 201408                                  | ITAIR  |
|                          | DIE WITH THE REAL PRINTERS   | THE RESIDENCE OF THE PROPERTY OF THE PROPERTY OF   | 5099            | 201409                                  | IT QA  |
|                          | ***************************************  |  | S099            | 201410                                  | IT Operations  |
|                          |  |  | 3099            | 201411                                  | Estates  |
|                          |  | THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL | 3099            | 201412                                  | Finance  |
|                          |  |  | 8099            | 201414                                  | HR   |
|                          |  |  | 3099            | 201415                                  | Risk   |
| -                        |  |  | 3099            | 201416                                  | Legal  |
|                          |  |  | 9099            | 201417                                  | Corporate Executive  |
|                          |  |  | S099            | 201418                                  | Marketing  |
| OCCUPANT OF THE PARTY OF | THE PERSON NAMED IN COLUMN TWO IS NOT THE  |  | 5003            | 201205                                  | Governance   |
| 1005                     |  | CONTRACTOR OF THE PARTY OF THE  | 3003            | 201200                                  | Constitution   |
| 1002                     | SMB  |  | ZO-STREET       |   | AND RESIDENCE THE RESIDENCE OF A STATE OF  |
| geninskihtenomer         | SMO  | SMB Hull   | 100             | With the same                           | I CONTRACTOR STATEMENT OF THE STATEMENT      |
|                          |  | OMO PIUII  | 9031            | 205002                                  | Contact Centres  |
| *000                     |  | LANCOUS REPORT OF THE  | 3031            | 200002                                  | Chiser calasts   |
| 1009                     | 1009   |  | 2000            |   |  |
|                          |  |  |                 |   |  |

#### **Product Codes**

Revenues and direct costs in the GL are recorded by Product Groups.

The product groups used by KCOM to report revenues and costs do not align with the product groups which need to be reported in the RFS and so revenues and volumes in the GL are mapped to those in the RFS using more detailed information contained in KCOM's billing system, APS.

## 4. Accounting Separation Framework

The following Regulatory Accounting Principles have been applied in:

- the production of the RFS;
- the application of the Attribution Methods;
- the application of the Transfer Charging System; and
- the application of the Accounting Policies.

## Principle 1 – Priority

Within the Regulatory Accounting Principles, insofar as there is conflict between the requirements of any or all of these Principles, the Principles are to be applied in the same order of priority in which they appear in this document.

## Principle 2 - Cost Causality

Revenue (including transfer charges), costs (including transfer charges), assets and liabilities shall be attributed to cost components, services and Markets in accordance with the activities which cause the revenues to be earned or costs to be incurred or the assets to be acquired or liabilities to be incurred.

Where it is not possible to attribute revenues, costs, assets and liabilities in accordance with the preceding paragraph, the attribution shall be such as to present fairly the revenues, costs, assets and liabilities accounted for in the Financial Statement for each Business as a whole.

#### Principle 3 - Objectivity

The attribution shall be objective and not intended to benefit either KCOM or any other operator, product, service, component, or market.

#### Principle 4 – Consistency

There shall be consistency of treatment from year to year. Where there are material changes to Regulatory Accounting Principles, the attribution methods, or the accounting policies that have a material effect on the information reported in the financial statements of the Businesses, the parts of the previous year's financial statements affected by the changes shall be restated with appropriate explanatory notes.

#### Principle 5 - Use of UK GAAP

Unless expressly provided for, generally accepted accounting principles and practices in the United Kingdom are to be followed.

## Principle 6 – Transparency

The methodology should provide a transparent description of the accounting and other methods used in the preparation of the RFS such that a suitably informed reader can:

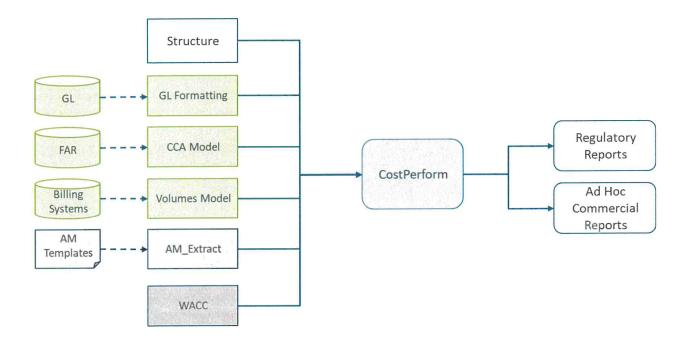
- gain an understanding of the overall structure of KCOM's financial and information systems from which regulatory accounting data is derived and the sequence of the processing and 'cascade' effect of the intermediate cost centres;
- gain an understanding of all the material, methodologies and drivers (e.g. systems, processes and procedures) applied in the preparation of regulatory accounting data; and
- make their own judgement as to the reasonableness of these methodologies and driver data and any changes to them.

#### RFS Model Design

KCOM's RFS are prepared using an activity-based costing model (the RFS Model) which uses data from the company's financial and operational systems to generate revenues and costs for the specified markets.

KCOM's RFS model uses the CostPerform activity-based costing system. The overall design of the RFS Model is set out in Figure 1

Figure 1 RFS Model Design



## **GL** Input

To ensure that the RFS model captures all costs and revenues, the entire general ledger for KCOM is brought into the model. This is done by obtaining extracts from the SAP general ledger and then pre-formatting the account code structure for input into the CostPerform model.

#### Fixed Asset Register (FAR)

KCOM's fixed assets are listed in detail in its Fixed Asset Register (FAR). Each individual asset in the register is categorised with a regulatory accounting classification to enable it to be allocated to individual services.

The FAR classifications are set out in Annex 1: FAR RFS Categories.

The Current Cost Accounting (CCA) Model adjusts the historical cost of the fixed assets contained in the FAR to a CCA value used in the preparation of the RFS.

The CCA valuation methodology is described further in Section 8.

## **Billing Systems/ Volumes Model**

To allocate some costs and calculate unit costs, the RFS model uses service volumes.

Volumes for rental and connection services reported in the RFS are obtained from KCOM's billing system, APS.

The APS system contains details for all billed services. To prepare the RFS it is necessary to categorise the billed services to services in the relevant markets.

This is done by assigning an RFS Service Category to each billed service.

The RFS Service Categories are set out in Annex 2: RFS Service Categories.

Call service volumes for the call Origination markets are obtained from KCOM's inhouse software which captures interconnect traffic data - Interconnect Summary

#### **AM Templates**

For those costs which are attributed to more than one cost category, details of the cost categories being allocated to, and the basis on which they are attributed is input to the CostPerform model using standardised Attribution Methodology ("AM") templates.

## 6. Activity-Based Costing Model

KCOM's RFS are prepared using an activity-based costing ("ABC") model built using the CostPerform system.

The model follows the usual layered approach in cost allocation models – costs from the general ledger are entered at the first layer and cascade down through various activities and categories to final products at the final layer.

The overall design of the ABC model is shown in Figure 2 below.

100% 100% 100% 100% Relevant Relevant L91 L65 L71 L81 L41 151 L21 L01 L11 Support Cost Centres Retail Retail Activities Activities Support Retail Primary Assets Revenues, Products Costs Costs, Assets Grouped GL Working Liabilities Support Wholesale Wholesale Capital (GL) Costs & Channel Assets Activities Activities External Wholesale Reconciling Reconciling Products Network Network (GL) (GL) Plant Groups Products Compon's FAR/CCA FAR Reconciling

Figure 2: ABC Model Design

#### Layers not shown:

- Layer 00: Parameters to capture WACC
- Layer 15: TSO Costs
- Layer 61: Primary Assets
- · Layer 68: Overheads

The following sections describe each layer and provide details of the cost categories in each layer and the basis for their onward apportionment.

Revenue, costs, assets and liabilities from one layer are allocated to a later layer either based on a direct one-to-one allocation or apportionment using a cost driver.

The tables in this section show how costs are allocated or apportioned from one layer to another. The 'Destination' Column for each layer shows the 'Object' to which a value is allocated (if the AM Code is DIR\_000) or apportioned, using the Apportionment Methodology ("AM") indicated in the column.

#### Layer 01 - General Ledger

All costs and revenues are entered at this level from the General Ledger ("GL") and Fixed Asset Register ("FAR"). There are approximately 6,500 objects in Layer 01. All values at Layer 01 are allocated to Layer 11 – Grouped GL.

#### Layer 11 - Grouped GL

This layer aggregates GL values for the purposes of onward apportionment and allocation (approximately 1,100).

Values which are not relevant to the provision of services in the Hull Area are grouped into larger categories and allocated to various reconciling categories in subsequent layers.

#### Laver 15 - TSO

The costs of Technology, Service and Operations (TSO) cost centres are aggregated at Layer 15 and apportioned to subsequent layers using Apportionment Methodologies shown in Table 5 (and described in Section 7).

Table 5 - Layer 15 - TSO Costs

| Layer | Symbol     | Name         | Hierarchy | Parent    | Unit | Object<br>Allocates | Destination | AM Code | AM Name   |
|-------|------------|--------------|-----------|-----------|------|---------------------|-------------|---------|-----------|
| L15   | TSO Costs  | TSO Costs    | 1         | L15       |      | SA_44               |             |         |           |
| L15   | All TSO GL | TSO Recharge | A         | TSO Costs |      | SA_43               | -           | AM_1510 | TSO Costs |

### Layer 21 - Support Costs

Support costs are aggregated at this layer and allocated to support cost categories or direct cost activities.

The Support cost categories at Layer 21 and their onward apportionments are set out in Table 6 (and described in Section 7).

Table 6 – Layer 21 Support Costs and Support Assets

| Layer | Symbol                | Name                      | Destination             | AM Code | AM Name     |
|-------|-----------------------|---------------------------|-------------------------|---------|-------------|
| L21   | SA                    | Support Assets            |                         |         |             |
| L21   | SA-General IT         | General IT                | OH-SA-General IT        | DIR_000 | Direct      |
| L21   | SA-Office Furniture   | Office Furniture          | OH-SA-Office Furniture  | DIR_000 | Direct      |
| L21   | SA-Non-network Bldgs  | Non-network Bldgs         | OH-SA-Non-network Bldgs | DIR_000 | Direct      |
| 121   | SA-Residual           | Residual                  | NC-OOS BS               | DIR_000 |             |
| L21   | SA-Prod-Mgmt          | Prod-Mgmt                 | OH-SA-Prod-Mgmt         | DIR_000 | Direct      |
| L21   | SA-Billing-CSS-Sys    | Billing-CSS-Sys           |                         | AM_2130 | Billing     |
| L21   | SA-OLA Out of Scope   | OLA Out of scope          | NC-OOS BS               | DIR_000 | Direct      |
| L21   | SA-Corporate Assets   | Corporate Assets          | OH-SA-Corporate Assets  | DIR_000 | Direct      |
| L21   | SC                    | Support Cost Centres      |                         |         |             |
| L21   | 201413                | Brand Finance             | NC-OOS IS               | DIR_000 | Direct      |
| L21   | 201418                | Marketing                 | RCC-Marketing           | DIR_000 | Direct      |
| L21   | 205011                | Contact Centres Core      | NC-OOS IS               | DIR_000 | Direct      |
| L21   | NSC                   | TSO Network Support Costs |                         |         |             |
| L21   | NSC-Network Support   | General Network Support   | NOC-Network Operations  | DIR_000 | Direct      |
| L21   | NSC-Support Contracts | Support Contracts         | t <sub>e</sub> :        | AM_2110 | TSO Support |
| L21   | NSC-Platforms         | Platforms                 | -                       | AM_2110 | TSO Support |
| L21   | NSC-TSO Field Ops     | TSO Field Ops             | -                       | AM_2120 | Field Ops   |
| L21   | SA Stocks             | Stocks                    |                         |         | Mark Live   |
| L21   | Network Stocks OLA    | Network Stocks OLA        | CP-STOCK-Network Whis   | DIR_000 | Direct      |
| L21   | Network Stocks OOS    | Network Stocks OOS        | NC-OOS BS               | DIR_000 | Direct      |
| L21   | Network Stocks Fibre  | Network Stocks Fibre      | CP-STOCK-Fibre          | DIR 000 | Direct      |

## Layer 41 - Primary Costs

Costs at this layer represent aggregated costs for operating and support activities.

The Primary cost categories at Layer 41 and their onward apportionments are set out in Table 7 (and described in Section 7).

## Table 7 - Layer 41

| Layer | Symbol | Name                        | Destination                | AM Code        | AM Name | Driver  |
|-------|--------|-----------------------------|----------------------------|----------------|---------|---------|
| L41   | PCC    | Primary Cost Centres        |                            | Manager of the |         | 3127    |
| L41   | 5001   | Enterprise - Private        |                            | 172            | No.     |         |
| 1.41  | 201101 | Marketing                   | NC-OOS IS                  | DIR 000        | Direct  | 10.0    |
| L41   | 201102 | Sales - Principles          | NC-OOS IS                  | DIR 000        | Direct  | 1       |
| L41   | 5002   | Enterprise - Public         |                            | NEW YORK       |         |         |
| L41   | 201111 | Marketing                   | NC-OOS IS                  | DIR_000        | Direct  | ****    |
| L41   | 201112 | Sales - Central Govt        | NC-OOS IS                  | DIR 000        | Direct  | 1       |
| .41   | S003   | Enterprise - Shared         |                            |                |         |         |
| L41   | 201121 | Ent. Central Pract.         | NC-OOS IS                  | DIR 000        | Direct  |         |
| 41    | 201122 | Marketing Costs             | NC-OOS IS                  | DIR 000        | Direct  |         |
| L41   | 201123 | Proposition Product Manager | NC-OOS IS                  | DIR 000        | Direct  |         |
| 41    | 201124 | Sales - Bid Support         | NC-OOS IS                  | DIR 000        | Direct  |         |
| L41   | 201125 | Sales - Client Princ        | NC-OOS IS                  | DIR 000        | Direct  |         |
| L41   | 201126 | Sales Ops & Strategy        | NC-OOS IS                  | DIR OOO        | Direct  |         |
| L41   | 201127 | Consultancy Fee Earn        | NC-OOS IS                  | DIR_000        | Direct  |         |
| L41   | 201128 | Consultancy Pre Sale        | NC-OOS IS                  | DIR 000        | Direct  |         |
| L41   | 201129 | Consult Bus Ser Sale        | NC-OOS IS                  | DIR 000        | Direct  |         |
| .41   | 201130 | ConsultCentral Mgmt         | NC-OOS IS                  | DIR 000        | Direct  |         |
| L41   | S011   | Wholesale - Hull            |                            |                |         |         |
| L41   | S012   | Wholesale - National        |                            |                |         |         |
| L41   | 201031 | Partners                    | OH-WCC-Partners            | DIR 000        | Direct  |         |
| L41   | 5021   | Consumer                    |                            |                |         |         |
| L41   | 201012 | Customer & Tech Srvs        | RCC-Cons-Cust Tech Serv    | DIR_000        | Direct  |         |
| L41   | 201016 | Consumer Sales & Eng        | RCC-Cons Sales Eng         | DIR_000        | Direct  |         |
| L41   | 5031   | SM8 - Hull                  |                            |                |         |         |
| L41   | 201002 | Business Sales              | RCC- SMB- Business Sales   | DIR 000        | Direct  |         |
| 41    | 201003 | Business Marketing          | RCC-SMB-Business Marketing | DIR_000        | Direct  |         |
| L41   | 201004 | <b>Business Solutions</b>   | RCC-SMB-Other              | DIR_000        | Direct  |         |
| L41   | 201005 | Safe At Home                | RCC-SMB-Other              | DIR_000        | Direct  | = = = = |
| L41   | 201006 | Directories                 | RCC-SMB-Other              | DIR_000        | Direct  |         |
| L41   | 205002 | CC Other                    | RCC-SMB-Other              | DIR_000        | Direct  |         |
| L41   | 5032   | SMB - National              |                            |                |         |         |
| L41   | 201041 | SMB National Sales          | NC-005 IS                  | DIR_000        | Direct  |         |
| 41    | 201042 | SMB National Product        | NC-OOS IS                  | DIR_000        | Direct  |         |
| .41   | 201043 | SMB National Mktg           | NC-OOS IS                  | DIR_000        | Direct  |         |
| .41   | 201045 | NNS                         | NC-DOS IS                  | DIR_000        | Direct  |         |
| 41    | 5033   | SMB - Shared                |                            | NEKS LEE       |         |         |
| 41    | 201011 | Customer Insight            | RCC-Cons Sales Other       | DIR_000        | Direct  |         |
| 41    | 201017 | Customer Improvement        | RCC-Cons Sales Other       | DIR_000        | Direct  |         |
| .41   | 201022 | SMB/Con/Wsale Centra        | RCC-Cons Sales Other       | DIR_000        | Direct  |         |
| L41   | S098   | Interconnect & Other        |                            |                |         |         |

| L41 | 5099                     | Intercompany                            |                       |         |                  |                       |
|-----|--------------------------|---|-----------------------|---------|------------------|-----------------------|
| L41 | 201201                   | Sales - Support Desk                    | NC-OOS IS             | DIR_000 | Direct           |                       |
| 41  | 201202                   | Pre-Sales                               | NC-OOS IS             | DIR 000 | Direct           |                       |
| L41 | 201203                   | Integ. & Develop                        | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201204                   | Programme/Proj Mgmt                     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201205                   | PMO                                     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201206                   | Prof Service General                    | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 209401                   | GFS                                     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201090                   | Finance (asset costs onlY0              | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 202090                   | Finance (Enterprise)                    | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 205090                   | Finance (Contact Centres)               | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 203090                   | Finance (Eclipse)                       | NC-OOS IS             | DIR 000 | Direct           |                       |
| L41 | 204090                   | Finance (Media)                         | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 206090                   | Finance (Smart)                         | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201412                   | HR                                      | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201415                   | Risk                                    | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201416                   | Legal                                   | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201417                   | Corporate Executive                     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201501                   | Pool - Architecture                     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201502                   | Pool - Programme Manager & Project Co-o | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201503                   | Pool - Customer Service and Support     | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201504                   | Pool - Design & Development             | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | 201505                   | Pool - Resource Scheduling              | NC-OOS IS             | DIR_000 | Direct           | - Martine State State |
| L41 | NOC                      | TSO Network Operating Costs             | 2332                  |         |                  |                       |
| L41 | NOC-Network Operations   | Network Support                         | -                     | AM_4120 | TSO Net Op Costs | GRC_CLS               |
| L41 | NOC-Data                 | National Network Data                   | NC-Bandwidth external | DIR_000 | Direct           |                       |
| L41 | NOC-Voice                | National Network Voice                  | NC-OOS IS             | DIR_000 | Direct           |                       |
| L41 | NOC-Horizon Hull Network | Horizon Hull Network                    | -                     | AM_4120 | TSO Net Op Costs | GRC_CLS               |
| L41 | NOC-Hereditament         | Hereditament                            | -                     | AM_4120 | TSO Net Op Costs | GRC_CLS               |
| L41 | NOC-Copper Field Ops     | Copper Field Ops                        | NC-Field Ops Copper   | DIR_000 | Direct           |                       |
| L41 | NOC-Fibre Field Ops      | Fibre Field Ops                         | NC-Field Ops Fibre    | DIR_000 | Direct           |                       |
| L41 | NOC-Other Field Ops      | Other Field Ops                         | NC-Field Ops Other    | DIR_000 | Direct           |                       |
| L41 | NOC-Power                | Power                                   | -                     | AM_4120 | TSO Net Op Costs |                       |
| L41 | NOC-Provisioning         | Provisioning                            | NC-Provisioning       | DIR_000 | Direct           |                       |

## Layer 51- Network Support Assets

Network Support Assets include duct, Core SDH, TDM and IP assets which are allocated to Primary Assets in Layer 61.

The Network Support Asset categories and apportionment bases are set out in Table 8 below (and described in Section 7).

Table 8 – Network Support Asset Categories

| Layer   | Symbol                   | Name                   | Destination      | AM Code | AM Name                   | Driver             |
|---------|--------------------------|------------------------|------------------|---------|---------------------------|--------------------|
| L51     | NSA                      | Network Support Assets |                  |         |                           |                    |
| L51     | NSA-Duct EYD             | Duct EYD               | -                | AM_501  | Duct Analysis             | GRC_CLS            |
| L51     | NSA-Core TDM             | Core TDM               | PG-SDH Equipment | DIR_000 | Direct                    |                    |
| L51     | NSA-Core IP              | Core IP                | PG-IP Equipment  | DIR_000 | Direct                    |                    |
| L51     | NSA-Exchange Bldg        | Exchange Bldg          | -                | AM_504  | Exchange Bldg Analysis    | GRC_CLS            |
| L51     | NSA-Network IT           | Network IT             | -                | AM_505  | Network IT Analysis       | GRC_CLS            |
| L51     | NSA-Network Vehicles     | Network Vehicles       | -                | AM_506  | Network Vehicles Analysis | GRC_CLS            |
| L51     | NSA-NGA Support          | NGA Support            | -                | AM_508  | NGA Support Analysis      | GRC_CLS            |
| L51     | NSA-Concentrator EYD     | Concentrator EYD       | -                | AM_509  | Core-Access Split         |                    |
| L51     | NSA-Processor EYD        | Processor EYD          | PG-Processor     | DIR_000 | Direct                    |                    |
| L51     | NSA-CPE                  | CPE                    | -                | AM_511  | CPE Analysis              | SA_33              |
| <br>L51 | NSA-Outsource NW Support | Outsource NW Support   | -                | AM_512  | Outsource support         | OPEX PLUS CCA DEPN |
| L51     | NSA-Network Support      | Network Support        | -                | AM_513  | Network Support           | OPEX PLUS CCA DEPN |
| L51     | NSA-Bus-Provisioning     | Bus-Provisioning       | -                | AM 514  | Business Provisioning     | OPEX PLUS CCA DEPN |

## Layer 61 - Primary Assets

Asset costs are aggregated at Layer 61 to receive apportionments of support costs.

The Network Support Asset categories and apportionment bases are set out in Table 9 (and described in Section 7).

Table 9 - Layer 61 Primary Assets

| Layer | Symbol                       | Name                         | Destination                  | AM Code | AM Name              |
|-------|------------------------------|------------------------------|------------------------------|---------|----------------------|
| L61   | PA                           | Primary Assets               |                              |         |                      |
| L61   | PA-Access Equipment          | PA-Access Equipment          | PG-Access Equipment          | DIR_000 | Direct               |
| L61   | PA-Access-Copper             | PA-Access-Copper             | PG-Access-Copper             | DIR_000 | Direct               |
| L61   | PA-Access-Copper-Drop        | PA-Access-Copper-Drop        | PG-Access-Copper-Drop        | DIR_000 | Direct               |
| L61   | PA-Access-Fibre-NGA-Drop     | PA-Access-Fibre-NGA-Drop     | PG-Access-Fibre-NGA-Drop     | DIR_000 | Direct               |
| L61   | PA-Access Fibre LL           | PA-Access Fibre LL           | PG-Access Fibre LL           | DIR_000 | Direct               |
| L61   | PA-CISBO-CPE                 | PA-CISBO-CPE                 | PG-CISBO-CPE                 | DIR_000 | Direct               |
| L61   | PA-CISBO-Exch-Equip          | PA-CISBO-Exch-Equip          | PG-CISBO-Exch-Equip          | DIR_000 | Direct               |
| L61   | PA-Concentrator - Usage      | PA-Concentrator - Usage      | PG-Concentrator - Usage      | DIR_000 | Direct               |
| L61   | PA-Core-Fibre                | PA-Core-Fibre                | PG-Core-Fibre                | DIR_000 | Direct               |
| L61   | PA-DSLAM                     | PA-DSLAM                     | PG-DSLAM                     | DIR_000 | Direct               |
| L61   | PA-NGA CPE                   | PA-NGA CPE                   | -                            | AM_601  | NGA CPE Analysis     |
| L61   | PA-NGA Exchange Equipment    | PA-NGA Exchange Equipment    | PG-NGA Exchange Equipment    | DIR_000 | Direct               |
| L61   | PA-Optical Ethernet switches | PA-Optical Ethernet switches | PG-Optical Ethernet switches | DIR_000 | Direct               |
| L61   | PA-TISBO-Exchange Equipment  | PA-TISBO-Exchange Equipment  | PG-TISBO-Exchange Equipment  | DIR_000 | Direct               |
| L61   | PA-NGA Passive               | PA-NGA Passive               | -                            | AM 602  | NGA Passive Analysis |

## Layer 65 - Plant Groups

Plant Groups are groups of assets used to deliver network services.

The Plant Group categories and apportionment bases are set out in Table 10 below (and described in Section 7).

Table 10 – Layer 65 Plant Groups

| Layer | Symbol                       | Name                          | Destination               | AM Code | AM Name |  |
|-------|------------------------------|-------------------------------|---------------------------|---------|---------|--|
| L65   | PG                           | Plant Groups                  |                           |         |         |  |
| L65   | PG-Access-Copper             | Access Copper Cable           | NC-Access Copper          | DIR_000 | Direct  |  |
| L65   | PG-Access Fibre LL           | Access Fibre Leased Lines     | NC-Access Fibre LL        | DIR_000 | Direct  |  |
| L65   | PG-Access-Fibre-NGA-Spine    | Access Fibre NGA Spine        | NC-Access Fibre NGA Spine | DIR_000 | Direct  |  |
| L65   | PG-Access-Fibre-NGA-Dist     | Access Fibre NGA Distribution | NC-Access Fibre NGA Dist  | DIR_000 | Direct  |  |
| L65   | PG-Access-Fibre-NGA-Drop     | Access Fibre NGA Drop         | NC-Access Fibre NGA Drop  | DIR_000 | Direct  |  |
| L65   | PG-Core-Fibre                | Core Fibre                    | NC-Core Fibre             | DIR_000 | Direct  |  |
| L65   | PG-Core-Fibre-NGA            | Core Fibre NGA                | NC-Core Fibre NGA         | DIR_000 | Direct  |  |
| L65   | PG-CISBO-Exch-Equip          | CISBO Exchange Equipment      | NC-CISBO Exch Equip       | DIR_000 | Direct  |  |
| L65   | PG-CISBO-CPE                 | CISBO CPE Equipment           | NC-CISBO CPE Equip        | DIR_000 | Direct  |  |
| L65   | PG-TISBO-Exchange Equipment  | TISBO Exchange Equipment      | NC-TISBO Exch Equip       | DIR_000 | Direct  |  |
| L65   | PG-TISBO CPE Equipment       | TISBO CPE Equipment           | NC-TISBO CPE Equip        | DIR_000 | Direct  |  |
| L65   | PG-PSTN CPE/NTP              | PSTN CPE/NTP                  | NC-PSTN CPE/NTP           | DIR_000 | Direct  |  |
| L65   | PG-ISDN2 CPE/NTP             | ISDN2 CPE/NTP                 | NC-ISDN2 CPE/NTP          | DIR_000 | Direct  |  |
| L65   | PG-ISDN 30 CPE/NTP           | ISDN 30 CPE/NTP               | NC-ISDN 30 CPE/NTP        | DIR_000 | Direct  |  |
| L65   | PG-NGA Exchange Equipment    | NGA Exchange Equipment        | NC-NGA Exch Equip         | DIR_000 | Direct  |  |
| L65   | PG-NGA Systems               | NGA Systems                   | NC-NGA Systems            | DIR_000 | Direct  |  |
| L65   | PG-NGA CPE Cons              | NGA CPE Cons                  | NC-NGA CPE Cons           | DIR_000 | Direct  |  |
| L65   | PG-NGA CPE Bus               | NGA CPE Bus                   | NC-NGA CPE Bus            | DIR_000 | Direct  |  |
| L65   | PG-Tier 1& 2 ATM switches    | Tier 1& 2 ATM switches        | NC-Tier 1& 2 ATM switches | DIR_000 | Direct  |  |
| L65   | PG-DSLAM                     | DSLAM                         | NC-DSLAM                  | DIR_000 | Direct  |  |
| L65   | PG-Optical Ethernet switches | Optical Ethernet switches     | NC-Opt Ethernet switches  | DIR_000 | Direct  |  |
| L65   | PG-Exchange - Lines          | Exchange - Lines              | NC-Exch - Lines           | DIR_000 | Direct  |  |
| L65   | PG-Concentrator - Usage      | Concentrator - Usage          | NC-Conc - Usage           | DIR_000 | Direct  |  |
| L65   | PG-Processor                 | Processor                     | NC-Processor              | DIR_000 | Direct  |  |
| L65   | PG-EYE Fibre                 | EYE Fibre                     | NC-EYE Fibre              | DIR_000 | Direct  |  |
| L65   | PG-Access Equipment          | Access Equipment              | NC-Access Copper          | DIR_000 | Direct  |  |
| L65   | PG-Access-Copper-Drop        | Access-Copper-Drop            | NC-Access Copper          | DIR_000 | Direct  |  |
| L65   | PG-SDH Equipment             | SDH Equipment                 | NC-SDH Equipment          | DIR_000 | Direct  |  |
| L65   | PG-IP Equipment              | IP Equipment                  | NC-IP Equipment           | DIR 000 | Direct  |  |

## Layer 68 - Overheads

Overhead cost categories are aggregated at Layer 68 for onward apportionment. Overhead categories and apportionment bases are set out in Table 11 below (and described in Section 7).

Table 11 - Layer 68 Overheads

| Layer | Symbol                      | Name                          | Destination                | AM Code    | AM Name          | Driver         |
|-------|-----------------------------|-------------------------------|----------------------------|------------|------------------|----------------|
| L68   | Overheads                   | Overheads                     |                            | TO GOVERNO | La ple e de Milo | le consecution |
| 1,68  | OH-SA                       | Support Assets                |                            |            |                  |                |
| 168   | OH-SA-General IT            | General IT                    | NC                         | DIR_000    | Direct           | OPEX PLUS ADDS |
| 168   | OH-SA-Office Furniture      | Office Furniture              | NC                         | DIR_000    | Direct           | OPEX PLUS ADDS |
| 168   | OH-SA-Non-network Bldgs     | Non-network Bldgs             | NC                         | DIR_000    | Direct           | OPEX PLUS ADDS |
| 1.68  | OH-SA-Prod-Mgmt             | Prod-Mgmt                     | NC                         | DIR_000    | Direct           | OPEX PLUS ADDS |
| L68   | OH-SA-Corporate Assets      | Corporate Assets              | NC                         | DIR_000    | Direct           | OPEX PLUS ADDS |
| L68   | OH-SC                       | Support Cost Centres          |                            |            |                  |                |
| L68   | OH-General                  | General                       |                            | AM_901     | Other recharges  | OPEX PLUS ADDS |
| .68   | OH-Corp Costs Not Recharged | Corp Charges Not Recharged in | GL                         | AM_901     | Other recharges  | OPEX PLUS ADDS |
| .68   | OH-WCC-Partners             | Partners SGA                  | .6                         | AM_6805    | Partners SGA     |                |
| .68   | OH-HEY Consumer Marketing   | HEY Consumer Marketing        | RCC-Cons-Cust Tech Serv    | DIR_000    | Direct           |                |
| .68   | OH-HEY Business Marketing   | HEY Business Marketing        | RCC-SMB-Business Marketing | DIR_000    | Direct           |                |
| .68   | OH-WC                       | Support Cost Centres          |                            |            |                  |                |
| .68   | OH-Cash-1001                | OH-Cash-1001                  | NC-OOS BS                  | DIR_000    | Direct           |                |
| .68   | OH-DEBTORS-1001 IC          | OH-DEBTORS-1001 IC            | CP-DEBTORS-Whis            | DIR_000    | Direct           |                |
| .68   | OH-DEBTORS-1001 OOS         | OH-DEBTORS-1001 OOS           | NC-OOS BS                  | DIR_000    | Direct           |                |
| 168   | OH-DEBTORS-1001 Whis        | OHP-DEBTORS-1001 Whis         |                            | AM_6801    | Working Capital  |                |
| .68   | OH-DEBTORS-1001 SMB         | OH-DEBTORS-1001 SMB           |                            | AM_6801    | Working Capital  |                |
| .68   | OH-DEBTORS-1001 Cons        | OH-DEBTORS-1001 Cons          | CP-DEBTORS-Cons            | DIR_000    | Direct           |                |
| .68   | OH-DEBTORS-1001 Others Corp | OH-DEBTORS-1001 Others Corp   | *                          | AM_6801    | Working Capital  |                |
| .68   | OH-CREDITORS-1001 Corp      | OH-CREDITORS-1001 Corp        |                            | AM_6801    | Working Capital  |                |
| .68   | OH-CREDITORS-1001 OOS       | OH-CREDITORS-1001 OOS         | NC-OOS BS                  | DIR_000    | Direct           |                |
| .68   | OH-CREDITORS-1001 SMB       | OH-CREDITORS-1001 SMB         |                            | AM_6801    | Working Capital  |                |
| .68   | OH-CREDITORS-1001 Cons      | OH-CREDITORS-1001 Cons        | CP-CREDITORS-Cons          | DIR_000    | Direct           |                |
| .68   | OH-CREDITORS-1001 Whis      | OH-CREDITORS-1001 Whis        | -                          | AM 6801    | Working Capital  |                |

## Layer 71 - Components

Network components aggregate the costs used to deliver network services for onward apportionment to network products.

Details of the components used in the RFS model are set out in Annex 3.

#### Layer 81 - Network Products

Layer 81 calculates the costs of network Products defined to match the wholesale and retail services sold by KCOM.

Details of Network Product Categories are set out in Annex 4.

#### Layer 91- Wholesale & Retail Products

Fully allocated costs for wholesale and retail services sold by KCOM in the relevant markets are calculated at Layer 91 by aggregating Network Products with appropriate SGA costs from Layer 81.

Details of Wholesale & Retail Product Categories are set out in Annex 4.

## 7. Cost Apportionment Methodologies

#### Introduction

This section describes the cost apportionment methodologies used in the RFS Model to allocate fully KCOM's revenues, costs and liabilities to individual services reported on in the RFS Markets.

KCOM's approach to apportionment is to seek to identify the appropriate driver for each item and, as far as possible, use objective operational and/or financial data relevant to that driver to generate apportionment bases.

## **Layer 15 - Apportionment Methodologies**

## *TSO costs (AM\_1510)*

KCOM's Technology, Service and Operations (TSO) team is responsible for operating KCOM's network inside and outside of the Hull Area.

TSO costs are recharged to the market segments for management and statutory accounts. The HEY recharge is apportioned to cost categories for the RFS using budget cost assumptions of each cost type.

This results in allocations to RFS cost categories shown in Table 12.

Table 12 - TSO Cost Categories

| Destination Code         | Destination Name    |
|--------------------------|---------------------|
| NOC-Data                 | Network Data        |
| NOC-Voice                | Network Voice       |
| NOC-Horizon Hull Network | Horizon Hull Networ |
| NOC-Hereditament         | Hereditament Hull   |
| NSC-Network Support      | Network Support     |
| NSC-TSO Field Ops        | TSO Field Ops       |
| NOC-Power                | Power               |
| NSC-Support Contracts    | Support Contracts   |
| NSC-Platforms            | Platforms           |
| NOC-Provisioning         | Provisioning        |
| NC-OOS IS                | NC-OOS IS           |

## **Layer 21 Apportionment Methodologies**

#### Billing systems (AM\_2130)

The value of KCOM's billing systems are apportioned to its wholesale and retail channel assets (WCC-Billing and RCC-Billing) in Layer 71 proportionately to external revenues recorded in the GL.

#### Network Support Contracts, Platforms (AM\_2110)

The costs of network support contracts and platforms recharged to the HEY segment at Layer 15 are allocated to network activities based on an analysis of the contracts and platform.

Costs are apportioned to the cost categories shown in Table 13 below.

Table 13 – HEY Cost Centres for Network Support Contracts and Platforms

| Source Name       | Destination Code           | Destination Name       |
|-------------------|----------------------------|------------------------|
| Support Contracts | <b>NSC-Network Support</b> | General Network Suppor |
| Support Contracts | NOC-Power                  | Power                  |
| Support Contracts | NOC-Data                   | Network data           |
| Platforms         | NSC-Network Support        | General Network Suppor |
| Platforms         | NOC-Power                  | Power                  |
| Platforms         | NOC-Data                   | Network data           |

#### Field Ops (AM\_2120)

The costs of the TSO Field Operations team are apportioned to copper, fibre and 'other' field cost categories in Layer 41 based on the FTE of the copper, fibre and other teams in the Field Ops Cost Centre.

#### **Layer 41 Apportionment Methodologies**

#### Network Support Costs (AM-4120)

Network Support Costs comprise the costs of the TSO general network support, general network support contracts and general network platforms.

Costs are apportioned to the Primary Asset Categories in Layer 61 shown in Table 14, based on the GRC of the assets.

Table 14 - Primary cost Categories for Network Support Costs

| Source Name   | Destination Code  | Destination Name             |  |  |  |
|---|---|------------------------------|--|--|--|
| Network Support   | PA-Access Equipment                                     | PA-Access Equipment          |  |  |  |
| Network Support   | PA-Access-Copper  | PA-Access-Copper             |  |  |  |
| Network Support   | ort PA-Access-Copper-Drop PA-Access-Copper-Drop         |                              |  |  |  |
| Network Support   | upport PA-Access-Fibre-NGA-Drop PA-Access-Fibre-NGA-Dro |                              |  |  |  |
| Network Support   | PA-Access Fibre LL                                      | PA-Access Fibre LL           |  |  |  |
| Network Support   | PA-CISBO-CPE  | PA-CISBO-CPE                 |  |  |  |
| Network Support PA-CISBO-Exch-Equip                     |   | PA-CISBO-Exch-Equip          |  |  |  |
| Network Support   | PA-Concentrator - Usage                                 | PA-Concentrator - Usage      |  |  |  |
| Network Support   | PA-Core-Fibre   | PA-Core-Fibre                |  |  |  |
| Network Support   | PA-DSLAM  | PA-DSLAM                     |  |  |  |
| Network Support   | PA-NGA CPE  | PA-NGA CPE                   |  |  |  |
| Network Support   | PA-NGA Exchange Equipment                               | PA-NGA Exchange Equipment    |  |  |  |
| Network Support   | PA-Optical Ethernet switches                            | PA-Optical Ethernet switches |  |  |  |
| Network Support PA-TISBO-Exchange Equipment PA-TISBO-Ex |   | PA-TISBO-Exchange Equipment  |  |  |  |
| Network Support   | PA-NGA Passive  | PA-NGA Passive               |  |  |  |

## Horizon Contract Costs (AM\_4120)

In the years ending 31st March 2017 and 31st March 2018 KCOM outsourced the maintenance of its network in the Hull Area to BT under the terms of a contract referred to as the Horizon Contract. The costs of this contract are apportioned to the assets BT (at Layer 61 – Primary Assets) are responsible for maintaining based on the GRC of those assets.

#### Hereditament Costs (AM\_4120)

Hereditament Costs are apportioned to the Primary Assets in Layer 61 based on the GRC of those assets.

#### Power Costs (AM 4120)

Power Costs are apportioned to the Primary Assets in Layer 61 using the split of power consumption at each of the exchanges over the GRC of those assets.

#### Field Op Costs

Field Operations costs for the fibre and copper teams are apportioned to the relevant copper and fibre assets (at Layer 61 - Primary Assets) the team are responsible for maintaining based on the GRC of those assets.

## Layer 51 Apportionment Methodologies

#### Duct (AM 501)

The costs of duct are apportioned to the relevant copper and fibre assets (at Layer 61 - Primary Assets) based on the GRC of those assets

### Exchange Buildings (AM\_504)

The costs of Exchange Buildings are apportioned to the assets located at the exchange buildings (at Layer 61 - Primary Assets) based on the GRC of those assets.

## Network IT (AM\_505)

The costs of Network IT are apportioned to network assets (at Layer 61 - Primary Assets) based on the GRC of those assets.

#### Network Vehicles (AM 506)

The costs of Network IT are apportioned to network assets (at Layer 61 - Primary Assets) based on the GRC of those assets.

## NGA Support (AM-508)

The costs of NGA support assets are apportioned over relevant NGA assets (at Layer 61 - Primary Assets) based on the GRC of those assets.

#### Core Access (AM-509)

Split of concentrator costs between line-cards and traffic.

#### CPE (AM 511)

The costs of customer premises equipment (CPE) are apportioned to PSTN, ISDN2, ISDN30 Plant Groups based on management estimates of the relative costs for customer equipment for these different types of service.

#### Outsourced Network Support (AM\_512)

The costs of capitalized outsourced network support assets are apportioned to copper and fibre assets (at Layer 61 - Primary Assets) based on previously allocated Opex plus Depreciation.

#### Network Support (AM 513)

Network support assets are allocated to network assets (at Layer 61 - Primary Assets) based on previously allocated Opex plus Depreciation.

## Business Provisioning (AM\_514)

Capitalised business provisioning asset costs are allocated to relevant Plant Groups based on volumes.

## **Layer 61 Apportionment Methodologies**

#### NGA CPE (AM\_601)

The costs of NGA CPE are apportioned to NGA Consumer and Business Plant Groups based on volumes.

#### NGA Passive (AM\_602)

The costs of NGA Passive Assets are apportioned to Spine, Distribution and Drop Plant Groups based on the relative NGA cable count data extracted from KCOM's GIS database.

## Layer 68 Apportionment Methodologies

#### Partners SGA Costs (AM\_6805)

Wholesale products sold in the Hull area are supported by KCOM's 'Partners' team.

The costs of this team are apportioned in two steps:

Step 1 – Total costs are apportioned to Wholesale (Hull) and Wholesale (National) segments pro rata to revenues.

Step 2 – costs apportioned to the Wholesale (Hull) Segment are apportioned to retail and wholesale channel cost categories proportionate to revenues.

#### Working Capital AM 6801

External debtors and creditors for the Wholesale, Consumer and SMB segments are apportioned to relevant components proportionately to revenues.

#### Recharges (AM\_901)

Recharges from the Central supporting functions are allocated to the Network Components for HEY proportionate to operating expenditure plus capex additions.

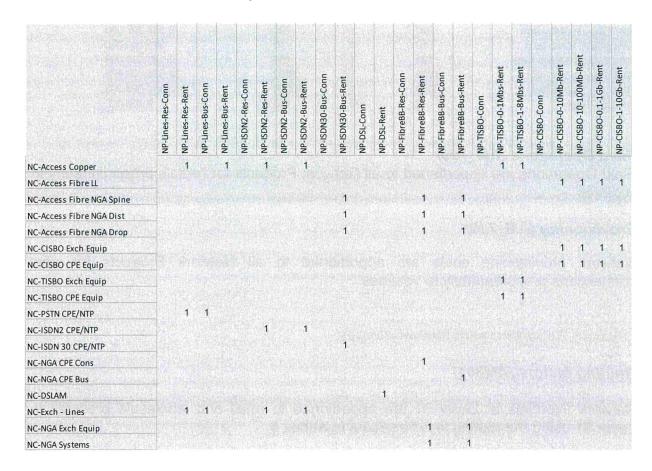
The remainder of the costs from the Central supporting functions not recharged to the market segments of KCOM are allocated to all components proportionate to operating expenditure plus capex additions.

## **Layer 71 Apportionment Methodologies**

## Access Network Component Factors (AM\_701)

Network Components are allocated to Network Products (Layer 81) using the factors shown in Table 15.

**Table 15 - Access Network Component factors** 



#### Core Network Component Factors (AM\_702)

Core Network Components costs are allocated to Network Products (Layer 81) based on the bandwidth assumptions shown in Table 16.

**Table 16 – Core Network Component factors** 

|                         | speed (Mbps) | Contention/% | Speed in core | Mbyte/minute | Mbyte per line  |
|-------------------------|--------------|--------------|---------------|--------------|-----------------|
| NP-Call Termination     |              |              |               | 3.84         |                 |
| NP-CO-Other             |              |              |               | 3.84         |                 |
| NP-CO-HEY               |              |              |               | 3.84         |                 |
| NP-CO-Local             |              |              |               | 3.84         |                 |
| NP-FibreBB-Res-Rent     | 148          | 0.87%        | 1.29          |              | 40,605,754      |
| NP-FibreBB-Bus-Rent     | 362.5        | 0.87%        | 3,15          |              | 99,456,660      |
| NP-TISBO-0-1Mbs-Rent    | 0.1          | 1            | 0.1           |              | 3,153,600       |
| NP-TISBO-1-8Mbs-Rent    | 2            | 1            | 2             |              | 63,072,000      |
| NP-TISBO-10-100Mbs-Rent | 10           | 1            | 10            |              | 315,360,000     |
| NP-TISBO->100Mbs-Rent   | 200          | 1            | 200           |              | 6,307,200,000   |
| NP-CISBO-0-10Mb-Rent    | 10           | 1            | 10            |              | 315,360,000     |
| NP-CISBO-10-100Mb-Rent  | 100          | 1            | 100           |              | 3,153,600,000   |
| NP-CISBO-0.1-1Gb-Rent   | 1000         | 1            | 1000          |              | 31,536,000,000  |
| NP-CISBO-1-10Gb-Rent    | 10000        | 1            | 10000         |              | 315,360,000,000 |
| NP-DSL-Rent             | 6            | 20           | 0.3           |              | 9,460,800       |

## Field Operations (AM\_705)

Field Operations are apportioned to all Network Products for rentals proportionately to volumes

#### Provisioning (AM\_710)

Network provisioning costs are apportioned to all Network Products for new connections proportionately to volumes

## Layer 81 Apportionment Methodologies

## Routing factors (AM801)

Network Products at Layer 81 are apportioned to retail and wholesale products in Layer 91 using the routing factors set out in Annex 6.

#### 8. CCA Valuation Methodology

The RFS are prepared using the current cost accounting convention. The requires assets to be restated at their current (rather than historical cost).

Terminology used in the RFS model is as follows:

Gross Book Value ('GBV'): The original historical cost of acquiring the assets as recorded in the Fixed Asset Register ('FAR')

Net Book Value ('NBV'): The depreciated cost of the asset as recorded in the FAR

Annual Historical Cost Depreciation ('Ann HC Depn'): The depreciation recorded in the FAR.

**Gross Replacement Cost ('GRC'):** The original historical cost of acquiring the assets as recorded in the Fixed Asset Register ('FAR') uplifted by the monthly RPI Index

**Gross Holding Gain:** Calculated as the difference between opening and closing GRC for each asset, less any disposals, plus any additions

Backlog Depreciation: Calculated as follows:

(1 - Opening NBV ) X Gross Holding Gain GBV

Net Holding Gain: Calculated as follows:

Gross Holding Gain – Backlog Depreciation

Annual CCA Depreciation ('Ann CCA Depn'): Total annual depreciation charge under CCA accounting. Calculated as follows:

Average Opening and Closing GRC X Ann HC Depn Average Opening and Closing GBV

Supplementary CCA Depreciation: Calculated as follows:

Ann CCA Depn - Ann HC Depn

#### **CCA Valuation Methodology**

In the RFS, all fixed assets are revalued by applying a Retail Price Index ('RPI') adjustment to the historical cost of the asset recorded in the Fixed Asset Register.

# 9. Revenues and Transfer Charges

External revenues for wholesale services are calculated as follows:

- Each product in the KCOM's billing system (APS) is tagged with a relevant regulatory service type (shown in Annex 2)
- The relevant GL code for each APS entry is identified using mapping tables
- Revenues in the GL are allocated proportionately to the revenues for each APS entry mapped to that GL code

## 10. Preparation of RFS

The published RFS are prepared using Excel output tables from the CostPerform ABC model.

The regulatory reporting requirements which set out the format of the RFS require costs to be presented using different categories in the profit and loss and network cost statements.

The reports and associated cost categories which KCOM is required to use in its RFS as shown in Figure 3 to Figure 5 below.

## Figure 3 Profit and Loss Account format

## Kingston Wholesale Market: XXXX

CURRENT COST PROFIT AND LOSS ACCOUNT for the year ended  $\mathsf{XXX}$ 

|  | £k<br>XXX  | % per line<br>item/total |
|--|------------|--------------------------|
| Turnover                                     |            |                          |
| Internal Sales                               | XXX        | XXX                      |
| External Sales                               | XXX        | XXX                      |
| Total Turnover                               | XXX        | XXX                      |
| Operating costs                              |            |                          |
| Operating costs of Wholesale Market          |            |                          |
| - Maintenance                                | XXX        | XXX                      |
| - Provision & Installation                   | XXX        | XXX                      |
| - Finance & Billing                          | XXX        | XXX                      |
| - Outpayments                                | XXX        | XXX                      |
| - Bad Debts                                  | XXX        | XXX                      |
| - Depreciation                               | XXX        | XXX                      |
| - Other Costs                                | XXX        | XXX                      |
| Sub total operating expenditure              | XXX        | XXX                      |
| CCA adjustments:                             |            |                          |
| Holding gain                                 | XXX<br>XXX |                          |
| Supplementary depreciation                   | XXX        |                          |
| Total operating costs                        | XX         |                          |
| Return                                       | XXX        |                          |
|  |            |                          |
| RETURN ON MEAN CAPITAL EMPLOYED AND TURNOVER | XXX        |                          |
| for the year ended XXX                       | %<br>%     |                          |
| Return on mean capital employed              | XXX        |                          |
| Return on turnover                           | XXX        |                          |

## Figure 4 Balance Sheet format

## Kingston Wholesale Market XXXX

# STATEMENT OF CURRENT COST MEAN CAPITAL EMPLOYED for the year ended $\mathsf{XXX}$

|  | £k<br><b>XXX</b> | £k<br><b>PY</b> | % Change |
|--|------------------|-----------------|----------|
| Fixed assets   |                  | FI              |          |
| Tangible fixed assets                                |                  |                 |          |
| - Land & Buildings                                   | XXX              | XXX             | XXX      |
| - Duct   | XXX              | XXX             | XXX      |
| - Transmission Equipment                             | XXX              | XXX             | XXX      |
| - Exchange Equipment                                 | XXX              | XXX             | XXX      |
| - Other  | XXX              | XXX             | XXX      |
| Total fixed assets                                   | XXX              | XXX             | XXX      |
| Current assets                                       |                  |                 |          |
| Stocks   | XXX              | XXX             | XXX      |
| Debtors  | 75.51            | ,,,,,           | 7001     |
| - internal   | XXX              | XXX             | XXX      |
| - external   | XXX              | XXX             | XXX      |
| Total current assets                                 | XXX              | XXX             | xxx      |
| Creditors: amounts falling due within one year       |                  |                 |          |
| Other creditors                                      |                  |                 |          |
| - internal   | XXX              | XXX             | XXX      |
| - external   | XXX              | XXX             | XXX      |
| Total creditors: amounts falling due within one year | XXX              | XXX             | XXX      |
| Net current assets                                   | XXX              | XXX             | XXX      |
| otal assets less current liabilities                 | XXX              | XXX             | xxx      |
| Closing capital employed                             | XXX              | XXX             | XXX      |
| Mean capital employed                                | xxx              | xxx             | XXX      |

## Figure 5 Network Activity format

Kingston Statement of Costs on a Current Cost Basis

Network Activity Statement for the year ended XXXX

Network Activity Statement - XXX

| Network Activity Statement - XXX      |               |                               |  |                                 |                                 |  |                  |  |                                   |   |
|---------------------------------------|---------------|-------------------------------|--|---------------------------------|---------------------------------|--|------------------|--|-----------------------------------|---|
| Fully Allocated Cost                  | HCA operating | Supplementary<br>Depreciation | Holding gain<br>and other CCA<br>adjustments | Total CCA<br>operating<br>costs | CCA mean<br>capital<br>employed | Applicable<br>rate of return<br>on capital % | Capital<br>costs | Total of<br>operating<br>costs and<br>capital costs<br>relating to<br>current year | Volume (No. of<br>Business Lines) | Average costs<br>per min/unit or<br>a current cost<br>basis relating<br>to current year |
|                                       |               |                               | 200000                                       | 2000000                         | 1007200                         | li successi                                  |                  |  |                                   | XXX   |
| Exchange concentrator                 | XXX           | XXX                           | XXX  | XXX                             | xxx                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Exchange processor                    | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Exchange-exchange transmission link   | XXX           | XXX                           | XXX  | XXX                             | xxx                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Exchange-exchange transmission length | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  |                                   | XXX   |
| National operator assistance          | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Emergency operator assistance         | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| PPP for narrowband call services      | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Local Loop Infrastructure             | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Totals                                | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | ***                               | ^^^   |
| Network Activity Statement            |               |                               |  |                                 |                                 |  |                  |  |                                   |   |
| for year ended PY                     |               |                               |  |                                 |                                 |  |                  |  |                                   |   |
| Exchange concentrator                 | xxx           | XXX                           | xxx  | XXX                             | XXX                             | XXX  | XXX              | xxx  | XXX                               | XXX   |
| Exchange processor                    | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Exchange-exchange transmission link   | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Exchange-exchange transmission length | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| National operator assistance          | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Emergency operator assistance         | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | xxx  | XXX                               | XXX   |
| PPP for narrowband call services      | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Local Loop Infrastructure             | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |
| Totals                                | XXX           | XXX                           | XXX  | XXX                             | XXX                             | XXX  | XXX              | XXX  | XXX                               | XXX   |

Revenues, costs, assets and liabilities in the RFS Model are categorised for reporting in the Profit and Loss Account, Balance Sheet and Network Activity Statement reports using Regulatory Reporting Group (RRG) classifications which are attached to costs at layer 001 (GL) in the RFS Model.

Classifying costs at his level enables costs to be categorised at the most disaggregated layer.

Costs in the Network Activity Statement are classified using Component Cost categories determined by Ofcom. In the RFS Model these are tagged at Layer 71 (components).

The components are as follows:

- Local Loop Infrastructure
- Exchange to Exchange Infrastructure
- Electronics
- Other
- Exchange Concentrator
- Exchange Processor
- Field Maintenance
- Field Provision
- Sales and Product Management
- Net Current Assets

The mapping of network components to reported components is shown in Table 17 below.

### **Table 17 Regulatory Component classification**

| Layer | Symbol                    | Name                             | RR Component                        |
|-------|---------------------------|----------------------------------|-------------------------------------|
| L71   | NC                        | Components                       |                                     |
| .71   | WHLN                      | Wholesale Business               |                                     |
| 71    | NCC                       | Network Components               |                                     |
| .71   | NC-Access Copper          | NC-Access Copper Cable           | Local Loop Infrastructure           |
| 71    | NC-Access Fibre LL        | NC-Access Fibre Leased Lines     | Local Loop Infrastructure           |
| 71    | NC-Access Fibre NGA Spine | NC-Access Fibre NGA Spine        | Local Loop Infrastructure           |
| 71    | NC-Access Fibre NGA Dist  | NC-Access Fibre NGA Distribution | Local Loop Infrastructure           |
| 71    | NC-Access Fibre NGA Drop  | NC-Access Fibre NGA Drop         | Local Loop Infrastructure           |
| 71    | NC-Core Fibre             | NC-Core Fibre                    | Exchange to Exchange Infrastructure |
| .71   | NC-Core Fibre NGA         | NC-Core Fibre NGA                | Exchange to Exchange Infrastructure |
| 71    | NC-CISBO Exch Equip       | NC-CISBO Exchange Equipment      | Electronics                         |
| 71    | NC-CISBO CPE Equip        | NC-CISBO CPE Equipment           | Electronics                         |
| 71    | NC-TISBO Exch Equip       | NC-TISBO Exchange Equipment      | Electronics                         |
| .71   | NC-TISBO CPE Equip        | NC-TISBO CPE Equipment           | Other                               |
| 71    | NC-PSTN CPE/NTP           | NC-PSTN CPE/NTP                  | Other                               |
| 71    | NC-ISDN2 CPE/NTP          | NC-ISDN2 CPE/NTP                 | Other                               |
| 71    | NC-ISDN 30 CPE/NTP        | NC-ISDN 30 CPE/NTP               | Other                               |
| 71    | NC-NGA Exch Equip         | NC-NGA Exchange Equipment        | Electronics                         |
| .71   | NC-NGA Systems            | NC-NGA Systems                   | Other                               |
| 71    | NC-NGA CPE Cons           | NC-NGA CPE Consumer              | Other                               |
| 71    | NC-NGA CPE Bus            | NC-NGA CPE Business              | Other                               |
| 71    | NC-Tier 1& 2 ATM switches | NC-Tier 1& 2 ATM switches        | Electronics                         |
| 71    | NC-DSLAM                  | NC-DSLAM                         | Electronics                         |
| 71    | NC-Opt Ethernet switches  | NC-Optical Ethernet switches     | Electronics                         |
| 71    | NC-Exch - Lines           | NC-Exchange - Lines              | Exchange Concentrator               |
| 71    | NC-Conc - Usage           | NC-Concentrator - Usage          | Exchange Concentrator               |
| 71    | NC-Processor              | NC-Processor                     | Exchange Processor                  |
| 71    | NC-EYE Fibre              | NC-EYE Fibre                     | RR Comp Excluded                    |
| 71    | NC-SDH Equipment          | NC-SDH Equipment                 | Electronics                         |
| 71    | NC-IP Equipment           | NC-IP Equipment                  | Electronics                         |
| 71    | NC-Bandwidth external     | NC-Bandwidth external            | Other                               |
| 71    | NC-Field Ops Copper       | NC-Field Ops Copper              | Field Maintenance                   |
| 71    | NC-Field Ops Fibre        | NC-Field Ops Fibre               | Field Maintenance                   |
| 71    | NC-Field Ops Other        | NC-Field Ops Other               | Field Maintenance                   |
| 71    | NC-Provisioning           | NC-Provisioning                  | Field Provision                     |
| 71    | WHL-CHANNEL               | Wholesale Channel Costs          |                                     |
| .71   | WCC-Partners              | WCC-Partners                     | Sales and Product Management        |
| 71    | WCC-Billing               | WCC-Billing                      | Other                               |

| L71 | WWC                        | Wholesale Working Capital      |                    |
|-----|----------------------------|--------------------------------|--------------------|
| L71 | CP-STOCK-Network Whis      | CP-STOCK-Network Whis          | Net Current Assets |
| L71 | CP-STOCK-Fibre             | CP-STOCK-Fibre                 | Net Current Assets |
| L71 | CP-DEBTORS-Whis            | CP-DEBTORS-Whis                | Net Current Assets |
| L71 | CP-CREDITORS-Whis          | CP-CREDITORS-Whis              | Net Current Assets |
| L71 | RETC                       | Retail & Residual              |                    |
| L71 | RETCC                      | Retail Channel Cost Components |                    |
| L71 | RCC-Cons-Cust Tech Serv    | RCC-Cons-Cust Tech Serv        | RR Comp Excluded   |
| L71 | RCC-Cons Sales Other       | RCC-Cons Sales Other           | RR Comp Excluded   |
| L71 | RCC-Cons Sales Eng         | RCC-Cons Sales Eng             | RR Comp Excluded   |
| L71 | RCC- SMB- Business Sales   | RCC- SMB- Business Sales       | RR Comp Excluded   |
| L71 | RCC-SMB-Business Marketing | RCC-SMB-Business Marketing     | RR Comp Excluded   |
| L71 | RCC-SMB-Other              | RCC-SMB-Other                  | RR Comp Excluded   |
| L71 | RCC-Billing                | RCC-Billing                    | RR Comp Excluded   |
| L71 | RCC-Interconnect           | RCC-Interconnect               | RR Comp Excluded   |
| L71 | RCC-Marketing              | RCC-Marketing                  | RR Comp Excluded   |
| L71 | RESIDUAL                   | RESIDUAL                       |                    |
| L71 | NC-OOS BS                  | NC-OOS BS                      | RR Comp Excluded   |
| L71 | NC-OOS IS                  | NC-OOS IS                      | RR Comp Excluded   |
| L71 | NC-EYE BS                  | NC-EYE BS                      | RR Comp Excluded   |
| L71 | RWC                        | Retail Working Capital         |                    |
| L71 | CP-DEBTORS-Bus             | CP-DEBTORS-Bus                 | Net Current Assets |
| L71 | CP-DEBTORS-Cons            | CP-DEBTORS-Cons                | Net Current Assets |
| L71 | CP-CREDITORS-Bus           | CP-CREDITORS-Bus               | Net Current Assets |
| L71 | CP-CREDITORS-Cons          | CP-CREDITORS-Cons              | Net Current Assets |

## **Annex 1: FAR RFS Categories**

| Core IP                   |
|---------------------------|
| Core TDM                  |
| CPE                       |
| Duct EYD                  |
| Exchange Bldg             |
| Network IT                |
| Access Fibre Non-NGA      |
| Network Vehicles          |
| NGA Passive               |
| NGA Support               |
| Outsource NW Support      |
| Processor EYD             |
| Access Equipment          |
| Access-Copper             |
| Access-Copper-Drop        |
| Access-Fibre-NGA-Drop     |
| CISBO-CPE                 |
| CISBO-Exch-Equip          |
| Concentrator - Usage      |
| Core-Fibre                |
| DSLAM                     |
| NGA CPE                   |
| NGA Exchange              |
| Equipment                 |
| Optical Ethernet switches |
| TISBO-Exchange            |
| Equipment                 |
| Billing-CSS-Sys           |
| General IT                |
| Non-network Bldgs         |
| Office Furniture          |
| OLA Out of Scope          |
| EYE Assets                |
| Corporate Assets          |
| Out of Scope              |
| ***                       |
|                           |

Bus-Provisioning Concentrator EYD

#### **Annex 2: RFS Service Categories**

RP-Lines-Res-Conn RP-Lines-Res-Rent RP-Lines-Bus-Conn RP-Lines-Bus-Rent RP-ISDN2-Res-Conn RP-ISDN2-Res-Rent RP-ISDN2-Bus-Conn RP-ISDN2-Bus-Rent RP-ISDN30-Bus-Conn RP-ISDN30-Bus-Rent RP-DSL-Conn RP-DSL-Rent RP-FibreBB-Res-Conn RP-FibreBB-Res-Rent RP-FibreBB-Bus-Conn RP-FibreBB-Bus-Rent RP-Centrex-Conn RP-Centrex-Rent RP-TISBO<8Mb Conn RP-TISBO-0-1Mb-Rent RP-TISBO-1-8Mbs-Rent RP-TISBO>8Mb Conn RP-TISBO-10-100Mbs-Rent RP-CISBO-Conn RP-CISBO-EAS-0-10Mb-Rent RP-CISBO-EAS-10-100Mb-Rent RP-CISBO-EAS-0.1-1Gb-Rent RP-CISBO-EAS-1-10Gb-Rent RP-CISBO-Etherline-0-10Mb-Rent RP-CISBO-Etherline-10-100Mb-Rent RP-CISBO-Etherline-0.1-1Gb-Rent RP-CISBO-Etherline-I 0-10Mb-Rent RP-CISBO-Etherline-I-10-100Mb-Rent RP-CISBO-Gigaline 0.1-1Gb Rent RP-CISBO-VPLS-0-10Mb-Rent RP-CISBO-VPLS-10-100Mb-Rent RP-CISBO-VPLS-0.1-1Gb-Rent RP-CISBO-CCTV-Rent RP-CO-Geo RP-CO-Loc RP-CO-FtM RP-CO-Intl RP-CO-Prs RP-CO-OpAs RP-CO-Karoo RP-CO-Emer RP-CO-Pay RP-CO-ISDN-Data RP-CO-EYE

RP-IP Line Central 100Mb

RP-IP Line Customer rental

RP-CO-Data

RP-Payphones-Rent

WP-Lines-Res-Conn

WP-Lines-Res-Rent

WP-Lines-Bus-Conn

WP-Lines-Bus-Rent

WP-ISDN2-Res-Conn

WP-ISDN2-Res-Rent

WP-ISDN2-Bus-Conn

WP-ISDN2-Bus-Rent

WP-ISDN30-Bus-Conn

WP-ISDN30-Bus-Rent

WP-DSL-Conn

WP-DSL-Rent

WP-FibreBB-Res-Conn

WP-FibreBB-Res-Rent

WP-FibreBB-Bus-Conn

WP-FibreBB-Bus-Rent

WP-Centrex-Conn

WP-Centrex-Rent

WP-TISBO<8Mb Conn

WP-TISBO-0-1Mb-Rent

WP-TISBO-1-8Mbs-Rent

RP-TISBO>8Mb Conn

WP-TISBO-8-100Mbs-Rent

WP-CISBO-Conn

WP-CISBO-EAS-0-10Mb-Rent

WP-CISBO-EAS-10-100Mb-Rent

WP-CISBO-EAS-0.1-1Gb-Rent

WP-CISBO-EAS-1-10Gb-Rent

WP-CISBO-ECAS-0-10Mb-Rent

WP-CISBO-ECAS-10-100Mb-Rent

WP-CISBO-ECAS-0.1-1Gb-Rent

WP-CISBO-ECAS-1-10Gb-Rent

WP-CISBO-EDAS-0-10Mb-Rent

WP-CISBO-EDAS-10-100Mb-Rent

WP-CISBO-EDAS-0.1-1Gb-Rent

WP-CISBO-EDAS-1-10Gb-Rent

WP-CISBO-Etherline-0-10Mb-Rent

WP-CISBO-Etherline-10-100Mb-Rent

WP-CISBO-Etherline-0.1-1Gb-Rent

WP-CISBO-Etherline-I 0-10Mb-Rent

WP-CISBO-Etherline-I-10-100Mb-

Rent

WP-CISBO-Gigaline 0.1-1Gb Rent

WP-CISBO-VPLS-0-10Mb-Rent

WP-CISBO-VPLS-10-100Mb-Rent

WP-CISBO-VPLS-0.1-1Gb-Rent

WP-CISBO-CCTV-Rent

WP-CO-Geo

WP-CO-Loc

WP-CO-FtM

WP-CO-Intl

WP-CO-Prs

WP-CO-OpAs

WP-CO-Karoo

WP-CO-Emer

WP-CO-Pay

WP-IP Line Central 100Mb

WP-IP Line Customer rental

WP-CO-EYE

WP-CO-Data

WP-CO-ISDND

WP-TISBO-<8Mbs-Conn

WP-TISBO->8Mbs-Conn

WP-CT

WP-Kit

RP-TISBO-<8Mbs-Conn

RP-TISBO->8Mbs-Conn

**RP-OTHER** 

RP-CPE-Rent

RP-Misc

RP-Mob

RP-EYE

**RP-CPS-Indirect** 

**RP-Lincs** 

**RP-Chargeable Works** 

RP-BB-Misc

**RECN-OOS** 

**Bespoke Private Circuits** 

QUERY

RP-Other OLA

RP-Other EYE

RP-EYE Res Line Rent

RP-EYE ADSL Rent

RP-EYE Res Line Conn

RP-EYE ADSL Conn

**Annex 3: RFS Components** 

| Layer | Symbol                    | Name                             |
|-------|---------------------------|----------------------------------|
| L71   | NC                        | Components                       |
| L71   | WHLN                      | Wholesale Business               |
| L71   | NCC                       | Network Components               |
| L71   | NC-Access Copper          | NC-Access Copper Cable           |
| 1.71  | NC-Access Fibre LL        | NC-Access Fibre Leased Lines     |
| 1.71  | NC-Access Fibre NGA Spine | NC-Access Fibre NGA Spine        |
| L71   | NC-Access Fibre NGA Dist  | NC-Access Fibre NGA Distribution |
| 1.71  | NC-Access Fibre NGA Drop  | NC-Access Fibre NGA Drop         |
| L71   | NC-Core Fibre             | NC-Core Fibre                    |
| L71   | NC-Core Fibre NGA         | NC-Core Fibre NGA                |
| L71   | NC-CISBO Exch Equip       | NC-CISBO Exchange Equipment      |
| L71   | NC-CISBO CPE Equip        | NC-CISBO CPE Equipment           |
| 171   | NC-TISBO Exch Equip       | NC-TISBO Exchange Equipment      |
| L71   | NC-TISBO CPE Equip        | NC-TISBO CPE Equipment           |
| L71   | NC-PSTN CPE/NTP           | NC-PSTN CPE/NTP                  |
| L71   | NC-ISDN2 CPE/NTP          | NC-ISDN2 CPE/NTP                 |
| L71   | NC-ISDN 30 CPE/NTP        | NC-ISDN 30 CPE/NTP               |
| 1.71  | NC-NGA Exch Equip         | NC-NGA Exchange Equipment        |
| L71   | NC-NGA Systems            | NC-NGA Systems                   |
| L71   | NC-NGA CPE Cons           | NC-NGA CPE Consumer              |
| L71   | NC-NGA CPE Bus            | NC-NGA CPE Business              |
| L71   | NC-Tier 1& 2 ATM switches | NC-Tier 1& 2 ATM switches        |
| L71   | NC-DSLAM                  | NC-DSLAM                         |
| L71   | NC-Opt Ethernet switches  | NC-Optical Ethernet switches     |
| L71   | NC-Exch - Lines           | NC-Exchange - Lines              |
| 171   | NC-Conc - Usage           | NC-Concentrator - Usage          |
| L71   | NC-Processor              | NC-Processor                     |
| L71   | NC-EYE Fibre              | NC-EYE Fibre                     |
| 171   | NC-SDH Equipment          | NC-SDH Equipment                 |
| 1.71  | NC-IP Equipment           | NC-IP Equipment                  |
| L71   | NC-Bandwidth external     | NC-Bandwidth external            |
| 171   | NC-Field Ops Copper       | NC-Field Ops Copper              |
| L71   | NC-Field Ops Fibre        | NC-Field Ops Fibre               |
| L71   | NC-Field Ops Other        | NC-Field Ops Other               |
| L71   | NC-Provisioning           | NC-Provisioning                  |
| L71   | WHL-CHANNEL               | Wholesale Channel Costs          |
| L71   | WCC-Partners              | WCC-Partners                     |
| 171   | WCC-Billing               | WCC-Billing                      |

| L71  | WWC                        | Wholesale Working Capital      |
|------|----------------------------|--------------------------------|
| L71  | CP-STOCK-Network Whis      | CP-STOCK-Network Whls          |
| L71  | CP-STOCK-Fibre             | CP-STOCK-Fibre                 |
| L71  | CP-DEBTORS-Whis            | CP-DEBTORS-Whis                |
| L71  | CP-CREDITORS-Whis          | CP-CREDITORS-Whls              |
| L71  | RETC                       | Retail & Residual              |
| L71  | RETCC                      | Retail Channel Cost Components |
| L71  | RCC-Cons-Cust Tech Serv    | RCC-Cons-Cust Tech Serv        |
| 171  | RCC-Cons Sales Other       | RCC-Cons Sales Other           |
| L71  | RCC-Cons Sales Eng         | RCC-Cons Sales Eng             |
| L71  | RCC- SMB- Business Sales   | ROC- SMB- Business Sales       |
| 171  | RCC-SMB-Business Marketing | RCC-SMB-Business Marketing     |
| L71  | RCC-SMB-Other              | RCC-SMB-Other                  |
| L71  | RCC-Billing                | RCC-Billing                    |
| 171  | RCC-Interconnect           | RCC-Interconnect               |
| L71  | RCC-Marketing              | RCC-Marketing                  |
| L71  | RESIDUAL                   | RESIDUAL                       |
| 171  | NC-OOS BS                  | NC-OOS BS                      |
| L71  | NC-OOS IS                  | NC-OOS IS                      |
| L71  | NC-EYE BS                  | NC-EYE BS                      |
| L71  | RWC                        | Retail Working Capital         |
| 1.71 | CP-DEBTORS-Bus             | CP-DEBTORS-Bus                 |
| L71  | CP-DEBTORS-Cons            | CP-DEBTORS-Cons                |
| L71  | CP-CREDITORS-Bus           | CP-CREDITORS-Bus               |
| L71  | CP-CREDITORS-Cons          | CP-CREDITORS-Cons              |

#### Annex 4: RFS Network Products

| Layer      | Symbol  | Name  |
|------------|---|---|
| L81        | NRP   | Wholesale & Retail                          |
| L81        | WHLB  | Wholesale Buisness                          |
| L81        | NP-WHL  | Network Products (WHL)                      |
| L81        | NP-Lines  | NP-Lines                                    |
| L81        | NP-Lines-Res-Conn   | NP-Residential Lines-Connection             |
| L81        | NP-Lines-Res-Rent   | NP-Residential Lines-Rental                 |
| L81        | NP-Lines-Bus-Conn   | NP-Business Lines-Connection                |
| L81        | NP-Lines-Bus-Rent   | NP-Business Lines-Rental                    |
| L81        | NP-ISDN2  | NP-ISDN2                                    |
| L81        | NP-ISDN2-Res-Conn   | NP-Residential Lines-ISDN 2 Connection      |
| L81        | NP-ISDN2-Res-Rent   | NP-Residential Lines-ISDN 2 Rental          |
| L81        | NP-ISDN2-Bus-Conn   | NP-Business ISDN 2 Lines-Connection         |
| L81        | NP-ISDN2-Bus-Rent   | NP-Business ISDN 2 Lines-Rental             |
| L81        | NP-ISDN30   | NP-ISDN30                                   |
| L81        | NP-ISDN30-Bus-Conn  | NP-Business ISDN 30 Lines-Connection        |
| L81        | NP-ISDN30-Bus-Rent  | NP-Business ISDN 30 Lines-Rental            |
| L81        | NP-CO   | NP-CO                                       |
| L81        | NP-CO-Local   | NP-Call Origination-Local                   |
| L81        | NP-CO-HEY   | NP-Call Origination-HEY                     |
| L81        | NP-DSL  | NP-DSL Connection                           |
| L81        | NP-DSL-Conn   | NP-DSL-Connection NP-DSL-Rental             |
| L81        | NP-DSL-Rent<br>NP-Fibre Broadband   | NP-Fi bre Broadband                         |
| L81<br>L81 |   | NP-Fibre Broadband - Residential-Connection |
| L81        | NP-FibreBB-Res-Conn<br>NP-FibreBB-Res-Rent  | NP-Fibre Broadband - Residential-Rental     |
| L81        | NP-FibreBB-Bus-Conn   | NP-Fibre Broadband - Business-Connection    |
| L81        | NP-FibreBB-Bus-Rent   | NP-Fibre Broadband - Business-Rental        |
| L81        | NP-TISBO  | NP-TISBO                                    |
| L81        | NP-TISBO-Conn   | NP-TISBO-All bandwidth connection           |
| L81        | NP-TISBO-Collin   | NP-TISBO-0-1Mbs-Rental                      |
| L81        | NP-TISBO-1-8Mbs-Rent  | NP-TISBO-1-8Mbs-Rental                      |
| L81        | NP-CISBO  | NP-CISBO                                    |
| L81        | NP-CISBO-Conn   | NP-CISBO-All bandwidth connection           |
| L81        | NP-CISBO-0-10Mb-Rent  | NP-CISBO-10Mb-Rental                        |
| L81        | NP-CISBO-10-100Mb-Rent  | NP-CISBO-100Mb-Rental                       |
| L81        | NP-CISBO-0.1-1Gb-Rent   | NP-CISBO-1Gb-Rental                         |
| L81        | NP-CISBO-1-10Gb-Rent  | NP-CISBO-10Gb-Rental                        |
| L81        | NP-CT   | NP-CT                                       |
| L81        | NP-Call Termination   | NP-Call Termination                         |
| L81        | NP-Bandwidth  | NP-EB                                       |
| L81        | NP-Bandwidth external   | NP-External bandwidth                       |
| L81        | NP-WHL-CHANNEL  | Wholeslae Channel Costs                     |
| L81        | NP-WCC-Partners   | WCC-Partners                                |
| L81        | PWCW  | Component Working Capital Wholesale         |
| L81        | NP-DEBTORS-WhIs   | NP-DEBTORS-WhIs                             |
| L81        | NP-CREDITORS-Whls   | NP-CREDITORS-Whls                           |
| L81        | RETB  | Retail Buisness                             |
| L81        | NP-RETC   | Retail Costs                                |
| L81        | NP-RCC-Cons-Cust Tech Serv  | RCC-Cons-Cust Tech Serv                     |
| L81        | NP-RCC-Cons Sales Other   | RCC-Cons Sales Eng                          |
| L81        | NP-RCC-Cons Sales Eng   | RCC-Cons Sales Eng                          |
| L81        | NP-RCC- SMB- Business Sales   | RCC- SMB- Business Sales                    |
| L81        | NP-RCC-SMB-Business Marketing   | RCC-SMB-Business Marketing                  |
| L81        | NP-RCC-SMB-Other  | RCC-SMB-Other                               |
| L81        | NP-RCC-Billing  | NP-RCC-Billing                              |
| L81        | NP-RCC-Interconnect   | NP-RCC-Interconnect                         |
| L81        | NP-Marketing  | NP-Marketing                                |
| L81        | NP-RESIDUAL   | RESIDUAL                                    |
| L81        | NP-OLA Other IS   | NP-OLA Other IS                             |
| L81        | NP-OOS BS   | NP-OOS BS                                   |
| L81        | NP-OOS IS   | NP-OOS IS                                   |
| L81        | NP-EYE BS   | NP-EYE BS                                   |
| L81        | PWCR  | Component Working Capital Retail            |
| L81        | NP-STOCK-Network Ret  | NP-STOCK-Network Ret                        |
|            | NP-STOCK-Cons   | NP-STOCK-Cons                               |
| L81        |   |   |
| L81<br>L81 | NP-DEBTORS-Bus  | NP-DEBTORS-Bus                              |
|            | AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO | NP-DEBTORS-Bus<br>NP-DEBTORS-Cons           |

## Annex 5: RFS Wholesale & Retail Products

| 91       | All Areas  | All Areas   |
|----------|--|---|
| 91       | HEY<br>OLA   | HEY Segment<br>OLA  |
| 91       | WHLP   | Wholesale Products  |
| 91<br>91 | M1<br>WP-Lines-Res-Conn  | Analogue Exchange Line Services Wholesale Residential Lines-Connection                                |
| 91       | WP-Lines-Res-Rent  | Wholesale Residential Lines-Rental  |
| 91<br>91 | WP-Lines-Bus-Conn<br>WP-Lines-Bus-Rent                                 | Wholesale Business Lines-Connection Wholesale Business Lines-Rental                                   |
| 91       | M2<br>WP-ISDN2-Res-Conn  | ISDN 2 Exchange Line Services Wholesale Residential Lines-ISDN 2 Connection                           |
| 91<br>91 | WP-ISDN2-Res-Rent  | Wholesale Residential Lines-ISDN 2 Rental   |
| 91<br>91 | WP-ISDN2-Bus-Conn<br>WP-ISDN2-Bus-Rent                                 | Wholesale Business ISDN 2 Lines-Connection Wholesale Business ISDN 2 Lines-Rental                     |
| 91       | M3   | ISDN 30 Exchange Line Services  |
| 91<br>91 | WP-ISDN30-Bus-Conn<br>WP-ISDN30-Bus-Rent                               | Wholesale Business ISDN 30 Lines-Connection Wholesale Business ISDN 30 Lines-Rental                   |
| 91       | M4   | Call Origination on Fixed Public Narrowband Networks  |
| 91<br>91 | WP-CO-Geo<br>WP-CO-Loc   | Wholesale Call Origination-Geographic Wholesale Call Origination-Local                                |
| 91<br>91 | WP-CO-FtM<br>WP-CO-Intl  | Wholesale Call Origination-Fixed to Mobile Wholesale Call Origination-International                   |
| 91       | WP-CO-Inti<br>WP-CO-Prs  | Wholesale Call Origination-LCFA/NCFA/PRS  |
| 91<br>91 | WP-CO-OpAs<br>WP-CO-Karoo  | Wholesale Call Origination-Operator Assistance Wholesale Call Origination-Karoo Metered & Unmetered   |
| 91       | WP-CO-Emer   | Wholesale Call Origination-Emergency  |
| 91<br>91 | WP-CO-Pay<br>WP-CO-EYE   | Wholesale Call Origination-Payphone Wholesale Call Origination-EYE                                    |
| 91       | WP-CO-Data   | Wholesale Call Origination-Data   |
| 91<br>91 | WP-CO-ISDND<br>M5  | Wholesale Call Origination-ISDN Data Asymmetric Broadband Origination                                 |
| 91       | WP-DSL-Conn  | Wholesale DSL Connection  |
| 91<br>91 | WP-DSL-Rent<br>WP-FibreBB-Res-Conn                                     | Wholesale DSL Rental Wholesale Fibre Residential Broadband-Connection                                 |
| 91       | WP-FibreBB-Res-Rent  | Wholesale Fibre Residential Broadband-Rental  |
| 91       | WP-FibreBB-Bus-Conn<br>WP-FibreBB-Bus-Rent                             | Wholesale Fibre Business Broadband-Connection Wholesale Fibre Business Broadband-Rental               |
| 91       | M6   | TISBO<8Mbs  |
| 91       | WP-TISBO-<8Mbs-Conn<br>WP-TISBO-0-1Mb-Rent                             | Wholes ale TISBO <8Mbs-Connection Wholes ale TISBO Rental 0-1Mbs-Rental                               |
| 91       | WP-TISBO-1-8Mbs-Rent   | Wholesale TISBO Rental 1-8 Mbs-Rental   |
| 91       | M7<br>WP-TISBO->8Mbs-Conn  | TISBO>8Mbs<br>Wholes ale TISBO >8Mbs-Connection   |
| 91       | WP-TISBO-8-100Mbs-Rent   | Wholesale TISBO Rental 8-100Mbs-Rental  |
| 91       | M8<br>WP-CISBO-Conn  | Wholesale CISBO All bandwidths-Connection   |
| 91       | WP-CISBO-EAS-0-10Mb-Rent   | Wholesale CISBO Ethernet Assured 0-10Mbs-Rental   |
| 91<br>91 | WP-CISBO-EAS-10-100Mb-Rent<br>WP-CISBO-EAS-0.1-1Gb-Rent                | Wholes ale CISBO Ethernet Assured 10-100Mbs-Rental Wholes ale CISBO Ethernet Assured 0.1-1Gbs-Rental  |
| 91       | WP-CISBO-EAS-1-10Gb-Rent   | Wholesale CISBO Ethernet Assured 1-10Gbs-Rental   |
| 91<br>91 | WP-CISBO-ECAS-0-10Mb-Rent<br>WP-CISBO-ECAS-10-100Mb-Rent               | Wholes ale CISBO ECAS 0-10 Mbs-Rental Wholes ale CISBO ECAS 10-100 Mbs-Rental                         |
| 91       | WP-CISBO-ECAS-0.1-1Gb-Rent   | Wholesale CISBO ECAS 0,1-1Gbs-Rental  |
| 91<br>91 | WP-CISBO-ECAS-1-10Gb-Rent<br>WP-CISBO-EDAS-0-10Mb-Rent                 | Wholesale CISBO ECAS 1-10Gbs-Rental<br>Wholesale CISBO EDAS 0-10Mbs-Rental                            |
| 91       | WP-CISBO-EDAS-10-100Mb-Rent  | Wholesale CISBO EDAS 10-100Mbs-Rental   |
| 91<br>91 | WP-CISBO-EDAS-0.1-1Gb-Rent<br>WP-CISBO-EDAS-1-10Gb-Rent                | Wholesale CISBO EDAS 0.1-1Gbs-Rental Wholesale CISBO EDAS 1-10Gbs-Rental                              |
| 91       | WP-CISBO-Etherline-0-10Mb-Rent   | Wholesale CISBO Etherline 0-10Mbs-Rental  |
| 91       | WP-CISBO-Etherline-10-100Mb-Rent<br>WP-CISBO-Etherline-0.1-1Gb-Rent    | Wholesale CISBO Etherline 10-100Mbs-Rental Wholesale CISBO Etherline 0.1-1Gbs-Rental                  |
| 91<br>91 | WP-CISBO-Etherline-I 0-10Mb-Rent<br>WP-CISBO-Etherline-I-10-100Mb-Rent | Wholesale CISBO Etherline Internet 0-10Mbs-Rental Wholesale CISBO Etherline Internet 10-100Mbs-Rental |
| 91       | WP-CISBO-Gigaline 0.1-1Gb Rent   | Wholesale CISBO Gigaline 0.1-1Gb-Rental   |
| 91       | WP-CISBO-VPLS-0-10Mb-Rent<br>WP-CISBO-VPLS-10-100Mb-Rent               | Wholesale CISBO VPLS 0-10Mbs-Rental Wholesale CISBO VPLS 10-100Mbs-Rental                             |
| 1        | WP-CISBO-VPLS-0.1-1Gb-Rent   | Wholesale CISBO VPLS 0.0-1 Gbs-Rental   |
| 91       | WP-CISBO-CCTV-Rent<br>M9   | Wholesale CISBO CCTV-Rental  Call Termination   |
| 91       | WP-CT  | Call Termination  |
| 91       | M10<br>WP-Centrex-Rent   | Wholes ale - Centrex Rental   |
| 91       | WP-Centrex-Conn  | Wholesale - Centrx Connection   |
| 91       | M11<br>WP-IP Line Central 100Mb  | IP Une<br>WP-IP Une Central 100Mb   |
| 1        | WP-IP Line Customer rental RETP  | WP-IP Line Customer rental Retail Products  |
| 1        | RP-UNES  | Retail Exchange Unes  |
| 91       | RP-Unes-Res-Conn<br>RP-Unes-Res-Rent                                   | Retail Residential Unes-Connection Retail Residential Unes-Rental                                     |
| 91       | RP-ISDN2-Res-Conn  | Retail Residantial ISDN2-Conn   |
| 1        | RP-ISDN2-Res-Rent<br>RP-Unes-Bus-Conn                                  | Retail Residantial ISDN2-Rental<br>Retail Business Lines-Connection                                   |
| 91       | RP-Unes-Bus-Rent   | Retail Business Lines-Rental  |
| 91       | RP-ISDN2-Bus-Conn<br>RP-ISDN2-Bus-Rent                                 | Retail Business ISDN 2-Connection Retail Business ISDN 2-Rental                                       |
| 91       | RP-ISDN30-Bus-Conn   | Retail Business ISDN 30-Connection  |
| 91       | RP-ISDN30-Bus-Rent<br>RP-CO  | Retail Business ISDN 30-Rental Retail Call Origination  |
| 91       | RP-CO-Geo  | Retail Call Origination-Geographic  |
| 91<br>91 | RP-CO-Loc<br>RP-CO-FtM   | Retail Call Origination-Local Retail Call Origination-Fixed to Mobile                                 |
| 91       | RP-CO-Intl   | Retail Call Origination-International   |
| 91       | RP-CO-Prs<br>RP-CO-Karoo   | Retail Call Origination-LCFA/NCFA/PRS Retail Call Origination-Karoo Metered & Unmetered               |
| 91       | RP-CO-Emer   | Retail Call Origination-Emergency (No retail element)   |
| 91       | RP-CO-Pay<br>RP-CO-EYE   | Retail Call Origination-Payphone<br>Retail Call Origination-EYE                                       |
| 91       | RP-CO-Data<br>RP-CO-ISDN-Data  | Retail Call Origination-Data<br>Retail Call Origination-ISDN Data Calls                               |
| 91       | RP-Broadband   | Retail Broadband  |
| 1        | RP-DSL-Conn  | Retail DSL Connection   |
| 1        | RP-DSL-Rent<br>RP-FibreBB-Res-Conn                                     | Retail DSL Rental Retail Fibre Residential Broadband-Connection                                       |
| 1        | RP-FibreBB-Res-Rent  | Retail Fibre Residential Broadband-Rental   |
| 1        | RP-FibreBB-Bus-Conn<br>RP-FibreBB-Bus-Rent                             | Retail Fibre Business Broadband-Connection<br>Retail Fibre Business Broadband-Rental                  |
| 1        | RP-TISBO <8MB<br>RP-TISBO-<8Mbs-Conn                                   | Retail TISBO<8Mbs   |
| 1        | RP-TISBO-0-1Mb-Rent  | Retail TISBO <8Mbs-Connection Retail TISBO Rental 0-1Mbs-Rental                                       |
| 1        | RP-TISBO-1-8 Mbs - Rent<br>RP-TISBO > 8 MB                             | Retail TISBO Rental 1-8Mbs-Rental Retail TISBO>8Mbs   |
| 1        | RP-TISBO->8Mbs-Conn  | Retail TISBO >8Mbs-Connection   |
| 91       | RP-TISBO-8-100Mbs-Rent RP-CISBO  | Retail TISBO Rental 8-100Mbs-Rental Retail CISBO  |
| 91       | RP-CISBO-Conn  | Retail CISBO All bandwidths-Connection  |
| 91       | RP-CISBO-EAS-0-10Mb-Rent<br>RP-CISBO-EAS-10-100Mb-Rent                 | Retail CISBO Ethernet Assured 0-10Mbs-Rental<br>Retail CISBO Ethernet Assured 10-100Mbs-Rental        |
| 91       | RP-CISBO-EAS-0.1-1Gb-Rent  | Retail CISBO Ethernet Assured 0.1-1Gbs-Rental   |
| 91       | RP-CISBO-EAS-1-10Gb-Rent   | Retail CISBO Ethernet Assured 1-10Gbs-Rental  |
| 91       | RP-CISBO-Etherline-0-10Mb-Rent<br>RP-CISBO-Etherline-10-100Mb-Rent     | Retail CISBO Etherline 0-10Mbs-Rental Retail CISBO Etherline 10-100Mbs-Rental                         |
| 91       | RP-CISBO-Etherline-0.1-1Gb-Rent  | Retail CISBO Etherline 0.1-1Gbs-Rental  |
| 91       | RP-CISBO-Etherline-I 0-10Mb-Rent<br>RP-CISBO-Etherline-I-10-100Mb-Rent | Retail CISBO Etherline Internet 0-10Mbs-Retail Retail CISBO Etherline Internet 10-100Mbs-Rental       |
| 91       | RP-CISBO-Gigaline 0.1-1Gb Rent   | Retail CISBO Gigaline 0.1-1Gbs-Rental   |
| 91       | RP-CISBO-VPLS-0-10Mb-Rent<br>RP-CISBO-VPLS-10-100Mb-Rent               | Retail CISBO VPLS-10Mbs-Rental Retail CISBO VPLS-100Mbs-Rental  |
| 91       |  | Retail CISBO VPLS-1Gbs-Rental   |

# **Annex 6 Routing Factors**

| 0 |   |   |   | NP-CISBO-10-100Mb-Rent |    |     |   |   |   |    |   |   |   |   | - |   |   |   | _ | NP-Lines-Bus-Rent | NP-Lines-Bus-Conn | NP-Lines-Res-Conn<br>NP-Lines-Res-Rent |  |
|---|---|---|---|------------------------|----|-----|---|---|---|----|---|---|---|---|---|---|---|---|---|-------------------|-------------------|--|--|
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   | _                                      | nno-seR-seni-qR  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   | _                                      | FP-Lines-Rent  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   | _                 |  | nno-su8-seniJ-9A   |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   | _                 |                   |  | FP-Lines-Bus-Rent  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   | _ |                   |                   |  | RP-ISDN2-Res-Conn  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   | _ |                   |                   |  | RP-ISDN2-Res-Rent  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   | _ |   |                   |                   |  | RP-ISDNZ-Bus-Conn  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   | _ |   |   |                   |                   |  | RP-ISDN2-Bus-Rent  |
|   |   |   |   | +                      |    |     |   |   |   |    |   |   |   |   |   | 0 |   |   |   |                   |                   |  | RP-ISDN30-Bus-Conn   |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   | 0 |   |   |   |   |                   |                   |  | RP-ISDN30-Bus-Rent   |
|   |   |   | 4 |                        |    |     |   |   |   |    |   |   |   | _ |   |   |   |   |   |                   |                   |  | RP-DSL-Conn  |
|   |   |   |   |                        |    | 11  |   |   |   |    |   |   | _ |   |   |   |   |   |   |                   |                   |  | RP-DSL-Rent  |
|   |   |   |   |                        | L  |     |   |   |   |    |   | _ |   |   |   |   |   |   |   |                   |                   |  | RP-FibreBB-Res-Conn  |
| 0 |   |   |   |                        |    |     |   |   |   |    | _ |   |   |   |   |   |   |   |   |                   |                   |  | RP-FibreBB-Res-Rent  |
| 0 |   |   |   |                        |    | L   |   |   |   | _  |   |   |   |   |   |   |   |   |   | L                 |                   |  | RP-FibreBB-Bus-Conn  |
|   |   |   |   |                        |    |     |   |   | _ |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-FibreBB-Bus-Rent  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   | _                 |  | RP-Centrex-Conn  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   | _                 |                   |  | RP-Centrex-Rent  |
|   |   |   |   |                        |    |     |   | _ |   |    |   |   |   |   |   |   |   |   |   | _                 |                   |  | nno-sdM8>-OBSIT-9A   |
|   |   |   |   |                        |    |     | _ |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | JneA-dM1-0-082IT-9A  |
|   |   |   |   | 1                      |    | _   |   |   |   | 1  |   |   |   |   |   |   |   |   |   | Ļ                 |                   |  | IneA-adM8-1-OB2IT-9A   |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | nnoO-sdM8<-OBSIT-9A  |
|   |   |   |   |                        | j. | _   |   |   |   |    |   |   |   |   |   |   |   |   |   | L                 |                   |  | RP-TISBO-8-100Mbs-Rent   |
|   |   |   |   |                        | _  |     |   |   |   |    |   |   |   |   |   |   |   |   |   | Ļ                 | (4040-11          |  | RP-CISBO-Conn  |
|   | L |   | 1 | _                      |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   | L                 |                   |  | RP-CISBO-EAS-0-10Mb-Rent   |
|   |   |   |   | _                      |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-EAS-10-100Mb-Rent   |
|   |   |   | _ |                        |    |     |   |   | 4 |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-EAS-0.1-1Gb-Rent  |
| + |   | _ |   | 4                      | 1. |     |   |   |   |    |   | _ |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-EAS-1-10Gb-Rent   |
|   | Ш |   | 1 | 1                      |    | 1   |   |   |   |    |   | 4 | _ |   |   |   |   |   |   |                   |                   |  | RP-CISBO-Etherline-0-10Mb-Rent   |
|   |   |   |   | _                      |    | ļ., | - | - |   |    | - | - | _ |   |   |   |   |   |   | L                 |                   |  | Rent   |
| - |   | - | _ |                        | 1  | ļ., |   |   |   |    | - | _ |   |   | _ |   |   |   |   | 1                 |                   |  | RP-CISBO-Etherline-0.1-1Gb-Rent  |
| à |   |   |   | -                      |    |     |   |   |   |    | _ | - |   |   |   |   |   |   |   | 1                 |                   |  | P-CISBO-Etherline-I 0-10Mb-Rent  |
| Ŝ |   | - | _ | 4                      |    |     |   |   | - |    | - |   |   | j |   |   |   |   |   | -                 |                   |  | RP-CISBO-Gigaline 0.1-1Gb Rent<br>RP-CISBO-Etherline-I-10-100Mb-<br>Rent<br>Rent |
|   |   |   |   | L                      |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-VPLS-0-10Mb-Rent  |
|   |   |   |   | _                      |    |     |   |   |   | I  |   | Ī |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-VPLS-10-100Mb-Rent  |
|   |   |   | _ | J.                     |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CISBO-VPLS-0.1-1Gb-Rent   |
|   |   |   |   |                        |    | 1   |   |   |   |    |   |   |   |   |   |   |   | j |   |                   |                   |  | RP-CISBO-CCTV-Rent   |
|   | _ |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | ∞9-CO-G€0  |
| _ |   |   |   |                        |    | L   |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | 20-Loc-RP-CO-Loc   |
|   | _ |   |   |                        |    |     |   |   |   |    |   | J |   |   |   |   |   |   |   |                   |                   |  | RP-CO-FtM  |
|   | _ |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-Intl   |
|   | _ |   |   |                        |    |     |   |   |   |    | I |   |   |   |   |   |   |   |   |                   |                   |  | a9-00-9A   |
|   | _ |   |   |                        |    |     |   |   | 1 |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-Karoo  |
|   | _ |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-Emer   |
|   | _ |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-Pay  |
|   | _ |   |   |                        |    |     |   |   |   |    |   | I |   |   |   |   |   |   |   |                   |                   |  | RP-CO-ISDN-Data  |
|   | _ |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-EYE  |
|   | _ |   |   | _                      |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-IP Line Central 100Mb   |
|   |   |   |   |                        |    |     |   |   |   |    |   |   | _ |   |   |   |   |   |   |                   |                   |  | RP-IP Line Customer rental   |
|   |   |   |   |                        |    |     |   |   | Ī |    |   |   |   |   |   |   |   |   |   |                   |                   |  | RP-CO-Data   |
|   |   |   |   |                        |    |     |   |   |   | I. |   |   |   |   |   |   |   |   |   |                   |                   | _                                      | RP-Payphones-Rent  |
|   |   |   |   |                        | 1  |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   | _                                      | nnoO-seA-seniJ-9W  |
|   |   |   |   |                        |    |     |   |   |   | 4  |   |   |   |   |   |   |   |   |   |                   |                   |  | WP-Lines-Res-Rent  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   | _                 |  | nnoO-suB-səniJ-9W  |
|   |   |   |   |                        |    |     |   |   |   |    |   |   |   |   |   |   |   |   |   |                   |                   |  | JneA-suB-sentJ-9W  |

| NP-CO-Loga | SISBO                                    | ISBO<br>ISBO                                | ISBC                               | ISBC                 | ISBC                             | ibref               | ibreE               | NP-FibreBB-F        | NP-DSL-Conn | DNS                | SNO3               | SDN2              | DNZ               | ÖNZ               | nes-              | nes-                                   | nes-              |                                    |
|------------|--|---|------------------------------------|----------------------|----------------------------------|---------------------|---------------------|---------------------|-------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|--|-------------------|------------------------------------|
| NP-CO-HEY  | 0-1-1<br>emin                            |   | NP-CISBO-Conn                      | 100                  | NP-Fibrebb-Bus-<br>NP-TISBO-Conn | 38-8                | 3B-R                | SB-R                | onn         | 30-Bu              | 30-Bu              | 2-Bus             | -Bus              | -Res              | Bus-              | NP-Lines-Res-Rent<br>NP-Lines-Bus-Conr | NP-Lines-Res-Conn |                                    |
|            | NP-CISBO-1-10Gb-Rent NP-Call Termination | 100N  | NP-CISBO-1-8Mbs-Rent NP-CISBO-Conn | NP-TISBO-0-1Mbs-Rent | NP-TISBO-Conn                    | NP-FibreBB-Bus-Conn | NP-FibreBB-Res-Rent | NP-FibreBB-Res-Conn |             | NP-ISDN30-Bus-Rent | NP-ISDN30-Bus-Conn | NP-ISDN2-Bus-Rent | NP-ISDN2-Bus-Conn | NP-ISDN2-Res-Conn | NP-Lines-Bus-Rent | NP-Lines-Res-Rent<br>NP-Lines-Bus-Conn | Conn              |                                    |
|            | NP-CISBO-1-10Gb-Rent NP-Call Termination | NP-CISBO-0-10Mb-Rent NP-CISBO-10-100Mb-Rent | Rent                               | Rent                 | ant.                             | i ii                | ent                 | Ĭ                   |             | 2                  | 3                  | -                 | 3 (               |                   |                   |  |                   |                                    |
|            |  | 2   |                                    |                      |                                  |                     |                     | -                   |             |                    |                    |                   |                   |                   |                   |  |                   | WP-ISDN2-ResPent                   |
|            |  |   |                                    |                      | -                                | -                   | - 10                |                     |             |                    |                    |                   | +                 |                   | -                 |  |                   | WP-ISDNZ-Bus-Conn                  |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   | _                 | -                 |                   |  |                   | WP-ISDN2-Bus-Rent                  |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             | +                  |                    | _                 | -                 | 4                 |                   |  |                   | WP-ISDN30-Bus-Conn                 |
|            |  |   |                                    |                      |                                  | -                   | -                   | 4                   |             |                    | 0                  |                   | -                 | ÷                 |                   | -                                      |                   | WP-ISDN30-Bus-Rent                 |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             | 0                  |                    | -                 |                   | Ļ                 | -                 |  |                   | WP-DSL-Conn                        |
|            |  |   |                                    |                      |                                  |                     | -                   |                     | _           |                    | -                  |                   |                   | -                 |                   |  | -                 |                                    |
|            |  |   |                                    |                      |                                  |                     |                     | _                   |             |                    | Н                  |                   | -                 | +                 | -                 | -                                      |                   | WP-DSL-Rent                        |
| -          |  |   |                                    |                      |                                  |                     | -                   | _                   |             |                    |                    |                   | 4                 |                   | -                 |  |                   | nnoO-seA-88endiT-9W                |
|            |  |   |                                    |                      |                                  |                     | _                   |                     |             |                    |                    |                   |                   |                   | -                 |  |                   | WP-FibreBB-Res-Rent                |
|            |  |   |                                    |                      |                                  | _                   |                     | -                   | _           | Ш                  |                    |                   |                   | Ļ                 | 4                 |  |                   | MP-FibreBB-Bus-Conn                |
|            |  |   |                                    | -                    |                                  | ٠.                  |                     |                     |             |                    |                    |                   |                   | -                 |                   | -                                      |                   | MP-FibreBB-Bus-Rent                |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   | 1                 | - 1               | _                                      |                   | nno-Xentre-Conn                    |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   | _                 |  |                   | WP-Centrex-Rent                    |
|            |  |   |                                    |                      | _                                |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | MP-TISBO-<8Mbs-Conn                |
|            |  |   |                                    | _                    |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | WP-TISBO-0-1Mb-Rent                |
|            |  |   |                                    | T                    |                                  |                     |                     |                     |             | H                  |                    |                   |                   |                   |                   | 1                                      |                   | JneA-sdM8-1-082IT-9W               |
|            |  |   |                                    |                      | _                                |                     |                     | T                   |             |                    |                    |                   |                   |                   |                   |  |                   | MP-TISBO->8Mbs-Conn                |
| -          |  |   |                                    |                      | -                                |                     |                     |                     |             |                    |                    |                   |                   | 1                 | ij                | -                                      | -                 | WP-TISBO-8-100Mbs-Rent             |
|            |  |   |                                    |                      |                                  | of the con-         |                     | - ilo               |             | Г                  |                    |                   |                   |                   |                   |  | it                | WP-CISBO-Conn                      |
|            | -  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   | -                 | Ť                 |                   |  |                   | WP-CISBO-EAS-0-10Mb-Rent           |
| -          |  |   | -                                  | +                    |                                  |                     |                     |                     |             | +                  |                    | -                 | -                 | 777               |                   |  |                   | WP-CISBO-EAS-10-100Mb-Rent         |
|            |  |   |                                    | 1                    |                                  | -                   | -                   |                     |             | H                  |                    |                   | +                 | -                 |                   | +                                      | -                 | WP-CISBO-EAS-0.1-1Gb-Rent          |
|            |  | -   |                                    |                      | -                                |                     |                     |                     | -           | H                  |                    | -                 |                   | ì                 |                   | +                                      |                   | WP-CISBO-EAS-1-10Gb-Rent           |
|            |  | -   |                                    | +-                   | -                                |                     | -                   | -                   |             | Н                  |                    | -                 | ÷                 | +-                |                   | ÷                                      |                   | WP-CISBO-ECAS-0-10Mb-Rent          |
| -          |  |   |                                    | -                    |                                  | -                   |                     | +                   | -           | -                  | -                  |                   | +                 | +                 |                   | +                                      | 1                 | WP-CISBO-ECAS-10-100Mb-Rent        |
|            |  | _   | -                                  |                      |                                  |                     |                     | -                   | -           | H                  |                    | -                 |                   | +-                | -                 | -                                      | -                 | WP-CISBO-ECAS-0.1-1Gb-Rent         |
|            |  | _   | -                                  | -                    |                                  | -                   | -                   | +                   |             | -                  |                    |                   | -                 | -                 |                   | 4                                      | -                 |                                    |
|            |  |   | 4                                  | 1                    |                                  |                     | _                   |                     |             | -                  |                    |                   |                   | +                 |                   | +                                      |                   | WP-CISBO-ECAS-1-10Gb-Rent          |
|            |  | _   |                                    |                      |                                  |                     |                     | 4                   | _           | -                  |                    |                   | 4                 |                   |                   | 4                                      | -                 | WP-CISBO-EDAS-0-10Mb-Rent          |
|            |  | _   |                                    |                      |                                  |                     |                     |                     |             | L                  |                    |                   |                   |                   |                   | 4                                      | 1                 | WP-CISBO-EDAS-10-100Mb-Rent        |
|            |  | _   |                                    | -                    |                                  |                     |                     |                     |             |                    |                    |                   |                   | Ĺ                 |                   |  |                   | WP-CISBO-EDAS-0.1-1Gb-Rent         |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   | -                 |                   |                   |  |                   | WP-CISBO-EDAS-1-10Gb-Rent          |
|            |  | _   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   | 1                 |                   |  |                   | WP-CISBO-Etherline-0-10Mb-Rent     |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             | ĺ.                 |                    |                   |                   |                   |                   |  |                   | WP-CISBO-Etherline-10-100Mb-Rent   |
|            |  | , –   |                                    | 1                    |                                  |                     |                     |                     |             | П                  |                    |                   |                   |                   |                   |  | l)                | WP-CISBO-Etherline-0.1-1Gb-Rent    |
|            | -  |   | -                                  |                      | -trootige -                      |                     |                     | 7                   |             |                    |                    |                   |                   | T                 |                   |  |                   | WP-CISBO-Etherline-I 0-10Mb-Rent   |
|            |  | <del>-</del>                                |                                    | T                    | wis                              |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | NP-CISBO-Etherline-I-10-100Mb-Rent |
|            |  | 4   |                                    | -                    | -                                | +                   |                     |                     | _           | -                  |                    | _                 | 4                 | -                 |                   | 1                                      | -                 | May dol-1 a simplic odolo "        |
|            | l  | _   | LĹ                                 | Ļ                    |                                  | 11                  |                     |                     |             |                    |                    |                   | -                 |                   | 4                 | 1                                      | -                 | WP-CISBO-Gigaline 0.1-1Gb Rent     |
|            |  | _   |                                    | -                    |                                  |                     |                     |                     |             |                    | -                  | _                 | -                 | -                 |                   | -1                                     |                   | WP-CISBO-VPLS-0-10Mb-Rent          |
|            |  |   |                                    |                      |                                  |                     |                     | ×                   |             |                    |                    |                   | _                 | į.                |                   | _                                      |                   | WP-CISBO-VPLS-10-100Mb-Rent        |
|            |  | _   |                                    |                      | i                                | 4                   |                     | į                   | -           |                    |                    |                   |                   |                   |                   |  |                   | WP-CISBO-VPLS-0.1-1Gb-Rent         |
|            |  | _   |                                    |                      | ì                                |                     |                     |                     |             |                    |                    |                   |                   | 1                 |                   |  |                   | WP-CISBO-CCTV-Rent                 |
|            | _  |   |                                    | L                    |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | TD-9W                              |
| _          |  |   |                                    | Π                    |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | WP-CO-Geo                          |
| _          |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   | I                                      |                   | WP-CO-Loc                          |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | WP-CO-FtM                          |
| -1-        |  | -   |                                    | +                    |                                  |                     |                     | 7                   |             | Г                  |                    |                   |                   | T                 |                   |  |                   | Mb-co-luft                         |
| -          | -  | -   | -                                  | -                    |                                  | -                   |                     |                     |             |                    |                    |                   |                   | T                 |                   |  |                   | WP-CO-Pra                          |
| -          | -  |   | -                                  | t                    | -                                |                     |                     | Ť                   |             | t                  | -                  |                   |                   | 1                 |                   | 1                                      | Ţ,                | Mb-co-obya                         |
|            |  | -   |                                    |                      |                                  | -                   | -                   |                     |             |                    | П                  |                   | -                 |                   |                   |  |                   | WP-CO-Karoo                        |
| _          | -  | -   | -                                  | -                    | +                                |                     | -                   | -4-                 |             | +                  |                    |                   |                   | +                 |                   | -                                      | +                 | WP-CO-Emer                         |
| _          | -  | +   | -                                  | -                    |                                  | -                   |                     |                     |             | ÷                  |                    | -                 |                   | +                 |                   | +                                      | - Dance           | WP-CO-Pay                          |
|            | -  |   | ÷                                  | +                    |                                  | -                   |                     |                     |             | H                  | H                  | -                 | -                 |                   |                   |  | +                 | MP-CO-ISDND                        |
| _          |  | -   |                                    |                      |                                  |                     | -                   |                     |             | H                  | -                  |                   |                   | -                 | -                 |  | -                 |                                    |
|            |  | _   | 1                                  | 1                    |                                  |                     | -                   |                     |             | 1                  | e<br>Day           |                   | -                 | -                 | -                 | -                                      | -                 | WP-IP Line Central 100Mb           |
|            | L  |   |                                    |                      |                                  |                     |                     | -                   |             | _                  |                    |                   | 4                 | -                 |                   |  | -                 | WP-IP Line Customer rental         |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    | -                  |                   |                   |                   | -                 | -                                      |                   | RP-EYE Res Line Rent               |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   | L                 |                   | 4                                      | -                 | RP-EYE ADSL Rent                   |
|            |  |   |                                    |                      |                                  |                     |                     |                     |             |                    |                    |                   |                   |                   |                   |  |                   | RP-EYE Res Line Conn               |

