

---

**Record Keeping Rules  
for the Telecommunications Industry**

---

**Australian Competition and Consumer Commission**

**December 1999**

# Table Of Contents

	<b>Page</b>
<b>Executive Summary</b>	<b>4</b>
<b>1 Context</b>	<b>5</b>
1.1 Background	
1.2 Role of the ACCC	
1.3 Competition and Market Analysis	
1.4 Information Requirements	
1.5 Conclusion	
<b>2 Framework for the Record Keeping Rules</b>	<b>16</b>
2.1 Proposed Evolution of RKR	
2.2 Augmentation of Information Provided by Recommended Solution	
2.3 Recommended Accounting Separation Architecture	
2.4 Descriptions of Services	
2.5 Ancillary Reports	
<b>3 Reporting Requirements</b>	<b>34</b>
3.1 Reporting Cycle	
3.2 Capital Adjusted Profit Statements	
3.3 Capital Employed Statements	
3.4 Fixed Asset Statements	
3.5 WACC Report	
3.6 Usage Reports	
3.7 Modelled Declared Services Report	
3.8 Supplementary Segmented Services Reports	
<b>4 Examples of Output Use</b>	<b>46</b>
4.1 Determining Appropriate Access Prices	
4.2 Investigating Anti-Competitive Conduct	
4.3 Economic Depreciation	
<b>5 Technical details</b>	<b>51</b>
5.1 Allocation Principles	
5.1.1 Allocation of Revenues	
5.1.2 Allocation of Costs	
5.1.3 Allocation of Capital Employed	
5.1.4 Allocation Rules	
5.2 End User Access Adjustments	
5.3 Weighted Average Cost of Capital	
5.4 Modelling Procedure	
5.5 Segmented Services Reporting	

	<b>Page</b>
<b>6 Carrier Regulatory Accounting Procedures Manual Guidelines</b>	<b>85</b>
6.1 Background	
6.2 Level of Detail Required	
6.3 Administration	
6.4 Sample Contents Page	
6.5 Example of the Appendix B Report Format	
<b>7 Current Cost Adjustments</b>	<b>92</b>
7.1 Background	
7.2 The Main Adjustments Under Financial Capital Maintenance	
7.2.1 Revaluation of Fixed Assets	
7.2.2 Holding Gains and Shareholder Funds	
7.2.3 Other FCM Adjustments	
7.3 Calculation of Current Cost Asset Values	
7.4 Modern Equivalent Asset Valuation Issues in Telecommunications	
<b>8 Modification Process</b>	<b>99</b>
<b>9 Audit and Compliance</b>	<b>100</b>
<b>10 Implementation Plan</b>	<b>101</b>

#### **Appendices**

- Appendix 1 - Chart of Accounts
- Appendix 2 - Example of Detailed Capital Adjusted Profit Statement

## Executive Summary

The Australian Competition and Consumer Commission (ACCC) is responsible for overseeing the development of a competitive telecommunications industry within Australia. Investigating anti-competitive practices and arbitrating access price disputes are important functions within these responsibilities and the legislation recognises that appropriate information is key to discharging these duties successfully. The ACCC has the power to establish Record Keeping Rules (RKR) which define the data and information that telecommunications carriers are required to keep and report to the ACCC on an ongoing basis.

This report details a recommended reporting architecture and some key processes for capturing financial information from licensed telecommunications carriers. This information will be reported on a historical basis using fully distributed costing. Since this is only a proxy for the forward looking, incremental economic data most appropriate for assessing anti-competitive behaviour and market prices, this document also outlines the steps the ACCC could take to further develop these RKR.

In summary, this report provides:

- A comprehensive reporting architecture specifying the services which telecommunications carriers may be required to report against
- Details of the information to be provided for each service, particularly the revenues, costs and capital associated with each service. This includes a detailed description of the financial statements required for each service, as well as a number of supplementary reports
- Principles to be applied by carriers in developing detailed allocation methodologies in compliance with the record keeping requirements
- Recommendations on reporting cycles and the process for modifying the RKR
- Guidelines for telecommunications carriers to develop their Regulatory Accounting Procedures Manuals
- Audit and compliance guidelines for ensuring the accuracy and appropriateness of the information provided to the ACCC
- An overview of the adjustments needed to convert historical costs to current costs as a further evolution of the RKR

# 1 Context

## 1.1 Background

In the early 1990s, retail and limited carrier-based competition was introduced to the Australian telecommunications market. The *Telecommunications Act* 1991 set out the functions and statutory obligations of AUSTEL for the economic and technical regulation of the industry. The Acts required AUSTEL to develop a Chart of Accounts (COA) and a Cost Allocation Manual (CAM) detailing carriers' financial reporting obligations to AUSTEL.

The objective of these provisions was to provide a stable information base to support AUSTEL's information requirements in undertaking its primary functions of promoting competition, monitoring carrier performance, reviewing prices, administering access arrangements and monitoring universal service obligation costing. The key feature of the COA/CAM architecture was a horizontal accounting separation regime, requiring each carrier to provide financial data for each of its major retail services. This information was primarily intended to assist AUSTEL in identifying cross-subsidisation between services. It has become apparent, however, that the COA/CAM suffers from a number of limitations. These include:

- There is inadequate vertical separation between upstream network services and contestable downstream activities
- Internal costs at the access level are not explicitly identified
- The information reported is historic, not forward looking
- Certain service definitions have become obsolete

The first two limitations make it difficult to compare a carrier's costs of providing services to access seekers against its cost of providing similar services to its own retail operations. It is thus difficult to detect or discourage anti-competitive price discrimination in favour of the internal carrier. The last two limitations make it difficult to develop a robust view on appropriate price ranges for services based on revenue-cost analysis, either because economic costs cannot be derived or because the cost object is inappropriately defined. This makes it difficult to detect potential price-based anti-competitive behaviour such as predatory pricing and cross-subsidisation.

Other problems with the COA/CAM included difficulties in introducing changes to the service definitions or the service architecture, and a lack of detailed specifications for carriers to report their detailed methodologies.

In 1997 the responsibility for regulating competition and resolving pricing disputes was passed to the Australian Competition and Consumer Commission (ACCC). In response to its obligation to establish a revised set of Record Keeping Rules (RKR) for carriers, the ACCC chaired a RKR Working Group, comprising industry representatives and Commission staff, that explored ways of developing a more appropriate and effective accounting separation framework than the COA/CAM procedures.

The Working Group developed a preliminary "Conceptual Model" as a starting point for developing a new accounting separation model that would overcome the existing COA/CAM's key limitations. In December 1998, the ACCC engaged Arthur Andersen to develop a detailed

architecture for a new accounting separation model and practical guidelines for the establishment of the revised RKR's.

## 1.2 Role of the ACCC

The regulatory changes of July 1997 brought competition and economic regulation of telecommunications into line with the general regulatory provisions of the *Trade Practices Act (TPA)*. This legislation gave the ACCC responsibility for regulating access to telecommunications infrastructure and for enforcing competitive safeguards in the telecommunications industry. There are two key areas of the legislation directly relevant to the ACCC's role.

### *Part XIB – Anti-Competitive Conduct*

Part XIB prohibits any carrier from engaging in anti-competitive conduct (the "competition rule"). Under section 151AJ of the Act, a carrier is said to have misused its market power if:

- It has substantial market power and has taken advantage of that power with the effect, or likely effect, of substantially lessening competition, or
- It engages in conduct which contravenes certain provisions in Part IV of the TPA

The ACCC has the power to issue a "competition notice" or directly seek injunctions in the Federal Court if it considers that a carrier has breached either of these conditions.

### *Part XIC – Guaranteeing Access to Network Services*

This part of the Act sets out how the ACCC will regulate access in telecommunications markets so as to promote the long-term interests of end users through lower prices, increased quality and greater diversity of goods and services.

One of the ACCC's key roles is the **declaration** of specific telecommunications services. The purpose of declaration is to ensure that competitors can gain access to bottleneck facilities and compete effectively. This should ultimately promote the long-term interests of end users. A provider of a declared service is obliged to make the service available to requesting access seekers on reasonable terms and conditions. These terms and conditions can be determined in three different ways:

- An **access undertaking** submitted by the access provider for approval by the ACCC
- A privately **negotiated agreement** between access provider and access seeker
- An **arbitration** by the ACCC where access seeker and provider are unable to reach a negotiated agreement

It should be noted that the Part XIC access regime applies only to declared services.

## ***Information Gathering Powers***

In administering the competition rule, the ACCC has at its disposal certain information gathering tools. These include:

- The ability to obtain tariff information (Divisions 4 and 5 of Part XIB)
- The Commission may obtain records kept by firms for their own internal uses (Section 155 of the TPA). There is a relatively low threshold to exercising this power in respect of a “designated telecommunications matter” - the Commission need only decide that the information is needed to perform its Part XIB or Part XIC functions
- The discretion to order carriers to maintain records in a specified manner and form (Section 151BU of the TPA). The development of these RKR is the subject of this report

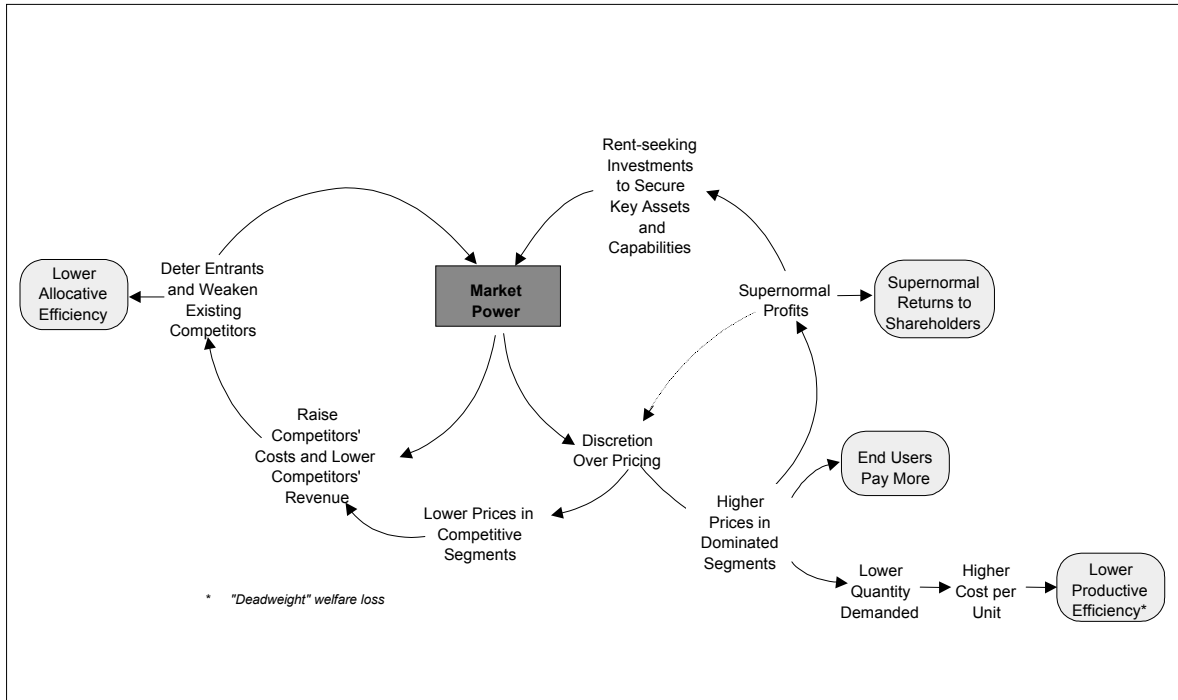
### **1.3 Competition and Market Analysis**

The first step in establishing an effective record keeping regime is to determine what types of information the ACCC requires to effectively promote competition in the telecommunications industry. It is therefore necessary to identify the key factors which may inhibit or promote the development of effective competition within the industry, and also to consider how these factors may evolve over the next few years.

#### ***Market Power***

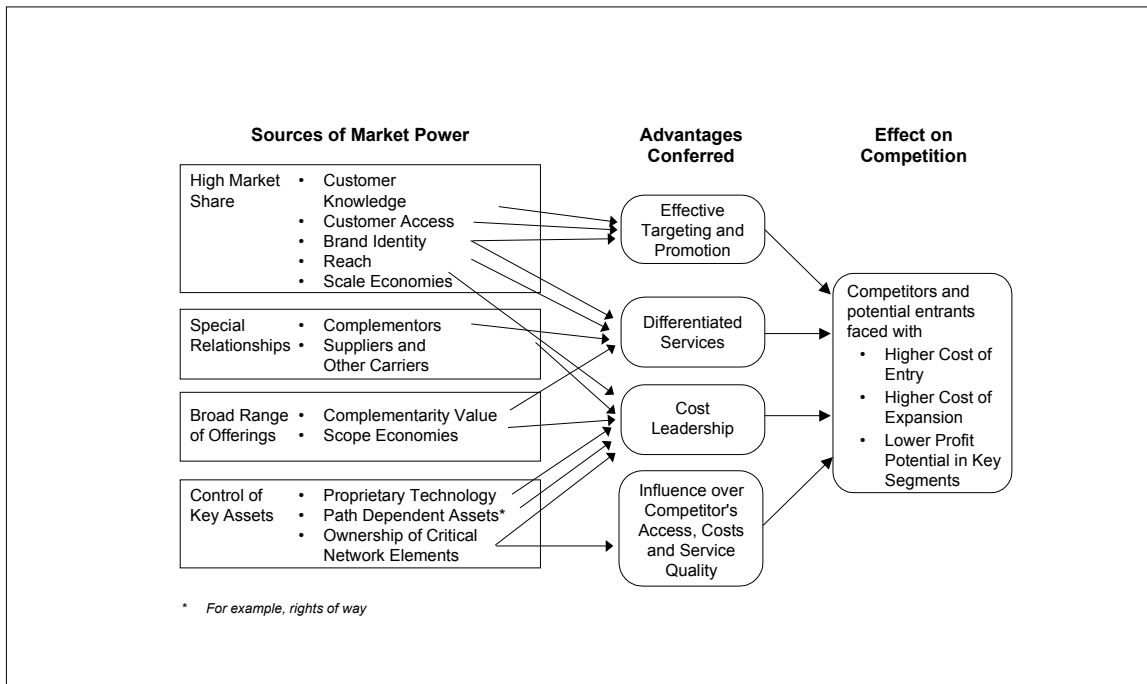
In most jurisdictions, the incumbent telecommunications carrier enjoys substantial market power in many of its business activities. Market power is a potent strategic weapon as it allows an organisation to escape the normal disciplines of competitive markets and extract supernormal profits at the expense of overall economic efficiency and, therefore, economic welfare. Figure 1 illustrates how the application of market power can sustain a reinforcing cycle allowing a short term position of advantage to be leveraged into a long-term position of dominance within an industry.

**Figure 1: Potential Effects of Market Power**



There are a number of sources of market power which, individually or collectively, can confer significant advantages over competitors in the market place. Figure 2 illustrates some of these important relationships.

**Figure 2: Competitive Advantage from Market Power**

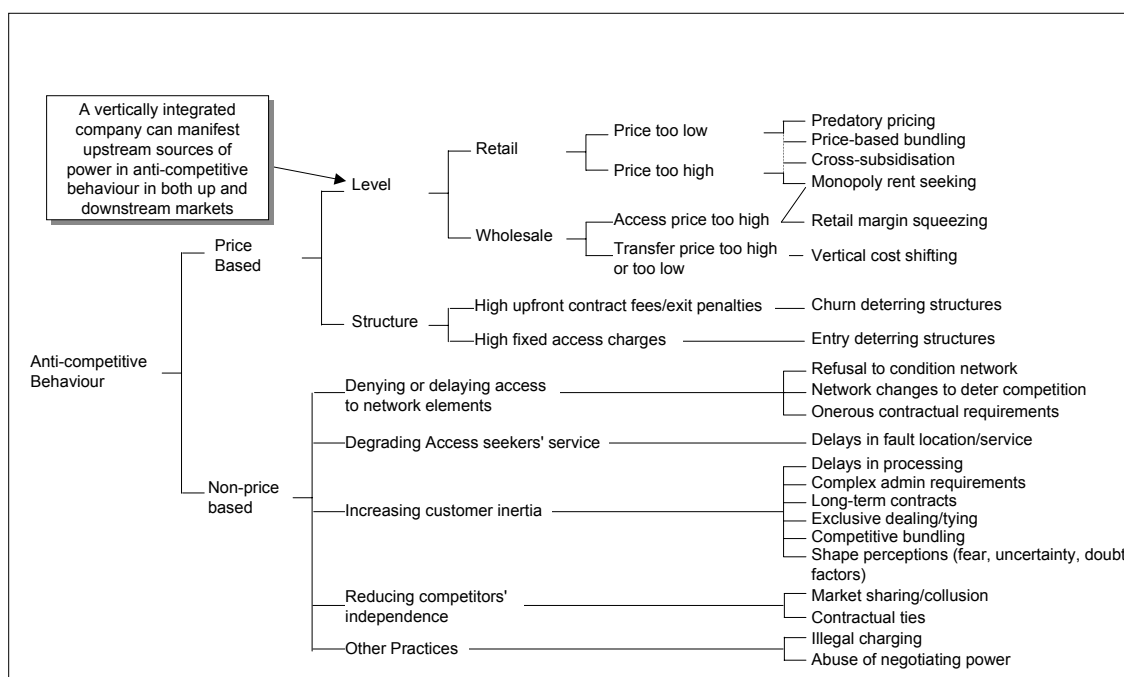


There are many ways in which market power may be abused. Organisations with market power can use a wide range of pricing tactics and other actions to influence competition. A vertically and horizontally integrated company is able to apply a strong position in one area of its business to areas where its position is weaker. Figure 3 categorises some forms of anti-



competitive behaviour that have been observed in telecommunications markets around the world.

**Figure 3: Potential Ways of Exercising of Market Power**



In many jurisdictions, including Australia, the incumbent carrier has substantial market power. Figure 4 provides a qualitative assessment of the sources of market power for a typical incumbent telecommunications carrier.

		Typical Incumbent	Comments
High Market Share	<ul style="list-style-type: none"> <li>Customer Knowledge</li> <li>Customer Access</li> <li>Brand Identity</li> <li>Reach</li> <li>Scale Economies</li> </ul>	<ul style="list-style-type: none"> <li>■ ■</li> <li>■ ■</li> <li>■ ■</li> <li>?</li> <li>■ ■ ■ ■</li> </ul>	<ul style="list-style-type: none"> <li>Varies by market, but generally incumbents have customer usage histories and much higher volumes of traffic and therefore capture more key statistics</li> <li>Have a larger customer base ... some switching barriers</li> <li>Incumbent carriers have a strong brand position, although some customers may view this negatively. Heavy advertising across many products continues to strengthen brand</li> <li>End-to-end connectivity arrangements can negate this potentially large source of power</li> <li>Significant fixed costs independent of capacity lead to economies of scale primarily in the network ... very sensitive to capacity utilisation. Most of scale economies derived from ownership of CAN</li> </ul>
Special Relationships	<ul style="list-style-type: none"> <li>Complementors</li> <li>Suppliers and Other Carriers</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>■</li> </ul>	<ul style="list-style-type: none"> <li>Most existing relationships relatively easy to replicate. In future, relationships with banks, retailers and content providers may become more important</li> <li>Buying power arising from size of investments. Global alliances becoming more important</li> </ul>
Broad Range of Offerings	<ul style="list-style-type: none"> <li>Complementarity Value</li> <li>Scope Economies</li> </ul>	<ul style="list-style-type: none"> <li>■ ■</li> <li>■ ■</li> </ul>	<ul style="list-style-type: none"> <li>Carrier's ability to bundle a broader range of products than competitors offers some advantage</li> <li>Underlying infrastructure capable of providing broad service range and therefore generating scope economies</li> </ul>
Control of Key Assets	<ul style="list-style-type: none"> <li>Proprietary Technology</li> <li>Path Dependent Assets</li> <li>Ownership of Critical Assets</li> </ul>	<ul style="list-style-type: none"> <li>■</li> <li>■ ■</li> <li>■ ■ ■ ■</li> </ul>	<ul style="list-style-type: none"> <li>Possibly have some proprietary technology</li> <li>Rules on rights of access can change causing higher costs for new entrants</li> <li>Incumbents control or have major influence over key assets, eg: <ul style="list-style-type: none"> <li>- CAN</li> <li>- Network topology</li> <li>- Operating information systems</li> </ul> </li> </ul>

\* Other players may also have market power in specific markets

**Figure 4: Strength of the Sources of Market Power for Typical Incumbent Carriers**

This distribution of market power has two important practical implications for the regulator:

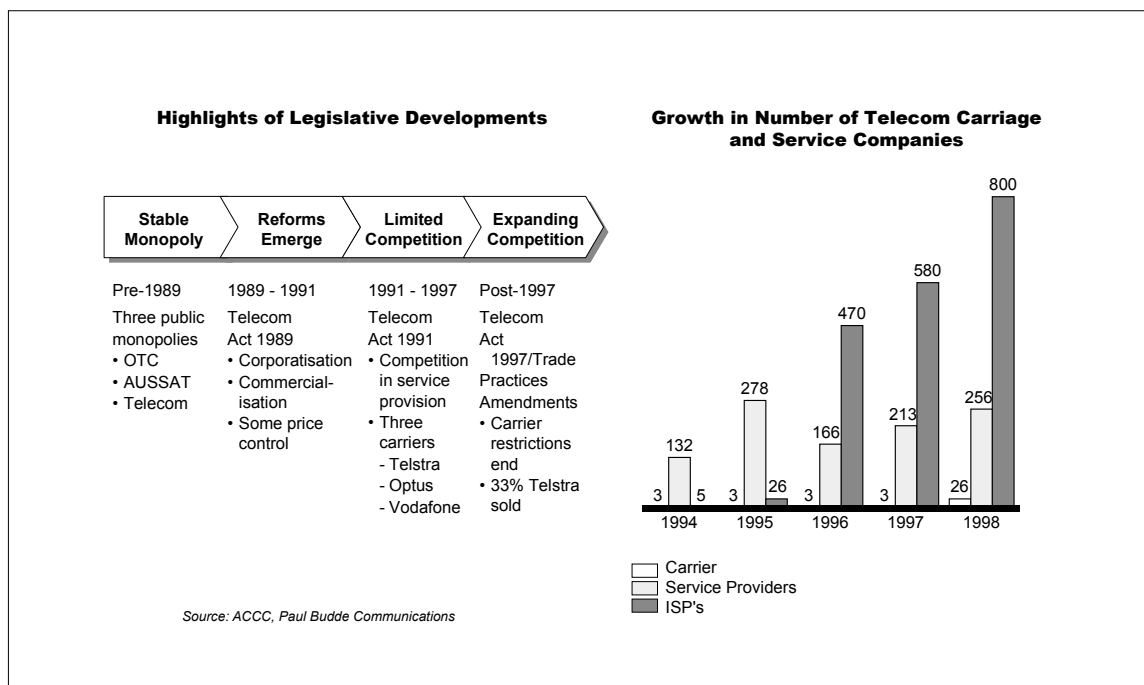
- Control of key ‘bottleneck’ assets such as the Customer Access Network is generally a key source of market power for the incumbent. Information relevant to the terms and conditions of access to such facilities is therefore likely to be of great value to the regulator
- The incumbent generally also enjoys a number of other important sources of market power, and may choose to take advantage of any of these in pursuing its objectives. The regulator should not, therefore, focus exclusively on facilitating access to bottleneck facilities: significant anticompetitive risks may also exist in other areas

### Evolution of Competition in Telecommunications

The distribution of market power in the telecommunications industry is not static. The industry is facing substantial changes in its competitive and technological landscape. These changes may affect the balance of power in certain segments, or even in the industry as a whole. It is important for the regulator to monitor these developments as they may lead to some barriers to competition being lowered and others being raised. A number of key trends are summarised below.

**Market liberalisation** has been a key driver of change over the past decade. Legislative changes have allowed new players to enter the telecommunications market and compete with what was once a government-owned monopoly. Figure 5 outlines the key legislative developments in the Australian telecommunications market, and shows the growth in the number of carriers and service providers over the last five years.

**Figure 5: Impact of Legislative Changes**



**Competition** is likely to increase in intensity as deregulation has allowed new entrants to seek to gain market position. Some will look to challenge the incumbent in a range of services and invest heavily in their own facilities. Other players will focus on specific segments by offering lower prices, leading in a new technology, offering value-added services or providing wholesale services to other telecommunications retailers.

Competition will develop not just from domestic telecommunications players but also from major international telecommunications companies who are seeking significant positions in attractive markets or are following their multi-national customers overseas. Other major infrastructure owners, such as electricity and rail organisations, may also seek to develop a telecommunications presence. These organisations can leverage the ownership of rights of way, existing internal telecommunications networks and in some cases existing customer bases, billing systems etc, to move into the fast growing communications market.

**Convergence** of the media, computer, and telecommunications is an important trend, driven by convergence in the underlying technologies and interdependencies in the demand for the services offered by each of these industries. The converged industry value chain will clearly be very different from that of the existing telecommunications industry, and the existing sources of market power could, therefore, either increase or decrease in importance. It is not clear where the balance of power will lie - content, carriage or service - or which players are best placed to thrive in the emerging industry.

**New technologies** are being developed which will impact the competitive landscape. New multiplexing techniques such as Dense Wave Division Multiplexing (DWDM) for transport over optic fibres can dramatically increase the capacity of new and existing infrastructure. Digital subscriber line (xDSL) technologies, which allow the passage of high bandwidth information over copper lines, have the potential to significantly upgrade the value of legacy infrastructure such as the CAN. New wireless technologies, such as local multi-point distribution service, multi-channel multi-point distribution services or third generation mobiles, have the potential to replace existing mobile technologies or permit economic bypass of existing fixed local loops, potentially eroding the value of current facilities.

The digitisation of voice services using Internet protocols, frame relay etc. provides a fundamentally lower cost method of providing these services and could strand some existing circuit switching infrastructure.

**Demand** patterns for telecommunications services are changing, with data and mobile services growing much faster than traditional basic access and fixed voice services. This could reduce the value of existing assets, which may not be suited to the new applications and traffic patterns, making it difficult for incumbents to leverage existing sources of market power.

The net impact of these trends on the distribution of market power is difficult to assess without a more comprehensive study. However, there is sufficient evidence to suggest that existing sources of power, such as the control of key assets, will continue to be important for some time. Furthermore, other sources of power, such as customer knowledge and economies of scope, could well be leveraged by an incumbent to establish strong positions in emerging services and technologies and, potentially, retard the development of effective competition.

## 1.4 Information Requirements

Given the current imbalances in market power evident in the telecommunications industry, and the multitude of ways in which this market power could potentially be abused, the ACCC will have to continue actively monitoring and intervening in this industry for some time. The ACCC's two key functions, assessing anti-competitive behaviour and guaranteeing access to network services, both rely on specific forms of information to be discharged successfully.

### *Investigating Anticompetitive Conduct*

The ACCC follows a three-stage process to assess whether conduct of concern is in fact anti-competitive:

1. Establish the relevant market boundaries associated with the conduct in question.
  - Identify relevant services and likely substitutes
  - Analyse price and volume records to establish cross-elasticities
  - Establish extent to which a small but significant non-transitory increase in price (SSNIP) is possible
  - Delineate relevant product, geographical, functional and time boundaries of the market
2. Confirm that the carrier or service provider has substantial market power within these boundaries.
  - Measure market shares by volume and/or revenue
  - Establish strength of special relationships (exclusive relationships which confer economic advantage)
  - Assess breadth of relevant service offerings (identify key complementary products and establish whether competitors are able to offer these)
  - Measure extent of control of key assets (identify relevant bottleneck/differentiating assets and assess extent to which carrier's owns and controls these)
3. Assess whether market power has in fact been exercised and that this has lessened, or is likely to lessen, competition.
  - Demonstrate that the carrier has taken advantage of its power
  - Demonstrate that the conduct in question has lessened, or is likely to lessen, competition in the relevant market (competitors have been/are likely to be eliminated, damaged, discouraged from entering or deterred from engaging in competitive conduct)
  - Show that this would not have happened to the same extent under normal competitive conditions

The ACCC has a range of information needs at each of these stages. Price, market share, asset ownership and other information will be required in the first two stages. Figure 6 lists the types of information the ACCC is likely to use in defining the market and assessing market power.

**Figure 6: Information Relevant to Market Definition and Market Power**

Task	Information Required
Establish market boundaries	<ul style="list-style-type: none"> <li>Records of prices for products/services under investigation, as well as other products/services that might be substitutes</li> <li>Volume and capacity utilisation records for products/services under investigation, as well as close substitutes</li> <li>Advice on relevant product, functional, time and geographical boundaries</li> </ul>
Confirm that carrier/service provider has substantial market power	<ul style="list-style-type: none"> <li>Market share data. This could be derived from RKR data on revenues, but volume share may be preferable. Revenues/volumes for service providers not subject to RKRs may have to be estimated</li> <li>Ownership share of key assets</li> <li>Contractual and other information relating to special relationships</li> <li>Information on range of relevant products/services offered and evidence of complementarity (eg. Market research and/or data on combined vs individual service purchasing patterns)</li> </ul>

The information required in the final stage depends on the type of anti-competitive conduct being investigated. Information on prices and economic costs, preferably forward-looking incremental costs, will generally be required to investigate **price-based anticompetitive conduct**. This is outlined in Figure7 below.

**Figure 7: Information Relevant to Price Based Anti-Competitive Behaviour**

Conduct	Information		
	Costs*	Price	Other
Predatory Pricing	✓	✓	
Cross-subsidisation	✓	✓	
Price-based Bundling	✓	✓	• Cost savings from bundling
Monopoly Rent Seeking	✓	✓	
Retail Margin Squeezing	✓	✓	
Vertical Cost Shifting	✓	✓	
Churn Deterring Structures	May be relevant	✓	<ul style="list-style-type: none"> <li>Contract details</li> <li>Additional cost information (eg. Churn processing costs)</li> </ul>
Entry Deterring Structures	May be relevant	✓	<ul style="list-style-type: none"> <li>Conduct details</li> <li>Additional cost information (eg. Setup costs)</li> </ul>

\* The most relevant costs would be those derived using a long-run incremental cost standard (eg LRIC for price floors; TSLRIC or TELRIC+ for price levels)

Various forms of quantitative and qualitative information will be required to investigate **non-price based anti-competitive conduct**, as outlined in Figure 8. Note that much of this information is not based on financial data from a given company’s operations, but is obtained from a broad range of other market and non-financial sources.

**Figure 8: Information Relevant to Non Price Based Anti-Competitive Behaviour**

Conduct	Information
Refusal to Condition Network	<ul style="list-style-type: none"> <li>• Correspondence between access provider and access seeker</li> <li>• Independent technical advice on feasibility and cost of conditioning</li> <li>• Time required to complete conditioning work</li> </ul>
Network Changes	<ul style="list-style-type: none"> <li>• Internal records and plans</li> <li>• Statistics on network traffic and charges</li> <li>• Independent technical advice</li> </ul>
Onerous Contractual Requirements	<ul style="list-style-type: none"> <li>• Contract details</li> <li>• Legal and industry advice on appropriate terms and conditions</li> </ul>
Delays in Fault Location/ Service	<ul style="list-style-type: none"> <li>• Comparative statistics of fault location and service times</li> <li>• International benchmarks</li> </ul>
Delays in Processing	<ul style="list-style-type: none"> <li>• Comparative statistics on processing times</li> <li>• International benchmarks</li> </ul>
Complex Admin Requirements	<ul style="list-style-type: none"> <li>• Details on administrative requirements</li> <li>• Examples of other carriers/service providers' requirements</li> </ul>
Exclusive Dealing/Tying	<ul style="list-style-type: none"> <li>• Contract details</li> <li>• Submissions by complainant and other affected players</li> </ul>
Bundling competed with uncompleted Products	<ul style="list-style-type: none"> <li>• Details of bundling arrangements</li> <li>• Market share in each wholesale and/or retail product within bundle</li> <li>• Price and TSLRIC may also be relevant</li> </ul>
Shape Perceptions	<ul style="list-style-type: none"> <li>• Details of marketing and other communications</li> <li>• Independent technical/financial advice may be relevant</li> </ul>
Market Sharing/collusion	<ul style="list-style-type: none"> <li>• Internal records/correspondence, meeting notes, etc.</li> <li>• Price and TSLRIC may be relevant</li> </ul>
Contractual Ties	<ul style="list-style-type: none"> <li>• Contract details</li> </ul>
Illegal Charging	<ul style="list-style-type: none"> <li>• Billing and contractual details</li> </ul>
Abuse of Negotiating Power eg. Refusal to Pay Reciprocal Charges	<ul style="list-style-type: none"> <li>• Network traffic statistics</li> <li>• Negotiating power (eg. proportion of cost/revenue base, cost of alternative options)</li> <li>• Indicators of information asymmetry (eg. internal vs external cost, service level or technical transparency)</li> </ul>

*Note: Similar information may be required to determine appropriate terms and conditions of access*

### ***Guaranteeing Access to Network Services***

In conducting an investigation into the declaration of a service, the assessment of an undertaking or the arbitration of an access pricing dispute, the ACCC will generally first need to confirm the relevant market boundaries and assess the distribution of market power, as described above. It will therefore require information similar to that set out in Figure 6.

To determine reasonable access prices, whether in the context of an undertaking or an access pricing dispute, the ACCC will typically require detailed financial information on the declared service in question. Specifically, it will require cost and capital employed information for the service in question, appropriately disaggregated into its constituent components. It will also require usage information to allow it to calculate the unit cost of the service and its underlying components. This provides a starting point for modelling the forward-looking incremental cost of providing the service to third parties, and it will also allow the Commission to compare the cost of the declared service to analogous internally provided network services.

## **1.5 Conclusion**

As explained in Section 1.1, this report focuses on the development of a new accounting separation regime to address the ACCC's primary requirements for regularly-reported financial information. This section surveyed the ACCC's broader information requirements and it is clear that both financial and non-financial information will be required. The remainder of this report addresses the ACCC's requirements for detailed financial information on services likely to be the subject of regulatory scrutiny. It is recommended that the ACCC investigate non-financial information needs more fully to determine whether regular collection and reporting from carriers or other sources is necessary.

## 2 Framework for the Record Keeping Rules

### 2.1 Proposed Evolution of RKR

The previous section explored the ACCC's information requirements, and concluded that the RKR should provide the ACCC with detailed financial information for each service of interest, ie. services likely to be the subject of anti-competitive conduct or access-related investigations. In practice, the following services are of particular importance to the ACCC:

- All declared services, as these may be subject to undertakings and access pricing disputes
- Selected retail services, particularly those which are large and/or growing in importance, as these are likely to be the subjects of anti-competitive conduct complaints
- Selected internally provided network services, as this provides a basis for separating upstream from downstream activities and for comparing declared services to internally provided services

The first task in developing a new record keeping regime is, therefore, to establish an accounting separation architecture that captures revenues and costs for each of these services. Furthermore, it may be useful to segment certain services to provide more accurate data on those segments. For example, an access pricing dispute may relate to a declared service within a metropolitan area, so it would be helpful for the ACCC to understand the average costs associated with providing that service within metropolitan areas, rather than across all areas.

The second task is to resolve a number of important technical issues. In particular, choices need to be made regarding the allocation approach, appropriate cost basis and cost standard.

From the Commission's point of view, costs would ideally be reported on both an historical and a current cost basis, using both a fully distributed and an incremental costing standard. The top-down allocation approach based on historical costs and a fully distributed costing standard are required to ensure reconciliation to the carriers' statutory accounts. A series of adjustments would be applied to convert these to appropriate economic costs (ie. forward looking incremental costs).

Unfortunately, it would not be practical to move directly from the existing COA/CAM arrangements to a regime that introduces a new reporting architecture, a new cost basis and a new cost standard simultaneously. Each of these changes would involve a very significant investment in time and effort by both the carriers and the ACCC and, as the UK experience has demonstrated, it may take a number of years to develop and implement such a regime. We therefore propose a solution that introduces major changes to the accounting separation architecture, but minimises changes to the cost basis, cost standard and allocation approach. This provides a solution that is immediately useful and can be implemented reasonably rapidly, yet constitutes a sound basis for future developments.



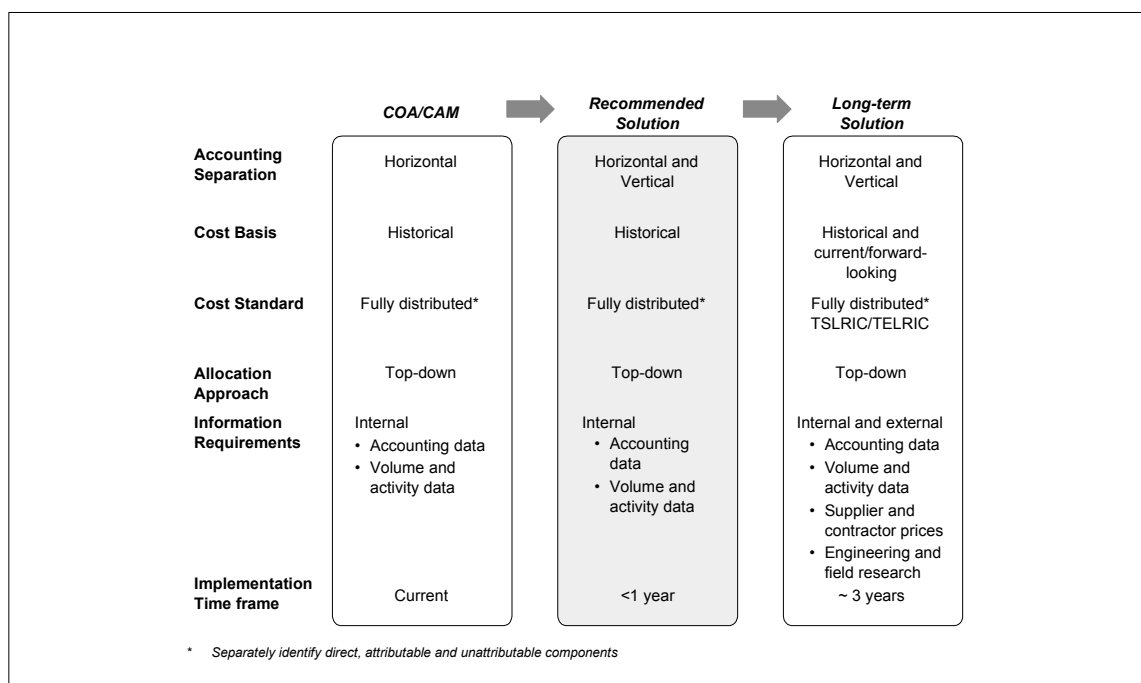
The new RKR regime will require reporting of detailed financial and usage information for both wholesale and retail services. That is, it introduces vertical accounting separation. It will also require additional segmentation of costs for selected declared services. The cost basis will remain historical and a fully distributed costing standard will be maintained. The rationale for these choices is outlined in Figure 9 below.

**Figure 9: Key Technical Issues**

Issue	Recommendation	Rationale
Architecture	<ul style="list-style-type: none"> <li>• Separation between wholesale and retail "businesses"</li> <li>• Identification of key upstream costs (facilities and activities)</li> </ul>	<ul style="list-style-type: none"> <li>• Pragmatic first step in evolution of RKR's</li> <li>• Ability to identify upstream vs downstream costs is key to diagnosing vertical cost shifting</li> <li>• Wholesale pricing increasingly important</li> </ul>
Cost Basis	<ul style="list-style-type: none"> <li>• Historical</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate scope of change controls development and implementation risk</li> <li>• Reconciles to statutory accounts, so builds confidence in new separation model</li> <li>• Foundation for eventual current cost-based RKR's</li> <li>• Operators need time to go down learning curve before implementing current costing methodologies</li> </ul>
Costing Standard	<ul style="list-style-type: none"> <li>• Fully distributed costs, with direct, attributable and unattributable elements separately identified</li> </ul>	<ul style="list-style-type: none"> <li>• Common allocation rules provide a basis for comparing costs across different companies and avoids manipulation</li> <li>• By separately identifying direct, attributable and unattributable elements, proxies for incremental costs can be derived</li> </ul>
Other <ul style="list-style-type: none"> <li>• Leverage points</li> <li>• Flexibility</li> </ul>	<ul style="list-style-type: none"> <li>• Highest granularity in services dependent on bottleneck facilities</li> <li>• Potential to distinguish between major geographic or other segments</li> <li>• Avoid overly prescriptive architecture, eg "defined" hierarchy of network elements and services</li> </ul>	<ul style="list-style-type: none"> <li>• Variations in granularity will help to minimise compliance costs while retaining insights</li> <li>• Anticipate changes likely to impact costs and sources of power eg. IP networks, xDSL, wireless technologies               <ul style="list-style-type: none"> <li>- Identify services likely to grow in importance eg. Internet and mobile telephony</li> <li>- Understand likely evolution of cost drivers</li> </ul> </li> <li>• Rapid technological change makes it harder to use network elements as basic building blocks</li> <li>• Interdependent service definitions will make it harder to add new services or redefine existing ones</li> </ul>

Although the move from a fully distributed, historically based set of costs to one that more closely approximates forward looking incremental costs is not recommended at this stage, the Commission may choose to move in this direction at some point in the future. This recommended evolution is outlined in Figure 10 below.

**Figure 10: Recommended Evolution of Record Keeping Rules**



In Section 6 of this report, we recommend that the ACCC begins to establish a timeframe for implementation of current cost adjustments to all, or at least some, asset categories within the RKR, as the obvious next step in the RKR's evolution.

## 2.2 Augmentation of Information Provided by Recommended Solution

The Commission has a number of options for augmenting the information that will be reported through the proposed solution, but which fall short of moving to the long term solution. A few of these options are described below.

### *Calculation of Proxies for Incremental Costs*

Rough proxies for incremental costs can be derived provided that there is sufficient granularity in the cost line items reported against each service, and that the direct, attributable and unattributable components of all costs are separately identified. Some broad guidelines for developing such proxies are outlined in Section 4.2.

### *Ad-hoc Modelling of Current Costs*

Data obtained from RKR reports may be used as an input to ad-hoc current cost models. Section 6 of this report outlines a general approach for converting historical to current costs using cost indexation and modern equivalent asset (MEA) valuation methods.

### *Ad-hoc Information Gathering for Specific Cases*

For some anti-competitive investigations and access pricing disputes, the financial data reported in compliance with the RKR may be too highly aggregated to be of immediate assistance to the Commission. Further disaggregation, or “drilling down”, may be necessary. If so, the Commission may invoke its section 155 powers to obtain this information.

### ***Supplementation with Information from Bottom-Up Models***

To the extent that some of the cost objects within the record keeping rules relate to those modelled in specific bottom up models (eg. the Universal Service Obligation and National Economic Research Associate models), the Commission may find it useful to analyse and compare data from both sources. This may allow the Commission to “sanity check” the data from either source and, in some areas, to obtain insight into the relationship between historic and forward looking costs. Similarly, some of the basic RKR input data (eg. usage statistics) may also be used as input into the bottom-up models, reducing the development and maintenance costs of these models.

### ***Selective Reporting on a Forward Looking Incremental Costing Basis***

A somewhat longer-term option is for the Commission to require the production of forward looking incremental costs for a limited number of key services. This would allow it to focus development efforts on the areas of highest anti-competitive risk while reducing the overall cost of development and compliance. The disadvantage of this approach is that the effort required to develop these methodologies would be “amortised” over fewer services.

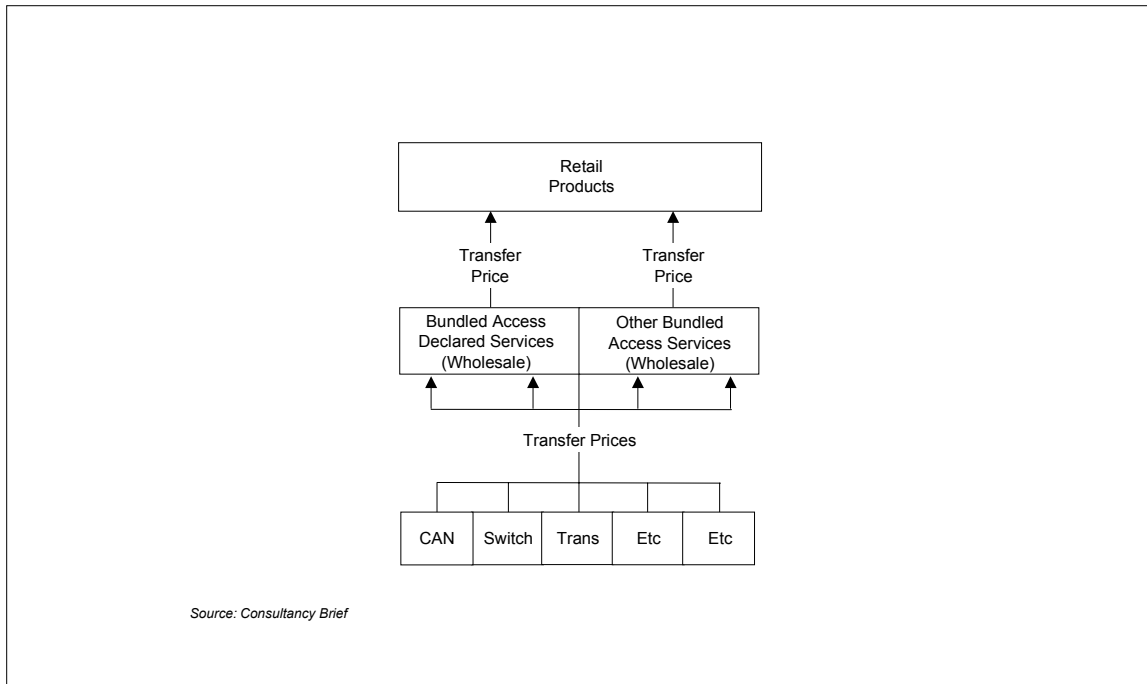
## **2.3 Recommended Accounting Separation Architecture**

This section describes in detail a practical accounting separation architecture that captures financial information for all declared services, as well as for key retail and internal wholesale services.

### ***Development Process***

The starting point for developing the recommended architecture was to explore the ramifications of the high-level Conceptual Model developed by the Industry Working Group. The Conceptual Model divides a vertically integrated carrier’s operations into access and retail services. This split recognises that a carrier’s network services are “access” inputs used for downstream retail services, but they can also be provided “wholesale” to competing service providers as well as internal carrier users. In contrast to the COA/CAM, the Conceptual Model focuses on the separation of bottleneck upstream network services from contestable downstream activities.

**Figure 11: Working Group Conceptual Model**



In the course of developing a detailed practical separation model, a number of significant technical issues were identified. Figure 12 summarises these issues.

**Figure 12: Technical Issues Raised by Conceptual Model**

Issue	Comment
1. Full cost allocation to network elements is neither practical nor helpful	<ul style="list-style-type: none"> <li>• Cost causality is weakened in three tier approach                             <ul style="list-style-type: none"> <li>- Underlying detail is lost as costs are aggregated and unitised for transfer pricing</li> <li>- Many costs which are attributable to specific services are unattributable to network elements</li> <li>- So allocation to network elements will distort costs in the absence of very fine granularity</li> </ul> </li> </ul>
2. Declared services are not collectively exhaustive	<ul style="list-style-type: none"> <li>• An approach to capturing all the costs associated with the "wholesale business" needs to be developed                             <ul style="list-style-type: none"> <li>- Necessary for reconciliation to statutory accounts</li> <li>- Important to assess materiality of costs not allocated to specific services</li> </ul> </li> </ul>
3. Declared and potentially declared PSTN services form a hierarchy of increasing network aggregation	<ul style="list-style-type: none"> <li>• Certain declared and potentially declared PSTN services (eg local PSTN) are components of others (eg local carriage)</li> </ul>
4. It is not feasible to map declared services directly to internal retail services, so a simple transfer pricing mechanism between declared and retail services would be misleading	<ul style="list-style-type: none"> <li>• The definitions of declared services were developed specifically for the purposes of provision to external access seekers</li> <li>• Retail services use subsets or supersets of declared services, eg domestic PSTN incorporates both ISDN and PSTN long distance voice traffic</li> <li>• There are wholesale-specific costs not incurred in providing a service internally, eg connecting equipment, billing activities, contract management activities</li> </ul>
5. Not all declared or potentially declared services are currently consumed	<ul style="list-style-type: none"> <li>• The approach must ensure that costs are developed for these services either within the P/L architecture or externally to this</li> </ul>

Various approaches to addressing these issues were explored within the project team and with members of the Working Group, culminating in the development of a recommended architecture that is a refinement of the high level Conceptual Model. This addresses all the technical issues while meeting the ACCC's key information needs.

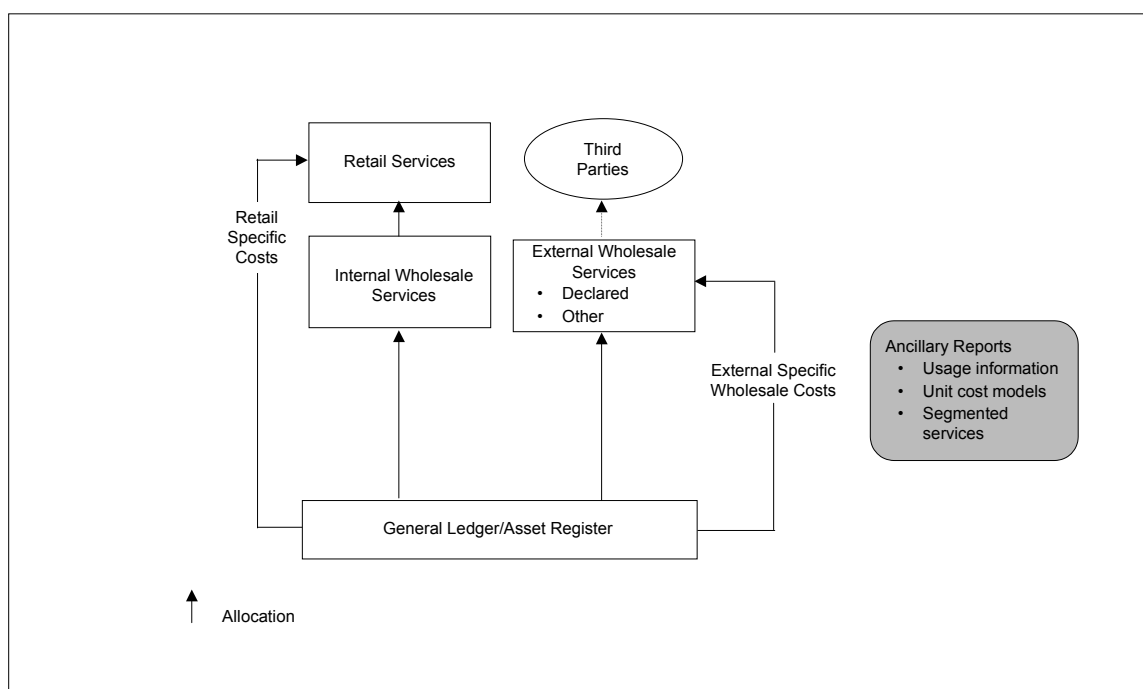
### ***Description of Recommended Architecture***

The recommended architecture is a two-tier accounting separation model. It has a number of important features.

- Wholesale (internal and external) and retail services are separated
- The internal business (ie. declared services and other external wholesale services) and the external business (ie. retail services and the underlying internal wholesale services) are separated
- Costs that are specifically associated with providing only the retail component of a service and similarly only an external wholesale service are allocated directly to those services
- There is no network element layer. Revenues, costs and capital employed are generally allocated to each service as directly as possible from the General Ledger. This maintains cost causality and allows the easy inclusion or modification of new or existing services as the ACCC's focus changes or as new products are developed. However, network specific costs and capital employed are initially allocated to each major network asset providing information on each network facility that can be used by the ACCC for further modelling or cost comparisons
- There is no transfer pricing mechanism between the internal wholesale and the retail services. All the relevant wholesale costs, including the cost of capital, are incorporated in the retail cost of each service. No additional information would be yielded by mandating a transfer pricing mechanism
- In addition to the core financial reports for the defined services, a number of ancillary reports are required to meet the ACCC's specific information needs. There are three key ancillary areas:
  - Usage information for major services and for network assets underlying PSTN based services. This information will allow the calculation of unit costs and will facilitate cost comparisons to ensure equivalence in the treatment of internal and external service offerings. This data may also be used in internal modelling by the ACCC
  - Average unit cost models of declared services with little or no current usage. This is used to derive indicative costs for declared services which may be the focus of regulatory interest (eg. an arbitration or an undertaking), but are not yet consumed to any significant extent
  - Supplementary service Capital Adjusted Profit Statements and Capital Employed Statements based on a segmentation of interest to the ACCC such as geography. This increases the level of detail in specific services where the ACCC anticipates a high level of regulatory interest

This architecture is illustrated in Figure 13 below.

**Figure 13: Recommended Architecture for Record Keeping Rules**



This architecture addresses all of the technical issues that were identified earlier. Figure 14 below outlines the way in which each of the key issues is dealt with in the recommended architecture.

**Figure 14: Resolution of Key Issues by Recommended Architecture**

Issue	Recommended Architecture Response
Cost Causality	<ul style="list-style-type: none"> <li>• Maintain cost causality as long as possible by allocating costs directly from general ledger to each wholesale service</li> <li>• Report asset-related costs as line items within each service P&amp;L, and consolidate to calculate total costs for each asset</li> </ul>
Declared services not collectively exhaustive	<ul style="list-style-type: none"> <li>• Non-retail costs not associated with specified services of interest (declared and other) are captured in an "other" bucket</li> </ul>
PSTN service hierarchy	<ul style="list-style-type: none"> <li>• Ignore hierarchy, and allocate cost only to services which are externally consumed (ie. by third parties or the carriers retail business)<sup>1</sup></li> </ul>
Declared services not consumed in retail services	<ul style="list-style-type: none"> <li>• Each retail service has an underlying wholesale-level cost component (internal wholesale service)</li> <li>• Costs for each internal wholesale service are all non retail-specific costs for the relevant retail service</li> </ul>
Not all declared services are currently consumed	<ul style="list-style-type: none"> <li>• A separate modelling process for estimating the costs these services has been developed</li> <li>• Reports on these costs will be supplementary to the core set of service P&amp;L's</li> </ul>

<sup>1</sup> An alternative approach was also considered: Model this hierarchy, and allocate costs to all services in the hierarchy based on total consumption (ie both within and external to Wholesale layer); use internal transfer pricing to reconcile double-counting

The recommended architecture also provides the key financial information required by the ACCC:

- It generates detailed financial information for declared services, key retail services and internal wholesale services
  - Total cost, revenue and capital employed are reported for each service
  - Each of these totals are disaggregated into a number of line items, providing a high level of transparency into the underlying network and operational costs
  - The direct, attributable and unattributable components of all costs are separately identified
- It will also be possible for the ACCC to identify the direct and attributable costs associated with key network facilities, with highest granularity in the CAN, and to unitise these costs using the data provided in the usage reports

In comparison to a three-tier model, the recommended architecture will be relatively straightforward to implement.

- It avoids the practical difficulties associated with developing a network element layer. Although the notion of a robust set of fully costed “building blocks” appears attractive, the UK experience demonstrates that it is extremely complex to develop and implement. The fully allocated network element approach also weakens cost causality (see Figure 12)
- It broadly maintains the COA/CAM line item categories and allocation approaches, reducing the extent to which financial systems and procedures need to be changed

However, it is recognised that the development and implementation of segmented service reports is likely to impose a significant additional compliance burden on carriers. Therefore, an extended timeframe for implementing this aspect of the new RKR architecture is recommended (see Section 2.5).

The RKRs are therefore a significant step beyond the existing COA/CAM in providing the ACCC with the information it needs in order to carry out its responsibilities. Figure 15 identifies the key developments and differences of the RKRs from the COA/CAM.

**Figure 15: Key Differences between the COA/CAM and the New RKR**

Area	COA/CAM	New RKR
Accounting Separation	<ul style="list-style-type: none"> <li>Horizontal only</li> </ul>	<ul style="list-style-type: none"> <li>Horizontal and vertical separation                             <ul style="list-style-type: none"> <li>Wholesale layer introduced</li> <li>Indicative P&amp;L's for external wholesale and internal retail "businesses" provided</li> </ul> </li> </ul>
Estimated costs of new declared services	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Modelling approach to derive indicative costs for new services</li> </ul>
Segmentation for key services of interest	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Supplementary reports will provide segmented financial data for specific services of interest</li> </ul>
Reporting of usage data	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Usage data reported for key services and key network assets</li> </ul>
Capital employed	<ul style="list-style-type: none"> <li>End of period balance sheet</li> </ul>	<ul style="list-style-type: none"> <li>Statement of capital employed provided for each service</li> </ul>
Other	<ul style="list-style-type: none"> <li>RAPM requirements not clearly defined</li> <li>Weak process for amending RKR</li> </ul>	<ul style="list-style-type: none"> <li>Detailed RAPM requirements for greater transparency</li> <li>Tighter process to ensure amendments achieved in reasonable timeframe</li> <li>General refinement of allocation principles, service definitions, etc.</li> <li>Certain reports removed: reconciliation, transfer pricing, internal usage, chart of accounts listing (Debit/Credit)</li> </ul>

## 2.4 Descriptions of Services

The wholesale and retail layers are divided into a number of service categories that reflect both natural boundaries between service types and where it is considered that anti-competitive behaviour and access disputes may arise. Unless granted an exemption by the ACCC, each carrier must develop and report financial statements for each of these categories.

Figures 16, 17, 18 and 19 describe the internal carrier retail and wholesale service categories to be reported against.

Generally the internal wholesale service is equivalent to the 'de-retailed' retail service. That is, it captures the network and product/customer costs which are not retail specific as well as a share of the organisational overhead. There are two exceptions:

- Number portability services (local, mobile and freephone) do not relate to a stand alone retail service but are components of the call related retail service. Local and freephone number portability services are fully consumed in providing one retail service. Mobile portability is instead, associated with all mobile retail services and will need to be allocated across them. As this service is not yet in operation and arrangements have not been determined, further details have not been developed
- Wholesale Broadcast is a stand-alone wholesale service that is used for providing services such as Pay TV over fixed networks. As the retailing of this service is typically undertaken by a separate subsidiary to the telecommunications carrier and the service involves content provision rather than the provision of a telecommunications service, the ACCC does not require a retail report. However, the wholesale carriage component is a telecommunications service and does need to be reported.



Figures 20 and 21 describe the external carrier wholesale service categories to be reported against. The descriptions for declared services in Figure 21 are an abridged version of the full service descriptions given by the ACCC, that carriers should use to define these services.

It should be noted that there are a number of services that are presently before the ACCC which may be declared in the short term. These are:

- Unconditioned Local Loop
- Local PSTN Originating and Terminating Services
- Local Carriage
- Mobile Long Distance

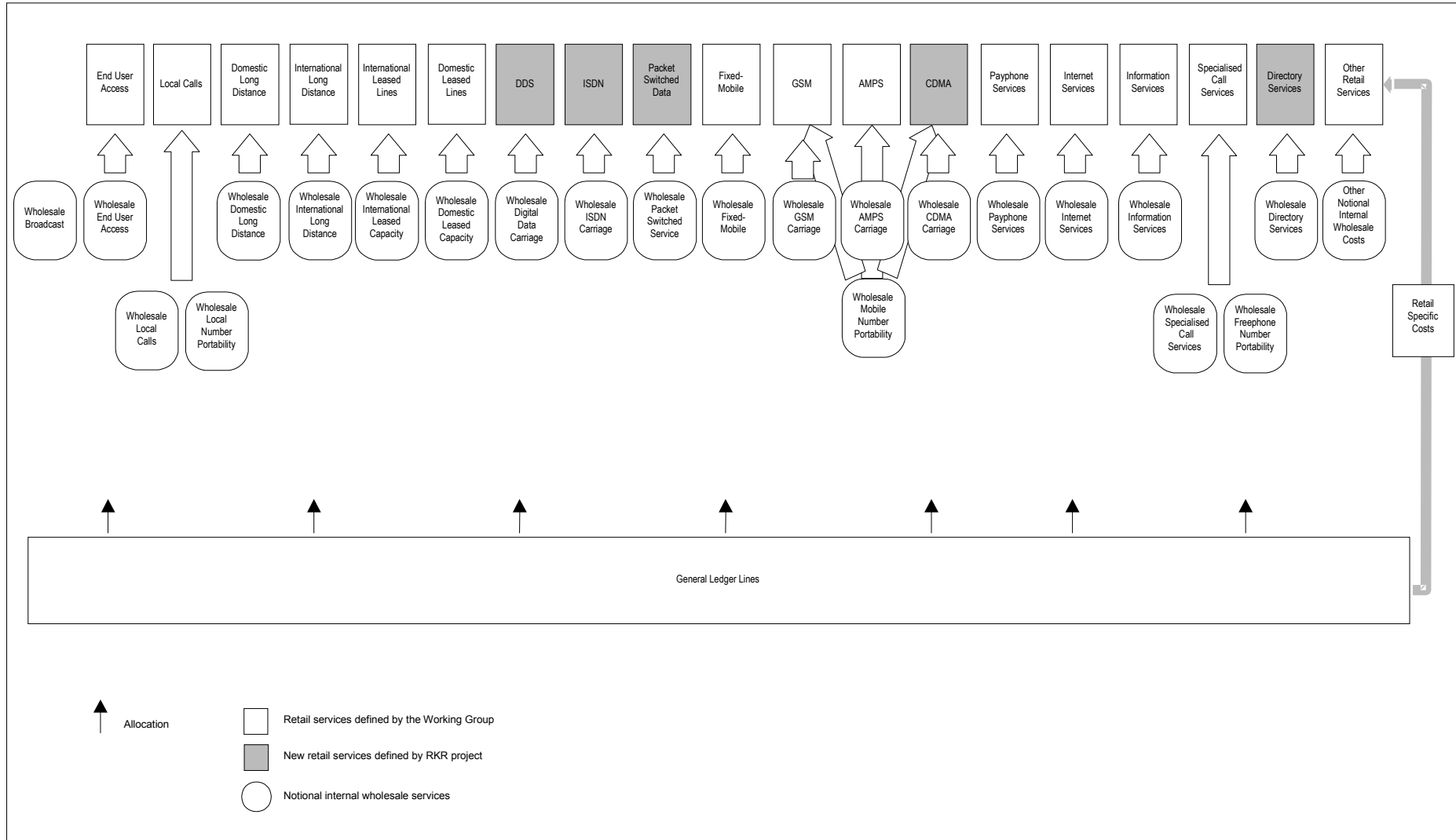
While these have not been included within the model definitions, when and if they, or any other future services, are declared they are to become part of this framework.

The external wholesale 'Transmission' service is somewhat different from the other external services in that, while it is primarily based on declared services, it also incorporates an undeclared aspect. This is because the ACCC has declared all transmission except for the Melbourne to Sydney leg. In order to simplify the capture and allocation of costs and to provide an overall view of external transmission services, both the declared and undeclared services are to be captured together. More detailed information is available to the ACCC from the ancillary segment reports.

The descriptions identify a number of portability services which relate to local, mobile and freephone services. Further work is being undertaken by the ACCC regarding number portability. Only local number portability has in fact been put in place and even here the specific arrangements are still being developed by the industry. The defined service architecture therefore is forward looking in that mobile and freephone services, both internally and externally, are not in place and will have no financials associated with them.

Given existing arrangements with local number portability, it is more simple to regard this as being a service only provided to external access seekers. All financials associated with both establishing and operating the service should therefore be captured in the external business local number portability service. This may change in the future and therefore provision has been made for a similar wholesale service in the internal business.

**Figure 16: Internal Business Services**



**Figure 17: Retail Service Descriptions**

**Figure 18: Internal Wholesale Service Descriptions**

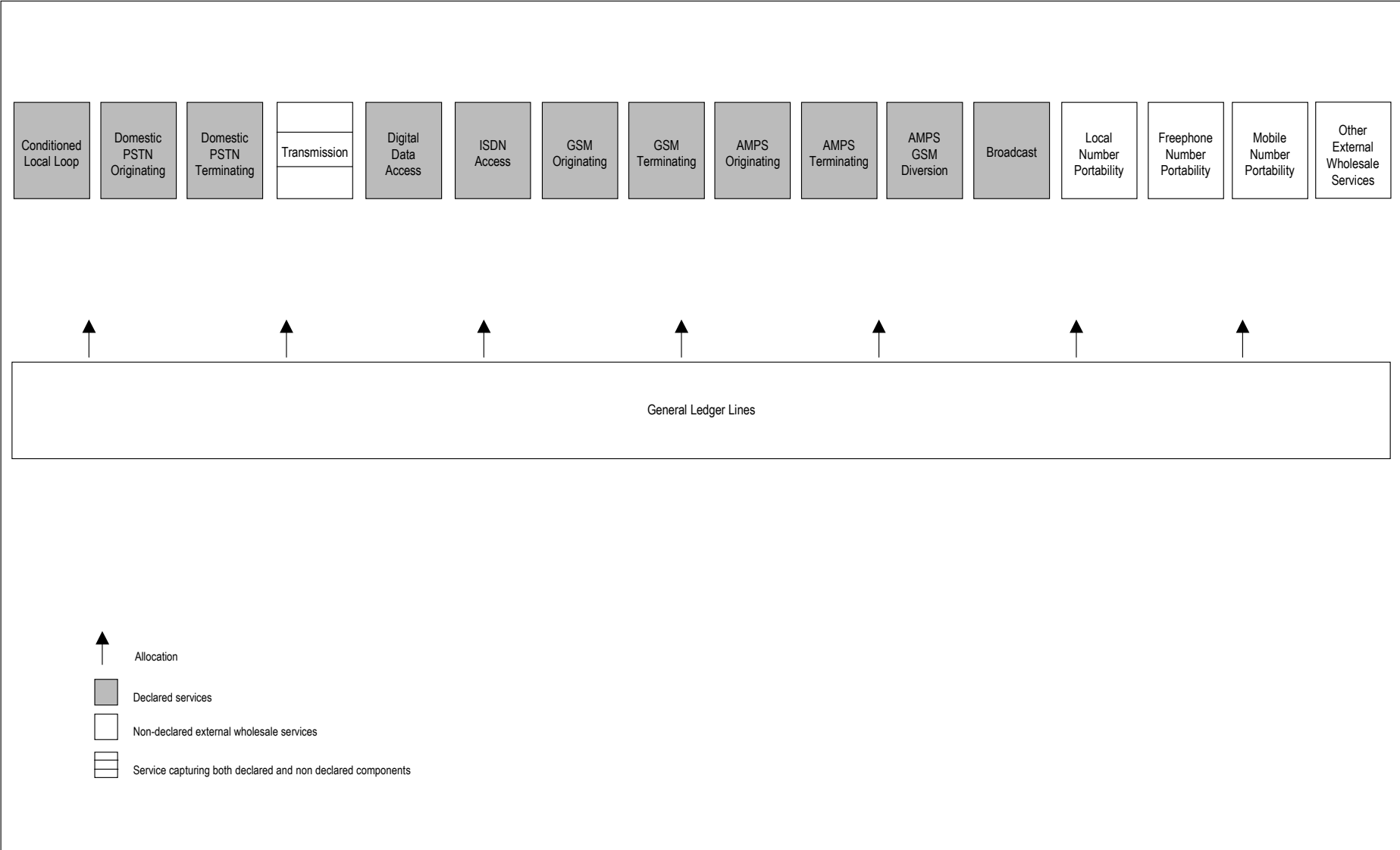
Service	Description
1. End User Access	Provision of access to the switched telecommunications network from the customer premises
2. Local Calls	Provision of fixed network to fixed network calls within the carrier defined local call area
3. Domestic Long Distance	Provision of fixed network to fixed network domestic calls beyond the local call area, excluding international calls
4. International Long Distance	Provision of international calls originating either within or outside Australia
5. International Leased Lines	Provision of all non-switched leased capacity to/from a point outside Australia's territorial boundary
6. Domestic Leased Lines	Provision of all non-switched leased capacity solely within Australia
7. Digital Data Service	Provision of services on a Digital Data Network
8. ISDN	Provision of ISDN voice and data services
9. Packet Switched Data	Packet switched services designed for data communication between computers and data terminals which splits data into segments called packets
10. Fixed to Mobile	Provision of fixed network to mobile network calls terminating on domestically and internationally located mobile terminals
11. GSM Mobiles	Provision of services, including access, originating on GSM networks
12. AMPS Mobiles	Provision of services, including access, originating on AMPS networks
13. CDMA Mobiles	Provision of services including access originating on CDMA networks
14. Payphone Services	Provision of telephone calls from a carrier controlled pay telephone, whether owned, operated or leased. All other calls from non-carrier controlled payphones are captured under either Local, Domestic Long Distance, Fixed to Mobiles or International cost objects
15. Internet Services	Provision of Internet and related services including web hosting, web page design, SMTP and other email services, electronic commerce and domain name administration services. Does not include local or domestic long distance calls for access to the Internet or carriage of internet traffic
16. Information Services	Provision of recorded message and other information sharing services, including community service calls, home shopping, chat services and EFT, or as otherwise specified by the ACCC
17. Specialised Call Services	The provision of call services which involve subscriber customised functions in the handling, routing or changing of calls, including toll-free, charge card, Freephone services, alternate and credit card-billing services, call-waiting, call distribution and forwarding, call screening, UPT and VPN services, or as otherwise determined by the ACCC
18. Directory Services	Provision of directory services including Printed Alphabetical or Classified Listings, electronic listing, 013/0175 type services, through connect services, community, business, maritime, telex and facsimile directories
19. Other Retail Services	Provision of other retail services not already identified

Service	Description
1. Wholesale Broadcast	An analogue service for the supply of a broadcasting service by means of line links that deliver signals for end users e.g. Pay TV carriage
2. Wholesale End User Access	Provision of access to the PSTN network not including retail specific costs
3. Wholesale Local Calls	Non retail specific costs for providing fixed network to fixed network calls within the carrier defined local call area
4. Wholesale Local Number Portability	Provision of a service to allow PSTN customers number portability when changing carriers
5. Wholesale Domestic Long Distance	Non retail specific costs for providing fixed network to fixed network domestic calls beyond the local call area, excluding international calls
6. Wholesale International Long Distance	Non retail specific costs for providing international calls originating either within or outside Australia
7. Wholesale International Leased lines	Non retail specific costs for providing all non-switched leased capacity to/from a point outside Australia's territorial boundary
8. Wholesale Domestic Leased lines	Non retail specific costs for providing all non-switched leased capacity solely within Australia
9. Wholesale Digital Data Carriage	Non-retail specific costs for providing access and carriage on a digital data network
10. Wholesale ISDN Carriage	Non-retail specific costs for providing access and carriage of voice and data on an ISDN network
11. Wholesale Packet Switched Service	Non retail specific costs for providing packet switched services designed for data communication between computers and data terminals which splits data into segments called packets
12. Wholesale Fixed-mobile	Non retail specific costs for providing fixed network to mobile network calls terminating on domestically and internationally located mobile terminals
13. Wholesale GSM Carriage	Non retail specific costs for providing services, including access, originating on GSM networks

**Figure 19: Internal Wholesale Service Descriptions**

Service	Description
14. Wholesale AMPS Carriage	Non retail specific costs for providing fixed services including access, originating on AMPS networks
15. Wholesale CDMA Carriage	Non retail specific costs for providing fixed services including access originating on CDMA networks
16. Wholesale Mobile Number Portability	Provision of a service to allow mobile customers number portability when changing carriers
17. Wholesale Payphone Services	Non retail specific costs for providing telephone calls from a carrier controlled pay telephone, whether owned, operated or leased. All other calls from non-carrier controlled payphones are captured under either Local, Domestic Long Distance, Fixed to Mobiles or International cost objects
18. Wholesale Internet Services	Non retail specific costs for providing Internet and related services including web hosting, web page design, SMTP and other email services, electronic commerce and domain name administration services. Does not include local or domestic long distance calls for access to the Internet or carriage of internet traffic
19. Wholesale Information Services	Non retail specific costs for providing recorded message and other information sharing services, including community service calls, home shopping, chat services and EFT, or as otherwise specified by the ACCC
20. Wholesale Specialised Call Services	Non retail specific costs for providing call services which involve subscriber customised functions in the handling, routing or changing of calls, including toll-free, charge card, Freephone services, alternate and credit card-billing services, call-waiting, call distribution and forwarding, call screening, UPT and VPN services, or as otherwise determined by the ACCC
21. Wholesale Freephone Number Portability	Provision of a service to allow Freephone customers number portability when changing carriers
22. Wholesale Directory Services	Non retail specific costs for providing directory services including Printed Alphabetical or Classified Listings, electronic listing, 013/0175 type services, through connect services, community, business, maritime, telex and facsimile directories
23. Other Internal Wholesale Costs	Other non retail specific costs which are used for the provision of services to the carriers retail customers

**Figure 20: External Business Services**



**Figure 21: External Wholesale Service Descriptions**

Service	Description
1. Conditioned local loop (Declared)	A service for the supply of media independent unswitched transmission capacity of voice band width, being a leased conditioned two-wire (twisted copper pair) analogue based service
2. Domestic PSTN Originating/ Terminating (Declared)	An access service for the carriage of telephone (ie. PSTN and PSTN equivalent such as voice from ISDN) calls (ie. voice, data over the voice band) to a POI from end-customers' assigned numbers from the geographic number ranges of the Australian Numbering Plan and directly connected to the Access Provider's network
3. Transmission (both Declared and Non Declared)	A service for the carriage of certain communications from one transmission point to another transmission point via network interfaces at a designed rate on a permanent basis by means of guided and/or unguided electromagnetic energy. This captures all wholesale provisions both declared and non declared
4. Digital Data Access (Declared)	An access service for the domestic carriage of data between a digital data Interconnect Terminal Point located at the access seeker's exchange or network facility and a NTU or unimux or modem located at the customer's premises where the customer is directly connected to the access provider's network
5. ISDN Originating/Terminating (Declared)	Provision of a service by way of an Integrated Services Digital Network from customer equipment at an end user's premises in Australia to an exchange
6. GSM Originating/Terminating (Declared)	An access service for the carriage of telephone calls (ie. voice, data over the voice frequency band) to a POI from end-customers to B parties, assigned numbers from the GSM number ranges of the Australian Numbering Plan and directly connected to the Access Provider's GSM network
7. AMPS Originating/Terminating (Declared)	An access service for the carriage of telephone calls (ie. voice, data over the voice frequency band) to a POI from end-customers to B parties, assigned numbers from the AMPS number ranges of the Australian Numbering Plan and directly connected to the Access Provider's AMPS network
8. AMPS-GSM Diversion (Declared)	A service whereby all calls made to a nominated AMPS Network number are diverted to a designated POI of the GSM carrier/carriage service provider nominated by the former AMPS subscriber
9. Broadcasting (Declared)	An analogue service necessary for the purposes of enabling the supply of a broadcasting service by means of line links that deliver signals to end-users, and of a kind that was used for those purposes on 13 September 1996. This is an access service which provides a basic carriage and distribution access function together with other functions as requested
10. Local Number Portability	Provision of number portability for retail PSTN customers wishing to maintain existing contact numbers while changing carriers
11. Freephone Number Portability	Provision of number portability of retail Freephone customers wishing to maintain existing contact numbers while changing carriers
12. Mobile Number Portability	Provision of number portability for retail mobile customers wishing to maintain existing contact numbers while changing carriers
13. Other External Wholesale Services	Other wholesale costs associated with providing services to external third parties who provide retail services

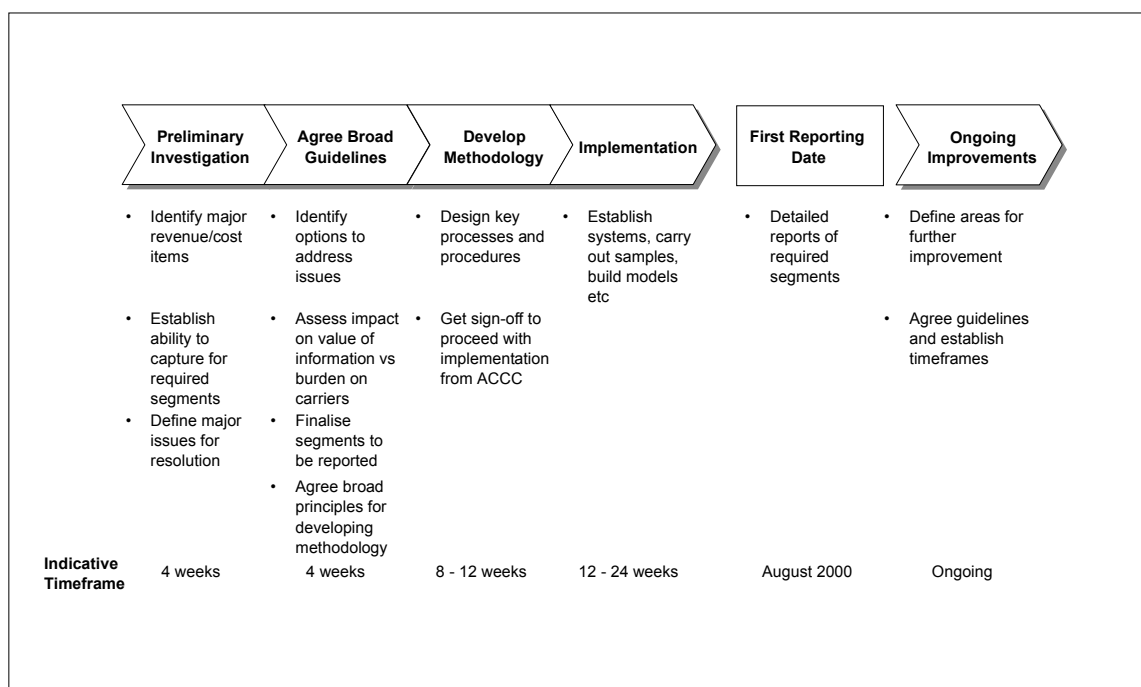
*Note: The definition for the declared services identified above should use the full service definition as used by the ACCC in the service declaration*

## 2.5 Ancillary Reports

Details of all the ancillary reports are provided in Sections 3.6 (Usage Reports), 3.7 (Modelled Declared Services) and 3.8 (Supplementary Segmented Services).

Some carriers may be concerned about the effort involved in developing supplementary segmented service reports. While it is acknowledged that this may be a difficult task for some carriers, the ACCC needs to understand segment-level differences in costs for key services. A number of issues relating to specific market segments are already before the ACCC, and it is likely that more will emerge. This report does not dictate a methodology for reporting on these items as each carrier faces a different set of practical issues relating to data availability and systems constraints. Instead we outline a process in Figure 22 whereby each carrier is responsible for developing a detailed methodology consistent with both the ACCC's information requirements and its own capabilities.

**Figure 22: Process for Developing Supplementary Segmented Services**



We are of the view that segment based reports should be required by August 2000. However we recognise that there may be significant issues involved in developing the information for some services. For each service, therefore, the development process outlined above may take one of a number of different paths.

- Development of a reliable top down model within the prescribed timeframe
- Development of a bottom up model within the prescribed timeframe
- If agreed with the ACCC, development of a “rough” top down model within the prescribed timeframe



The ACCC may, at its discretion, consider requests to extend the timeframe for producing segment reports for specific services, based on its assessment of the difficulties involved in developing a suitable methodology, the importance of the information to the ACCC and the level of accuracy and reliability required.

### **3 Reporting Requirements**

All telecommunications carriers who could or do provide declared services will be subject to these Record Keeping Rules. The ACCC may also require certain other carriage service providers to meet the RKR requirements. The core outputs of the Record Keeping Rules will be a Capital Adjusted Profit statement and a Capital Employed statement for each wholesale and retail service identified. A Fixed Asset statement identifying historical/revalued asset cost and accumulated depreciation, and a WACC report, is also required to support the Capital Employed statement. The financial information will be presented in a series of line items that follow the listing of accounts given in the Chart of Accounts (Appendices).

A number of ancillary reports will also be required:

- Usage information for specific network assets and key services
- Models of unused or limited use declared services
- Market segment splits for some specific products

A number of reports that were required for the COA/CAM have been eliminated as the information generated was seen as being of limited use or is provided in a different manner. These are the balance sheet, chart of accounts listing, transfer pricing report and the internal usage report.

#### **3.1 Reporting Cycle**

The existing reporting cycle for the COA/CAM is every 3 months but it is our view that this is beyond the needs of the ACCC. We would recommend a reporting cycle of every 6 months in line with standard statutory reporting requirements.

It is recognised that different carriers have different statutory reporting periods and therefore the outputs will not be entirely comparable. However, as the primary purpose of the reports is not to provide a period by period comparison of different carrier's financial status we do not regard this as being a strong enough reason to warrant more frequent reporting.

For reports required 6 monthly, a full year report should also be provided at statutory year end together with the 6 monthly report. All reports should be provided both in paper and electronic versions.

The cycle times for the regulatory reports are summarised in Figure 23.

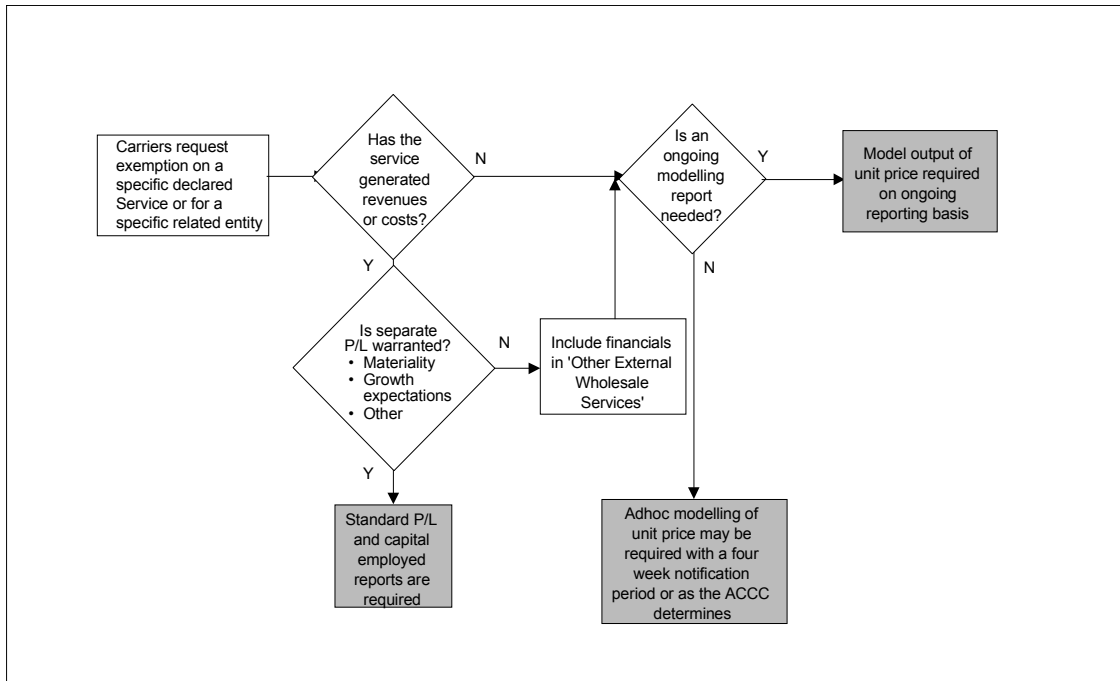
**Figure 23: Cycle Times for Required Reports**

<b>Report</b>	<b>Period</b>	<b>Submission to ACCC Following Statutory Reporting Date</b>
Capital Adjusted Profit and Loss Statement	<ul style="list-style-type: none"> <li>• 6 months</li> </ul>	Within 4 weeks after statutory release dates for the full year reports and 2 weeks after statutory release dates for the half-year reports
Capital Employed Statement Fixed Asset Statement WACC Report	<ul style="list-style-type: none"> <li>• 6 months</li> </ul>	Within 4 weeks after statutory release dates for the full year reports and 2 weeks after statutory release dates for the half-year reports
Ancillary Reports <ul style="list-style-type: none"> <li>• Usage</li> <li>• Modelled declared services</li> <li>• Supplementary Segments</li> </ul>	<ul style="list-style-type: none"> <li>• 6 months</li> <li>• 6 months</li> <li>• Annual</li> </ul>	Within 4 weeks after statutory release dates for the full year reports and 2 weeks after statutory release dates for the half-year reports

While the ACCC should reserve the right to require reports on all services identified within this document, it is accepted that information on some external services may be of limited value in certain circumstances and from specific carriers. We have therefore developed a process in Figure 24, which allows carriers to seek exemptions from providing Capital Employed Profit Statements or unit price models for declared services either where there is no use of the service, or where usage is not material. Carriers may also seek exemptions for related entities where similar criteria exist. **It is not envisaged that the ACCC’s decision process used in these circumstances would necessarily be public.**

- Q. What about others subject to the RKR ie. access providers and active declared services?***
- Q. If a Profit and Loss statement is not warranted, what does it mean to include financials in other external wholesale services?***
- Q. It is not envisaged that ACCC decision making process will necessarily be public. What does this mean?***
- Q. Whether any of the ACCC decisions should be subject to Administrative Law Review?***

**Figure 24: Declared Service/Related Entity Reporting Decision Process**



### 3.2 Capital Adjusted Profit Statements

Figures 25, 26 and 27 illustrate the formats for wholesale and retail Capital Adjusted Profit statements for both internal and external businesses. (The appendices lay out a detailed example of these reports).

***Q. Are the categories in the document relevant to all carriers?***

The key elements of these reports are:

- The identification, for each service and in total, of the revenue and expense streams described in the Chart of Accounts separated into direct, attributable and unattributable categories. These are generated from the allocation principles described in Section 5
- The subtraction of the costs of capital employed in the provision of each service and in total, calculated from the Capital Employed statements described in Section 3.3
- The transfer of internal wholesale costs for each service to the related internal retail service. This allows the calculation of a Capital Adjusted Profit for these services which does not allow for any access costs, except for End User Access.
- Adjustments to distribute the costs and revenues of End User Access across internal and external wholesale services to develop an Access Adjusted Profit for internal services or a Capital Adjusted Profit for external services. (External services already allow for the costs of access). This ensures that internal and external wholesale services are on a similar basis so that appropriate comparisons between them can be made

**Figure 25: Capital Adjusted Profit Format – Retail Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Retail Revenue</b>	Allocated from accounts							
•								
•								
•								
<b>Retail Specific Costs</b>	Allocated from accounts							
• Organisational								
-								
-								
-								
• Product								
-								
-								
-								
<b>Retail Cost of Capital</b>	Direct from retail capital employed statement							
<b>Gross Retail Profit</b>	Retail revenue less retail specific costs and retail cost of capital							
<b>Wholesale Capital Adjusted Cost</b>	Cost of used wholesale services from internal wholesale business P/L							
<b>Retail Capital Adjusted Profit</b>	Revenue less retail, wholesale and capital costs							
<b>Access Adjusted Wholesale Cost</b>	Cost of used wholesale services including access costs							
<b>Retail Access Adjusted Profit</b>	Retail revenue less retail, wholesale (including access) and capital costs							

**Figure 26: Capital Adjusted Profit Format – Internal Wholesale Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Costs</b>	Allocated from accounts							
Organisation								
•								
•								
•								
Product								
•								
•								
•								
Network								
•								
•								
•								
<b>Wholesale Cost of Capital</b>	Direct from capital employed statement							
<b>Wholesale Capital Adjusted Cost</b>	Wholesale costs and capital costs							
<b>Access Cost Adjustment</b>	Allocation of End User Access costs							
<b>Access Revenue Adjustment</b>	Allocation of access revenue less retail specific costs							
<b>Access Adjusted Wholesale Cost</b>	Wholesale, capital and access transfer costs plus access revenue adjustments							

**Figure 27: Capital Adjusted Profit Format – External Wholesale Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Revenue</b>	Allocated from accounts							
•								
•								
•								
<b>Wholesale Costs</b>	Allocated from accounts							
• Organisational								
-								
• Product								
-								
• Network								
-								
-								
<b>Cost of Capital</b>	Direct from capital employed statement							
<b>Access Revenue Adjustment</b>	Allocation of access revenue less retail specific costs							
<b>Capital Adjusted Profit</b>	Wholesale revenue less wholesale and capital costs plus access revenue adjustment							

### 3.3 Capital Employed Statements

Figures 28, 29 and 30 illustrate the formats for wholesale and retail service Capital Employed statements for both internal and external business.

**R. Are the categories in the document relevant to all carriers? (SH)**

The key elements of these reports are:

- The identification, for each service and in total, of the written down value of non-current assets and working capital as at the appropriate statutory reporting date, described in the Chart of Accounts separated into direct, attributable and unattributable categories. These are generated from the allocation principles described in Section 5. The written down value is based on the information from the Fixed Asset statements. This provides a Total Capital Employed figure
- A Weighted Average Cost of Capital provided by the carriers
- A Cost of Capital for each service and in total, calculated by multiplying the WACC by the Total Capital Employed

**Q. Will WACC be firm specific or industry specific?(ACCC needs to take a decision). It should not service specific.**

**Figure 28: Capital Employed Format – Retail Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Retail Assets</b>	Allocated from asset register							
• Communications Plant								
-								
• Other Non-Communications Plant								
-								
• Other Non-Current Assets								
-								
-								
<b>Current Assets and</b>	Allocated from asset register							
•								
•								
•								
<b>Total Capital Employed</b>	Sum of Retail Assets and Current Capital							
<b>WACC</b>	Carrier developed							
<b>Cost of Capital</b>	WACC multiplied by Total Capital Employed							

**Figure 29: Capital Employed Format – Internal Wholesale Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Assets</b>	Allocated from asset register							
• Communications Plant								
-								
• Other Non-Communications Plant								
-								
• Other Non-Current Assets								
-								
<b>Net Working Capital</b>	Allocated from asset register							
•								
•								
•								
<b>Total Mean Capital Employed</b>	Sum of Wholesale Assets plus Net Working Capital							
<b>WACC</b>	Carrier developed							
<b>Cost of Capital</b>	WACC multiplied by Total Mean Capital Employed							

**Figure 30: Capital Employed Format – External Wholesale Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Assets</b>	Allocated from asset register							
• Communications Plant								
-								
• Other Non-Communications Plant								
-								
• Other Non-Current Assets								
-								
<b>Net Working Capital</b>	Allocated from asset register							
•								
•								
•								
<b>Total Mean Capital Employed</b>	Sum of Wholesale Assets plus Net Working Capital							
<b>WACC</b>	Carrier developed							
<b>Cost of Capital</b>	WACC multiplied by Total Mean Capital Employed							



### 3.4 Fixed Asset Statement

Figures 31, 32 and 33 illustrate the formats for wholesale and retail service Fixed Asset statements for both internal and external business.

The key elements of these reports are:

- The identification, for each service and in total, of the historical/revalued value and accumulated depreciation for each fixed asset described in the Chart of Accounts separated into direct, attributable and unattributable categories. These are generated from the allocation principles described in Section 5. This provides the base information for calculating the written down value for each fixed asset that is used in the Capital Employed statement

**Figure 31: Retail Fixed Asset Reporting Format – Internal Business**

	Service 1			Total		Total			Total
	Direct	Attributable	Unattributable			Direct	Attributable	Unattributable	
<b>Retail Fixed Assets</b>	Allocated from asset register								
• Communications Plant	Each asset is reported on both								
-	historical/revaluation value and accumulated								
-	depreciation								
• Other Non-Communications Plant									
-									
-									
• Other Non-Current Assets									
-									
-									
<b>Total Fixed Assets</b>									

**Figure 32: Wholesale Fixed Asset Reporting Format – Internal Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Fixed Assets</b>	Allocated from asset register							
• Communications Plant	Each asset is reported on both historical/revaluation value and accumulated depreciation							
-								
-								
• Other Non-Communications Plant								
-								
-								
• Other Non-Current Assets								
-								
-								
<b>Total Fixed Assets</b>	Sum of wholesale fixed assets							

**Figure 33: Wholesale Fixed Asset Reporting Format – External Business**

	Service 1			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Wholesale Assets</b>	Allocated from asset register							
• Communications Plant	Each asset is reported on both historical/revaluation value and accumulated depreciation							
-								
-								
• Other Non-Communications Plant								
-								
-								
• Other Non-Current Assets								
-								
-								
<b>Total Fixed Assets</b>	Sum of wholesale assets							

### 3.5 WACC Report

To support the capital employed statements carriers should provide the ACCC with a document which identifies the value and source of all variables used in calculating the WACC's associated with each service, together with any assumptions made. The format of this document is left to each carrier's discretion.

### 3.6 Usage Reports

Figures 34 and 35 illustrate the formats required for two usage reports being a Service Usage report and a Key Network Asset Usage report.

The Service Usage report provides information on the usage of a number of major retail and wholesale services. This allows the ACCC to develop indicative unit prices for these services and provides some base information which can be used in other models.

**Figure 34: Service Usage Report**

Internal Services									
Service	End User Access	Local Calls	Domestic Long Distance	International Long Distance	Domestic Leased Lines	International Leased Lines	Fixed - Mobile	GSM	CDMA
Usage Factors	# Lines	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Mbits	# Mbits	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes

External Services						
Service	Conditioned Local Loop	Domestic PSTN Originating	Domestic PSTN Terminating	GSM Originating	GSM Terminating	Transmission
Usage Factors	# Lines	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Call attempts # Connected calls # Minutes	# Lines/circuits at each bandwidth

The Key Network Asset Usage report separates out a number of important assets for internal and external PSTN based services as well as the total usage of these assets across **all** services (for example usage of the CAN by ISDN would also be included, among others). Usage is measured based on customer end minutes. This information is important as:

- It allows the ACCC to compare the unit cost of assets between various services, providing transparency that a carrier is treating all services in a similar manner. This is particularly important in ensuring that services to access seekers are based on similar costing methods to those for internal users. This was regarded by the Working Group, as an important aspect of the new RKR's even though auditing of the carriers reports should provide this confidence

- It allows the calculation of an average asset unit price (over all services), which can be used as an input in certain modelling exercises the ACCC may wish to carry out

**Figure 35: Key Asset Usage Report**

	Internal Business PSTN Services				External Business PSTN Services			Total Usage Over All Services
	End User Access	Local Calls	Domestic Long Distance	International Long Distance	Conditioned Local Loop	Domestic PSTN Originating	Domestic PSTN Terminating	
<b>Key Network Assets</b> <ul style="list-style-type: none"> <li>• CAN Equipment*</li> <li>• CAN Equipment via allocation of End User Access</li> <li>• Switching Equipment - Local</li> <li>• Switching Equipment - Trunk</li> <li>• Interchange Cables</li> <li>• Transmission Equipment</li> <li>• International Network Cables</li> </ul>								

\* Assumes that presently differentiating usage of CAN elements by different services is not possible

### 3.7 Modelled Declared Services

Modelling of the average unit cost may be required for declared services that are either not currently being used or are used to such a limited extent that doubts could exist on the accuracy of the information captured in the core reports. While the model outputs will naturally depend on the specific service being modelled, we provide a broad outline as to what an output report may look like.

***Q. Figure suggests that even if an exemption is granted, a model output of unit price may be required on an on going reporting basis. (SH)***

**Figure 36: Outline of a Modelled Declared Service Report**

Assets	Value (\$m)	Usage Customer End Minute	Unit Cost
Asset A • Causally related costs - Depreciation - Maintenance - Other • Common costs • Written-down asset value • Capital charge • Total asset cost			
Asset B • • •			
Asset Z • • •			
Total			

### 3.8 Supplementary Segmented Services

A list of required segments of key services have been developed. This list reflects the existing priorities for the ACCC. Capital Adjusted Profit statements and Capital Employed statements should be developed for the segments below.

- All declared PSTN services that are consumed: CBD, metropolitan, provincial and rural geographic segments

This presently includes Domestic PSTN Originating and Terminating services and Conditioned Local Loop but will also include any PSTN based services that are declared in the future

- The Transmission declared service: each inter-capital link and an “Other Transmission Links” service
- The DDS declared service: CBD, metropolitan, provincial and rural geographic segments
- The GSM retail service: segmented by the terminating carrier of the call

As the specific outputs are still to be fully developed, we have not provided a report format.

## 4 Examples of Output Use

### 4.1 Determining Appropriate Access Prices

In July 1997, the Commission released its guide to Access Pricing Principles in Telecommunications. These principles indicate the approach the Commission is inclined to take when considering access pricing issues under Part XIC of the Trade Practices Amendment (Telecommunications) Act 1997. Specifically, the Commission will use the following broad principles in assessing undertakings and in conducting arbitrations:

- Access prices should be cost based
- Access prices should not discriminate in a way that reduces efficient competition
- Access prices should not be inflated to reduce competition in dependent markets
- Access prices should not be predatory

In reality, determining whether a price conforms to these rules is difficult, time consuming and costly. With this in mind, the Commission developed a number of readily observable pricing rules to assist it in making this determination. The Commission will generally obtain the information relevant to these rules using its powers under the tariff filing directions under Division 4 of Part XIB and its general information gathering powers under s.155 of the TPA. However, the information provided through the RKR's may be of relevance in assessing compliance with some of these rules. Two examples are outlined below.

**Figure 37: Examples of RKR Data Use**

<b>Rule</b>	<b>Potential Relevance of RKR data</b>
"Access prices available to competitors must not be greater than the access provider's best price to its own vertically integrated operations (unless cost justification is provided)"	The RKR's require carriers to develop costs for internally provided wholesale services. If the declared service under consideration is similar in nature to one of these internal wholesale services, the cost of the service (including the cost of capital) provides a starting point for determining the access provider's "price" to its own vertically integrated operations. Various adjustments may have to be made to account for specific differences between the declared and internal services, but it should be feasible to produce a first-pass estimate in many cases
"Any increase in an access price must be based on recognisable changes in the cost of providing the service"	The RKR's require carriers to provide detailed cost information for declared services. Changes in access prices should therefore be mirrored by changes in the reported costs. Furthermore, it should be possible to pinpoint these changes to specific line items

The Commission recognises that applying the pricing rules will not necessarily satisfy the principle that access prices should be cost based. The Commission has therefore outlined the methodology it would be inclined to employ, where appropriate, in determining a cost-based access price. The Commission’s view is that access prices should, in general, be based on the total service-long run incremental cost (TSLRIC) of providing the service.

However, the Commission recognises that measuring TSLRIC is a difficult, time-consuming and error-prone exercise, and has outlined four criteria which may assist it in determining whether an access price falls within acceptable boundaries. Figure 38 below outlines how the information in the RKR may be of relevance to the Commission in evaluating an access price against these criteria. Note that it will be important to assess whether the historical costs reported in the RKR are likely to differ significantly from those of a cost-efficient firm using best available assets. If so, these costs will need to be adjusted using a current costing approach as outlined in Section 6.

**Figure 38: Relevance of RKR Information to Access Pricing Criteria**

Criterion	Relevance of RKR Data
The total cost of providing the service should not exceed the stand-alone costs	An upper boundary for the stand-alone cost of providing a service could be obtained by subtracting the direct and attributable costs associated with all other services from the company’s total wholesale cost base. In practice, this boundary will usually be higher than actual stand alone cost, and will exceed any reasonable access price
The allocation of common costs across a set of services should not exceed total common costs for that set of services	This will always be the case if the RKR allocation principles are consistently applied
The common costs must be common to the declared service and not unduly allocated to that service	The RKR requires that all allocation decisions be based on cost causality where possible. Where cost causality is unclear, a general allocator is used to spread costs across services in a non-discriminatory manner
The vertically integrated internal transfer price should incorporate any common costs incorporated in the access price (ie. the same common costs should be equally reflected in the internal transfer price and the access price)	All costs, except for retail specific costs, are allocated to both internal and external wholesale services, and the same allocation principles apply to all services. Therefore, common costs will be incorporated in both internal and external wholesale services on the same basis

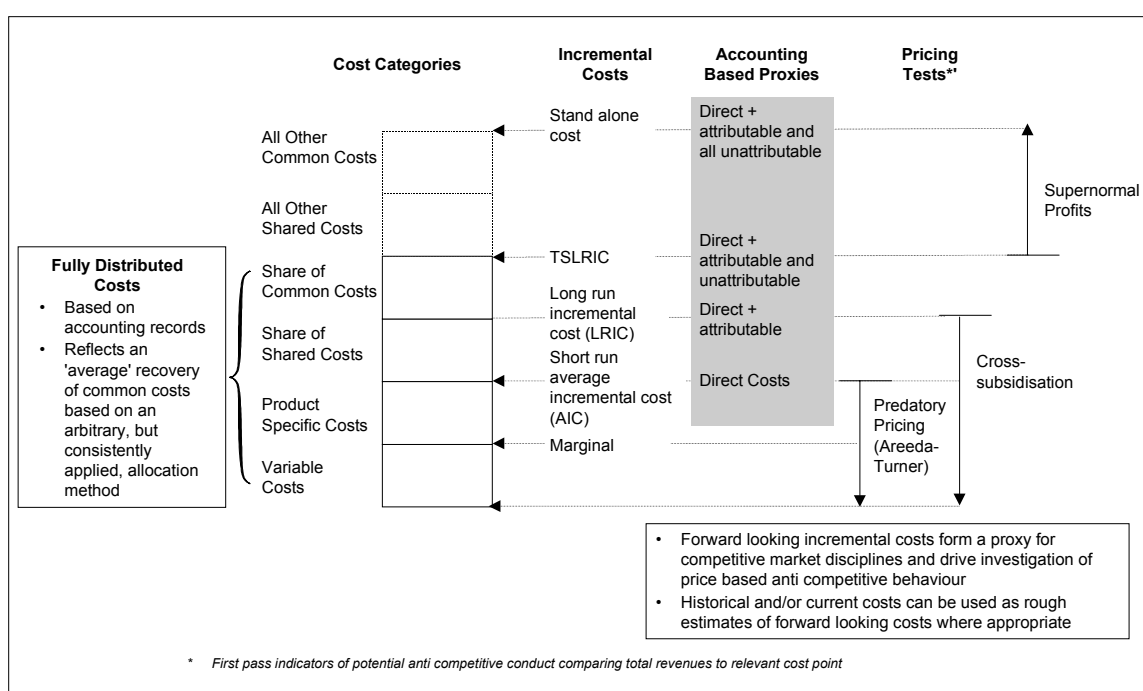
The fully distributed cost of service may provide a first-pass proxy for the incremental cost of providing that service plus an “average” recovery of common costs. Similarly, the sum of the direct and attributable cost components may provide a first-pass estimate of the long-run incremental cost of providing the service. Again, adjusting historical costs to a current cost basis will improve the robustness of such comparisons.

Clearly, the Commission will frequently need to probe deeper than reported gross cost level, examining the breakdown of costs into line items in order to gain a fuller understanding of the cost composition of a specific service, and apply this information in its decision making process.

## 4.2 Investigating Anti-Competitive Conduct

The previous section outlined some broad fully distributed cost proxies for incremental costing concepts. Figure 39 includes an indication of how these proxies relate to notional tests for supernormal profits, predatory pricing and cross-subsidisation.

**Figure 39: Indicative Relationship between Fully Distributed and Incremental Costing Concepts**



The earlier caveats, regarding the care with which such information should be interpreted, apply equally in this area. For example, where the relationship between costs and prices appears to point to some form of anti-competitive pricing, the Commission will usually find it necessary to seek further evidence to confirm that this has indeed been the case. For example, the Commission may:

- Test for cross-subsidisation by comparing the costs of analogous internal and external wholesale services. This will usually require a detailed assessment of differences in specific line items, making appropriate adjustments for legitimate differences in the nature of the services
- Compare the return on capital associated with uncontested versus contested services
- “Drill down” to obtain more disaggregated information on services of interest using its Section 155 information gathering powers



- Examine relevant outputs from existing or ad-hoc bottom-up models

It is worth noting that the auditing provisions should ensure that the allocation principles have been applied consistently across all services. Gross differences in costs of analogous services, or excessive returns on capital, should therefore be readily apparent. This may provide a strong incentive for carriers to avoid significant departures from acceptable pricing behaviour.

### **4.3 Economic Depreciation**

Accounting based depreciation typically assumes that the value of an asset decreases in direct proportion to some measure of usage, typically an age-based proxy. This presupposes that the economic value creating potential erodes in a consistent linear manner over the life of the asset. Further, changes in the value of the asset due to factors such as inflation and technological developments are not allowed for. The RKR's are based on the use of carriers' accounting information and therefore the depreciation costs recorded are on an historical accounting basis.

In carrying out its deliberations the ACCC may wish to evaluate how the costs of supplying particular services varies using a depreciation cost that may better reflect an economic approach. There are a number of alternatives available. Many of these attempt to develop specific depreciation profiles that better match an asset's value creation potential to its life. This approach is best suited to a bottom-up modelling process where the relevant usage of specific assets, together with their age, can be used in a model and different scenarios evaluated rather than retrospectively trying to apply this to existing accounting data.

On the other hand, using an annuity-based approach has certain advantages. It can easily be applied using the information provided within the RKR's, and has been used in other regulatory areas providing a consistency of approach. The annuity based technique reflects the financial commitments a business should make to ensure it can replace its assets at the end of their life. It assumes that an organisation puts away money in a sinking fund which returns the organisation's WACC so that, over the life of the fund, it compounds to be equivalent to the asset's cost. As the RKR's develop this can be applied to Current Cost adjusted assets which would better reflect the actual commitments needed on an ongoing basis.

## **5 Technical Details**

The information provided in this report provide the RKR requirements that carriers must use in developing their detailed implementation manuals. In the main, the requirements stated are prescriptive however we acknowledge that, in some circumstances, modification may be required at an individual carrier level. Processes have been outlined to reflect this.

### **5.1 Allocation Principles**

It is fundamental to the RKR that all costs, revenues and capital employed, except where specifically excluded, are allocated fully to the specified services. The allocation rules explicitly exclude cash and short term investments, minority interests, interest (both earned and paid), tax and dividend distributions (paid and proposed).

If a carrier considers that there are other items which should not be allocated then they must seek the approval of the ACCC prior to the commencement of the audit process. (It is considered unlikely that there will be material items other than those mentioned above which will be excluded).

Similarly in arriving at the capital employed and fixed asset statements it is envisaged that all assets and liabilities, other than equity, minority interest, debt and cash assets will be fully allocated.

Allocation of costs, revenues and capital forms the major procedural issue within the RKR. The key objective is to ensure that these financial items are appropriately matched for each of the defined services. The principles embodied within the previous COA/CAM have generally been followed, although some modifications and/or refinements have been made.

The primary objective has been to relate individual General Ledger or related Sub Accounts as closely as possible to the services in question. The allocation principles and rules developed should therefore generally be applied at this level rather than at a higher level of aggregation.

Aggregation to a cost pool, is however, specifically required for the allocation of costs and assets to primary network assets.

A number of allocation rules have been described in Section 5.1.4. These should be used in allocating revenues, costs and capital employed to services. In specific cases where it is apparent that this is not appropriate, a variation on this rule should be sought from the ACCC to allow for an alternative procedure to be applied.

The allocated revenues, cost and capital employed should be recorded against the categories listed in the Chart of Accounts (see the Appendices).

#### **5.1.1 Allocation of Revenues**

Carrier revenue accounts should be allocated according to the following three principles and reported under the appropriate RKR account.

### ***Direct***

Those revenues which are solely generated by a particular service ie. a one to one relationship exists. This is the preferred method of assignment.

### ***Attributable***

Those revenues which are part of a pool of common revenue and are identifiable to a particular service via a verifiable cause and effect relationship. There is no requirement for this to be a one-to-one relationship and it may be multi-step. This classification will require allocation between services. The driver of this allocation is usage related (but not necessarily traffic related). Allocation is to be based on the principles outlined in Section 5.1.4.

### ***Unattributable***

Those revenues which are part of a pool of common revenue, but are not identifiable to a service through a verifiable cause and effect relationship. This classification will require allocation between services. The driver of this allocation is not usage related, and may be arbitrary. Allocation is to be based on the principles outlined in Section 5.1.4.

## **5.1.2 Allocation of Costs**

Carrier cost accounts should be allocated according to the following three principles and reported under the appropriate RKR account.

### ***Direct***

Those costs which are solely generated by a particular service ie. a one to one relationship exists. This is the preferred method of assignment.

### ***Attributable***

Those costs which are part of a pool of common costs, and are identifiable to a particular service via a verifiable cause and effect relationship. There is no requirement for this to be a one-to-one relationship and it may be multi-step. The classification will require allocation between services. The driver of this allocation is usage related (but not necessarily traffic related). Allocation is to be based on the principles outlined in Section 5.1.4.

### ***Unattributable***

Those costs which are part of a pool of common costs, but are not identifiable to a service through a verifiable cause and effect relationship. This classification will require allocation between services. The driver of this allocation is not usage related, and may be arbitrary. Allocation is to be based on the principles outlined in Section 5.1.4.

Costs relating to excess capacity of communications plant and equipment are to be incorporated as part of the total costs for reporting purposes and allocated in proportion to their existing level of usage of plant and equipment.

Unattributable costs are not expected to be greater than 10% of a carrier's aggregate costs, however if this does occur a description of the reasons for this should be provided by the carrier to the ACCC.

### *Network Costs*

In order to assess the network-based costs associated with primary facilities within telecommunications networks, secondary plant costs, network related activities and other network expenses are to be allocated to each RKR network line item.

Three cost categories are to be captured for each network facility.

- Depreciation
- Maintenance
- Other

The 'Other' category will include the 'secondary plant' and network activity costs such as:

- Power Plant
  - Power equipment required for the operation of local and trunk exchanges, transmission terminals and repeaters, radio terminals, repeater stations and customer locations
- Activities such as:
  - Network Management
    - . Network management costs associated with monitoring performance of the telecommunication network including alarm management systems, radio performance monitoring equipment and network protection equipment
  - Platform Delivery
    - . Platform delivery costs associated with network planning, network design, network technology developed and network retirement

- Other expenses such as:
  - Property costs
    - . Cost of land, building and improvements and associated equipment such as electric light and power equipment, lifts and air conditioning etc which are considered and integral part of the building
  - Utilities
    - . Costs of utilities used to support network equipment such as electric power, gas and water
  - Other
    - . Other network secondary plant/asset costs and network activities not identified above

A two-stage allocation process is required. First costs should be allocated to the network facility and then this cost pool should be allocated to the various RKR services.

### **5.1.3 Allocation of Capital Employed**

The principles developed in this section should be applied to assets' Historical/Revalued Cost and Accumulated Depreciation and from this to capital employed.

Carrier capital should be allocated according to the following three principles and recorded under each RKR line item.

#### ***Direct***

That portion of capital which is solely generated by a particular service ie. a one to one relationship exists. This is the preferred method of assignment.

#### ***Attributable***

That portion of capital which is part of a pool of common capital, and is identifiable to a particular service via a verifiable cause and effect relationship. There is no requirement for this to be a one-to-one relationship and it may be multi-step. This classification will require allocation between services. The driver of this allocation is usage related (but not necessarily traffic related). Allocation is to be based on the principles outlined in Section 5.1.4.

#### ***Unattributable***

That portion of capital which is part of a pool of common capital, but is not identifiable to a service through a verifiable cause and effect relationship. This classification will require allocation between services. The driver of this allocation is not usage related and may be arbitrary. Allocation is to be based on the principles outlined in Section 5.1.4.

The values used should be based on the closing month balance for the previous period.

### ***Network Capital Employed***

In order to assess the network-based assets associated with primary facilities within telecommunications networks, other network asset requirements are to be allocated to each RKR Primary Plant line item.

Two capital categories are to be captured for each network asset.

- Primary asset
- Other assets

The 'Other' category will include assets such as power plant, property or assets associated with activities such as network management and platform delivery. A two-stage allocation process is required. First assets should be allocated to the primary network asset and then this asset pool should be allocated to the various RKR services. Allocation is to be based on the principles outlined in Section 5.1.4.

### ***Cash and Short Term Investments***

The treatment of cash and short term investments in the calculation of capital employed raises difficult methodological and conceptual issues. It is possible for a business to have an operational requirement for physical cash in its business. It is also possible for a business to have cash which is purely excess to requirements. However in most cases the cash element within a business can be viewed as a funding decision akin to negative liquid debt. For the purposes of the RKR's it is proposed that cash and short term investments should not be included in the average capital employed for any services but should rather be deducted from the value of debt in the WACC calculation. Any related interest income should therefore be netted off the interest expense when calculating the appropriate WACC to ensure consistency of treatment.

### **Q Cash in excess of the minimum requirement for running the business?**

As the RKR's are further developed it is envisaged that carriers will be required to make adjustments to separately identify excess cash and short term investments (which would then be treated as a separate revenue stream) and to allocate cash required for operations, if any, to the appropriate services.

#### **5.1.4 Allocation Rules**

Appendix 1 details the allocation rules to be used for the revenues, costs and capital employed within each RKR line item.

## 5.2 End User Access Adjustments

The allocation process carried out previously should have generated an End User Access cost base together with the allocation of part of the asset costs traditionally associated with Access to external wholesale services (both declared and non declared).

Two adjustments are then needed in order that appropriate comparisons can be made between the internal and external services that are similar in nature.

- The cost of End User Access must be distributed across the non-access services of the internal business
- End User Access revenue must be allocated across the other internal and external services

### *Cost of Access*

A unit cost factor should be developed for End User Access that incorporates its expenses and cost of capital and is divided by the total internal business customer end minutes which pass through it. This is used to allocate the End User Access costs to internal services, based on their usage of these customer end minutes.

This provides two views of all internal services, being with and without End User Access.

### *End User Access Revenue*

Carriers typically receive revenue from retail customers for access lines which are then used to provide services for external wholesale clients. In order to prevent double counting this revenue should be allocated across all non-access services in order to provide a constant base for comparisons. As its affect is to reduce the return a carrier could charge an access seeker, this adjustment should be captured as a negative cost rather than a revenue per se.

This revenue however, is partially responsible for covering the actual retail costs associated with providing access and which are covered by the carrier irrespective of whether an access seeker uses the access infrastructure. These retail specific costs, which include both expenses and a cost of capital, should be subtracted from the revenue prior to allocation.

The net revenue adjustment should be allocated based on the customer end minutes of use of all access infrastructure both internally and externally.

### Worked Example

Figure 40 demonstrates the adjustments required for End User Access.

#### **Step 1**

A unit cost factor is calculated for End User Access based on customer end minutes.

Eg. Item 1 shows Wholesale Capital Adjusted Profit for End User Access is \$2,000 million. If we assume total end user minutes using End User Access are 40 billion then the unit

cost factor is 5¢/minute. Multiplying this by each services' usage gives the allocation of cost. So if local calls use 28 billion minutes, \$1,400 million of cost will be allocated.

## **Step 2**

Gross retail profit for End User Access is established by subtracting retail specific costs and the retail costs of capital from retail revenue.

Figure 40 shows this as \$800 million.

Total customer end minutes through the access elements associated with End User Access must then be established. This will be different from Step 1 as now usage of these elements by access seekers is also included. A unit cost factor for gross retail profit is calculated in a similar manner to Step 1 and used to allocate the gross retail profit as a 'negated cost' across the services.

Eg. Assume local calls uses 50% of total minutes, Domestic PSTN Terminating used 5% and Domestic PSTN Originating uses 3%.

The amount of gross retail profit allocated is equal to \$400 million, \$40 million and \$24 million respectively.

## **Step 3**

We can see that:

- The total of 'Access Cost Adjustment' in the Capital Adjusted Profit – Internal Wholesale Business will equal the End User Access 'Wholesale Capital Adjusted Profit'
- The sum of 'Access Revenue Adjustment' for the Internal Wholesale Business and External Business' Capital Adjusted Profit statements, will equal the End User Access 'Gross Retail Profit'

## **Step 4**

Also note that for End User Access the allocation of cost and net revenue does not alter the financials recorded. Not Applicable is recorded in the adjustment report lines.



**Figure 40: End User Access Example**

**Capital Adjusted Profit - Internal Wholesale Business**  
(\$m)

	End User Access	Local Calls	.....	Total
Wholesale Costs				
•				
•				
•				
Total	(500)	(100)	.....	
Wholesale Cost of Capital	(1,500)	(500)	.....	
Wholesale Capital Adjusted Cost	(2,000)	(600)	.....	
Access Cost Adjustment	N/A	(1,400)	.....	(2,000)
Access Revenue Adjustment	N/A	400	.....	x
Access Adjusted Wholesale Cost	N/A	(1,600)	.....	

**Capital Adjusted Profit - External Business**  
(\$m)

	Domestic PSTN Terminating	Domestic PSTN Originating	.....	Total
Wholesale Revenue				
•				
•				
•				
Total	500	400	.....	
Wholesale Costs				
•				
•				
•				
Total	(10)	(10)	.....	
Cost of Capital	(290)	(200)	.....	
Access Revenue Adjustment	40	24	.....	y
Capital Adjusted Profit	240	214	.....	

**Capital Adjusted Profit - Retail Business**  
(\$m)

	End User Access	Local Calls	.....	Total
Retail Revenue				
•				
•				
•				
Total	1,000	1,500	.....	
Retail Specific Costs				
•				
•				
•				
Total	(100)	(100)	.....	
Retail Cost of Capital	(100)	(100)	.....	
Gross Retail Profit	800	1,300	.....	
Wholesale Capital Adjusted Cost	(2,000)	(600)	.....	
Retail Capital Adjusted Profit	N/A	700	.....	
Access Adjusted Wholesale Cost	N/A	(1,600)	.....	
Retail Access Adjusted Profit	N/A	(300)	.....	

- 1 Step 1: Allocate Cost
- 2 Step 2: Allocate Gross Retail Profit
- 3 Step 3: Confirm appropriate totals are correct
- 4 Step 4: Enter N/A in End User Access adjustment items

### 5.3 Weighted Average Cost of Capital

After seeking input from the Working Group we have reached the conclusion that allowing the carriers to develop their own WACC's to apply to the capital employed for each service is appropriate. While this may lead to some differences in approach by different carriers it does not prevent the ACCC from doing scenario analyses around the carriers stated WACC and provides a starting point for further discussion in the instance where a dispute arises.

**R. *Is a WACC figure applied consistently across all services, or is a separate WACC used for each service? If so separate reports/summaries will be required.***

The WACC should be on a pretax, nominal basis calculated by the following formula. **All variables used should be identified and their sources described in the WACC report (see Section 3.5).** In keeping with the definition of the capital employed figures which exclude cash and short term investments, these amounts should be subtracted from the value of debt in generating the WACC variables.

$$WACC = [R_e / (1 - (T(1 - \gamma)))] \times E/V + R_d \times D/V$$

$$\text{Where the equity return } R_e = R_f + \beta_e(R_m - R_f)$$

Figure 41 details the definitions of the variables.

**Figure 41: Definition of WACC Variables**

WACC		Equity Return	
$R_e$	Return on equity after company tax	$R_f$	Risk free rate of return
$R_d$	Pre-tax average cost of debt	$\beta_e$	Equity beta
T	Corporate tax rate	$R_m - R_f$	Market Risk premium
$\gamma$	Value of franking credits		
E	Market value of equity		
D	Market value of debt		
V	Total value of debt plus equity		

#### Worked Example

The following example is not intended to define the way carriers develop their WACC's but to provide general guidance only.

Figure 43 lays out the key variables and some examples of sources or ranges that may be appropriate for carriers together with the calculated figures that arise from applying the relevant equations.

**Figure 42: WACC Calculation Example**

Variable	Title	Example Value	Comment
$R_f$	Risk free rate of return	6.0 %	12 month average of the ten year bond rate over the period
$\beta_e$	Equity beta	0.8	Varies due to many factors. Telecommunications business can range from ~0.5 - 1.0
$R_m - R_f$	Market risk premium	6.0%	Various sources based on both historical and current assessments. Can range from ~4.5 - 8.0%
$R_e$	Return on equity after tax	10.8%	Calculated
$R_d$	Pretax cost of debt	6.5%	Sum of risk free rate plus a risk premium specific to each carrier
$T$	Corporate tax rate	30%	Should be the actual tax paid as a percentage of the relevant profit
$\gamma$	Franking credits	0.7	Different sources provide a range of ~ 0.5 - 0.85
$E$	Market value of equity	\$1000m	Base on market value wherever possible
$D$	Market value of debt	\$600m	Base on market value less cash and short term investments
$V$	Total value of debt and equity	\$1600m	Calculated
<b>WACC</b>	Weighted average cost of capital	9.86%	Calculated

Source: ACCC Assessment of Teltra's undertaking of PSTN Originating and Terminating Access - Cost of Capital January 1999

#### 5.4 Procedure for Modelled Declared Services

Provision is made within these RKR that, where a declared service is not yet consumed or it's use is so limited that the financial allocations are of doubtful precision, a model is required by the carrier which will generate an indicative unit price for the service. The following procedure is a guide to the process which should be used but which may be altered in consultation with the ACCC where the specific circumstances warrant.

The modelling process incorporates nine major steps.

1. Identify the retail and wholesale services within the RKR which are aligned with the use of assets involved in the declared service
2. Identify the usage of each RKR asset by these services
3. Identify the operating and maintenance costs for each asset
4. Calculate the capital charge for the asset
5. Identify the non-retail common costs associated with the relevant services and allocate to the assets

6. Subtract any contributions from end user access revenues less retail related costs of end user access provision and allocate across the assets
7. Subtract the relevant contributions of other carriers and services to providing any USO cost component implicitly included in costs and allocate across the assets
8. Divide each asset's cost by each asset's usage to generate an asset specific unit cost
9. Add each asset's unit costs to provide the average total service cost.

## **5.5 Segmented Services**

Refer to Section 3.7.

## **6 Carrier Regulatory Accounting Procedures Manual Guidelines**

This section outlines the required contents of the Regulatory Accounting Procedures Manual (RAPM) to be developed and maintained by carriers in order to comply with the requirements of the ACCC's revised record keeping rules (RKR). It also contains recommendations on how this information should be administered and maintained.

### **6.1 Background**

The RAPM is a document that is developed and maintained by each carrier. The exact information required will differ from one carrier to the next depending on the structure and operations of the particular carrier. However, whilst the specifics may differ, the basic structure and level of detail within the RAPM, should be consistent from one carrier to the next. As far as possible information should be presented in a structure and manner which is consistent with the structure of the RKR.

The development of the RAPM in compliance with the RKR is the sole responsibility of the carrier. In the event that the ACCC feels that a particular carrier is not providing a level of detail or clarity that is required to enable them to ascertain the basis on which the RKR are being administered within the carrier, then the ACCC will request for an update or amendment to the carrier's RAPM.

### **6.2 Level of Detail Required**

It is envisaged that, to the extent possible, the RAPM document should stand on its own, rather than contain a large number of references to the RKR. As such extracts from the RKR will need to be included in the RAPM, such as the overall objectives, allocation principles and guidelines. These will be included in the RAPM in such a way as to show the relevance for the particular carrier and to enable the reader of the RAPM to understand the appropriate context for the information and guidelines.

The document will also require various types of background information. This may include organisational structures, product information, details of billing, financial, accounting and operational packages that are to be used for the capture and generation of information used in the compilation of the reports required under the RKR.

The RAPM should contain details of all studies, surveys and models that are used for allocation purposes. The volume of information may make it more appropriate for this information to be contained in attachments to the RAPM, but these are considered an integral part of the RAPM.

The RAPM should provide worked examples of all of the allocation methods that are undertaken, such that it is clear to the reader the exact manner in which the information collected has been used to calculate the level of revenues or costs associated with a particular service.

The RAPM should identify, **for each GL line used by the carrier** the following information:

- **General Ledger Account Number** *Carriers Management Account Identifier eg: Cost Centre, General Ledger Account Number*
- **General Ledger Description** *Carriers Management Account Description*
- Allocation Principle (ie. direct, attributable or unattributable)
- Allocation Method (ie. for all non-direct this would be the model, survey or study used to identify the appropriate allocation factor)
- Allocation driver (ie. FTE headcount, minutes of usage, asset cost base etc)

### **6.3 Administration**

- a) The RAPM, including all attachments, should be maintained in an electronic format
- b) Each carrier should designate an individual whose responsibility it is to ensure that the RAPM is up to date. That person is the only person able to make changes to the RAPM, and is also responsible for a positive assessment as to whether any such changes are required (see below)
- c) Each page of the RAPM should identify the date it was last amended as well as the date of the edition to which it belongs
- d) The contents page of the RAPM should include, for each section of the RAPM, as well as the various attachments, details of the last time that this particular part of the RAPM was updated
- e) In addition, the report should include a section that highlighting the changes that have been made since the previous edition
- f) It is envisaged that the RAPM will have a full formal review at least once a year, timed such that this review is completed prior to the commencement of the carriers financial year. In addition the responsible person for the RAPM should undertake a more limited review on a six monthly basis to ensure that it is still appropriate in the light of changes to the carrier's business offerings and organisational structure and the ACCC's requirements

### **6.4 Sample Contents Page**

The following lays out a sample of how the RAPM manual should be laid out and describes the key features of major sections. This should be regarded as providing the minimum information which the ACCC should require although carriers may choose to alter the format of the manual if it accomplishes the same general purpose.

## 1.0 Introduction

### 1.1 Purpose of Manual

### 1.2 Structure of Procedures Manual

### 1.3 Required reports (format shown in Appendix A) and timetable for presentation and audit

### 1.4 Confidentiality

### 1.5 Amendments

## 2.0 Organisation Structure and Systems

### 2.1 Roles & Responsibilities

This should identify the roles and responsibilities of different groups and positions within the carrier in respect of the following:

- Update and maintenance of the RAPM
- Gathering of the underlying data and model inputs required for preparation of the RKR reports

### 2.2 Accounting & System Environments

This should provide details of the various financial, accounting and operational packages that are utilised to gather and process the information required for the preparation of the reports required under the RKR. It should pay particular attention to the regulatory reporting systems and the way in which they extract information from the day-to-day financial, accounting and operational packages.

### 2.3 Organisation Structure

This should contain details of the organisation of the business and operating units within the carrier, with particular reference to the operational support units and how they relate to the main business streams. Current versions of the organisational charts should be included in the RAPM as appendices.

### 2.4 Maintenance of the Cost Allocation Procedures

This should contain details of specific individuals who are responsible for the maintenance of the RAPM, as well as the policies and procedures required to ensure that all changes to products, general ledger accounts, record keeping or any other matters which would affect the carrier's ability to conform with the RKR.

### 2.5 Controls and Procedures



These include the necessary controls and procedures to ensure that the RAPM is updated on a timely basis to reflect changes in the carrier's service offerings, internal structure and ACCC requirements.

It should clearly articulate the responsibility of business units to report appropriate changes in operations and business activities to the appropriate responsible person to enable updates to the RAPM to be made on a timely basis.

### 3.0 Reporting Requirements

This will identify all of the specific reports required (formats to be contained in an appendix), as well as narrative explaining the purpose of each report and the guiding principles to be applied in developing the necessary information for the reports.

### 4.0 Allocation Principles and Guidelines

Largely drawn from the RKR's these are required to ensure that this is a stand alone document capable of use by carrier personnel.

### 5.0 Product/Service Definitions

This should include details of the carrier's services and how these map to the product and service definitions that are used in the RKR's.

### 6.0 Revenue Allocation Procedures

#### 6.1 Overview

This will contain the basic principles to be followed.

#### 6.2 Allocation Processes

This will contain the basis for allocation used for each of the revenue streams, including reference to the appropriate section within the RAPM which explains in more detail the methodology and practices used for that particular allocation.

#### 6.3 Allocation Studies

This should include details of the methodology of the various studies or calculations used to undertake the allocations.

### 7.0 Cost Allocation Procedures

#### 7.1 Overview

This will contain the basic principles to be followed, together with an overview of the procedures undertaken to gather the necessary information and allocate costs.

#### 7.2 Allocation Processes

For each cost item this will contain the basis for allocation used as laid out in the RKR's. It will include an explanation of how this is implemented in the particular circumstances of the carrier. This will also include, as necessary, reference to the appropriate section within the RAPM which explains in more detail the methodology and practices used for that particular allocation.

It will include a summary of the general allocators used, describing the cost lines to which they are applied (whether directly or indirectly) as well as the studies used to support these allocators.

Specific flowcharts should be drawn up to show any allocation process that involves more than one step in the allocation process ie. for support unit costs.

### 7.3 Allocation Studies

This should include details of the methodology of the various studies or calculations used to undertake the allocations.

## 8.0 End User Access Adjustments

### 8.1 Overview

This will contain an overview to and explanation of the principles behind the End User Access Adjustments.

### 8.2 Example calculations

This section will contain an example, based on the carriers specific circumstances of how to calculate the necessary adjustments. This will include a step-by-step guide as to where to obtain the appropriate information, whether or not this is from the general ledger or other studies.

### 8.3 Allocation Studies

To the extent that any allocation studies are utilised for the calculation of the End User Access Adjustments these should be explained in detail in this section.

## 9.0 Product Usage Reports

### 9.1 Required Reports

This will detail the Product Usage Reports that are required by the RKR's.

### 9.2 Report Production Process

This should detail the sources used for the production of the various Product Usage Reports, together with any allocations or calculations used to prepare the reports.

### 9.3 Allocation Studies

To the extent that any allocation studies are utilised for the preparation of the Product Usage Reports these should be explained in detail in this section.

## 10.0 Segmented Services Reports

### 10.1 Required Reports

This will detail the segmental reports that are required by the RKR.

### 10.2 Report Production Process

This should detail the sources used for the production of the various Segmented Services Reports, together with any allocations or calculations used to prepare the reports.

### 10.3 Allocation Studies

To the extent that any allocation studies are utilised for the preparation of the Segmented Services Reports these should be explained in detail in this section.

## 11.0 Modelling Procedures

### 11.1 Required Reports

This will detail the model output reports required by the RKR and which the ACCC requires to be assessed on an ongoing basis.

### 11.2 Report Production Process

This should detail the sources used for the production of the various models, together with any allocations or calculations used to prepare the reports.

### 11.3 Allocation Studies

To the extent that any allocation studies are utilised for the preparation of the models these should be explained in detail in this section.

## 12.0 Glossary

This should contain definitions of some of the terms used in the procedures manual, in the RKR, or in the Carriers business.

## Appendices

- A Sample Reports
- B Detailed Mapping and Allocation Schedule
- C Organisation Chart

## 6.5 Example of the Appendix B Report Format

Figure 43 lays out a format for the information required in Appendix B. This allows the ACCC to clearly understand what financials are being captured within each RKR line item, how the carrier has interpreted and applied the allocation principles that may apply and clearly identifies the relevant study which may have been used to generate allocation information.

**Figure 43: General Ledger Account Carriers Management Account Mapping or RKR and Allocation Schedule**

<b>GL Account Carriers Management Account Identifier</b>	<b>Description</b>	<b>Allocation Principle</b>	<b>Allocation Method</b>	<b>Allocation Prime Driver</b>
<b>XXXXXXX</b>	As per GL, with further elaboration if required	ie. Direct, Attributable or Unattributable	eg Study Ref A1	ie. headcount, revenue, cost etc

## 7 Current Cost Adjustments

While this report does not recommend that current cost adjustments be immediately incorporated into the RKR, this will be an important next step in their continued evolution. We would encourage the ACCC to set in place a timeframe, say by 30 December 2000, for current cost adjustments to be made to at least a number of key asset classes.

### 7.1 Background

Current Cost Accounting (CCA) is a methodology originally devised for financial reporting in times of rapidly changing prices where traditional Historical Cost Accounting (HCA) was considered inadequate. There are two alternative approaches to CCA. The approaches differ in their approach to “capital maintenance”. That is, the manner in which the capital of the company is viewed when determining profit.

Capital can either be viewed in operational terms (ie. as the company’s capacity to produce goods and services) or in financial terms (ie. as the value of shareholder’s equity interest). These are known as operating capital maintenance and financial capital maintenance concepts respectively:

- Operating Capital Maintenance (OCM) considers the operating capability of the company. Proponents of OCM assert that capital maintenance under this approach requires the company to have as much operating capability – or productive capacity – at the end of the period as at the beginning
- Financial Capital Maintenance (FCM) considers the financial capital of the company is maintained in current price terms. Capital is assumed to be maintained if shareholders’ funds at the end of the period are maintained in real terms at the same level as at the beginning of the period

If OCM was used to determine charges, the revenue requirement<sup>2</sup> would be derived as the sum of operating costs, historical cost depreciation, supplementary depreciation and a return on net assets. Under FCM, the revenue requirement would be the sum of operating costs, historical cost depreciation, supplementary depreciation and a return on net assets *less* holding gains/losses *plus* the adjustment to shareholders’ funds. Required revenue therefore differs depending on the capital maintenance concept used.

The use of the OCM concept may systematically incorporate insufficient or excess returns into the level of allowed revenue (depending, respectively, on whether asset-specific inflation was expected to be lower than or higher than general inflation). This is not a desirable feature of any regulatory regime, as it would not provide appropriate investment incentives.

---

<sup>2</sup> Defined as the level of revenue required in order to earn a reasonable return.

Under FCM, however, the returns to the providers of capital would equal the required return<sup>3</sup> (as measured by the cost of capital) irrespective of whether replacement costs were rising or falling relative to general prices. Hence, if current cost accounting information is used as the basis on which to assess interconnection charges (albeit as an interim stage prior to the use of LRIC information) FCM is the preferred capital maintenance concept. It follows, therefore, that separate accounts would also need to be prepared using the FCM concept.

## **7.2 The main adjustments under FCM**

This concept is concerned with the maintenance of an organisations financial capital in current dollar terms. A number of major adjustments are needed to allow for current cost changes.

### **7.2.1 Revaluation of fixed assets**

Under FCM the gross book value of assets is revalued to take account of *specific* price changes in the price of assets and changes in technology.

One way of calculating the current cost of assets is to apply specific price indices to the existing gross book value of assets. These may be derived from the company's procurement department. Alternatively, Modern Equivalent Asset ("MEA") valuation methods may be used. These base the value of assets on the current cost of modern equivalent assets subject to cost "abatements". These abatements are discussed further below.

#### ***Supplementary Depreciation***

The depreciation charge for the year is calculated on the basis of the new asset valuations. This ensures that the current cost of fixed assets consumed during the year is charged against revenue. For each asset, or group of assets, the FCM depreciation charge - assuming straight line depreciation - can be derived by dividing the gross replacement cost by asset life. Supplementary depreciation is the difference between historical cost depreciation and current cost depreciation charge. It may be positive or negative depending on whether the value of assets is rising or falling. It is a charge against profits in the Profit and Loss account.

#### ***"Backlog" depreciation***

The total current cost depreciation (ie. the sum of historical and supplementary depreciation) charges over the life of an asset will not equal the replacement cost of the asset at the end of its life. The difference is "backlog" depreciation.

Under FCM, backlog depreciation is not debited to the Profit and Loss account. Instead it is debited directly to the current cost reserve (CCR). This is because it does not form part of the current period's current cost of utilising the asset; rather it represents the effect on past consumption of subsequent price changes.

Transfers to or from the current cost reserve represent the *net* amount of the restatement of the gross current cost and the restatement of the accumulated depreciation; that is, they represent the change in the net value of the asset from one period to another.

---

<sup>3</sup> Subject to the level of investment in assets being efficient.

*Illustration of these concepts*

The tables below illustrates the above concepts for an asset purchased for \$10,000. The assumed life of the asset is 4 years. For simplicity, it is assumed that the asset is depreciated on a straight line basis. In Figure 44 it is assumed that the cost of replacing the asset falls by 10% per annum.

**Figure 44: Replacement cost falling by 10% per annum**

Year	Current Cost	Depreciation					"Required"	Backlog
		Current Cost	Historical	Supplementary	Cumulative			
0	10,000							
1	9,000	2,250.00	2,500.00	(250.00)	2,250.00	2,250.00	Nil	
2	8,100	2,025.00	2,500.00	(475.00)	4,275.00	4,050.00	(225.00)	
3	7,290	1,822.50	2,500.00	(677.50)	5,872.50	5,467.50	(405.00)	
4	6,561	1,640.25	2,500.00	(859.75)	7,107.75	6,561.00	(546.75)	

Derivation/explanation:

- Current cost is the gross replacement cost of the asset
- Current cost depreciation is derived as the gross replacement cost divided by the asset life
- Historical cost depreciation is the original acquisition cost divided by the asset life
- Supplementary depreciation is the additional depreciation charged as a result of revaluing the asset (it can also be derived as current cost depreciation less historical cost depreciation)
- Cumulative depreciation is the sum of cumulative current cost depreciation and backlog depreciation
- "Required" depreciation is the cumulative depreciation that would have been charged given the current cost of the asset – put another way, it is the difference between the gross and net replacement cost of the asset, and
- Backlog depreciation is the difference between required depreciation and cumulative depreciation



### 7.2.2 Holding gains and shareholders' funds

Under FCM, profit is recognised only after taking account of holding gains or losses that arise due to the effect of asset-specific inflation on the current cost value of assets and the effect of general inflation on shareholders' funds. Current cost profit under FCM can be derived as follows:

$$\text{FCM profit} = \text{HC profit} + \text{holding gains/(losses)} - \text{the erosion in the value of shareholders' funds due to general inflation}$$

Holding gains (or losses) comprise two components:

- The gain in the current cost value of assets as a result of changes in the cost of assets; that is, as a result of asset revaluations; and
- The element of the revaluation that is written off as depreciation during the year in question

The gain in current cost can be derived as:

$$\text{NBV(HC)}_{t-1} \times (\text{GRC}_t/\text{acquisition cost}) \text{ less } \text{NBV(HC)}_{t-1} \times (\text{GRC}_{t-1}/\text{acquisition cost})$$

where  $\text{NBV(HC)}_{t-1}$  is the written down historical cost of the asset at the end of the previous year, GRC is the gross replacement cost and acquisition cost is the original purchase consideration. The above formula reduces to the net book value in current cost terms at the end of the previous year multiplied by the change in the asset-specific price index. For the purposes of accounting separation, this amount should be credited to the Profit and Loss account.

The element of the revaluation that is written off as depreciation is derived as:

$$\text{HC depreciation} \times (\text{GRC}_t/\text{acquisition cost}) \text{ less } \text{HC depreciation}$$

Given that HC depreciation is derived as acquisition cost divided by asset life, this formula reduces to:

$$(\text{gross replacement cost} - \text{acquisition cost})/\text{asset life}$$

As discussed above, this is equivalent to supplementary depreciation. For the purposes of accounting separation in accordance with the Interconnection Directive, it shall be debited to the Profit and Loss account.

The effect of general inflation on shareholders' funds is taken into account through an adjustment to shareholders' funds, determined by multiplying the opening value of shareholders' funds by the change in the index of general price inflation for the period. This is debited to the Profit and Loss account and credited to a financial capital maintenance reserve.

### 7.2.3 Other FCM adjustments

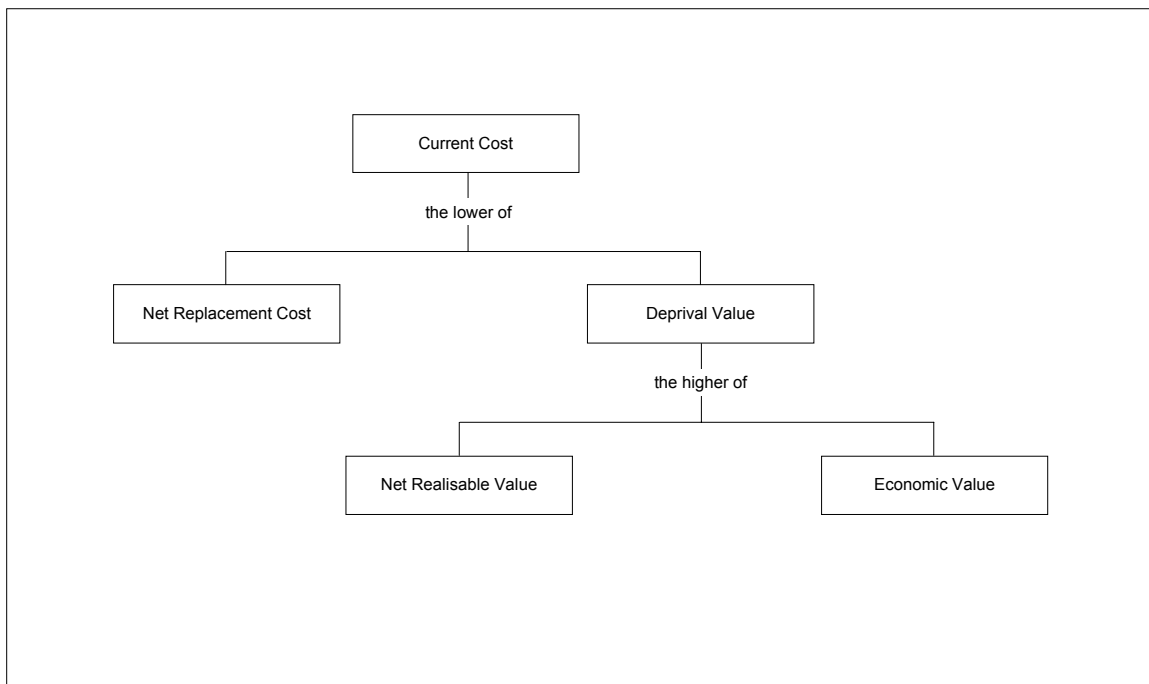
There are a number of other current cost accounting adjustments required under FCM, including the following, which have not been further described.

- Cost of sales adjustments
- Monetary working capital adjustments
- Gearing adjustments; and
- Adjustments to profit on sale of tangible fixed assets

### 7.3 Calculation of current cost asset values

A key element of the current cost methodology is the valuation of assets. Assets should be valued according to the following decision rule:

**Figure 45: Asset Valuation Decision Rule**



#### ***Net Replacement Cost***

The Net Replacement Cost is the cost of replacing the asset with another asset of similar characteristics and age.

A key element of this is the calculation of the replacement cost of the asset.

Replacement cost can simply be the cost today of replacing the asset with an identical one. However, when technology is changing rapidly, the existing asset may no longer be replaceable (eg. it is no longer manufactured). In this case it is necessary to calculate the MEA value which is the value of an asset with the same level of capacity and functionality as the existing asset. The issues relating to the calculation of MEA values for telecommunications operators are considered further below.

### ***Deprival Value***

Deprival Value (DV) represents the recoverable value of the asset to the organisation, that is, the higher of the economic value the asset is likely to generate or the net realisable value (NRV) of the asset if it were sold.

Economic Value (EV) is a measure of the value of an asset based on the net present value of future cash flows.

The valuation rules can be summarised as follows:

- If  $EV > NRV$ , the company will keep the asset in its current use
- If  $NRV > EV$ , the company will sell the asset now as the proceeds from the sale would exceed the economic value that it would be expected to generate from its continued use

Therefore the deprival value or recoverable amount of the asset is the higher of EV and NRV. The current cost therefore is the lower of its deprival value and the net replacement cost. That is, the lower of the amount the company could recover from the asset and the cost to the company to replace the asset with an identical one.

## **7.4 MEA valuation issues in telecommunications**

The adoption of CCA methodologies in telecommunications is complicated by the rate of technological change in the industry. This has implications in both identifying suitable replacement costs for old technology assets and ensuring the assets exhibit the same levels of functionality and capability.

Examples of technological issues for telecommunications operators include:

- Copper versus fibre cables
- Analogue versus digital switches; and
- PDH technology versus SDH technology

The new technologies are usually far superior to the old technologies in terms of functionality and efficiency. However, since MEA values are required to reflect assets of equivalent capacity and functionality, it is necessary to make adjustments to the current purchase price and also the related operating costs - for example, the new asset may require less maintenance. These adjustments are known as “abatements”.

For example, consider the valuation of two digital switches. Assume that one of the switches is an older basic type while the other is a newer type that has additional feature facilities such as voice mail. The supplier may only have the current replacement cost of the newer switch. In this case, the costs of the additional functionality should be deducted from the cost to derive an appropriate cost for the basic type.

## 8 Modification Process

An important part of establishing the RKR should be a clear process for both further development and regular updating to allow for changes in technologies or in markets/services of particular interest to the ACCC.

Without replacing the ACCC's rights to dictate RKRs we suggest that the following general procedures should be followed for modifying the RKRs.

- a) A six monthly review meeting of the ACCC with a Working Group of industry members, at which issues with the RKRs should be tabled
- b) Refinements of the existing RKRs including such things as services and their descriptions, line items, specific allocation procedures etc should be either resolved immediately at the review meeting or put to a committee of the members chaired by the ACCC. This committee should report back to the Working Group members within 6 weeks with any final submissions on recommended changes occurring within another 2 weeks. The ACCC should then release its final decision which is to be applied for the next report
- c) Substantial developments of the RKRs including changes to the underlying architecture, current cost or incremental cost adjustments, supplementary reports requiring significant new data capture etc should have a specific project team and plans developed that reflect the extent and nature of the changes. It is expected that these issues may require at least two reporting periods to pass before they could be successfully resolved and implemented
- d) Where new services are declared by the ACCC these are automatically included within the reporting framework. Where the declaration is within 8 weeks of the accounting closing date for a report then output based on the newly declared service will not be required until the following reporting period, otherwise a report is required

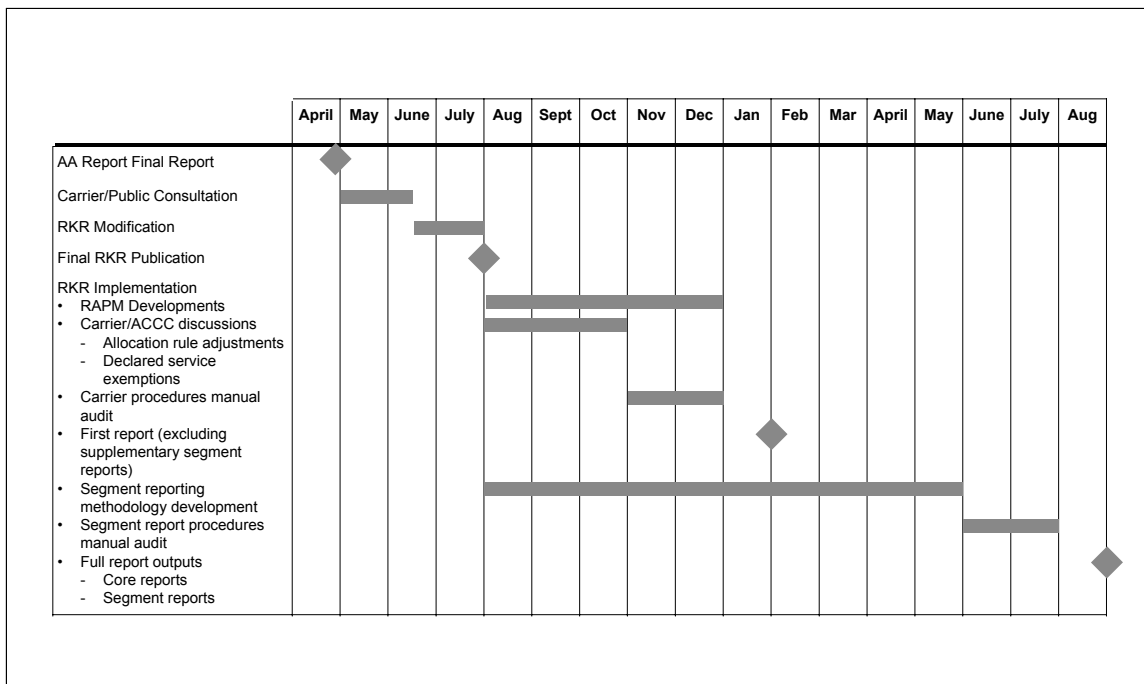
## **9 Audit and Compliance**

The audit and compliance framework contained in the current COA/CAM has been reviewed, and outlines audit guidelines and procedures for industry compliance have been prepared. These guidelines are contained in a separate document, *Audit and Compliance Framework for Revised Record Keeping Rules for the Australian Telecommunications Industry, April 1999*.

## 10 Implementation Process

As a guide for the implementation of these recommended RKR we have developed a high level plan which the ACCC should test with the Working Group members.

**Figure 46: Preliminary Implementation Plan**



## **Appendices**

- Appendix 1 - Chart of Accounts, Line Item Descriptions and Allocation Rules
- Appendix 2 - Detailed Example - Capital Adjustment Profit Statement



## Appendix 1

### Chart Of Accounts Line Item Descriptions and Allocation Rules

*Each of the assets and liabilities detailed below, should use the statutory reporting six monthly end figures.*

*Where assets cannot be directly identified as belonging to particular products, the basic principle is that Asset Values and Accumulated Depreciation should be allocated to products on the same basis as the costs that derive from those assets and liabilities ie. the value of the assets of a Call Centre should be allocated to products on the same basis as the Product Sales costs.*

Account Code	Line Item	Description	Allocation Method
<b><i>1</i></b> <b><i>Current Assets and Free Funds</i></b>			
1-1-01	Net Receivables	Balances due from customers and other persons within the next twelve months net of any doubtful debt amount	Where possible these should be identified directly with particular product groups or division. Thereafter they should normally be allocated using a revenue based allocator
1-1-10	Other Current Assets (excluding cash and short term investments)	All other current assets held for conversion within the next twelve months and not already included except for cash and short term investments	Where possible these should be identified directly with particular product groups or division. Thereafter they should be allocated using an appropriate general allocator
1-1-20	Trade Creditors	Amounts owing to trade creditors where no interest is to be paid. In arriving at the trade creditor figure for each month it will be necessary for the carrier to consider whether there are any short term distortions caused by unusual purchases of significant fixed asset items that are not paid for at the relevant period end	Where possible these should be identified directly with particular product groups or division. Thereafter they should normally be allocated using a cost based allocator
1-1-30	Provisions	Provisions such as employee entitlements, but excluding provisions for dividends or income tax	Provisions should be identified with appropriate divisions or product groups to the extent possible and allocated using an appropriate general allocator ie. pension provisions should be allocated based on payroll expenses

Account Code	Line Item	Description	Allocation Method
2-1	<b>Communications Plant &amp; Equipment</b>	<i>Asset value of owned in-service and WIP plant and equipment directly involved in providing and maintaining the telecommunications network). Each asset category is to have a separate asset value based on Historical/Revalued Value and Accumulated Depreciation as for CAN Ducts and Pipes</i>	<p><i>Historical/Revalued Value: Allocate based on the method provided for the specific asset</i></p> <p><i>Accumulated Depreciation: Allocate based on the method provided for the specific asset</i></p> <p><i>The following method should be used to develop the allocation of the “Other Asset” categories related to primary asset eg. CAN Ducts and Pipes – Other Assets</i></p> <p><i>“Where possible these assets should be directly related to the relevant primary assets being supported. If the secondary plant is being used to support a number of primary assets they should be allocated to the relevant primary network assets based on an appropriate allocator which should, as far as possible, be a function of usage or, failing this, relative net cost base. This may require a multi-stage allocation process.</i></p> <p><i>Once allocated to the primary network assets these secondary assets should be allocated to product using the same allocation method as the relevant primary asset. Where it is not possible to relate the secondary assets to specific primary assets or a pool of such assets the secondary assets should be allocated on the basis of the minutes usage within the core network”</i></p>
2-1-01-y	CAN Ducts & Pipes – Primary Asset	Ducts and pipes used for conveying telecommunication cables between termination points at customer premises and the local exchange	
2-1-01-1	<ul style="list-style-type: none"> <li>• Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-01-2	<ul style="list-style-type: none"> <li>• Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-02-y	CAN Ducts & Pipes – Other Assets	Other network assets that are directly associated with the operation of the CAN Ducts and Pipes eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	

2-1-02-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-02-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-05-y	CAN Copper Cables – Primary Asset	Copper wires and cables between customer premises and the Main Distribution Frame (MDF) of the local exchange	
2-1-05-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-05-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-06-y	CAN Copper Cables – Other Assets	Other network assets that are directly associated with the operation of the CAN Copper Cables eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-06-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-06-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-10-y	CAN Other Cables – Primary Asset	Non copper cables between the customer premises and the MDF of the local exchange	
2-1-10-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the relative proportion of product cable costs to total cable costs
2-1-10-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the relative proportion of product cable costs to total cable costs
2-1-11-y	CAN Other Cables – Other Assets	Other network assets that are directly associated with the operation of the CAN Other Cables eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-11-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the relative proportion of product cable costs to total cable costs
2-1-11-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the relative proportion of product cable costs to total cable costs
2-1-15-y	CAN Pair Gain Systems –	Pair gain systems operating between the customer premises and a	

	Primary Asset	local exchange	
2-1-15-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-15-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-16-y	CAN Pair Gain Systems – Other Assets	Other network assets that are directly associated with the operation of the CAN Pair Gain Systems eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-16-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on access line usage
2-1-16-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on access line usage
2-1-20-y	CAN Radio Bearer Equipment – Primary Asset	Radio bearer equipment operating between the customer premises and a local exchange	
2-1-20-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the number of radio circuit assignments per product
2-1-20-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the number of radio circuit assignments per product
2-1-21-y	CAN Radio Bearer Equipment – Other Assets	Other network assets that are directly associated with the operation of the CAN Radio Bearer Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-21-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the number of radio circuit assignments per product
2-1-21-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the number of radio circuit assignments per product
2-1-25-y	Other CAN – Primary Asset	Other assets existing between the customer premises and the local exchange not already included	
2-1-25-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the relative proportion of product CAN costs to total CAN costs
2-1-25-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the relative proportion of product CAN costs to total CAN costs

2-1-26-y	Other CAN – Other Assets	Other network assets that are directly associated with the operation of the Other CAN eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-26-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product otherwise allocate based on the relative proportion of product CAN costs to total CAN costs
2-1-26-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product otherwise allocate based on the relative proportion of product CAN costs to total CAN costs
2-1-30-y	Switching Equipment – Local – Primary Asset	All local automatic exchange and network operating centre switching equipment up to but excluding the terminal point of the external cables on the MDF. Included are associated relays and racks, pads, amplifiers and terminating sets	
2-1-30-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-30-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-31-y	Switching Equipment – Local – Other Assets	Other network assets that are directly associated with the operation of the Switching Equipment - Local eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-31-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-31-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-35-y	Switching Equipment – Trunk – Primary Asset	Trunk switching equipment includes all apparatus provided for establishing, switching, supervising and <i>charging for trunk telephone calls</i> . This includes selector switching, common control equipment, call charging apparatus, test access and performance monitoring in 4 wire automatic exchanges and 4 wire trunk switch boards. Also included are associated relays and racks, transformers, pads, amplifier and terminating sets, alarm transmission and associated equipment	
2-1-35-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on seconds of use of switching plant

2-1-35-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-36-y	Switching Equipment – Trunk – Other Assets	Other network assets that are directly associated with the operation of the Switching Equipment – Trunk eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-36-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-36-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on seconds of use of switching plant
2-1-40-y	Switching Equipment – Other – Primary Asset	All ancillary switching equipment including Exchange Communication Controller equipment, Networks Call Distributor, Business Performance Analyser, stand-alone alarm equipment. Does not include international switching equipment	
2-1-40-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the proportion of switching plant allocated to products above
2-1-40-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the proportion of switching plant allocated to products above
2-1-41-y	Switching Equipment – Other – Other Assets	Other network assets that are directly associated with the operation of the Switching Equipment – Other eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-41-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the proportion of switching plant allocated to products above
2-1-41-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the proportion of switching plant allocated to products above
2-1-45-y	Inter-exchange Cables – Primary Asset	Cabling between the local exchanges, and cabling between local and trunk exchanges and between trunk exchanges. Includes all copper pairs, coaxial and optical fibre cables for trunk and junction	
2-1-45-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of pairs, tubes or fibre circuits assigned per product
2-1-45-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of pairs, tubes or fibre circuits assigned per product

2-1-46-y	Inter-exchange Cables – Other Assets	Other network assets that are directly associated with the operation of the Inter-exchange Cables eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-46-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of pairs, tubes or fibre circuits assigned per product
2-1-46-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of pairs, tubes or fibre circuits assigned per product
2-1-50-y	Transmission Equipment – Primary Asset	Trunk and junction line transmission and multiplex equipment including carrier terminal repeater equipment, filters, line terminal equipment, equalisers and regenerators for coaxial and optical fibre links, all associated power plant wiring and cabling(excluding battery, rectifier and discharge cubicle interconnections), but not including any exchange service line or switchboard equipment. Also includes transmission huts and shelters. Excludes exchange equipment, cables and ducts	
2-1-50-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of circuits or channels in use for each product
2-1-50-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of circuits or channels in use for each product
2-1-51-y	Transmission Equipment – Other Assets	Other network assets that are directly associated with the operation of the Transmission Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-51-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of circuits or channels in use for each product
2-1-51-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of circuits or channels in use for each product
2-1-55-y	Radio Bearer Equipment – Primary Asset	All HF, VHF and UHF radio bearer equipment, protection bearer equipment, racks, feeders and their pressurising systems, aerials, radio towers and masts, and customer radio services	
2-1-55-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of radio circuit assignments per product
2-1-55-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost	Direct to product, otherwise allocate based on the number of

		or revalued amount as appropriate	radio circuit assignments per product
2-1-56-y	Radio Bearer Equipment – Other Assets	Other network assets that are directly associated with the operation of the Radio Bearer Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-56-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of radio circuit assignments per product
2-1-56-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of radio circuit assignments per product
2-1-60-y	Data Equipment – Primary Asset	Equipment used in the network including modem and network terminating units to enable transmission of different data services such as Text, Data Communication Packet Switching, Digital Data Network, Electronic Funds Transfer Network and other data services network equipment	
2-1-60-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of circuits in use for each product
2-1-60-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of circuits in use for each product
2-1-61-y	Data Equipment – Other Assets	Other network assets that are directly associated with the operation of the Data Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-61-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of circuits in use for each product
2-1-61-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of circuits in use for each product
2-1-65-y	Mobile Network and Terminal Equipment – Primary Asset	Manual mobile radio equipment, public automatic mobile telephone equipment, cellular mobile telephone equipment, paging equipment and other radio/non public equipment	
2-1-65-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product
2-1-65-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product



2-1-66-y	Mobile Network and Terminal Equipment – Other Assets	Other network assets that are directly associated with the operation of the Mobile Network and Terminal Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-66-1	<ul style="list-style-type: none"> <li>• Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product
2-1-66-2	<ul style="list-style-type: none"> <li>• Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product
2-1-70-y	Customer Equipment – Primary Asset	Equipment located at the customer premises and connected directly or indirectly to the network including telephones, small business systems, payphones, PABX's, teleconferencing and videoconferencing equipment and other terminal equipment	
2-1-70-1	<ul style="list-style-type: none"> <li>• Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product
2-1-70-2	<ul style="list-style-type: none"> <li>• Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product
2-1-71-y	Customer Equipment – Other Assets	Other network assets that are directly associated with the operation of the Customer Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-71-1	<ul style="list-style-type: none"> <li>• Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product
2-1-71-2	<ul style="list-style-type: none"> <li>• Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product
2-1-75-y	Satellite Equipment – Primary Asset	All satellite equipment, including satellite earth stations, antennae and other communications equipment. Covers both international and domestic satellites	
2-1-75-1	<ul style="list-style-type: none"> <li>• Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of channels in use
2-1-75-2	<ul style="list-style-type: none"> <li>• Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of channels in use
2-1-76-y	Satellite Equipment – Other Assets	Other network assets that are directly associated with the operation of the Satellite Equipment eg. power plant, and/or indirectly associated such as network management, platform	

		delivery assets etc	
2-1-76-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Direct to product, otherwise allocate based on the number of channels in use
2-1-76-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Direct to product, otherwise allocate based on the number of channels in use
2-1-80-y	International Network Cables – Primary Asset	Submarine cables and associated equipment including cable terminals used for international network operations	
2-1-80-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Base on the number of pair, tube or fibre circuits attributed to each service
2-1-80-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Base on the number of pair, tube or fibre circuits attributed to each service
2-1-81-y	International Network Cables – Other Assets	Other network assets that are directly associated with the operation of the International Network Cables eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-81-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Base on the number of pair, tube or fibre circuits attributed to each service
2-1-81-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Base on the number of pair, tube or fibre circuits attributed to each service
2-1-85-y	International Network – Other Systems – Primary Asset	All other international network equipment excluding satellite equipment and submarine cables. Includes telephone switching equipment, international radio stations, facility support and network management equipment	
2-1-85-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Base on the seconds of use of switching plant
2-1-85-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Base on the seconds of use of switching plant
2-1-86-y	International Network – Other Systems – Other Assets	Other network assets that are directly associated with the operation of the International Network – Other Systems eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-86-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Base on the seconds of use of switching plant

2-1-86-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Base on the seconds of use of switching plant
2-1-90-y	Other Communications Plant & Equipment – Primary Asset	Other communications plant and equipment not already included	
2-1-90-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Relate the plant to the asset classes established above and allocate on the basis of the principles for each. Otherwise allocate on the basis of communications plant employed to product
2-1-90-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Relate the plant to the asset classes established above and allocate on the basis of the principles for each. Otherwise allocate on the basis of communications plant employed to product
2-1-91-y	Other Communications Plant & Equipment – Other Assets	Other network assets that are directly associated with the operation of the Other Communication Plant & Equipment eg. power plant, and/or indirectly associated such as network management, platform delivery assets etc	
2-1-91-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	Relate the plant to the asset classes established above and allocate on the basis of the principles for each. Otherwise allocate on the basis of communications plant employed to product
2-1-91-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	Relate the plant to the asset classes established above and allocate on the basis of the principles for each. Otherwise allocate on the basis of communications plant employed to product
<b>Account Code</b>	<b>Line Item</b>	<b>Description</b>	<b>Allocation Method</b>
2-2	<i>Non Communications Plant &amp; Equipment</i>	<i>Asset value of owned in-service or WIP plant and equipment not included within Communications Plant and Equipment. Each line item is to have a separate asset value based on Written Down Value and Initial Historical Value as for CAN Ducts and Pipes</i>	
2-2-01-y	Information Technology	All computer and related equipment not associated with the operation or management of the telecommunications network	Allocate direct to product for dedicated systems, otherwise allocate to product based on an appropriate measure of systems usage, such as dollars billed, orders issued, faults reported etc

2-2-01-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	
2-2-01-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	These should be allocated based on an appropriate general allocator
2-2-03-y	Buildings and Improvements	All buildings including those under construction, owned by the company and the associated building alterations, extensions, structural attachments, improvements; and building plant and equipment such as electric light and power equipment, lifts and air conditioning which are considered an integral part of the building. Included are improvements on leased buildings	Where possible these should be identified directly with particular product groups, division, support unit or organisational cost grouping. Thereafter they should be allocated using a suitable allocator. The choice of allocator will normally mirror the primary allocator used within the corresponding cost item
2-2-03-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	
2-2-03-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	
2-2-05-y	Other	All other plant and equipment not already included	These should be allocated based on an appropriate general allocator
2-2-05-1	<ul style="list-style-type: none"> <li>Historical/Revalued Value</li> </ul>	The cost of bringing the asset to its current position and usage and/or the revalued amount thereof	
2-2-05-2	<ul style="list-style-type: none"> <li>Accumulated Depreciation</li> </ul>	The accumulated depreciation amount based on the historical cost or revalued amount as appropriate	
<b>Account Code</b>	<b>Line Item</b>	<b>Description</b>	<b>Allocation Method</b>
<b>2-3</b>	<b><i>Other Non Current Assets</i></b>	<b><i>Non current assets which are not plant and equipment.</i></b>	
2-3-01-4	Long term receivables	Balances owed by customers or other persons (eg directors, officers, employees) not due within the next twelve months, net of any doubtful amount	Where possible these should be identified directly with particular product groups or divisions. Thereafter they should be allocated using a suitable allocator. For employee related items this would either be headcount or employee costs. For customer related items this would normally be based on relative relevant revenue levels
2-3-05-4	Long term investment	Shares, options and other financial instruments intended to be held for more than twelve months	These will be allocated directly to “Other Non-Telecommunication Costs” to match with the dividend income flow being shown under that heading
2-3-10-4	Intangibles	Identifiable assets having no physical existence, their value being limited by the rights and anticipative benefits that possession	Where possible these should be identified directly with particular product groups or divisions. Thereafter they

		confers upon the owner, such as goodwill, trade marks, copyrights, patents, licenses and other assets of a similar nature	should be allocated using a suitable allocator. This would normally be a revenue based allocator
2-3-20-4	Land	All land (including freehold and perpetually renewable leasehold land) owned by the company. Includes land improvements but excludes buildings or other limited life structures	Where possible these should be identified directly with particular product groups, division, support unit or organisational cost grouping. Thereafter they should be allocated using a suitable allocator. The choice of allocator will normally mirror the primary allocator used within the corresponding cost item
2-3-25-4	Other	Other assets not expected to be developed, utilised or received within the next twelve months and which have not already been included ie net long term inventories and provisions future income tax benefit and deferred research and development expenditure	Where possible these should be identified directly with particular product groups, division, support unit or organisational cost grouping. Thereafter they should be allocated using a suitable allocator. The choice of allocator will normally mirror the primary allocator used within the corresponding cost item

Account Code	Line Item	Description	Allocation Method
<b>3</b>	<b><i>Revenue</i></b>		
<b>3-1</b>	<b><i>Retail</i></b>	<b><i>Revenue earned from final end consumers of telecommunications services</i></b>	
3-1-01	Call Revenue	All call revenue earned including phone cards	Direct to product where possible. Otherwise allocate to products on the basis of estimated usage as defined by carriers procedures. For bundled products, disaggregate and directly attribute to each individual product. Revenue collected in advance is to be accrued and applied over the term of the agreement
3-1-10	Rental Revenue	All rental income including equipment rental, services charges, leased capacity income and other special plan fees such as membership of discount schemes	Direct to product or otherwise allocate on the basis of the relative proportion of the relevant product revenue
3-1-20	Customer Connection Revenue	All revenue earned from connecting customers including installation charges	Direct to product
3-1-30	Equipment Sales	All equipment sales revenue, including customer premise and other terminal equipment	Direct to product
<b>3-2</b>	<b><i>Wholesale</i></b>	<b><i>Revenue earned from other telecommunications companies or overseas administrations</i></b>	
3-2-01	Carrier Interconnection Revenue	Interconnection and usage revenue earned from other national carriers	Direct to product
3-2-10	<b><u>Service Provider Interconnection Revenue</u></b>	Interconnection and usage revenue earned from carriage service providers	Direct to product
3-2-20	International In-Payments	In-payments earned from overseas carriers for call termination on domestic networks	Direct to product
<b>3-3</b>	<b><i>Other Retail</i></b>		
3-3-01	USO Levy Receipts	Amounts received from the Government based on loss per net cost area for providing standard telephone and payphone services to all community groups, regardless of the cost of supplying them, and on an equitable basis	Assign to Public Switched Network products on the basis of relevant weighted revenues for each standard telephone service category
3-3-10	Other Telecommunications	All other telecommunications revenue not included above	Direct to product or otherwise allocate to telecommunications product based on the relative

	Revenue		proportion of product revenue to total telecommunications revenue
3-3-20	Other Non - Telecommunications Revenue	All other non-telecommunications revenue not included above	Direct to product or otherwise allocate to non-telecommunications products based on the relative proportion of product revenue to total non-telecommunications revenue

Account Code	Line Item	Description	Allocation Method
<b>4</b>	<b>Costs</b>		
<b>4-1</b>	<b>Organisation</b>	<b><i>Relates to those activities supporting the Network and Product related aspects of the business</i></b>	
4-1-01	General Administration	General corporate type costs including, corporate centre, legal, regulatory, accounting & finance, human resources and personnel, and non- product specific research & development	<p>Certain organisation costs can be specifically identified with products and where possible this should be done. Where this is not possible they should be allocated using an appropriate divisional specific general allocator. Any remaining unattributable costs to be assigned by a general allocator</p> <ul style="list-style-type: none"> <li>- Accounting services based on total dollar spending (including capital) for particular products (this may be adjusted in the case of products which have a few very large transactions which would distort this allocation basis)</li> <li>- Human Resources base on full time equivalent employees</li> <li>- Legal base on head count working directly for divisions, but thereafter based on a general allocator such as total dollar spend</li> <li>- Regulatory, management, CEO and associated costs base on a general allocator such as total dollar spending</li> </ul>
4-1-10	Information Technology	All non-network information system asset costs (including depreciation) and operational costs such as data entry, IT support etc	Allocate costs direct to product for dedicated systems, otherwise allocate to product based on an appropriate measure of systems usage, such as dollars billed, orders issued, faults reported etc

4-1-20	Accommodation & Property	Costs (including depreciation) for non-network related accommodation and property including their maintenance, upgrade and the supply of basic services ie power, water etc	Apportion costs to the type of use of the property (eg administration etc). Relate use to another cost line item and allocate on that basis ie. Call Centre costs on the same basis as Product Sales costs
4-1-30	Other Non Communications Asset Costs	Depreciation, amortisation and other costs related to Non Communications Assets not already captured including intangibles	Base on an appropriate general allocator which is likely to be cost based
4-1-40	Other Organisational Costs	All other organisational costs not already captured	Base on an appropriate general allocator which is likely to be cost based
<b>4-2</b>	<b><i>Product and Customer</i></b>	<b><i>Non network costs closely associated with providing products and services to wholesale or retail customers</i></b>	
4-2-01	Installation	Costs associated with the installation, facility removal or connection of equipment in relation to customer premise equipment. Excludes costs of major installation works at the main network	Direct to product where possible otherwise allocate to products based on labour time spent on various products or assets
4-2-10	Marketing	Costs arising from market and product research, promotions and advertising (both directly related to products and general) including mail outs	Direct to product where possible. For those expenditures where multiple products are being marketed and or promoted, labour costs are to be allocated on the basis of labour time. For other generic expenditure, such as corporate advertising, a spread of costs to products based on a general promotion and marketing allocator such as value of products sold would be appropriate
4-2-15	Sales	Costs of direct and non-direct sales related activities including telemarketing, negotiations, technical information and support, account management	Direct to product where possible. For labour related costs allocate to products on the basis of labour time. Other sales and sales administration costs are to be allocated on the basis of labour costs, or other usage factors such as the weighted average selling time for each product, or sales volumes
4-2-20	Operator Services	Costs arising from the provision of services requiring operator assistance eg directory services, operator connected calls etc	Direct to product where possible, otherwise allocate residual costs based on operator labour utilisation
4-2-25	Customer Support	Costs of managing customer inquiries, complaints and disputes and credit management	Direct to product where possible. For labour costs allocate to products on the basis of labour time. Other costs are to be allocated on the basis of labour costs, or usage factors
4-2-30	Billing	Invoice and receipt processing and dispatch	Direct to product where possible, based on the number of bills produced. When multiple products are included in the same bill, the costs to be allocated equally amongst the



			products
4-2-31	Bad Debt Expenses	Debts written off or not expected to be collected. Debts written off but subsequently recovered are treated as Other Non – telecommunications revenue.	Direct to product where possible, otherwise allocate on the basis of revenue (appropriately adjusted for relevant risk history)
4-2-40	Interconnection Costs	Interconnection and usage expenses incurred to other national carriers for use of their networks	Direct to product where possible, otherwise apportion based on charge agreements and volume of activity
4-2-50	International Settlement Costs	Out-payment expenses incurred to overseas carriers for call termination on their network	Allocate to products on the basis of product usage as measured, for example, on the basis of the number of product circuits
4-2-60	USO Payments	Payments to the government with respect to losses in net cost areas in accordance with USO arrangements	Direct to product where possible, otherwise attributable to all products using a revenue based general allocator
4-2-70	Other Product Expenses	Other product activities not already included such as printing of directories, materials management, product retirement costs, product specific R&D etc	Direct to product where possible otherwise use a appropriate general allocator which is likely to be revenue based
4-3	<i>Network Costs</i>	<i>Costs associated with the assets, maintenance and operation of communications plant and equipment. Each asset is to have a separate statement of costs for depreciation, maintenance and other expenses as is described for CAN Ducts and Pipes</i>	<ul style="list-style-type: none"> <li>• <b>Depreciation:</b> Use the allocator defined for the network asset identified eg CAN pair count for CAN ducts and pipes</li> <li>• <b>Maintenance:</b> Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network</li> <li>• <b>Other Expenses:</b> Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the network</li> </ul>
4-3-01-x	CAN Ducts & Pipes	Ducts and pipes used for conveying telecommunication cables between termination points at customer premises and the local exchange	
4-3-01-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on CAN pair count

4-3-01-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-01-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-05-x	CAN Copper Cables	Copper wires and cables between customer premises and the Main Distribution Frame (MDF) of the local exchange	
4-3-05-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on CAN pair count
4-3-05-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-05-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-10-x	CAN Other Cables	Non copper cables between the customer premises and the MDF of the local exchange	
4-3-10-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on CAN pair count
4-3-10-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network

4-3-10-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-15-x	CAN Pair Gain Systems	Pair gain systems operating between the customer premises and a local exchange	
4-3-15-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on CAN pair count
4-3-15-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-15-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-20-x	CAN Radio Bearer Equipment	Radio bearer equipment operating between the customer premises and a local exchange	
4-3-20-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on the number of radio circuit assignments per service
4-3-20-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-20-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network

4-3-25-x	Other CAN	Other assets existing between the customer premises and the local exchange not already included	
4-3-25-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on CAN pair count
4-3-25-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-25-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-30-x	Switching Equipment – Local	All local automatic exchange and network operating centre switching equipment up to but excluding the terminal point of the external cables on the MDF. Included are associated relays and racks, pads, amplifiers and terminating sets	
4-3-30-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on seconds of use of switching plant
4-3-30-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-30-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-35-x	Switching Equipment – Trunk	Trunk switching equipment includes all apparatus provided for establishing, switching, supervising and <i>charging for trunk telephone calls</i> . This includes selector switching, common control equipment, call charging apparatus, test access and performance	

		monitoring in 4 wire automatic exchanges and 4 wire trunk switch boards. Also included are associated relays and racks, transformers, pads, amplifier and terminating sets, alarm transmission and associated equipment	
4-3-35-1	• Depreciation	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on seconds of use of switching plant
4-3-35-2	• Maintenance	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-35-3	• Other Expenses	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-40-x	Switching Equipment – Other	All ancillary switching equipment including Exchange Communication Controller equipment, Networks Call Distributor, Business Performance Analyser, stand-alone alarm equipment. Does not include international switching equipment	
4-3-40-1	• Depreciation	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on allocation of service switching plant to total switching plant identified above
4-3-40-2	• Maintenance	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-40-3	• Other Expenses	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-45-x	Inter-exchange Cables	Cabling between the local exchanges, and cabling between local and trunk exchanges and between trunk exchanges. Includes all	

		copper pairs, coaxial and optical fibre cables for trunk and junction	
4-3-45-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on number of pairs, tubes or fibre circuits assigned per service
4-3-45-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-45-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-50-x	Transmission Equipment	Trunk and junction line transmission and multiplex equipment including carrier terminal repeater equipment, filters, line terminal equipment, equalisers and regenerators for coaxial and optical fibre links, all associated power plant wiring and cabling (excluding battery, rectifier and discharge cubicle interconnections), but not including any exchange service line or switchboard equipment. Also includes transmission huts and shelters. Excludes exchange equipment, cables and ducts	
4-3-50-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on number of circuits or channels in use for each service
4-3-50-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-50-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network

4-3-55-x	Radio Bearer Equipment	All HF, VHF and UHF radio bearer equipment, protection bearer equipment, racks, feeders and their pressurising systems, aerials, radio towers and masts, and customer radio services	
4-3-55-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on the number of radio circuit assignments per service
4-3-55-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-55-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-60-x	Data Equipment	Equipment used in the network including modem and network terminating units to enable transmission of different data services such as Text, Data Communication Packet Switching, Digital Data Network, Electronic Funds Transfer Network and other data services network equipment	
4-3-60-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on the number of circuits in use for each service
4-3-60-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-60-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-65-x	Mobile Network and Terminal Equipment	Manual mobile radio equipment, public automatic mobile telephone equipment, cellular mobile telephone equipment, paging	

		equipment and other radio/non public equipment	
4-3-65-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Direct to product otherwise base on number of radio circuit assignments for each service
4-3-65-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-65-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-70-x	Customer Equipment	Equipment located at the customer premises and connected directly or indirectly to the network including telephones, small business systems, payphones, PABX's, teleconferencing and videoconferencing equipment and other terminal equipment	
4-3-70-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Direct to product
4-3-70-2	<ul style="list-style-type: none"> <li>• Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and 4-3-materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-70-3	<ul style="list-style-type: none"> <li>• Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-75-x	Satellite Equipment	All satellite equipment, including satellite earth stations, antennae and other communications equipment. Covers both international and domestic satellites	
4-3-75-1	<ul style="list-style-type: none"> <li>• Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment	Base on the number of channels in use



		over the useful life of the asset	
4-3-75-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-75-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-80-x	International Network Cables	Submarine cables and associated equipment including cable terminals used for international network operations	
4-3-80-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on the number of pair, tube or fibre circuits attributed to each service
4-3-80-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-80-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-85-x	International Network – Other Systems	All other international network equipment excluding satellite equipment and submarine cables. Includes telephone switching equipment, international radio stations, facility support and network management equipment	
4-3-85-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Base on the seconds of use of switching plant
4-3-85-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific

			assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-85-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network
4-3-90-x	Other Communications Plant & Equipment	Other communications plant and equipment not already included	
4-3-90-1	<ul style="list-style-type: none"> <li>Depreciation</li> </ul>	A periodic allocation of the historical cost of plant and equipment over the useful life of the asset	Relate the plant of the asset classes established above and allocate on the basis of the principles for each. Otherwise allocate on the basis of communications plant costs to product
4-3-90-2	<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	Cost of reactive and pro-active maintenance, maintenance planning including all labour and materials	Where possible these costs should be assigned to the items of communication plant being maintained. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes usage within the core network
4-3-90-3	<ul style="list-style-type: none"> <li>Other Expenses</li> </ul>	Other costs associated with the operation of the particular asset including power, property and accommodation costs and activities such as network management, planning and design	Where possible these costs should be assigned to the items of communication plant being supported. Allocate these costs on the basis of the principles outlined for the specific assets. For the remaining costs allocate on the basis of the minutes of usage within the core network or on the basis of total cost base for the core network

## Appendix 2

### Detailed Capital Adjusted Profit Statement - Retail Business Example

	End User Access			Total	Local Calls			Total	Total				
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	Total	
<b>Retail Revenue</b>													
• Call Revenue													
• Rental Revenue													
• Customer Connection Revenue													
• Equipment Sales													
• USO Levy Receipts													
• Other Telecommunications Revenue													
• Other Non-Telecommunications Revenue													
Total Revenue													
<b>Retail Specific Costs Organisation</b>													
• General Administration													
• Information Technology													
• Accommodation & Property													
• Other Non-Communications Asset Costs													
• Other Organisational Costs													

## Detailed Capital Adjusted Profit Statement - Retail Business Example

	End User Access			Total	Local Calls			Total	Total			Total
	Direct	Attributable	Unattributable		Direct	Attributable	Unattributable		Direct	Attributable	Unattributable	
<b>Retail Specific Costs Product</b>												
• Installation												
• Marketing												
• Sales												
• Operator Services												
• Customer Support												
• Billing												
• Interconnection Costs												
• International Settlement Costs												
• USO Payments												
• Other Product Expenses												
Total Specific Costs												
<b>Retail Cost of Capital</b>												
<b>Gross Retail Profit</b>												
<b>Wholesale Capital Adjusted Cost</b>												
<b>Retail Capital Adjusted Profit</b>												
<b>Access Adjusted Wholesale Cost</b>												
<b>Retail Access Adjusted Profit</b>												