ACCOUNTING SEPARATION OF LOCAL FIXED NETWORK

July 1999

Execu	ıtive Summary	241
1.	Background	243
1.1.	Tasman's Task	244
2.	ACCC's Record-Keeping Rules	245
2.1.	Background	245
2.2.	ACCC's Proposed Record-Keeping Rules (RKR)	245
2.2.	1. The Conceptual Model	246
2.2.		
2.2.	3. Implementation Timeframe	253
3.	RKR, Ring-Fencing Arrangements and Competition	255
3.1.	Commonwealth Government's Policy in Relation to Structural Separation of Telstra	255
3.2.	RKR and Competition.	256
3.2	1. Use of RKR to Assist in the Detection of Anti-Competitive Behaviour	256
3.3.	Ring-Fencing Arrangements	
3.4.	A Structural Separation Model for the Telecommunications Industry	260

EXECUTIVE SUMMARY

The National Competition Council's first tranche assessment of Commonwealth Progress with the implementation of National Competition Policy (NCP) considered that:

clause 4 of the Competition Principles Agreement placed a responsibility on the Commonwealth Government to have examined, prior to the partial privatisation in 1997, the appropriate treatment of the remaining monopoly element of Telstra's business, the local fixed network. Such an examination should have considered the merits of structurally separating the local fixed network from the non-monopoly elements of Telstra's business or, alternatively, arrangements for ring-fencing the local fixed network and Telstra's business units.

As part of the Council's second tranche assessment of the governments' progress with NCP Reform at the end of June 1999, Tasman Asia Pacific was asked by the Council to review the status of the Australian Competition and Consumer Commission's (ACCC) proposed record-keeping rules and the Commonwealth Government's proposed arrangements for ring-fencing the local fixed network. In addition, the Consultant was asked to assess the likelihood that the new record-keeping rules will work effectively to facilitate competition in the telecommunications industry.

The proposed record-keeping rules regime is an improvement on the existing Chart of Accounts and Cost Allocation Manual. It addresses the shortcomings of the existing Chart of Accounts/Cost Allocation Manual while incorporating the following new features: wholesale and retail services are separated; internal and external businesses are separated; costs that are specifically associated with providing only retail services and external wholesale services are allocated directly to those services; and revenues, costs and capital employed are generally allocated to each service as directly as possible from the General Ledger.

The new record-keeping rules will provide the Australian Competition and Consumer Commission with the necessary financial information so as to assess anti-competitive behaviour by carriers and carriage service providers. The new record-keeping rules regime is a necessary first step in establishing a broader ring-fencing framework for the telecommunications industry. At present, the Commonwealth Government does not have a coordinated policy with regard to arrangements for ring-fencing the telecommunications industry. Although, the new record-keeping rules, together with the new provisions in the *Telstra (Transition to Full Private Ownership) Bill 1998* and the *Telecommunications Legislation Amendment Bill 1998*, are potentially positive steps towards a ring-fencing model for the industry, these proposed arrangements are still inadequate in addressing anti-competitive issues such as Telstra's dominance in the local fixed network.

A ring-fencing regime will not remove the sources of Telstra's market power and may not be an effective strategy to combat anti-competitive behaviour, which discourages real competition in the telecommunications industry. It has been almost 10 years since competition was introduced in the telecommunications industry in Australia (limited competition in early 1990s and full competition in 1997), and Telstra remains the dominant

player, with significant market power, in the local telecommunicationsservices market. Its major rival, Optus, has made little inpad into the local maket.

The consultant considers that the ring-fencing regime may not be an effective approach to bring out real competition in the localtelecommunicationsmarket. Ring-fencing will not remove the key sources of Telstra's market power, and therefore, will not remove the incentive to engage in anti-competitive behaviour. The Consultant considers that the benefits of structural separation outweigh the costs.

THE PROPOSED MODEL

One possible model could be the separation of the Customer Access Network (CAN), the natural monopoly element of the network, from the transmission facilities. The CAN may be operated by an independent telecommunications operator, under the supervisor of a regulator authority, such as the ACCC. The CAN operator provides access to fringe telecommunications operators, and these operators can then use their own transmission and switching facilities to transmit telecommunications services, such as a telephone call, from their network to the CAN operator's network. This model separates the natural monopoly element of the network and introduces real competition in the local loop maket (Figure 1).

Telerom
Cherator
Access
CAN
Cherator
Access
Telerom
Cherator

Telerom
Cherator

Access
Telerom
Cherator

Telerom
Cherator

Access
Telerom
Cherator

Cherator

Access
Network

O istamers

Figure 1: The Consultant's Proposed Structural Separation Model

1. BACKGROUND

Telstra is a fully vertically integrated provider of telecommunications products and services, and prior to 1991, was a monopoly provider of all telephone services in Australia. While Telstra has been increasingly exposed to competition primarily from Optus, it retains monopoly control of its local fixed network.

The Commonwealth privatised one-third of Telstra in 1997. It is now intending to divest another tranche of Telstra that will take the level of private sector ownership to 49 percent. The Commonwealth has announced its support, in the longer-term, for divestment of the remaining 51 percent, subject to Telstra meeting prescribed service levels.

The National Competition Council (NCC) considered that clause 4 placed a responsibility on the Commonwealth to have examined, prior to the partial privatisation in 1997, the appropriate treatment of the remaining monopoly element of Telstra's business, the local fixed network. Such an examination should have considered the merits of structurally separating the local fixed network from the non-monopoly elements of Telstra's business or, alternatively, arrangements for ring-fencing the local fixed network and Telstra's business units. The NCC accepts that the framework for the regulation of the telecommunications sector is consistent with CPA principles, at least to the extent that responsibility for regulation is independent of Telstra.

Whilst the Commonwealth has not undertaken a formal clause 4 review, it noted that industry regulation does not lie with Telstra. The Commonwealth also advised the NCC that competition and regulatory matters were addressed in a series of reviews pertinent to both the partial sale of Telstra and the broader telecommunications sector. These reviews include the Telecommunications Policy Review, the Telstra Scoping Study, the Review of the Standard Telephone Service and the Senate Committee report *Telstra: to sell or not to sell?*

The Commonwealth stated that the pre-privatisation reviews had led to the development of the current regulatory framework and other arrangements relevant to clause 4, including delivery of the telecommunications universal service obligation through an industry levy.

The Commonwealth indicated that it did not pursue structural separation of the local fixed network, preferring to prohibit anti-competitive conduct by carriers or carriage service providers (Part XIB of the Trade Practices Act (TPA)) and to facilitate access to services provided by carriers or carriage service providers (Part XIC of the TPA).

Part XIB of the TPA includes provision for the (ACCC) to make 'record-keeping rules' which enable it to, among other things, require telecommunications carriers to furnish specific accounting information necessary for analysis of predatory behaviour and the cost of providing network access. This provision exists because of the potential for vertically or horizontally integrated telecommunications carriers to have internal cost allocation arrangements, which are counterproductive to investigations of predatory behaviour and to determining the cost of providing access to a carrier's network.

Allied with its intention to increase the proportion of private ownership of Telstra, the Commonwealth recently proposed changes to the regulatory regime governing

telecommunications, including amendments to the existing telecommunications-specific anticompetitive conduct and access provisions of the TPA. These changes were contained in the *Telstra (Transition to Full Private Ownership) Bill 1998* (as amended), which was defeated in the Senate on 4 July 1998.

The changes proposed by the Commonwealth would allow the ACCC to, among other things, disclose cost information kept by virtue of record-keeping rules and to establish a binding code of practice on how carriers provide other carriers with telecommunications network information, and use this information. Greater transparency of costs and certainty on use of commercial information should assist negotiations under the telecommunications access regime, which is designed to limit Telstra's monopoly power over its local fixed network.

The intended effect of the arrangements in place under Part XIB and Part XIC of the TPA is to limit possible anti-competitive behaviour arising from Telstra's local fixed network monopoly. The additional safeguards proposed in the *Telstra (Transition to Full Private Ownership) Bill 1998*, once in place, would go a considerable way to addressing the Commonwealth's responsibilities under clause 4 with respect to Telstra.

1.1. Tasman's Task

As part of the NCC's second tranche assessment of governments' progress with NCP Reform at the end of June 1999, Tasman Asia Pacific (hereafter referred to as "the Consultant") was asked by the NCC to review the *status* of the ACCC's proposed record-keeping rules and the Commonwealth Government's proposed arrangements for ring-fencing the local fixed network. In addition, the Consultant was asked to assess the likelihood that the new record-keeping rules will work effectively to facilitate competition in the telecommunications industry. In the process of this review, the Consultant has consulted with the relevant policy people in the relevant government departments.

2. ACCC'S RECORD-KEEPING RULES

2.1. 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 Act required AUSTEL to develop Chart of Accounts (COA) and a Cost Allocation Manual (CAM) detailing carriers' financial obligations to AUSTEL.

One of the objectives of the COA/CAM was to establish 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, and to detect anti-competitive practices by carriers. The COA/CAM, however, suffered from many shortcomings such as:

- Inadequate vertical separation between upstream network services and contestable downstream retail services.
- Internal costs at the access level were not explicitly identified.
- Reported information was historic and not forward looking.
- Certain definitions of services have become obsolete due to changing technology.

In summary, the COA/CAM did not provide the required information for AUSTEL to detect anti-competitive price discrimination and/or potential anti-competitive behaviour such as predatory pricing and cross-subsidisation.

2.2. ACCC's Proposed Record-Keeping Rules (RKR)

On 1 July 1997, the responsibility of administering competition and economic regulation of telecommunications services was transferred from AUSTEL to the ACCC. The ACCC's new responsibilities are primarily centred on:

- new enhanced competition powers under Part XIB of the Trade Practices Act (TPA);
 and
- new access provisions specific to telecommunications under Part XIC of the TPA.

As mentioned in Chapter 1, Part XIB of the TPA includes provision for the ACCC to make 'record-keeping rules' which enable it to, among other things, require telecommunications carriers to furnish specific accounting information necessary for analysis of predatory behaviour and the cost of providing network access.

In response to its obligation under Part XIB of the TPA, the ACCC chaired a RKR Working Group, comprising industry representatives and the ACCC's staff, to examine methods for

developing a more appropriate and effective accounting separation framework than the current COA/CAM procedures.

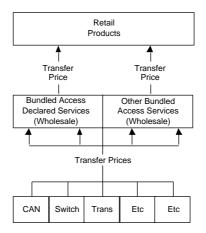
The Working Group developed a preliminary 'Conceptual Model' as a basis for developing a new accounting separation model that would overcome the key shortcomings of the existing COA/CAM procedures. In December 1998, the ACCC commissioned Arthur Anderson to develop a detailed architecture for a new accounting separation model and practical guidelines for the establishment of the revised RKR.

At the time of writing, the ACCC has not released the final draft report "Record Keeping Rules for the Telecommunications Industry" to the public. The information in this chapter is based on the draft report given to the Consultant by the ACCC.

2.2.1. The Conceptual Model

The conceptual model developed by the Working Group divides a vertically integrated carrier's operations into access and retail services (Figure 2)¹.

Figure 2: The Conceptual Model



Source:Consultancy Brief

As shown in Figure 2, a carrier's network services are *access* inputs used for downstream retail services, however, they can also be provided *wholesale* to competing carriers and service providers as well as internal carrier use.

¹ The figures used in this report are adapted from the ACCC's draft report.

2.2.2. The Proposed Accounting Separation Model

Although the Conceptual Model captures the desired elements of horizontal and vertical accounting separation, however, it is difficult to implement in practice. The proposed RKR architecture represents a practical refinement of the Conceptual Model, it addresses the technical issues while meeting the ACCC's key information requirements. Figure 3 illustrates some of the practical difficulties associated with the Conceptual Model as outlined in the ACCC's Draft Report.

Figure 3: Overcoming Practical Difficulties of the Conceptual Model

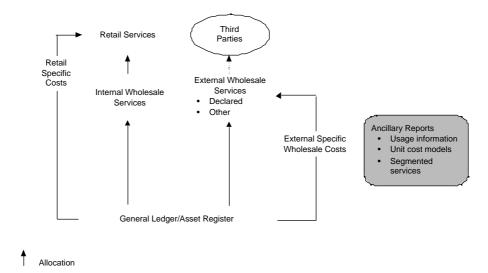
	Problems with Conceptual Model	Proposed Solution by RKR
Full cost allocation to network elements is neither practical nor helpful.	Cost causality is weakened by the three tier approach as: - Underlying detail is lost as costs are aggregated and unitised for transfer pricing. - Many costs which are attributable to specific services are unattributable to network elements.	 Maintain cost causality as long as possible by allocating costs directly from general ledger to each wholesale service. Report asset-related costs as line items within each service profit and loss, and consolidated to calculate total costs for each asset.
Declared services are not collectively exhaustive.	An approach that captures all costs associated with the wholesale business needs to be developed.	 Non-retail costs not associated with specified services of interest (declared and other) are captured in an 'other' category.
Declared and potentially declared PSTN services form a hierarchy of increasing network aggregation.	Certain declared PSTN services (e.g. local PSTN) are components of other services (e.g. local carriage). These services are therefore consumed both internally and externally at the wholesale layer.	 Ignore hierarchy and allocate cost only to services which are externally consumed (i.e. by third parties or the carriers retail business).

The proposed accounting separation model is a two-tier accounting model with the following important features (Figure 4):

- Wholesale (internal and external) and retail services are separated.
- The internal business (i.e. declared services and other external wholesale services) and the external business (i.e. retail services and internal wholesale services) are separated.
- Costs that are specifically associated with providing only retail services and external wholesale services are allocated directly to those services.
- Revenues, costs and capital employed are generally allocated to each service as directly as possible from the General Ledger.

- There is no transfer pricing mechanism between the internal wholesale and retail services. All relevant costs, including the cost of capital, are incorporated in the retail cost of each service.
- 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 requirements. There are three main ancillary areas:
 - Usage information for major services and for network assets underlying PSTN based services.
 - Average unit cost models of declared services with little or no current usage.
 - Supplementary service profit and loss, and mean capital employed reports based on a segmentation of interest to the ACCC such as geography.

Figure 4: Proposed Accounting Separation Model



The key differences between the COA/CAM and the new RKR are illustrated in Figure 5.

Figure 5: Key Differences Between the COA/CAM and the New RKR

Area	COA/CAM	New RKR	
Accounting Separation	Horizontal	 Horizontal and vertical Wholesale layer introduced. Indicative Profit and Loss for external wholesale and internal retail businesses provided. 	
Estimated Costs of New Declared Services	None	Modelling approach to derive indicative costs for new services.	
Segmentation for Key Services of Interest	None	Supplementary reports will provide segmented financial data for specific services of interest.	
Reporting of Usage Data	None	Usage data reported for key services and key network assets.	
Capital Employed	End of period balance sheet.	Statement of mean capital employed provided for each service.	
Other	 Regulatory Accounting Procedures Manual (RAPM) requirements not clearly defined. Weak process for amending RKR. 	 Detailed RAPM requirements for greater transparency. Tighter process to ensure amendments achieved in reasonable timeframe. General refinement of allocation principles, service definition, etc. Certain reports removed: reconciliation, transfer pricing, internal usage, chart of accounts listing. 	

The recommended evolution of the RKR is shown in Figure 6.

Long-term Solution Recommended COA/CAM Solution Accounting Horizontal Horizontal and Horizontal and Vertical Vertical **Cost Basis** Historical Historical Historical and current/forwardlooking Fully distributed* TSLRIC/TELRIC **Cost Standard** Fully distributed* Fully distributed* Allocation Top-down Top-down Top-down Approach

Accounting

Volume and

<1 year

activity data

data

Internal and external

Volume and

activity data

 Supplier and contractor prices
 Engineering and field research

~ 3 years

· Accounting data

Figure 6: Recommended Evolution of Record Keeping Rules

Current

Internal

Accounting data

Volume and

Information

Implementation

Time frame

TRADEOFFS

The new RKR involved several tradeoffs such as quality of information, and the pace and scope of change (Figure 7). In addition, a number of technical issues needed to be resolved such as selecting an allocation approach, cost basis (i.e. historical versus current) and cost standard (i.e. fully distributed versus incremental). Figure 8 presents the rationale for the selection of key elements in the design of the new RKR.

Figure 7: Key Tradeoffs in Designing New RKR

Objectives	Benefits	Costs	Constraints
Information Quality - Theoretically sound. - Fine granularity. - Rigorous cost causality in allocation methods.	 Improved ACCC decisions. Increased industry confidence in ACCC decisions. Enhanced "self-regulatory" effect. 	 Higher costs. Longer timeframe to develop. 	Carriers' existing costing systems and data.
Pace of Change - Rapid versus gradual.	- Rapid implementation will prevent Telstra consolidating its market power.	 Increased risk of methodological error and implementation failure. Potentially increased cost of development. 	Implementation practicalities.
Scope of Change - Staged versus "big bang".	 Some improvements achieved earlier. Implementation risk reduced Able to adjust to technology and other changes. 		Limitations of interim deliverables.

^{*} Separately identify direct, attributable and non-attributable components

Figure 8: Rationale for the Selection of Key Elements for the New RKR

Issue	Recommendation	Rationale
Architecture	 Separation between wholesale and retail businesses. Identification of key upstream costs (facilities and activities). 	 Pragmatic first step in evolution of RKR. Ability to identify upstream versus downstream costs is key to diagnosing vertical cost shifting. Wholesale pricing is increasing important.
Cost Basis	- Historical	 Moderate scope of change controls development and implementation risk. Reconciles to statutory accounts, so builds confidence in new separation model. Foundation for eventual current costbased RKR. Operators need time to go down learning curve before implementing current costing methodologies.
Costing	Fully distributed costs, with direct, attributable and unattributable elements separately identified.	 Common allocation rules provide a basis for comparing costs across different companies and avoids manipulation. By separately identifying direct, attributable and unattributable elements, proxies for incremental costs can be derived.
Other - Leverage points	 Highest granularity in services dependent on bottleneck facilities. Potential to distinguish between major geographical or other segments. 	 Variations in granularity will help to minimise compliance costs while retaining insights. Anticipate changes likely to impact costs and sources of power, e.g. IP networks, xDSL, wireless technologies.
- Flexibility	Avoid overly prescriptive architecture, e.g. "defined' hierarchy of network elements and services.	 Rapid technological change makes it harder to use network elements as basic building blocks. Interdependent service definitions will make it harder to add new services or redefine existing ones.

SERVICES INCLUDED IN THE NEW RKR

The new RKR framework applies to services that are likely to be subject to anti-competitive conduct or access-related investigations. Telecommunications services that are subject to the new RKR are:

- Internal Carrier Retail Services including: End User Access; Local Calls; Domestic Long Distance; International Long Distance; International Leased Lines; Domestic Leased Lines; Digital Data Service; ISDN; Packet Switched Data; Fixed to Mobile; GSM Mobiles; AMPS Mobiles; CDMA Mobiles; Payphone Services; Internet Services; Information Services; Specialised Call Services; Directory Services; and Other Retail Services.
- Internal Carrier Wholesale Services including: Wholesale Broadcast; Wholesale End User Access; Wholesale Local calls; Wholesale Local Number Portability; Wholesale Domestic Long Distance; Wholesale International Long Distance; Wholesale International Leased Lines; Wholesale Domestic Leased Lines; Wholesale Digital Data Carriage; Wholesale ISDN Carriage; Wholesale Packet Switched Service; Wholesale Fixed-Mobile; Wholesale GSM Carriage; Wholesale AMPS Carriage; Wholesale CDMA Carriage; Wholesale Mobile Number Portability; Wholesale Payphone Services; Wholesale Internet Services; Wholesale Information Services; Wholesale Specialised Call Services; Wholesale Freephone Number Portability; Wholesale Directory Services; and Other Internal Wholesale Costs.
- External Carrier Wholesale Services including: Conditional Local Loop (Declared);
 Domestic PSTN Originating/Terminating (Declared); Transmission (both Declared and Non Declared);
 Digital Data Access (Declared); ISDN Originating/Terminating (Declared);
 Originating/Terminating (Declared);
 AMPS Originating/Terminating (Declared);
 AMPS-GSM Diversion (Declared);
 Broadcasting (Declared);
 Local Number Portability;
 Freephone Number Portability;
 Mobile Number Portability,
 Other External Wholesale Services.

REPORTING REQUIREMENTS

All telecommunications carriers who are or could be providing declared telecommunications services will be subject to the proposed Record-Keeping Rules. The ACCC may also require other carriage service providers to adhere to the RKR requirements. The *core* outputs of the RKR will be:

- A Capital Adjusted Profit statement.
- A Mean Capital Employed statement for each whole and retail service identified.
- A Fixed Asset statement identifying historical/revalued asset cost and accumulated depreciation.
- A Weighted Average Cost of Capital (WACC) report.

In addition, the following ancillary reports will also be required:

- usage information for specific network asset;
- · models of unused or limited use declared asset; and
- market segment splits for specific products.

REPORTING CYCLE

Currently, the reporting cycle for the COA/CAM is every three months. The recommended reporting cycle for the proposed RKR is every six months in line with standard statutory reporting requirements (Figure 9).

Figure 9: Reporting Cycle for the Proposed RKR

Report	Period	Submission to ACCC Following Statutory Reporting Date
Profit and Loss Statement	6 months	Within seven days of issue.
Mean Capital Employed Statement	6 months	Within seven days of submission to ASIC or ASX.
Ancillary Reports - Usage - Models of declared services - Segments	6 months	Within seven days of submission to ASIC or ASX.

2.2.3. Implementation Timeframe

The ACCC foresees that the proposed accounting separation model can be implemented relatively quickly. The ACCC notes that the technical implications are fairly modest as the proposed model broadly maintains COA/CAM line item categories which are captured by existing systems; and avoids the problems associated with developing a completely new notion of network elements.

The preliminary implementation timetable for the new RKR is as follows.

- The Final Report on RKR by Arthur Anderson, in collaboration with the ACCC, will be released for Public Consultation in early June 1999. The Draft Instrument will also be released for public comment.
- Modification of RKR and Draft Instrument are expected to be finalised by end of July 1999.
- The Final Report is expected to be issued in August 1999.
- From the date of issuance of the Final Report to December 1999, it is expected that
 applicable telecommunications carriers and operators carry out the implementation of
 the new RKR.

- The first set of RKR reports (excluding supplementary segment reports) are expected to be available in January 2000.
- The first set of segmented reports are expected to be available by August 2000.

3. RKR, RING-FENCING ARRANGEMENTS AND COMPETITION

3.1. Commonwealth Government's Policy in Relation to Structural Separation of Telstra

Structural separation differs significantly from accounting separation. Accounting separation usually provides the information necessary to enable a regulatory authority to detect anti-competitive conduct, whereas structural separation removes the incentives for a firm to act in an anti-competitive manner. The main objectives of introducing structural separation in telecommunications are to discourage or eliminate cross-subsidisation between services, and to prevent anti-competitive practices by dominant carriers, with the ultimate aim of increasing competition in the industry.

Currently, the Commonwealth Government does not intend to pursue structural separation of Teltra's business operations. The Government, instead, prefers ring-fencing arrangements to structural separation. Ring-fencing arrangements usually involve accounting separation plus other non-financial arrangements, but leave all structural issues (boundaries, business areas and most incentives) unchanged. While ring-fencing could provide the basis for actions and differing charging policies and levels, to date the Government has no coordinated policy in regard to ring-fencing the carrier's business operations.

ACCOUNTING SEPARATION

Accounting separation:

- Is a means of increasing the amount of information available to the regulatory authority when monitoring and controlling conduct.
- Allows the regulator to see the carrier through a set of information "windows", *as if* it were a number of structurally separated firms, while allowing the firm to remain vertically and horizontally integrated.
- Requires the carrier to provide separate accounts for the different services that it provides.
- Makes transparent the wholesale prices that a carrier charges its own retail businesses, and hence to ensure that the carrier does not discriminate against other operators in setting wholesale charges to them.

The existing COA/CAM regime is a form of accounting separation, however, it has not achieved its main objectives as discussed in the previous chapter. As noted, Part XIB of the TPA includes provision for the ACCC to implement new record-keeping rules. The new RKR is an improvement on the existing COA/CAM, it addresses the shortcomings of the COA/CAM while incorporating new features.

3.2. RKR and Competition

The new RKR will provide the ACCC with the necessary financial information so as to assess anti-competitive behaviour by carriers and carriage service providers. The remainder of the section will examine how the new RKR will be used to detect anti-competitive behaviour in the telecommunications industry.

3.2.1. Use of RKR to Assist in the Detection of Anti-Competitive Behaviour

- 1. An access price above the total service long-run incremental cost (TSLRIC) of providing the service will lead to inefficiencies and hinder competition. While an access price below the TSLRIC may be predatory. The ACCC used the following four broad principles in assessing undertakings and in conducting arbitrations in relations to access prices:
 - 1. Access prices should be cost based.
 - 2. Access prices should not discriminate in a way that reduces efficient competition.
 - 3. Access prices should not be inflated to reduce competition in dependent markets.
 - 4. Access prices should not be predatory.

The information provided through the RKR may be relevant in assessing whether an access price is consistent with the above principles (Figure 10).

Figure 10: Use of RKR Data in Assessing Access Price

Rule	Potential relevance of RKR data
"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 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" of 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 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.

Source: ACCC Draft Report.

The ACCC recognises that measuring the TSLRIC is a difficult, time-consuming and errorprone task, however, it has suggested four criteria which may assist it in determining whether an access price falls within an acceptable (Figure 11).

Figure 11: Relevant 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 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 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 require 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 (i.e. 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.	

Source: ACCC Draft Report.

2. Anti-competitive behaviour such as predatory pricing and cross-subsidisation will lead to inefficiencies and hinder competition. Figure 12 illustrates how accounting based proxies obtained from the RKR can be used to test for supernormal profits, predatory pricing and cross-subsidisation. For example, an access price above TSLRIC up to the stand-alone cost could be used as an indicator for the degree of supernormal profits that a carrier earns from providing the access service. Information from the RKR can be used to determine a proxy for stand-alone cost and TSLRIC: the accounting proxy for stand-alone cost is direct cost plus attributable and all unattributable costs, while for TSLRIC is direct cost plus attributable and unattributable costs associated with the product. In addition, if a carrier charges a price below the average incremental cost for one of its products, then this would indicate that the carrier is engaging in predatory pricing, and is subsidising the product with a higher price charged for another product. The direct costs obtained from the RKR could be used as an accounting poxy for average incremental cost.

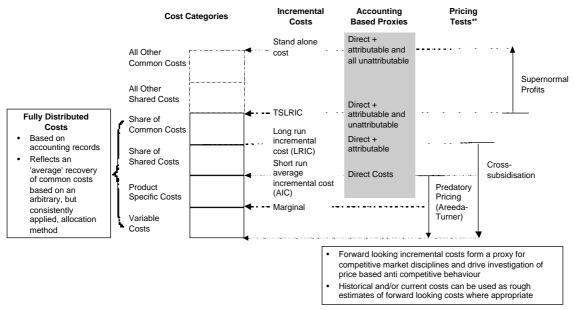


Figure 12: Accounting Based Proxies Used to Test for Anti-Competitive Behaviour

First pass indicators of potential anti competitive conduct comparing total revenues to relevant cost point

Source: ACCC Draft Report.

The key question is that if structural separation is not an option, would accounting separation be a sufficient alternative? A report by London Economics prepared for the then Department of Communications and the Arts (DoCA) noted that²:

...while accounting separation has theoretical appeal, in practice it may not be so desirable. It may involve a significant cost burden both for the firm and for the regulatory authority, and if not implemented correctly it will not achieve its aim.

In addition, there is abundant evidence in the UK to show that accounting separation in telecommunications services, such as mobile and other single product relationships, has not removed the incentives or ability to cross subsidise. Moreover, the existing COA/CAM, a form of accounting separation, has not prevented dominant carrier(s) such as Telstra from engaging in anti-competitive behaviour. But would a broader ring-fencing framework achieve the same objective of structural separation?

3.3. Ring-Fencing Arrangements

Ring-fencing is a vague concept, the arrangements that are entailed in a ring-fencing regime are different for different industries. At the centre-piece of a ring-fencing model is accounting separation, however, it also contains a list of arrangements that are designed to limit the dominant carrier's market power.

² London Economics (1995), *Accounting Separation*, a paper prepared for the Department of Communications and the Arts.

CURRENT STATUS OF RING-FENCING ARRANGEMENTS

The new RKR is an improved accounting separation model to the COA/CAM as it separates vertically and horizontally a carrier's financial operations. The RKR is a necessary first step in establishing a broader ring-fencing framework for the telecommunications industry. As mentioned, at present the Government does not have a coordinated policy in regard to ring-fencing the telecommunications industry. However, the new RKR, the additional safeguards proposed in the *Telstra (Transition to Full Private Ownership) Bill 1998* plus a number of new provisions in the *Telecommunications Legislation Amendment Bill 1998* are potentially positive steps towards establishing a more comprehensive, if second-best, framework for increasing competition in the industry.

Proposed Amendments to Division 6 of Part XIB of the TPA

Under the new amendments, the ACCC is allowed to disclose:

- A particular report, or particular extracts from a report, given to the ACCC by a carrier or a carriage service provider, in accordance with the record-keeping rules.
- A particular report, or particular extracts from a report, prepared by a carrier or a carriage service provider, in accordance with the record-keeping rules.
- A particular series of periodic reports, or particular extracts from each of the reports in that series, prepared by a carrier or a carriage service provider, in accordance with the record-keeping rules.

The report is to be disclosed to the public only if the disclosure would be likely to promote competition, or to facilitate the operation of Part XIB; or Part XIC; or Division 3 of Part 20 of the *Telecommunications Act 1997* (which deals with Rules of Conduct relating to dealings with international telecommunications operators); or Part 6 of the *Telstra Corporation Act 1991* (which deals with regulation of Telstra's charges).

REVIEW OF PART XIB OF THE TPA

According to Division 13 of Part XIB of the TPA, the Minister of Communications, Information Technology and the Arts will conduct a review of the operation of this Part of the TPA before 1 July 2000. The Terms of Reference for the Review have not been written, however, in conducting the review, consideration must be given to the question: whether any or all of the provisions of Part XIB should be repealed or amended? That is, the review will examine issues such as whether the current provisions in Part XIB are adequate in addressing anti-competitive conduct by carriers and carriage service providers, and/or whether broader ring-fencing arrangements are required.

EFFECTIVENESS OF A RING-FENCING REGIME

A ring-fencing regime may impose a significant cost burden both for the firm and for the regulatory authority. Ring-fencing arrangements do not remove, and are only intended to reduce, the incentive for a dominant carrier to act in an anti-competitive manner. If these arrangements are not implemented properly, then they will not achieve the desired objectives.

In addition, there are still significant informational and other advantages associated with a vertically integrated structure which are not removed by a simple process of ring-fencing. For example, a vertically integrated firm, such as Telstra, has detailed customer knowledge, a large customer base, customer reach and brand identity, which are sources of its market power. Other sources of market power are derived from the bargaining power that it has with its suppliers of inputs - which will impact significantly on its costs; and the control of key assets such as the transmission facilities.

3.4. A Structural Separation Model for the Telecommunications Industry

As discussed above, a ring-fencing regime will not remove the sources of market power and may not be an effective strategy to combat anti-competitive behaviour, which discourages real competition in the telecommunications industry. It has been almost 10 years since competition was introduced into the telecommunications industry in Australia (limited competition in early 1990s and full competition in 1997), and Telstra remains the dominant player, with significant market power, in the local telecommunications services market. Its major rival, Optus, has made little inroad into the local market.

Why should the telecommunications industry be treated differently from other infrastructure industries such as electricity, gas and railways, where there have been significant structural reforms, including horizontal and vertical unbundling? For example, the structural separation of the electricity industry in Victoria, separating generation, distribution and transmission facilities, has introduced real competition into the electricity market. As a result, consumers and industries have benefited immensely from the low prices. In addition, competition forces players in industry to choose the least cost method of production.

The consultant considers that the ring-fencing regime may not be an effective approach to bring out real competition in the local telecommunications market. Ring-fencing will not remove the key sources of Telstra's market power, and therefore, will not remove the incentive to engage in anti-competitive behaviour. The Consultant considers that the benefits of structural separation outweigh the costs. For example, in the US, the structural separation of AT&T into a long distance operation and a local loop operation, coupled with the recent introduction of competition into the local loop market, has lead to substantial benefits for customers and the general economy.

THE PROPOSED MODEL

There are many alternative models of structural separation of the local loop network. One possible model could be the separation of the Customer Access Network (CAN), the natural monopoly element of the network, from the transmission facilities i.e. from the CAN to trunk switches. Eventhough the costs of telecommunications technology have decreased significantly in recent years, the costs of duplicating the wires from a residential home to the local exchange may outweigh the benefits. The CAN may be operated by an independent telecommunications operator, under the supervisor of a regulator authority, such as the ACCC. The CAN operator provides access to fringe telecommunications operators. The telecommunications operators can then use their own transmission and switching facilities to transmit telecommunications services, such as a telephone call, from their network to the

CAN operator's network. This model separates the natural monopoly element of the network and introduces real competition in the local loop market (Figure 13).

Figure 13: The Consultant's Proposed Structural Separation Model

