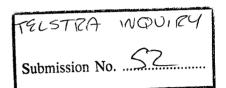


Macquarie Research Equities

Proposal for the Structural Separation of Telstra

31 January 2003

Summary	3
Economic structure	5
Not a natural monopoly anymore Access key to competition Telecommunications is different to and electricity industries	8
Structural Separation	13
Specific efficiency concerns Do Government entities face lower	
financing costs?	15
Relative value would depend on ar	bitrary
access prices	16
Significant practical problems	17
Loss of synergy	18
Specific impacts	19
The efficient provision of services to	0
end users	19
Regional and rural services	19
Telstra's ability to continue to provi	de a
full array of services	20
Ongoing investment	21
The wider telecommunications indu	ıstry
	21
The telecommunications regulatory	,
regime	22
Telstra's shareholder value	22
Overseas investor interest	23
The Commonwealth budget	23
Maybe there would be some	
beneficiaries from structural separa	tion
	25



Submission to the House of **Representatives Inquiry**

lan Martin (612) 8232 4576 ian.martin@macquarie.com This page has been left blank intentionally.

Summary: A major step backward and added risks to the nation's economic development

Twenty years ago most policy makers worked on the assumption that the telecommunications industry was a natural monopoly. A single supplier in the industry was seen as a natural outcome. However, given concerns about possible abuse of monopoly power and concern to ensure universal provision, the prevailing policy view was that such services should be provided by a Government-owned entity.

These assumptions have changed over the past 20 years. Monopoly elements only exist in some parts of the industry, and probably are not indefinite. And universal delivery of standard service can mostly be met as a commercial undertaking to the vast bulk of Australian users. Any remaining users who may be non-commercial can be effectively cross-subsidised under specific arrangements.

On this new understanding market delivery can be effective in the bulk of the industry and the Government involvement in the industry can be targeted to the specific areas where market provision is less effective. That is certain network access, competition regulation and USO delivery in non-commercial areas. If these specific arrangements are effective then the whole industry does not need to be constrained by monopoly provision or Government ownership.

Trend has been to separate roles of Government and market

This is the key overarching trend of 20 years of telecommunications industry development: to target Government involvement to specific areas where it is best needed, and liberalise the rest of the industry. This single trend has allowed the industry to become far more productive over a period of 20 years. It has allowed the removal of barriers between factors which influence the supply of services on one hand, and the development of service features which best meet user needs on the other.

The proposal for structural separation of Telstra into a wholesale company and a services company is a backward step in this long term development. It would create a barrier in the market between supply decisions and end-user demand. The barrier would become increasingly more significant and more of a constraint given the convergence of telecommunications infrastructure and services with more service features embedded in the network itself.

Instead, there are better ways of meeting the requirements for effective competition and provision of universal service. The focus of effective competition needs to be on ensuring network access is as efficient as possible. Further, structural change is needed to make third tier players more effective in the long term. However, this matter is more appropriately dealt with by investors and the capital markets rather than Government.

In addition there are a number of practical difficulties in any implementation of such a proposal given the state of development of the sector. For instance, there is a practical constraint in drawing a barrier between services and network. There would be significant implications for other network investors. There are likely to be significant compensation issues for investors in Telstra and possibly other companies. In any case, it would not solve the competition and regulation issues but simply replace them with new competition and regulation issues.

In summary the proposal to split Telstra into a services company and a network company would be a backward step, inefficient, ineffective and unnecessary. It

would significantly inhibit the development of the industry, to the detriment of the nation economically and socially.

Three sections in this submission

This submission is in three parts. The first part of this submission provides a brief analysis of the economic structure of the telecommunications industry, including an overview of why the industry is where it is. The key purpose of this brief analysis is to show that:

- it is important for the development of competition in the industry to have effective network access rules;
- enforced structural separation does not necessarily lead to effective access and has a range of other negative consequences.

In this section we also draw out some of the differences between key economic features in the telecommunications, road and electricity industries. The purpose of this is to highlight that while separation of infrastructure and services may work in the road and electricity markets the significant difference is that in telecommunications key service features are built into network infrastructure, and this is an increasing trend. Enforced separation in telecommunications, for instance, may be more comparable in its impact on services to that of nationalising transport fleets. (Much of this section is drawn from analysis we have previously published.)

The second part of this submission outlines some particular concerns with the proposal for structural separation. The proposal is not well defined and some of the assumptions behind it are questionable. The section highlights a range of economic efficiency concerns which are likely to arise from implementing such a policy. (Some of this section is also drawn from analysis we have previously published.)

The third part responds to the key points listed in the terms of reference for the Inquiry. In summary, we see no merit in the proposal despite its concern for improving competitive and social outcomes. We think the opposite; that the industry would be made significantly less effective in contributing to the nation's economic and social needs.

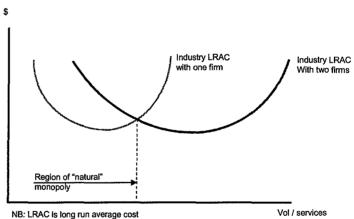
1 Economic structure of the telecommunications industry

In order to demonstrate some significant concerns with the proposal to separate Telstra into a core network business and a services company it is useful to summarise the main fundamental economic features of the telecommunications industry structure. Once this is done it is easy to see some of the risks inherent in forcing a separation between network and services. Also, it is useful to note some material differences between the telecommunications industry and the electricity and road industries in terms of the way in which each best provides services to their users. These differences help explain their different structures including why telecommunications companies are better off if they integrate services and network into a single operation.

Not a natural monopoly anymore ... if it ever was

Until the early 1980s, most governments and regulators viewed telecommunications as a natural monopoly. A widespread view was that it would be cheaper for one company to provide all telecommunications output than if more than one were involved in producing the required output. This is shown in Figure 1 in the region where the long run average cost (LRAC) of the industry is lower with one telco than if there was more than one.

Figure 1: Where is average cost lower with a single company?



Source: MRE, Sharkey 1982

Vol / services

Indeed, telecommunications was viewed as having such strong economies of scale, dominated by infrastructure costs (Figure 2), that LRAC would keep reducing as output increased indefinitely. The view was inherently self-fullfilling. The limit to optimal size for companies in general is that they become too big or too complex to be operated efficiently. At some point organisational constraints cause LRAC to increase. This dis-economy wasn't tested in the telecommunications sector because output was largely uniform until the late 1980s.

LRAC of infrastructure (or network service) provision

Vol / services

Figure 2: natural monopoly used to be everywhere in telcos

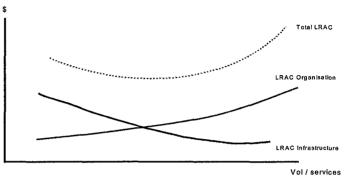
Source: MRE, July 02, Sharkey, 1982

The incumbent telecoms monopolies in the period up to the 1980s had little incentive to allow unconstrained service volume or rapidly expand service range, in part because this would test the limits of their organisational efficiency. While telcos produced the same black dial phone and standard service for everyone, arguably average costs did decrease as output increased. With a focus on engineering production rather than marketing of differentiated service, their organisational limits were never tested. They had limited incentive to solve more complex service needs or produce differentiated service to met different needs.

Bill Sharkey, an economist at AT&T Bell Labs, challenged this view in 1980. This was at a time when AT&T was under investigation by the US Justice Department for anti-competitive behaviour. In his book, "The Theory of Natural Monopoly", which dealt with telecommunications economics, he noted the cost function could be divided into plant (or infrastructure) costs, and firm (or organisational) costs (Figure 3). Infrastructure costs are those related to the technology of production of network services. Organisational costs are those related transactions or organisation of activities in the company.

Sharkey demonstrated that, of the two parts of the cost function, the organisational costs are more fundamental. Even if the plant or infrastructure costs are such that it is cheaper for only one facility to be provided "it is conceiveable that more than one firm could operate in a workable competitive market". Companies would simply need to find a way to share infrastructure costs or share aspects of the production process.

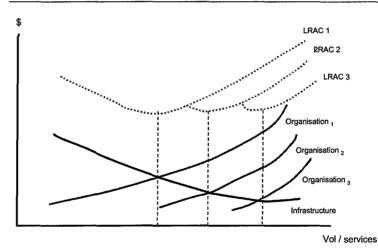
Figure 3: ...until customer service was distinguished from network



Source: MRE, July 02, Sharkey, 1982

This view was a substantial breakthrough that had (and continues to have) a profound effect on the structure and regulation of the telecommunications sector. It meant that competition could occur between telecommunications service providers if they had equal access to the infrastructure, where the economies of scale were. With the right access agreement, the industry could experience many of the benefits of competition (choice, responsiveness, service diversity, service price pressure) but still get the benefit of lower infrastructure costs as volumes increased (Figure 4).

Figure 4: Competition in service provision



Source: MRE, July 02, Sharkey, 1982

Once they had access to the incumbent's network, competitors frequently found it worthwhile to invest in their own infrastructure to some extent. Importantly, this allowed them a greater measure of control over their own services and service development.

During the 1990s there were huge advances in telecommunications technology (optic fibre, digitisation, wireless technology), largely brought about by competition, which lowered the LRAC of infrastructure. Similarly, advances in information technology lowered the costs of information processing and

database technologies, and so lowered the LRAC of organisational activities. In principle this made larger telecommunications companies more economic.

In practice, companies that tried to build businesses by acquisition (AT&T, Worldcom, BT) struggled to integrate systems and cultures to realise these potential scale benefits. In contrast Telstra has grown as an integrated company far more organically. Its true that its relatively few small acquisitions have often failed to become well integrated but, in any case, these haven't been a big burden on the company. Whether Telstra is more efficient as an integrated telco has not been tested as much as its overseas counterparts have because it has not faced the same competition and balance sheet pressures.

Access is the key to competition, but it is hard to get right

The largest part of the debate in telecommunications regulatory economics over the past 20 years has been: What are the appropriate access arrangements to encourage the most efficient industry outcomes? In particular: What is the appropriate price to charge various service providers for network access?

There are no easy answers to these questions. The industry has enormous scale and scope economics as well as a history of incumbency. It has gone through rapid development through the 1990s and subsequent slow down but retains a central role in modern economies. In this context, the current debate on the appropriate form of accounting or structural separation is another step in a long running issue of how to encourage competition in an industry in which it is difficult to compete without scale or scope. No given outcome is likely to satisfy all industry players.

Two key policy issues which would arise in the structural separation proposal deserve some consideration.

- 1. Long run incremental cost (LRIC) of network access is usually less than long run average cost (LRAC) in this industry. Current access prices are based on LRIC. Any shortfall in recovering all network costs from access is inherently met by Telstra (the integrated entity) but is offset by the economic gain from integrating network and services. In contrast, if structural separation went ahead it is likely to lead to higher access charges if there is a requirement for full cost recovery on the network business. This might spell the end for many struggling 3rd tier carriers.
- 2. Convergence of telecommunications and content activities (including media, Internet and IT) is already occuring. Networks already allow a great deal of additional service capability beyond simply transmitting data. The next generation of networks will support a much greater integration of services. Structural separation would slow down these service developments and may inhibit them altogether in some areas.

1. Structural separation could well lead to an increase in network access charges

In most countries regulators have adopted a total service long run incremental cost (TS LRIC) rule for access pricing. Being averaged over increments of output, LRIC is typically somewhere above LR marginal cost but below LR average cost. Typically LRIC exclude costs unrelated to access, allows some discount for volume of traffic provided by the access seeker and then averages the remaining cost across all access usage to get a unit interconnection price.

For most infrastructure where access is required the relevant volume of capacity will be in the range of capacity where there are increasing returns to scale. This means interconnection prices based on LRIC will be less than the LRAC of an equivalent level of traffic (Figure 5).

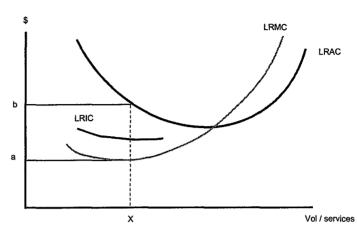


Figure 5: LR Incremental Cost < LR Average Cost

Source: MRE, July 02, Sharkey, 1982

If structural separation used transfer prices based on the existing interconnection price rule, then it seems unlikely that the Telstra network business would earn an economic profit. Charges would need to increase to recover costs on average. We don't have the available data to be sure of the extent of access price increase but, as a guide using rough estimates, network access charges may increase by between 25% and 50%.

Access price increases would be greater if the network business become less efficient. This seems likely both because key activities would be duplicated and because it would not be subject to market pressure to improve performance.

2. Convergence is coming...Telstra is re-organising to meet it

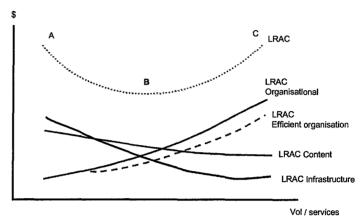
Digital traffic can be stored and processed as well as transmitted. This means telecommunication networks can do more than just send information and allow people to talk to each other. Increasingly telecommunications networks can offer database, IT, content and media services as well as traditional telecommunications service. Even the nature of traditional fixed line telephone services may change as voice traffic moves to an IP transmission and delivery mechanism.

Much of the costs of these incremental services will be separable and attributable to them. However a large part of the costs are joint with transmission services given synergies in collocation, network configuration, operational support systems, customer information systems and various management activies. In principle this gives a good deal of economic advantage to a fully integrated carrier, much of it reflected in emerging service packages.

Market analysts and investors have been critical of Telstra in the past for not organising itself to draw out these gains and share them between customers (in lower priced packages) and investors (in improved returns). In the past year or so we have seen Telstra begin to draw out these benefits with projects to improve internal processes, combine databases and offer more considered service bundles. It has also re-organised itself to better draw out the gains from operating as an integrated services and network company.

There may be still some way to go in this trend but at least it is heading in the right direction. Structural separation would undo and reverse these gains.

Figure 6: LRAC of convergence: increasingly complex



Note: Long run average cost (LRAC) comprises infrastructure, content and organisational costs

Source: MRE, July 02

Regulation shouldn't prevent economic benefits being exploited

It's a widely recognized principle that the purpose of regulation is not to stop a company exploiting economies of scope or scale. The national economy is better off if these are exploited. The point of regulation is to stop these economic benefits being abused, say by monopolistic pricing or anti-competitive behaviour. The point of pro-competitive access regulation such as Part XIC and supported by accounting separation is to allow, as far as possible, other competitors to exploit these benefits as far as practicable. The point of specific pro-competitive market conduct regulation such as Part XIB (again supported by accounting separation) is to prevent the incumbent from using its market power to inhibit competitors from exploiting these benefits as far as practicable.

Competing telcos may never achieve the same access and economic benefits from Telstra's network that Telstra has. Instead, they should develop their own competitive advantages in services or in particular geographic or customer segments supplementing these with incremental investment in infrastructure. This is perhaps a key reason why third tier players have not developed into effective competitors. Many (but not all) are overly reliant on network access, have done little to differentiate their strategies and have not invested sufficiently or in a co-ordinated way in capital infrastructure. In the latest reported results aggregate capital investment has fallen below 10% of sales, un unsustainable level (Table 1). (Note our data does not include spending by Nextgen, a significant network backbone project.) Our point is competition issues have more to do with competitors' approaches than the efficiency of network access rules, albeit these are crictical.

Table 1: Indicative third tier performance trends by half year

Indicator by half			Change		Change
(6 months ending)	Jun-01	Dec-01	on pp (%)	Jun-02	on pp (%)
Revenue (\$m)	1,218.8	1,275.8	4.7	1,252.5	(1.8)
Revenue (ex TELNZA)	456.6	500.0	9.5	529.6	5.9
EBITDA (\$m)	(1.5)	21.1	n.a.	104.9	n.a.
EBITDA (ex TELNZA)	(55.8)	(18.3)	n.a.	20.3	n.a.
EBITDA margin (%)	(0.1)	1.6	n.a.	8.3	n.a.
EBITDA margin (ex TELNZA)	(12.2)	(3.7)	n.a.	3.8	n.a.
Capex (\$m)	498.0	211.9	(57.5)	122.2	(42.3)
Capex (ex TELNZA)	176.5	116.0	(34.3)	45.0	(61.2)
Capex/sales ratio (%)	40.9	16.6	(59.4)	9.8	(116.4)
Capex/sales (ex TELNZA)	38.6	23.2	n.a.	8.5	n.a.
Source: Company reports for e	leven carriers	MRE, Janu	ary 2003		

Telecommunications is different to road and electricity industries

The views that suggests Telstra should be restructured into separate services and network companies reflects to some extent separation models in other infrastructure industries such as road transport and electricity networks. The view is that in these industries, operation and maintenance of the network is a distinct set of activities from the provision of services. (Network construction is more evidently a separable operation, requiring distinct skills, which could be conducted at arms-length on a project basis. The related activities may or may not extend to design and project management.)

The separation of network operation from service delivery is more self evident of road networks where the skills of operating and maintaining roads combine a number of engineering and systems skills. These are typically quite different from the organisational skills required to run transport and delivery companies or taxi and bus companies for example. There is some linkage as efficiency and safety of transport and travel require co-ordination between the road authorities and transport companies. Nevertheless, these can be reasonably achieved on an arms-length basis by negotiation or rules.

Vehicles, not networks, differentiate road transport supplier

However, most of the service attributes important in various road transport services rely far less on ownership and control of the road, but fundamentally on the vehicle used to supply each different type of transport service. Indeed, it would probably be impossible to maintain a sufficient standard of service and differentiation of service if the transport service provider did not also own, or at least control, the appropriate vehicle.

A linkage between infrastructure control and service provision may be less clear in the case of electricity where service provision to business users and end consumers relies far more on customer management skills than control of appropriate infrastructure. In Australia various electricity industry structures are being explored, some of which integrate generation, distribution and retail service delivery, and some of which separate these. Given electricity is a fairly generic service, it may be that infrastructure control does not give much economic benefit compared with being a specialist retail service provider.

31 January 2003 11

Table 2: Relative service attributes

Service attributes	Road		
	transport	Electricity	Telecommunications
Safety	Priority	High	Low
Service range	High	Low	High
Service differentiation	High	Low	High
Reliability	High	High	High
Source: MRE analysis		-	_

In telecommunications, network access is a more important feature...

Fundamentally, there are two related reasons why the telecommunications industry is better structured if there is significant integration between network provision and service delivery. These reflect significant differences in both provisioning activities and service attributes compared with the road transport and electricity industries. First, the activities of running a telecommunications network are far more integrated with those of providing telecommunications services than in the other two industries. For example, there is a far more continuous network provisioning to meet specific service requirements than is the case in the electricity or road industries. Service prioritisation and service level guarantees require a high level of operational control of the network. Service level agreements are a key feature of business service – but require some network control.

Second, the attributes of a telecommunications service which give them value are quite wide ranging and vary to some extent for different market segments. The range of services offered by the telecommunications industry is far greater and turns over more rapidly than the electricity industry. This requires more routine access to network for upgrade purposes. The road transport industry may have a greater service range, but service providers in that industry have the option of upgrading or varying vehicles to meet different needs. Usually they can do this without having to liaise with the network operator.

...so it should be open access, but not separated access

The interaction of network and service activities in telecommunications is increasing in importance as the next generation of networks are rolled out. These networks are increasingly capable of storage and processing as well as transmission. The design, development and deployment of services which exploit this widening capability requires an increase in interaction between network and services, rather than a separation.

Of course, in a competitive industry, other carriers and service providers need to be able to exploit the benefit of these network activities as well as the incumbent. They need to determine where best to locate and how best to design, install and operate their own switching, database and information processing equipment. To a significant extent they will want to own and operate this equipment and much of their own transmission equipment. However, as they lack the network capacity of the incumbent, they will also require equal access to Telstra's network, to complete their service provision.

2 Structural Separation would be a backward step

The structural separation proposal is not well defined

The structural separation proposal would see Telstra split into a wholesale network company and a retail services company. (We shall refer to the former as Telstra Network and the latter as Telstra Services.) We take this to mean that the services business would ultimately be privately-owned while the network business would remain majority owned, ultimately fully-owned by the Government.

The Inquiry Terms of Reference refer to a reduction in "the Commonwealth's current shareholding in Telstra's non-network business". The full effects of the proposed split might vary depending on the ownership and constraints placed on the two businesses. Notably:

- Presumably, the Government would aim to sell out of the services company completely. There is no regulatory or social reason for ongoing ownership. (Indeed, the same can be said about Telstra as it stands since majority ownership is not required for regulatory or social reasons.)
- In contrast, presumably the Government should aim for full ownership of
 the network company if it is to run this for regulatory purposes, as this
 would lead it to act in a manner which is oppressive to Telstra Network's
 minority private shareholders. (It could sell the company and regulate
 access, but one purpose of structural separation is to not have to
 regulate access. Isn't it?)

These points are noted because ownership and owners and managers objectives differ in the case of private and public ownership. Thus, ownership matters would compound the efficiency issues and affect the valuation and compensation issues. However, some of the main issues which are undefined in the proposal are:

- Whether the Telstra Services business would be prevented from investing in network infrastructure, and whether it would be obliged to use the Government-owned Telstra Network's wholesale services or could buy from network competitors.
- Presumably other telecommunications carriers' networks would not be nationalised and they would be free to choose between using their own networks, investing and expanding these, and where they might use the Government-owned Telstra Network services.
- Presumably the Telstra Network company would be prevented from competing in services, otherwise the same regulatory concerns which gave rise to the proposal for structural separation would re-emerge (but only worse if access regulation has been abandoned or watered down in the meantime).

Starting assumptions are questionable

The proposal which sees the Government retaining ownership of the network has been predicated on a view that the area of greatest significance to the community is the network. This is quite wrong. Users are far more interested in services and generally not overly concerned about which network or which technology delivers them, so long as it is reliable. The area of greatest significance to users is the services. The network only has value to the extent it can provide the services people want or need.

The view has also been put that Telstra's traditional activities have "obvious public sector characteristics" and that Telstra would be so dominant (if it were fully privatised) that it would be almost too powerful to regulate. These are debatable and, in our view, inaccurate.

On the first point, universal service is a fundamental obligation on Telstra. However, the overwhelming bulk of standard telephony service is commercial and supplied in a competitive market setting. Realistically, Telstra's USOs can only be supplied as an incremental obligation given that commercial services are in place. That is, commercial decisions lead to the bulk of network roll-out and service delivery. If this infrastructure and capability is in place then the additional cost of providing USOs is lower than it would be

Further, traditional telecommunications services are no-more "public sector" than provision of food or fuel. The 3 or 4% of lines which are not commercial are required by legislation to be provided by Telstra as USOs with funding specifically raised from all carriers. These obligations don't vary if ownership changes from public sector to private sector.

On the second point, Telstra is effectively regulated, although regulation could be made more effective. Certainly Telstra can't ignore the ACCC, the ACA or legislation. To the extent there is an industry failure, this is mostly because of policy decisions taken through the 1990s and earlier. Telstra itself cannot decline to supply universal service whether it is publicly owned or private as this is a legislative requirement. Indeed, Telstra would have more scope to avoid effective regulation or its USOs as a government owned company than a fully privatised one largely because of the conflict in interest between ownership and regulation. Publicly owned entities can default without the same redress as privately owned ones

Specific efficiency concerns

There are several concerns for investors with the structural separation options, notably the latter one which envisages a government owned network operator and a privatised retail operator.

- No role is envisaged for equity capital markets in Telstra network's infrastructure spending, which significantly raises network investment cost.
- There is a fallacious view put about by advocates of Government ownership of infrastructure that it faces lower financing costs.
- · Network operating costs would increase significantly.
- Relative value would depend on an a wide range of possible access prices.
- There are significant practical problems in determining a boundary between Telstra Network and Telstra Services (due to rapid technological change and evolution).
- Raises significant issues for other carriers.
- Loss of synergy between network and services.

Equity capital market is best placed to influence capital investment decisions

Telstra spends A\$3.5bn or more on infrastructure each year, and about 3 times that on operating expenditure. Public ownership and scrutiny through Government and Parliament are not the ideal discipline on this spending. This is because there is no clear ownership of decisions, with the burden of bad

decisions spread across the tax-payer base. The risk of this is that regulatory and policy arrangements might be used to "cover" the financial effects of bad or badly executed investment decisions.

The separation option would remove the role of the private equity capital market from much of infrastructure spending despite the high level of this, and the capital markets' expertise in disciplining spending and most efficiently funding investment. The reduction in scrutiny and appraisal is likely to lead to significantly higher capital costs.

In general, a single government owned entity will not be able to meet the needs of a modern telecommunications industry. A well-established economic principle is that no central agency can ever possess the knowledge needed to achieve what an efficient, competitive market can accomplish without central planning. For instance, Government owned network organisation certainly would not have market incentive to keep up with the most appropriate technology, service range or level of quality. It would not have a market incentive to be accountable for these aspects of capacity.

The Government's record in making technology decisions is poor because it lacks the risk assessment approach, diversity and range of expertise of private capital markets. Private investors suffer if they make bad decisions; Government investors avoid this by passing the pain onto a wide taxpayer base. There are lots of different private sector investors many with specialisation in different types of analysis and risk assessment. A Government network company is not the appropriate organisation to be making major decisions on major telecommunications investments or taking responsibility for network service provision.

Do Government entities face lower financing costs? Not really, its borne by taxpayers

One fallacious point noted in favour of Government investment in infrastructure (or Government owned entities) is that Governments face a lower interest rate than private investors. Advocates of direct Government investment suggest that it would be therefore cheaper for the nation if Government invested in such infrastructure rather private investors.

That some people use this seemingly appealing argument demonstrates they have missed the point about such investment. It is inherently risky because future outcomes are unknown. However, if investors are aware they risk losing their money then they can face up to such risks and manage it. For instance, they do research into possible outcomes, look at contingency plans and risk-sharing arrangements. There is ongoing appraisal and monitoring of risk and management of it.

In the structural separation proposal, capital lenders may offer the Government (or Government entities) cheaper rates only because they (the lenders) will not face risk of default or loss of investment. In this case, there is less incentive to manage risk. If the infrastructure project or entity fails lenders will still get their interest payments and investment funds back because Governments are backed by taxpayers. Taxpayers bear the risk. Advocates of such Government investment should take into account the interests of taxpayers in bearing the consequence if an investment goes wrong.

Network operating costs would increase significantly

A government owned network operator would not have sufficient discipline on cost control. Network capital and operating costs are likely to increase sharply. This would either be passed onto the retail company and other service providers

31 January 2003 15

as higher network access charges, be absorbed in "friendlier" regulation (say higher price caps) or ultimately be funded by the taxpayer.

One of the principles on which the telecommunications options are based is to maximise employment in the sector. Prior to privatisation Telstra had 93,000 employees, more than twice as high as it does now, and accordingly unit costs were much higher than they are now.

The principle on full employment contradicts another principle on "ensuring cheapest and fairest prices". It also contradicts the principle on maximising competition and investment. How do companies compete fairly when one is burdened with an employment maximisation objective? The risk is that it competes because it has a favourable regulatory structure, not because it is efficient.

Maximising employment is not an appropriate policy within an industry. It takes employment from more efficient areas, and in times of full employment is inflationary. It can hold back legitimate full employment. In the extreme, governments may find short term "solutions" to employment issues with industry policy but create bigger longer term problems, including bigger employment issues.

Relative value would depend on arbitrary access prices

The options paper suggests the value of the network company would be between \$20bn and \$25bn. In principle the value depends on the lower of the discounted cashflow generated from operating the network or the network replacement cost. However, given the economic structure of the industry, only one network will operate in many areas so the network replacement test is redundant. And the cashflow derived from network operation will be subject to regulated charges.

If Telstra is separated into a network company and services company, with the former being owned by Government and the latter being fully privatised, the relative value of the two would depend largely on the access price arrangements between the two, and to third parties. In general, the higher the transfer price, the greater the value of the network company and the lower the value of the services company.

As stated previously, if the network services company is to recover all its costs, including capital cost, then interconnection prices would have to increase. Indeed, they may increase quite substantially if operating and capital costs increase for the reasons outlined above. Quite apart from the level of access price, they are unlikely to be efficiently structured; they would vary for different access services but not in an efficient way. Efficient price structures require an efficient market environment.

In general, if transfer prices are too high then the value of the privately owned services company would be lower than if prices were set in a more efficient structure. Probably the value of the services company would be significantly below the current market value of the privatised part of Telstra (49.9%). In this case, compensation would be a significant factor in any restructuring.

Any ex ante evaluation of the appropriate compensation would be very judgemental given the novel operating structure and its inherent inefficiencies. It would be impossible to get this right except by coincidence, in which case it would be resolved as a political bargaining exercise.

On the other hand, if the level of transfer prices is too low, then this would increase the value of the services company, but reduce the value of the Government owned network company. This would tend to undermine the economic incentive for further network investment. In turn, this would either lead

to under-development of the network or, more likely a "bail-out" by taxpayers. Most likely it would be a combination of the two with under investment in some areas, and taxpayer-funded, politically-stimulated investment in other areas.

Of course other factors apart from the transfer access prices will also influence the relative value of the two companies. For instance, an inefficient network company (say for the reasons outlined in the previous two sections) would tend to pass on its inefficiencies to the services company, indeed to all services companies. These factors tend to compound the relative valuation and compensation issues.

Significant practical problems in defing a separation boundary

Given the significant and increasing interaction between network activities and service provision, it is increasingly difficult to determine where the boundary would lie between a network and services businesses.

- In which company would the systems for service initiation and provisioning lie?
- Which company would be responsible for billing information?
- If a new service required a software upgrade in exchanges which party would do it and with what priority?
- If a services company wanted to differentiate itself on the basis of its service range or quality, it might become hostage to operational constraints in the network company.
- How would the Government network operator prioritise competing demands for rollout and development by different service providers? Given physical capacity constraints, it would need some prioritisation, which raises the risk of favouritism.

It would be a worse outcome to inhibit the ability of telcos to exploit scope between network and services in order to create an artificial level playing field. In principle, regulation (and policy driven structural responses) doesn't take these scope advantages away. Regulation should stop them from being abused (or at least try to) and, where there is effective access regulation, encourage other players to exploit these benefits to some extent.

What about other carriers and their networks?

Given the inherent synergy between network ownership and service provision, various service providers have strong incentives to develop their own network infrastructure as far as possible. Most have done so to varying extents. In the proposed structural separation, it is not clear whether competitors would be forced to use the Government network or free to develop their own?

If they are obliged to use the Government network, then what would become of the \$10bn or more invested in competitive networks by Optus and others? Would these be bought out too, and if so at what price? Simply recovering sunk cost would be a boon for some. But of course this would leave the taxpayer picking up the cost of investment decisions that have not worked out. It would be a welcome relief to some carriers.

On the other hand if service providers are not compelled to use the Government network, or if it is not cheap or subsidised by tax-payers, service providers would develop their own networks in order to better control their own services. What would force Telstra Retail to use the Government owned network rather than use its cashflow to incrementally build out its own network? Optus would become the *de facto* incumbent carrier with a significantly greater integrated network than

any of its competitors. As each year passes the Government network would become more and more redundant leaving taxpayers holding an asset which is increasingly under-utilised by service providers which have built to meet their own needs.

Loss of synergy between network and services would set back industry development

We noted that, historically, protected incumbent telco operators had limited incentive to solve more complex service needs or produce differentiated service to met different needs (page 6.) One concern we have with the proposed separation is that a dominant network company would have limited incentive to develop new technologies and approaches to service. Of course, this also depends on the level of network competition and whether the arrangements prevent or inhibit network competitors such as Optus and others from exploring such developments.

It is not clear from the proposal what would happen to the networks of competitors. If they are to be nationalised and no service provider is able to develop network technologies, then the risk is that the Australian telecommunications industry would slip into a state of technical lethargy.

Of course, if non-Telstra carriers are free to continue network development then they will quickly become more advanced in their services and the technology behind these than the Telstra services company which is constrained to work through a contract process with the network company. This would increasingly marginalise and further reduce the value in Telstra Services. If instead it is free to invest in its own infrastructure, then as each year passes it competes more and more with Telstra Network, and each year this becomes more of a rump serving low margin areas and an increasing burden on its shareholders (the taxpayer).

In short, a separation which limits competitive market pressure risks increasing technological inefficiency. A separation where Telstra Services is able to invest in network and Telstra Network is allowed to compete in services may get around this problem. However, in the short term while it is being established it causes significant adjustment problems, including delays in service rollout (such as broadband for instance). And in the long term after it has been established, we are back where we were with the same issues but a more complex industry structure. It took AT&T the better part of two years to complete its strucural separation in the early 1980s, it did not solve fundamental access issues and the industry in the US is still searching out a better structure for convergence.

3 Specific impacts

On the basis of our analysis we draw the following conclusions in terms of specific impacts as listed in the terms of reference for the Inquiry. These are mostly negative although there may well be some beneficiaries. Overall, however, there is no doubt that consumers, the telecommunications industry and the national economy would all be worse off because of the additional costs and distortion to industry development that would be caused by this separation proposal.

The efficient provision of services to end users

We would expect a significant decline in the efficient provision of services to end users. There are several reasons for this.

First, efficient provision requires a close working relationship between the those responsible for customer relationship services, service initiation and maintenance and network provisioning. A notable development at Telstra as competition has become more effective has been organisational change designed to foster better interaction between these areas. This has the purpose of making network development and operation more responsive to the developing service needs of consumers.

The proposed structural separation means that such interaction would be constrained by the contract arrangements between Telstra Services and Telstra Network. This may work well in some cases but would be tested in many other cases, say, where end user needs change quickly or where services require particular network features (such as security, rapid data-location etc). In a single organisation issues can be solved quickly with good management oversight.

In the proposed structural separation arrangement issues may take significantly more time to be resolved. Contracts cannot always specific where relevant responsibilities lie. It may not be clear from case to case whether these occur on the services or network side. Further, because it doesn't face the end customer and has no competitive market performance incentive, the Government owned Telstra Network may not be concerned to resolve such issues efficiently.

Second, efficiency also requires an efficient cost structure, and with effective competition this leads to better service prices. The proposed structural separation increases costs for the reasons outlined in the previous sections. This will lead inevitably to higher prices for end users.

Regional and rural services

We are likely to see a far worse outcome for regional and rural services. The same constraints to efficient service outlined above also apply to regional and rural services but are compounded by two further issues. First, there is far less likelihood of competition in such areas. In cities and metropolitan areas competition could force some degree of responsiveness say pushing service providers to bang the table more loudly if Telstra Network takes too long to respond to a service initiation request or a maintenance problem.

At least city and metropolitan areas benefit to some extent because not all competitors are network-neutered; there would some degree of network competition, say from Optus and some other third tier players. This may well evolve more quickly to fill the gap in service left by the proposed structural separation. Indeed, if Telstra Services is not barred from network investment it is likely to build out infrastructure quickly in City and some metropolitan areas quite quickly.

But such responses are unlikely in rural and regional areas. Economic provision of network and services is rarely commercial on a stand-alone basis, a point indicated in the 1988 review of the cost of Telstra's (then Telecom's) Community Service Obligations. However, if services in rural and regional areas are part of a wider, typically national service provision then they are likely to be commercial in many regional and rural areas on an incremental basis. That is the additional cost of extending service rollout to each regional and rural area is much less than the stand-alone cost.

This is a fundamental principle of telecommunications service in rural and regional areas. It is also an important underlying principle of USO provision in non-commercial areas. If the proposed structural separation changed these underlying (incremental) relationships then it would either lead to a decline in USO services or an increase in USO costs.

Apart from the incremental cost implications, the overall cost implications of the structural separation proposal noted earlier would also be greater in rural and regional areas. This is because the greater distances and lower population density increase network requirements on average. The overall effect is a significantly greater average cost per user. In turn, this means either significant increases in charges in rural and regional areas or a significant increase in USO cost.

In summary, the structural separation proposal would inevitably lead to a decline in services and or service levels in regional and rural areas, possibly a failure of commercial service provision in many regional and rural areas and a blow-out in USO costs.

Telstra's ability to continue to provide a full array of telecommunications and advanced network services

Telstra Services and Telstra Network would be significantly constrained compared to Telstra (as it is now) in providing the full array of telecommunications and advanced network services. This is largely because they must work through necessarily complex contract arrangements in order to maintain the existing service range and to introduce new services. In a single company such issues are worked out through internal arrangements and any difficulties may be resolved quickly if there is good management oversight. In contrast, disagreements between two contracted parties may take weeks to resolve following dispute resolution procedures in the contract.

For instance, what if Telstra Services saw some service development as a priority and this required certain network changes which Telstra Network considered as non priority or too expensive?

A significant problem may emerge if Telstra Network preferred one technology but Telstra Services preferred the service features of another. These issues may not be easy to resolve in two stand-alone companies and so this may delay rollout of new technology and services.

A significant feature of centralised Government provision of network is that there is little incentive to develop network potential and indeed to develop new uses of the network and promote demand. The outcome of such Government provision through the 20th century was limited innovation, long queues for basic service provision and inhibited demand by consumers.

Further, because of the cost increases indicated earlier it is likely that some marginal services that require network development may not be rolled out at all. This would be compounded if arrangements between the two companies made it harder to market new services to develop demand. For instance, broadband is still largely a marginal economic service. A probable outcome of structural

separation is that it would raise costs and inhibit the development of demand, slowing the economic case for rapid broadband rollout. Instead, rivalry between integrated service and network companies supported by an efficient access regime is a far better basis for such service rollout.

Ongoing investment in new network infrastructure

It is hard to say *ex ante* whether network investment would increase or decrease, but almost certainly it would be less efficient. Regulated, particularly government-owned utilities such as Telstra Network often over-invest because they can pass on excess costs to captive customers or, if that fails, to tax-payers. Such gold-plating is rarely efficient investment however.

This outcome may depend on how Telstra Network is regulated. A price cap approach may be more efficient and so may or may not lead to more or less investment. As the regulatory model becomes more complex the outcomes for investment become less certain, but probably more efficient. For instance, the price control arrangements that have been in place since full competition was introduced in July 1997 have encouraged over-investment in backbone infrastructure and under investment in access infrastructure. This is likely to be one of the main reasons that 3rd tier players have failed to find an effective competitive role in the Australian telecommunications market.

One concern is that regulatory arrangements for the structural separation proposal have not been specified. Our analysis (below) is that structural separation would not solve regulatory issues, but may make them worse. In this case, it is hard to say whether network investment would increase or decrease but almost certainly it would be less efficient for two reasons.

First, overall investment costs would increase for the inefficiency reasons outlined on page 8.

Second, investment signals would be distorted because of the greater separation between end users and the investment decision. The usage information that should signal efficient decisions about where and how much to invest, as well as issues on optimal timing, choice of technology and so on would instead have somehow to passed through Telstra Services to Telstra Network. This additional barrier with its inherent complexity of contract arrangements is likely to distort that investment decision making process.

It is notable that as competition has increased in effectiveness, albeit slowly, that Telstra has had to reorganise itself so that these signals are more appropriately felt and responded to with better investment decisions. This step forward would be undone with the proposal for structural separation.

The wider telecommunications industry

Given our analysis in the preceding sections, it is likely that the wider telecommunications industry would be increasingly inefficient as each year passed. This would be a direct result of both an increase in costs and prices as well as a distortion of the market signals set back from increase.

In particular, we would be concerned that service development could be set back many years given the inherent distortion in investment signals and increase in overall costs.

Third tier competitors would be no better off than under current arrangements, and indeed could be worse off if the change in industry structure leads to a dilution of access regulation.

Possibly the arrangements may boost Optus. It may find it worthwhile to fill the position of the carrier formerly known as Telstra, at least in city and metropolitan

areas. It is unlikely to do so in many regional and rural areas. If so then this would mitigate our concerns to some extent. However, it should also indicate that there are advantages in being an integrated network and services firm over the structural separation proposal. If Optus does step into the void, a further complication may arise if access to its network by 3rd tier players is constrained and the access regime has been watered down or removed in favour of direct control over Telstra Network.

The telecommunications regulatory regime

The risk to competition would increase, rather than decrease, if the proposal lead to a weakening of access and competition regulation.

The structural options paper suggests that parts of the existing regulatory framework may become redundant. In particular some kind of access regime would still be required but would focus more on technical matters. Other benefits claimed are that the regulatory model would be less cumbersome and intrusive and deliver clearer pricing and investment signals. It is claimed this would lead to more efficient capital allocation and would allow more efficient and effective price controls. Untrue!

These claims are based on a view that commercial access to a network company would occur without the inherent conflicts in the existing regime. However, the conflicts would still occur because a network company would still compete for business with other network operators and compete for capital. Without a regulator to arbitrate commercial prices, there would be no real constraint to it pricing access in an anti-competitive way. The main difference with the current regime would be that the network operator would lack a market-driven commercial objective; its non-market objectives (higher employment levels, over-engineering, easy life) may compound commercial conflicts.

Competition can best deliver the benefits of choice, responsiveness and vigour in pricing if service providers and competing infrastructure providers have effective access to the incumbent's network. Regulatory developments over the past 20 years have mostly focussed on how to ensure effective, if not equal, access. Until recently, industry development has mostly gone the other way, with most telcos increasing in size and complexity. Many of these have not realised the benefits of size and integration.

If scale and integration can be harnessed, they can bring significant economic benefits. The risk is that they can be used to inhibit competition and dilute effective network access.

Telstra's shareholder value and its shareholders

Inevitably there would be a decline in the value of Telstra although it is hard to be sure without the proposal being made more definite. By this we mean that the sum of the value of Telstra Services plus Telstra Network would be less than the sum of Telstra as it stands today.

The reduction in value as we see it would result from:

An increase in the overall cost of the two businesses because of duplication and cost inefficiency.

A decrease in revenue prospects because of the distortion in market signals between users and network investment.

A related issue is that the share of value between the two entities depends on the contractual arrangements between the two companies including transfer price arrangements. One risk is that because of the Government-owned, largely monopoly nature of Telstra Network it might be free to increase access charges

without any significant constraints. Indeed, initially it might need to because in order to recover all costs. This factor would tend to lead to a transfer of value from Telstra Services (and other service companies) to Telstra Network.

The extent of impact of these access arrangements may not become clear until some time after the separation has occurred and investors have some time to assess how the arrangements between the two companies might work. This delay might complicate any compensation arrangements for Telstra shareholders.

Potential impact of separation on stock indices

A further issue to be considered with respect to a the structural separation of Telstra is the impact that such a proposal would have on Telstra's position within the context of the stock market and its investors. Materially changing the size of Telstra as a listed entity is likely to have a significant impact on the stock's share price and volatility which would be detrimental to both current and future shareholders.

A significant source of investor demand for stocks (such as Telstra) relates to their index weighting. Simply, the larger the index weight of a stock the greater the level of underlying index demand there is. Telstra currently makes up about 5.38% of the S&P ASX 200 (a local index). Telstra makes up 2.27% of the MSCI Australia, which is an index against which global investors will commonly benchmark. The index weight of a stock is influenced by a range of factors including its overall market capitalisation, liquidity (turnover of stock), foreign ownership restrictions and the level of strategic ownership.

Changes in the index weight of a stock because of changes to one of the underlying factors above can have a material impact on the share price. For example in 2001 the major global stock market indices, run by MSCI, incorporated foreign ownership restrictions into their Index methodology. In doing so, stocks such as Telstra which have restrictions on the allowable level of foreign ownership had their representation in the MSCI Indices substantially reduced. The adjustment to the new approach which reduced Telstra's index weight was done over two tranches. From the day the changes were announced to the date of the first tranche, Telstra's stock price fell from \$6.52 to \$5.50, or 16%. The stock then fell a further 14% to \$4.73 between the first and second tranches. While some of the decline can be attributed to weakness in global telcos there is little doubt that Telstra's reduced index weight in global indices contributed to the stock's decline & volatility over this time.

Telstra is currently the 5th largest stock in the local S&P/ASX Indices (those used by local Australian fund managers to track the Australian stock market) and the 11th largest stock in the MSCI Australia Index (the Index used by most global fund managers to track the Australian stock market). This means that to a certain extent, funds currently tracking the Australian stock market have to hold Telstra in their portfolio. If Telstra's weight within these Indices was substantially reduced, significant selling pressure would be an inevitable result as would a reduced focus of fund managers on the stock.

Tables 3- 5 below detail a number of scenarios post separation and the index-related selling that would likely result from the reduced market capitalisation of Telstra. We have estimated the index related selling using 3 assumptions as to the remaining equity value of Telstra Services (\$10bn, \$20bn and \$30bn). We have also looked at each scenario in the context of a foreign ownership restriction (of 49%) and no foreign ownership restriction.

23

Table 3: \$10bn listed entity, full free float

	Current	Weight Post	Weight	Expected
	Weight	restructure	Change	Index selling (\$m)
S&P/ASX 50	6.52%	2.28%	-4.24%	-\$58.4
S&P/ASX 100	5.70%	1.98%	-3.72%	-\$136.7
S&P/ASX 200	5.38%	1.86%	-3.51%	-\$488.7
S&P/ASX 300	5.32%	1.84%	-3.48%	-\$293.3
MSCI Australia (no FOR)	2.27%	2.23%	-0.04%	-\$11.5
MSCI Australia (49% FOR)	2.27%	1.11%	-1.17%	-\$267.0
FTSE Australia	2.33%	2.19%	-0.14%	included in MSCI
FTSE Australia (49% FOR)	2.33%	1.09%	-1.24%	included in MSCI
			Total (no FOR)	-\$988.6
		7	Total (49% FOR)	-\$1,244.1

Note: FOR = Foreign ownership restriction

Source:

Source:

Table 4: \$20bn listed entity, full free float

	Current	Weight Post restructure	Weight	Expected
	Weight	restructure	Change	Index selling (\$m)
S&P/ASX 50	6.52%	4.45%	-2.06%	-\$28.4
S&P/ASX 100	5.70%	3.88%	-1.82%	-\$66.7
S&P/ASX 200	5.38%	3.66%	-1.72%	-\$238.9
S&P/ASX 300	5.32%	3.62%	-1.70%	-\$143.4
MSCI Australia (no FOR)	2.27%	4.36%	2.09%	\$472.9
MSCI Australia (49% FOR)	2.27%	2.19%	-0.09%	-\$21.4
FTSE Australia	2.33%	4.29%	1.96%	included in MSCI
FTSE Australia (49% FOR)	2.33%	2.15%	-0.18%	included in MSCI
			Total (no FOR)	-\$4.6
		•	Total (49% FOR)	-\$499.0
Note: FOR = Foreign owners	ship restriction	on		

Table 5: \$30bn listed entity, full free float

	Current Weight	Weight Post restructure	Weight Change	Expected Index selling (\$m)
There would be no material	change for S	&P/ASX Indices		
MSCI Australia (no FOR)	2.27%	6.41%	4.13%	\$936.7
MSCI Australia (49% FOR)	2.27%	3.24%	0.97%	\$218.8
FTSE Australia	2.33%	6.30%	3.97%	included in MSCI
FTSE Australia (49% FOR)	2.33%	3.19%	0.86%	included in MSCI
		٦	Total (no FOR)	\$936.7
		То	tal (49% FOR)	\$218.8
Note: FOR = Foreign owners Source:	ship restriction	on		

In summary the tables above show that:

- At \$10bn market capitalisation for Telstra Services, and with no FOR, local Index selling is estimated to be \$980m worth and international selling will be immaterial. This is a substantial level of selling pressure given that Telstra's monthly average turnover currently is around \$85m.
- At a market capitalisation of \$10bn, a 49% FOR, local selling is estimated to be \$980m, international selling \$265m - combined selling of \$1.25bn

- At a market capitalisation of \$20bn, and with no FOR, local selling is estimated to be \$480m with international buying of \$470m - so net nothing
- At a market capitalisation of \$20bn, with a FOR, local selling is estimated at \$480m, with international selling immaterial – net selling of \$480m
- At a market capitalisation of \$30bn, and with no FOR, local selling immaterial, international buying \$935m – net buying of \$935m
- At a market capitalisation of \$30bn, 49% FOR, local selling immaterial, international buying \$220m – net buying of \$220m

Reduction in interest of overseas investors

There is also likely to be collateral damage to investment in Australia from offshore, particularly if overseas investors are not adequately compensated for any change in ownership and structure of Telstra. The implementation of any ill-considered policy on such a scale is likely to lead to an increase in overseas investors' views of sovereign risk generally, and lead to a net reduction in overseas investment in Australia.

The Commonwealth budget

The effects on the Commonwealth budget would be significantly negative, although it is difficult to be precise without being clearer about where and how separation occurs, including access charging arrangements and respective ownership of Telstra Services and Telstra Network. On the basis that Telstra Services is fully privatised, Telstra Network is full government owned and existing shareholders in Telstra are appropriately compensated then the budget effect might be a combination of three key factors:

- a one off reduction through the buy-back of the 49.9% of Telstra in order to undertake the structural separation;
- a one-off gain from the sale of Telstra Services after a separation;
- probably a net reduction in dividend receipts.

Buying back Telstra

It is unlikely that Telstra could be structurally separated even while it is partially privatised given it is hard and maybe impossible to do this without making minority shareholders worse off. It is hard to imagine the Board would approve it and run the risk of shareholder reaction or legal action. Maybe the Government could provide immunity but this transfers the risk to Government. Structural separation would be more sensible if the Government bought back Telstra first.

At current market prices this would require about \$30bn from budget to acquire the privatised 49.9%. The likelihood of a forced acquisition would drive up share prices

Given some people bought their shares from the Government at \$7.40 and \$7.80 on the basis of that Telstra was an integrated company, and that the regulatory framework was established (an did not include structural separation) they may argue for compensation to be increased to these prices. In this case, the budget requirement might be about 50% higher than current market value.

If competitors have their networks nationalised as well then the compensation would be increased by at least \$5bn to 10bn (depending what aspects are nationalised), maybe much more depending on what value has been added as these networks have become established.

Subsequent Privatisation of Telstra Services

The value that might be realised from a subsequent full privatisation of Telstra Services would depend significantly on contract arrangements between Telstra Services and Telstra Network, in particular access prices. A high access price would lead to a lower value for Telstra Services. Given the artificial nature of these are arrangements there are likely to be some compounding factors. First, contract arrangements are likely to be very complex; the greater the complexity the greater the uncertainty for investors and the lower the value of Telstra Services. Similarly, if the contract details do not cover all aspects, or if they leave room for doubt, then this also raises uncertainty and so reduces the value of Telstra Services.

A lower access price and friendlier terms and conditions would transfer value from Telstra Network to Telstra Services and other telcos (as well as consumers) and so increase the amount that might be raised in a privatisation of Telstra Services. However the effect is not revenue-neutral because it is shared with other telcos and consumers.

Even with a low access charge and friendly arrangements it is hard to see that a privatisation of a Telstra Services company which is not able to invest in network directly to meet changing needs, while its competitors are, would be of great interest to investors, especially to overseas investors. The uncertainties mentioned above would also hurt valuation. It is hard to see circumstances where a network-neutered Telstra services company would be worth as much as \$10bn, probably much less.

A probable reduction in dividend income.

The Government should receive about \$A1.48bn in dividends from Telstra this year. The amount it might receive in dividends from Telstra Network would depend largely on the access prices it charged (that is, these would be the key determinant of profit) and Telstra Network's reinvestment policy.

As we have noted access charges would probably have to increase in order for Telstra Network to recover all its costs. If they did not increase then there is a risk that Telstra Network would not generate enough cash to reinvest in network maintenance and development. Even with an increase in access charges there is likely to be significantly lower profit given the increase in costs from duplication and inefficiency and loss of synergy between network functions and service functions. Inevitably, there would be a significant decline in dividend receipts. If Telstra Network is increasingly marginalised as Telstra Services and competitors build out and use their own infrastructure, then dividend receipts will continue to decline over time.

Dividends are risky ...

It is also worth noting that in these comparisons of budget impact that there is a fallacy in comparing dividends foregone with interest saved. For instance, advocates of Government ownership of Telstra argue that the loss of dividends from selling the Government's remaining stake in Telstra would be greater than the interest saved if the proceeds of a sale where used to reduce debt. This is a fallacy, of course, as the comparison doesn't adjust for the risky nature of dividends compared with debt, and that Government's pass this risk onto taxpayers.

The fallacy is also apparent in the case of structural separation, and the risk may be greater. For instance, if Telstra Network faced lower profits and a decline in dividends, the owner, who is also responsible for regulation may be inclined to increase access charges rather than bear the budget consequences of a reduction in dividends.

...and not readily budgetted for

Equity investment with dividend return (and share price performance in the case of privatised companies) is risky, particularly in a sector under going significant change. Because dividend returns can vary significantly from period to period, investors, whether government, business or simply householders should not rely on equity returns to meet budget requirements.

Dividends are a discretionary matter and are not always paid reliably. Of course the reliability of each depends on the circumstances of each company, but on a like-for-like basis, dividends are riskier than interest returns.

...but generally you can budget on interest income

Bonds are more appropriate for that purpose. They are relatively safer because they have a prior claim on profit or assets before dividends are paid. In extreme cases, say in a winding up, they are safer because they have priority in repayment before equity holders.

More usually, interest payments on bonds are rarely defaulted on by established companies which are trading well. They can be relied on with a high degree of certainty. This means that a bond investment with a well-established secure company can be relied on for budget purposes.

Equity investment is about wealth creation...debt is more about income

It is a basic principle to use a good equity strategy for wealth creation but use secure bonds and interest income for a secure income stream. Some blue chip equities may look like safe and secure and give the appearance of certain dividend returns. Good companies will try to maintain a certain dividend payout ratio. They are certainly appropriate in a portfolio of investments which may mix wealth creation and income objectives.

The recent market performance of stocks regarded as blue chips (Brambles and AMP) show fundamentals can change as the market evolves. It is unsafe to rely on equity returns for budget purposes. Instead equity investments are essentially about wealth creation rather than safe steady income or wealth distribution. That means they require relatively active management with a view to how the equity investor can influence performance.

The risk with structural separation is that the wealth creation role of the telecommunications industry (i.e providing services of value to the community) becomes distorted because the Telstra Network company has conflicting objectives (wealth creation, regulatory and policy) and because its owner, the Government is both regulator, owner and policy maker.

Maybe there would be some beneficiaries from structural separation

Our comments on the proposal are pretty much all negative comments. We can see no merit in the proposal to force structural separation. However, two or three parties could benefit, its just that their benefit is not earned but comes at the expense of telecommunications consumers, the industry and the economy:

- Optus (assuming its network is not also nationalised) would be a significant beneficiary as it would become the largest integrated telco. Customers whose service relies on ready infrastructure would be dissatisfied with the decline in Telstra's service and so are most likely to migrate to Optus.
- Management and employees at Telstra Network would be beneficiaries. Generally, they would not face competitive pressure nor

- shareholder pressure to be efficient in either their control of costs or their responsiveness to service needs.
- Investment bankers, lawyers and consultants and others who would advise on the massive transaction would earn significant windfall gains.

Disclaimer:

Macquarie Group. Nothing in this report shall be construed as a solicitation to buy or sell any security or other product, or to engage in or refrain from engaging in any transaction. In preparing this report, we did not take into account the investment objectives, financial situation and particular needs of the reader. Before making an investment decision on the basis of this report, the reader needs to consider, with or without the assistance of a securities adviser, whether the advice is appropriate in light of their particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and any individual security may experience upward or downward movements, and may even become valueless. International investors are also reminded that there are additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. This report is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date nor do we accept any obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this report and/or further communication in relation to this report. This report has been issued and distributed: in Australia, by Macquarie Equities (Australia) Limited (ABN 58 002 832 126), a licensed securities dealer and a participating organisation of the Australian Stock Exchange Limited; in the UK, by Macquarie Equities (UK) Limited, which is regulated by the Financial Services Authority (No. 3704031). Its related body corporate, Macquarie Bank Limited, is a member of the London Stock Exchange and is regulated in the UK by the Financial Services Authority. The investments and investment services the subject of this report are not available to private customers in the UK; in Germany by Macquarie Equities Limited; in the US, by Macquarie Equities (USA) Inc. Any transactions by US persons in any security discussed in this report must be carried out through Macquarie Equities (USA) Inc; in Hong Kong, by Macquarie Equities (Asia) Limited, a registered dealer under the Securities Ordinance; and approved for distribution in Singapore by Macquarie Securities (Asia) Pte Ltd., a licensed dealer and investment adviser in Singapore. All enquiries from Singapore residents in relation to securities referred to in this report should be directed to Macquarie Securities (Asia) Pte Ltd: in New Zealand, by Macquarie Equities New Zealand Limited, a licensed sharebroker and member of the New Zealand Stock Exchange. The Macquarie Group of companies and their officers and employees may have interests in securities referred to in this report, including being directors of, or providing investment banking services to, their issuer. Further, they may buy or sell those securities as principal or agent, and as such may effect transactions which are not consistent with the recommendations (if any) in this report.

SYDNEY Macquarle Equities (Australia) Ltd Level 3 1 Martin Place Sydney NSW 2000	MELBOURNE Macquarie Equities (Australie) Ltd Level 23 101 Collins Street Melbourne VIC 3000	BRISBANE Macquarie Equities Ltd Level 12, Comalco Place 12 Creek Street Brisbane QLD 4000	PERTH Macquarie Equities (Australia) Ltd Level 28 77 St Georges Terrace Perth WA 6000	ADELAIDE Macquarie Equities Ltd Level 1 50 Grenfeli Street Adelaide SA 5000	WELLINGTON Macquarle Equities New Zealand Ltd Ground Floor Lombard House 95 Customhouse Quay Wellington, New Zealand
Phone (02) 8232 3434	Phone (03) 9635 8139	Phone (07) 3233 5888	Phone (08) 9224 0888	Phone (08) 8203 0200	Phone (64 4) 498 2800
Fax (02) 8232 3177	Fax (03) 9635 8260	Fax (07) 3233 5999	Fax (08) 9224 0735	Fax (08) 8212 4829	Fax (64 4) 498 2839
LONDON Macquarie Equities (UK) Ltd Level 30 City Point 1 Ropemaker Street London EC2Y 9HD	MUNICH Macquarle Equities Ltd Maximilianstr. 32 80539 Munchen Germany	NEW YORK Macquarie Equitles (USA) Inc. 21st Floor 600 Fifth Avenue New York NY 10020	HONG KONG Macquarie Equities (Asia) Ltd Level 17 Citic Tower 1 Tim Mei Avenue Hong Kong	SINGAPORE Macquarie Securities (Asia) Pte Ltd 23 Church Street #11-05 Capital Square Singapore 049481	AUCKLAND Macquarie Equities New Zealand Ltd Level 14 209 Queen Street Auckland, New Zealand
Phone (44 20) 7065 2070	Phone (49 89) 290530	Phone (1 212) 548 6500	Phone (85 2) 2823 3727	Phone (65) 6536 3875	Phone (64 9) 377 6433
Fax (44 20) 7065 2019	Fax (49 89) 2905320	Fax (1 212) 399 8928	Fax (85 2) 2823 3790	Fax (65) 6536 3926	Fax (64 9) 377 6488

Available to clients on the world wide web at www.macquarie.com.au/research and through First Call, Reuters, Multex and Bloomberg

31 January 2003 29

FEEDBACK

RESEARCH TEAMS

David Rickards (612) 8232 4017 (Head, Macquarie Research Equities)

CONSUMER STAPLES

Food	&	Beverages

(612) 8232 3104 Greg Dring (613) 9635 8380 Matthew Fletcher (852) 2249 3267 Joseph Ho (Hong Kong) Lee Hopperton (London) (44 20) 7065 2276

GLOBAL INDUSTRY SECTORS

CONSUMER DISCRETIONARY

A	hara	mn	nna	nte

Grea Dring (612) 8232 3104

Tourism & Leisure

Steve Wheen (612) 8232 4130

Media

Ramiz Chelat (612) 8232 3176 Stephen Freundlich (New Zealand)
David Gibson (New York) (649) 363 1418 (1 212) 548 6553 Linda Larsen (612) 8232 7485 (612) 8232 3172 Alex Poliak

Retailing

Warren Doak (New Zealand) (649) 363 1416 Ron Sargeant (612) 8232 6306

ENERGY (612) 8232 9692 Ed Reekie

FINANCIALS

Ranks

(612) 8232 5096 William Ammentorp Rick Cloppert (New York) Simon Ho (Hong Kong) (1 212) 548 6552 (852) 2249 3266 Stephen Kench (612) 8232 6089 (612) 8232 5989 Ben Koo Stephen Walsh (612) 8232 5987

Diversified Financials

(612) 8232 3296

Insurance Chris Esson

(612) 8232 5157 (612) 8232 4442 Tony Jackson

HEALTHCARE & BIOTECH

(612) 8232 3437 Paul Huxford John O'Connell (612) 8232 7544

INDUSTRIALS

Capital Goods

(612) 8232 7782 Mark Cotton Warren Doak (New Zealand) (649) 363 1416 (612) 8232 3104 Greg Dring Stephanie Fishe (612) 8232 3147 David Stanley (New Zealand) (649) 363 1414

Commercial Services & Supplies

Lee Hopperton (London) (44 20) 7065 2276 (612) 8232 4157 Ian Myles

Transportation - Airlines

(44 20) 7065 2276 Lee Hopperton (London) (612) 8232 4157

lan Myles

Transportation - Infrastructure Warren Doak (New Zealand) (649) 363 1416 Jon Fitch (Hong Kong) Lee Hopperton (London) (852) 2249 3237 (44 20) 7065 2276 Paul Huxford (612) 8232 3437 Luke Macnab (612) 8232 6377 lan Myles (612) 8232 4157

Transportation - Marine, Road & Rail

Warren Doak (New Zealand) (649) 363 1416 Jon Fitch (Hong Kong) Lee Hopperton (London) (852) 2249 3237 (44 20) 7065 2276 Paul Huxford (612) 8232 3437

INFORMATION TECHNOLOGY

(612) 8232 4572 Alex Milton

MATERIALS

Chemicals/Containers, Packaging/Paper & Forest Products, Construction Materials

(612) 8232 7782 (612) 8232 8518 David Green John Purtell (London) (44 20) 7065 2140 David Stanley (New Zealand) (649) 363 1414

Global Metals & Mining

(612) 8232 6844 (612) 8232 4931 Paul Barnes Ben Lyons Frank Van Rooyen (618) 9224 0833 John Santul (618) 9224 0863

REAL ESTATE

Property Trusts

(612) 8232 7782 Mark Cotton Stephen Freundlich (New Zealand) (649) 363 1418 (612) 8232 6948 Anthony Shields (612) 8232 6308 Rob Stanton (612) 8232 7786

Real Estate Management & Development

Mark Cotton Stephanie Fisher (612) 8232 7782 (612) 8232 3147 David Green (612) 8232 8518 John Purtell (London) (44 20) 7065 2140

TELECOMMUNICATIONS

(852) 2249 3247 Abhijit Attavar (Hong Kong) David Gibson (New York) (1 212) 548 6553 (649) 363 1415 Steve Hodgson (612) 8232 4576 (612) 8232 7124 Scott Rvall Tim Smart (612) 8232 4203

UTILITIES

(852) 2249 3237 (612) 8232 3437 Jon Fitch (Hong Kong) Paul Huxford (612) 8232 9692

OTHER SECTORS

COMMODITIES & PRECIOUS METALS

(44 20) 7065 2014 Jim Lennon Kamal Nagyi (44 20) 7065 2003 (44 20) 7065 2013 Adam Rowley

EMERGING LEADERS

Andrew Hokin (612) 8232 3296 (612) 8232 4572 (612) 8232 7781 Alex Milton Paul Staines Andrew Wackett (618) 9224 0867

QUANTITATIVE

Nick Bird (Asia ex Japan) Riccardo Briganti (612) 8232 3142 (612) 8232 4089 Raelene De Souza (612) 8232 8388 Myles Milston (612) 8232 7162 Michael Teh (612) 8232 4391 George Platt (Director) (612) 8232 6539

Data Services (Aust, New Zealand & Hong Kong) Sheridan Duffy (612) 8232 9786 (612) 8232 7628 Sandra Kemp

ECONOMICS and STRATEGY

Liz Dinh (Strategy) Richard Gibbs (Head of Economics) (612) 8232 8423 (612) 8232 3935 John Kyriakopoulos (Strategy) (612) 8232 8531 Roland Randall (NZ Economics) (612) 8232 6934 (612) 8232 7016 Brian Redican (Aus Economics) Rory Robertson (Strategy, New York) Tim Rocks (Equities Strategy) (1 212) 548 6528 (612) 8232 7562 Mark Tierney (Int'l Economics) (612) 8232 3121

Economic & Market Statistics

Simone Larkins (612) 8232 3976 Kathryn Ryan (612) 8232 3649

SALES TEAMS

Asia	
Ken MacAlpin	(852) 2823 3751

Europe

Charles Nelson, UK (44 20) 7065 2032 Rob Fabbro, Continental Europe (44 20) 7065 2031

Hong Kong

Paul Isgrove (852) 2823 3728

Melbourne

(613) 9635 8271 Richard Henley

Munich

Withelm Schröder (89) 29 0530

New York

Luke Sullivan (1 212) 548 6507

New Zealand

Ian Waddell (644) 498 2802

Singapore

(65) 6231 1185 **Bernard Thien**

Sydney

Ian Chalmers (612) 8232 3118

SPECIALIST SALES

Convertibles

Cameron Duncan (612) 8232 7405

Corporates

Peter Curry (612) 8232 4039

Derivatives

Andrew Best (612) 8232 3864

Emerging Leaders

Craig Carter (618) 9224 0878

Property Trusts

(612) 8232 6376 Tim Leahy

Quantitative

(612) 8232 4107 Arthur Roumeliotis

FMAIL ADDRESSES

FirstName.Surname@macquarie.com eg. David.Rickards@macquarie.com

TOLL FREE

From Overseas To Sydney

Canada 1800 989 8159 Hong Kong 800 96 2049 0053 161 6437 Japan New York 1888 622 7862 800 616 1037 Singapore

ONLINE RESEARCH

All our research is also available at:

Macquarie Research: Bloomberg: www.macquarie.com.au/research MAC GO

First Call: www.firstcall.com www.rbr.reuters.com www.multex.com Reuters: Multex:

Contact Heidi Heinz for access (612) 8232 3156

MACQUARIE EQUITIES (AUSTRALIA) LIMITED

31 January 2003

The Secretary
House of Representatives CITA Committee
R1, Suite 116
Parliament House
CANBERRA ACT 2600

Dear Sir/Madam

Please find enclosed the Macquarie Research Equities submission to the Committee's *Inquiry into the structure of Telstra*.

Please address all correspondence in relation to this submission to:

Ian Martin Senior Telecommunications Strategist Macquarie Research Equities No. 1 Martin Place Sydney NSW 2000

Tel: (02) 8232 4576 ian.martin@macquarie.com

Yours sincerely,

Ian Martin Division Director Macquarie Research Equities