TELSTRA INQUIRY

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Stewart A Fist
Technical Journalist
70 Middle Harbour Rd
LINDFIELD NSW 2070
Ph: (02) 9416 7458
E-mail fist@ozemail.com.au

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INQUIRY INTO THE STRUCTURE OF TELESTRA

It is my contention that splitting Telstra into three distinct and separate corporations, each with different responsibilities, would radically improve telecommunications in Australia, leading to lower costs, greater national general manufacturing efficiencies, and the development of new and innovative services.

These benefits would be apparent in both our cities and in the country, however it would be even more important in rural areas if current plans for simple full-privatisation were to result in Telstra becoming a gigantic for-profit monopoly, with only variable and spasmodic regulation from the ACA and ACCC. In such circumstance the country is bound to suffer to varying degrees, depending on the political will and balance of economic power at the time.

In telecommunications, it is obvious that technical efficiency gains are at their highest when:
• management is focussed on the primary tasks,
• the size of the operational units is not unwieldy,
• the management structure is fairly flat, and
• local problems are identified and actioned at a local level.

Also, ongoing productive investment in new network infrastructure is not an automatic consequence of sheer organisational size, or of dominance, but of focus, skill, motivation and a long-term view of the network as infrastructure -- rather than a short-term business opportunity.

Currently the wider telecommunications industry and of associated industries like broadcasting, security, health monitoring, and content services is stifled by Telstra's absolute dominance over the national network. This corporate strength (coupled with mis-direction as a result of political decisions) also breeds arrogance and denial -- and, as a result, many of the smaller businesses in Australia suffer poor service, and pay excessively for services.

Telstra artificial maintains high STD charges, and this, together with the lack of services in regional areas, has also become a major inhibitor of national decentralisation. Full privatisation can only make this situation worse.

The Problem:

The concerns about Telstra hinge on four factors:

1. The sheer size, power, and arrogance of the organisation, and the fact that it can use its economic and marketing power to defeat even token facilities competition -- because it holds sway over the key monopoly element of networking:
   a) the local copper loop.
   b) electronic databases, directories, and the only scale-economy billing service.
   c) numbering and portability

2. The fact that the corporation appears to increasingly focus on priorities such as entering the media business, New Age adventurism, takeovers, and on overseas investment. These are all emphasised at the expense of executive focus on domestic network maintenance and upgrading and the introduction of low-level, low-profit-potential technologies which would benefit the nation.

3. The fact that its part-privatisation has led to an emphasis on the more profitable business/geographical divisions and services, rather than the more mundane maintenance and upgrading of the basic national infrastructure and access provision. Yet it utilises its monopoly or near-monopoly of these older infrastructure elements to supports easy entry into new competitive ventures.

4. The fear that future for-profit emphasis with full privatisation will necessarily hamper basic infrastructure development -- especially in the bush, but also in the development of non-centralised means of communications (peer-to-peer networking, etc). With this new for-profit orientation, Telstra has a vested interest in not introducing lower-cost services, defeating e-mail spamming, etc.

In short:

A. The vertical integration of the corporation keeps it unfocussed, and yet control of many layers of business gives it dominance in competitive areas where it should not have this advantage over its rivals.

B. Full privatisation will probably have the effect of improving the efficiencies of some of the upper-range competitive (mainly content) services, but reduce the range of potentially useful services which support Australia's national business and social activities.

C. Network chains are only ever as competitive as their most monopolistic link. Topological network dominance (ownership of the local loop, mainly) puts Telstra in a prime position to disadvantage competitors and also to stifle non-telephony applications of the loop (or overcharge them to the point of non-viability) if they compete with other Telstra ventures.

D. Special network-oriented service are natural monopolies (mainly directories, national switching databases). Moreover, the ubiquity of Telstra's billing/authentication operations often puts it in a prime position to exploit effective monopoly power in the provision of existing services, and in the development of new content services.

The Possibilities:

a) The idea of using China Walls to create internal divisions in Telstra is clearly a waste of time -- there's a very strong Telstra culture. These 'moral structural separation' attempts serve only a PR/political value of papering over the cracks. China Walls have never worked consistently in any similar area of market dominance, and there's no reason to believe that they would work here either.

b) The ACCC's attempts to force Telstra to sub-lease access to the local loop to its competitors by unbundling the local loop, is a worthy attempt at solving some of the immediate problems. However it will never be a long-term solution. it will not, in itself, lead to structural reform, and it requires substantial regulation and draconian penalties to work at all -- and it also needs party-political support to succeed. So it is of temporary value only.

c) The proposed simple structural separation of Telstra into supposed "wholesale" and "retail" operations (whatever these words really mean in this context) only partly solve some of the problems. Telstra's dominance comes from numerous anti-competitive and dominance factors, not just from wholesale-retail synergies.

d) Complete structural separation of the networking infrastructure elements and the entrepreneurial businesses is clearly necessary, but this is only the first step. A second division is needed in networking (services and plant) to reduce Telstra's dominance over the local loop, and allow Optus and other facilities-based carriers to compete on a reasonably level playing field.

This does not mean that Telstra needs to be whittled down completely to an Optus size, but it does mean that structural divisions should be made so that Optus and the other carriers are no longer entirely dependent on their competitor, the dominant carrier Telstra, to conduct their normal for-profit businesses. It must also create a balance of power with the key network interconnection services provided by all competitors.

The Aim:

I see this as a two-stage operation:

Stage 1.

1. Whittle Telstra down until it is a new dynamic, entrepreneurial content and service conglomerate (retaining the brandname 'Telstra') which will be fully-privatised and operate on a normal for-profit basis.

2. Establish a network facilities company (Telecom Australia) which is able to compete on a level-playing field with Optus (and others) in the CBD and intercity markets. This company would also have the responsibility of maintaining good national network coverage (making it much larger than Optus, of course).

Telecom Australia should revert to being totally public/ government-owned and its services should be priced so that it operates on a break-even basis (Governments should not be able to take normal or "special dividends" as a hidden form of taxation).

In lieu of profits, Telecom Australia should be required to service the unprofitable areas of the country; support national services such as customs and defence; and supply welfare-type (CSO) services to the disabled and disadvantage. It would be financially supported, to a small degree, by USOs (or budget funding).

3. Establish a new, telecom service corporation (NTSC - National Telecoms Service Centre) by breaking out those monopolistic services which are essential to support all competing telecommunications services, and also future content services. Some of these functions, such as the master national electronic directory database, are a natural monopoly, and in a competitive environment they should be structurally separated from Telstra and Telecom Australia to ensure even-handedness.

Other services, such as the printed (white and yellow) directories are very highly profitable, and yet are close to natural monopolies -- partly because the customers only want one copy of the phone book, and partly because they are derived from information held in the electronic databases.

A country like Australia can't support duopoly services of these kinds, and the customers want a single source of ubiquitous information, anyway. In the past, Telstra's directory services have exploited their dominance and economic importance by grossly over-charging tradespeople and small businesses for essential listings.

The published directories are highly profitable (close to $1 billion), and there is no reason why such a corporation wouldn't be self-supporting and pay a reasonable rate of return on investments. So, I am suggesting that it remain a "half-pregnant" operation, with shareholders receiving a fixed-rate of return on their investment.

Stage 2.

This second structural division can take place later, and progressively: the creation of regional cable companies. The aim here is to remove the most dominant element of the total network (the local loop) from either Telstra or Telecom Australia's control, and allow for local self-determination in the range of services on offer, and the range of competitive companies which will be provided with connection on an equal basis.

I am suggesting that both the local loop and the local exchange buildings be franchised to purposely-established regional cable companies (not telephone or service companies). [Note: The HCF cable networks could be included here also].

In the USA, this idea of access separation is known as a "Cable Co" -- and, as its name suggest, these companies rent cable-access and channels between and end-user and a centralised location (the exchange or cable head-end) where services can be offered via networks. It is important to emphasise that these are not telephone companies (they don't provide switched services), and they rent their cables/channels to customers on an annual basis, and provide connections to telecos, ISPs or service provider only as requested by the customer.

The Cable Co's facilities and buildings could be controlled by local or shire councils or regional development authorities. However, I believe the ideal structure is that of regional mutual organisations -- with each phone-connection being equivalent to a single cooperative membership vote. Ideally, the customer needs to be given the ultimate control over his/her own local loop -- not companies, councils or regional development authorities.

The development of these Cable Cos should only happen in regions where there is full support from the local and shire councils, so the idea can be introduced into test areas (probably first in the country), and then progressively in other country region and the cities, depending on local demand.

Why bother?

The point is that the local loop is the key technical component of the telephone network which gives Telstra its supreme dominance in both telephony and the internet services. Whoever controls access, controls the most vital link to these networks. Radio access systems (WLL), despite the hoop-la, are unlikely to challenge this dominance in the near future -- although they will certainly play a part in some country areas -- and satellite access is only really useful in the more remote areas.

While the copper was designed purely as a telephone access link, it now serves as internet access also. In the future it could provide access a range of other one- and two-way information operations which are not part of circuit-switched or packet-switched telecommunications.

The creation of regional Cable Cos, which are large enough to employ a comprehensive range of (ex-Telstra) technical staff yet small enough (and regional) enough to hold service to their members as their key focus, is the sensible way to go.

These Cable Cos would attract most of the CSOs in rural and regional areas, since this is where the long-term problems lie. Most of the actual networks components (fibres and switches) are profit-making within a year or two of installation.

The regional emphasis, also means that most of the work will be local. Installing and maintaining local loops is generally non-technical (it's pole and wire work, trenching and some simple soldering) and most of it could be sub-contracted to local councils to be done along with road maintenance.

A Possible Mechanism of Structural Separation

Stage 1

In general, it is obvious to me that three primary structural separations should be made, between:
• the network-facilities
• networking services operations, and the
• higher-level services, international investments, and content services.

This is the essence of Stage 1, and it would be done by:

a) nominating the main facilities/functions allocated to the three entities.

b) prepare mission statements for each, and select executive teams

c) contract an independent moderator/adjudicator.

d) negotiation between the teams on the basis of:
- asset-values
- debt and other liabilities
- profit and cost potentials
- staff
- existing contracts

The outcome of these negotiation would be the division of the total 12.87 billion shares into three parcels which should then reflect the agreed balance of value placed on each of the three corporations.

There would need to be some new contracts for the exchange of services (GSM network connections, co-location of transmitters, etc).

e) allow shareholders to select which company their investment will remain with, knowing that:
- Telstra will be a for-profit entrepreneurial company, fully privatised,
- NTSC will be price-capped and pay fixed dividends determined the ROI, while remaining 51% owned by the government.
- Telecom Australia will be fully government owned, and any residual shareholdings will be converted to government bonds.

This is essentially a business separation, and it should be no more difficult to create this three-way division than it is for any other business dividing its functions. AT&T, for example, has been broken up along similar business lines three times in the past twenty years, and on each occasion it has subsequently flourished.

The above approach means that those shareholders who think Telstra's entrepreneurial aspirations are being hog-tied by the need to maintain the network, can remain with Telstra -- while those who want security can opt either for Telecom Australia bonds, or for NTSC's ROI dividends.

With the current 51% government ownership, is likely that the division could be achieved on an equitable basis without the need for any funding - despite the $13 billion debt partly created by the payment of "special dividends".

The proposed division in more detail

Telstra

Telstra would therefore become an entrepreneurial marketing-oriented, content and service company with the international investments. It would be free to develop its business in any way it wished.

This would remain a for-profit company, and it would become fully privatised by the government selling out any remaining shares.

Telstra would retain:

- Retail telecommunications services.
- GSM and 3G mobile-wireless services (3G and LMDS spectrum).
- PABX, Centrex, and private networking services.
- Big Pond Retail and all the associated content services.
- Foxtel Pay TV content services.
- The international undersea cable operations such as Reach, and the existing international carriage contracts.
- International satellite service contracts.
- Most of the office buildings, marketing staff, staff vehicles, office equipment etc.
- All local investments in software, share-trading and on-line companies, etc.
- All other overseas investments.
- Brand name and goodwill.

It would also acquire favourable contracts from Telecom Australia for its mobile base-station sites, wholesale telecommunications (where it is in competition to Optus), and for its own interstate channels.

Telecom Australia

Telecom Australia would be the engineering-oriented networking company with its focus solely on the development, maintenance and extension of the national network infrastructure. It would own, but later franchise, the local loops.

This would be a publicly-owned, break-even company. Any remaining share-holdings after the split would be converted to government bonds.

The aim is to reduce it's ability to exercise dominance, and create an organisation would can be left to operate in direct competition to Optus. However it would have the additional costs associated with providing total national coverage (compensated to a degree by a small part of the CSOs) -- as a trade-off against the need for profit-making.

It would be a company competitive with Optus, and control:

- All national fibre, microwave and DCRS radio networks
- CDMA mobile cellular and country wireless local loop services
- All national/international exchanges and buildings.
- All switching and multiplexing equipment
- All local exchange buildings (later franchised to local Cable Cos)
- All local access cables, ducts, etc. (later franchise to Cable Cos)
- Internet distribution services ("Wholesale")
- The rump of the NDS and engineering design services

• Inmarsat links
• Telecom Research Laboratories

It may also be given control of:
• Hybrid fibre-coaxial cable networks - provision, operations and maintenance only (no content)
• Later perhaps, ABC and SBS transmissions as contracted services.
• If ever necessary, a second domestic satellite service.

This organisation would initially get most of the Community Service Obligation funds, but the bulk of CSOs would transfer to the regional cable mutual organisations when they split away in Stage 2. CSOs are related to the problems of the diffuse distribution in local access in the country, and only rarely to the provision of rural extensions of the national network (switches and fibres).

National Telecoms Service Centre

Certain functions that Telstra performs are close to natural monopolies -- especially in a small-population/large area country like Australia. Many of these are required to provide information, referral or connection service all of the competitive telecommunications service providers. It is therefore best for these to be moved out of the control of any network operating company

I am proposing this new organisation would control:
• those elements of telecommunications (telephony and internet) and broadcasting which are essentially monopolistic (mainly directories),
• those involved with setting common telecom and internet standards (ITU, etc), and
• those which have special privacy concerns.

The organisation could also provide a small-billing service for all carriers and service/content providers, thus solving a major problem in the development of on-line content services. If a small-billing service (for individual costs, say, below credit card levels) is ever to be achieved in Australia, the function will probably become a monopoly because of our small population and the large geographical reach.

Currently the cost of billing most telephone calls is greater than the cost of transmitting them. Also mobiles are possibly going to be a standard way to make many small payments in the future, and there will be a need to make small payments on-line without the security implications of credit-cards. With the growth of low-priced content services in the future (including datacasting and single-channel or impulse Pay TV companies), these problems will compound.

These changes will leave many of these markets under the control of only large integrated telecom/broadcasting/data companies unless such a national small-billing service is provided. Fortunately, Telstra/Telecom already has the structure in place, an customers have shown (via acceptance of bundled marketing) that they prefer a single system of payment for such services.

The NTSC would develop and control:

- The national electronic database used by all carriers for number portability and general switching purposes.
- National and international call diversion functions (essential for "follow-me" customer services)
- Paper and electronic directories -- phone, fax, internet, yellow pages. (ex-Pacific Access + new functions)
- Directory assistance for all carriers.
- Translation and connection services for the disabled, aged, etc.
- Single-account billing services available to all telephony companies, ISPs, content providers, Pay TV services, etc. (consolidation of small-billings)
- Emergency services - police, fire, ambulance, bushfires

It would also assume these functions over time:

- Radio/TV program directories (on-line, print-source, and broadcast) which will be essential in the digital radio and TV age (400 channels)
- Telephone numbering system -- allocation and administration.
- Internet domain name -- allocation and administration.
- E-mail referral and diversion services.
- Telephony standards functions (national and international).
- National network security supervision, and customer privacy functions such as telemarketing block lists (and maybe anti-spam and anti-viral e-mail blocking services)

The NTSC could exist comfortable as a "half-pregnant" hybrid with a fixed rate of return on investment. It would probably then be used as a safe haven for superannuation funds, and pay a calculated dividends based on the prime interest rate (or the cost of living) plus a small premium. Ownership of the yellow-page directories would pay for all of the non-profitable functions and still leave a health return for the government and shareholders.

Stage 2

The local loop functions of Telecom Australia should be franchised progressively to regional Cable Companies operating as mutuals (probably using Telstra's CountryWide divisional boundaries). The possible exception is in the CBD of the major cities, where telephony competitors can successfully lay their own local access fibres or copper cables.

This Cable Co split would remove the control over local access from Telstra or any telephone company. Control over the local loop always gives a carrier dominance, and current attempts at "unbundling" services only ever go part-way to solving the problems.

The region of control of such companies would probably span a number of exchanges and often lie across more than one local/shire council area.

These Cable Cos would progressively assume control of:

- Local street ducting and copper cable, pillars, etc.
- Local exchange buildings.

They would become responsible for:

- Maintenance of the copper, renting twisted pair to customers on an annual rental basis.
- Upgrade local loops to fibre/RIM (probably using buy and install contracts) where required.
- Maintain the local exchange building, while renting rack-space and connection frames to companies wishing to provide telecom, internet, monitoring, security, broadcast/datacast services.
- Providing standardised multiplexing equipment at the request of the customer (ISDN, ADSL, HDSL, etc.) at each end of the access line.
- Rent private-line facilities within their region.

They could also:

- Control the Hybrid Fibre-Coaxial cable network and lease channels to Pay TV companies, and make connections for customers.
- Own and/or operate local CDMA/WLL services (including small repeaters) where needed, in association with Telecom Australia.
- Integrate telephony with CB radio and other similar services at a local level (mainly for rural monitoring).
- Establish and maintain peer-to-peer local networks.

Control over Telstra's existing Hybrid Fibre-Coaxial network (together with a shared billing service and conditional access standards) would create the possibilities of small program distribution companies/organisations renting only a single channel each for impulse Pay TV, or specific programming (educational, gardening, sports, etc) which can't competing at present with the Optus and Foxtel bundled subscription services.

The division needed to create local Cable Cos organisations is technically simple since there is a clear demarcation between digital core networks, and analog access links in the vast majority of Australia's telephone connections.

The use of mutual organisations to run these services, means that control of each customer's access remains the hands of that customer -- within the parameters of conforming to standards, and taking into account the quality of the line. In the past such decisions have been made by Telstra on a nationwide basis (rather than to suit local requirements). Local access is also important for the development of services other than telephony/internet, and the current control inhibits such developments.

Lastly, such separation would establish a level playing field among competitive telecommunications service providers and allow the development of other non-telephony services which need wire-line access (always-on internet; cable radio; health monitoring; education; security; remote control of pumps, fences, etc; local private networks, etc.).

And it serves to keep decision-making about the upgrading and maintenance of customer's access (which is not a national issue) at the local-regional level, directly involving the customers and the local councils in the decision.

Furthermore, it allows the low-tech access work to be done locally using local council workers, plumbers, electricians, etc. (under supervision, of course) and local equipment.

A small amount of basic training in telephone connections might need to be offered to the local electricians, etc. Such Cable Cos should be able to cut costs when cable upgrading work is performed together with road maintenance, etc.

Government returns.

It is clear that Telstra's privatisation and the existing structure and emphasis depend to a very large part of the government's financial interests. So it is important to consider the implications of structural separation in this light.

In the early days Telecom Australia was a burden on the taxpayer.
Then optical fibre and digital switching began to be introduced in the mid 1980s, and once the sunk costs had been amortised (about 1990) the companies began to be highly profitable.

Initially these profits were consumed by inflated staff numbers and executive perks, with only a bit being passed on to the government in the form of a moderate dividend.

But in the early 1990s this all changed and the then government began to see Telstra as a cash-cow. So as Telstra's network upgrading costs were amortised and some of their new services began to be even more profitable, they were coopted into paying excessive dividends to the government, and this was only possible by maintaining artificially high prices. In turn, this made it attractive for competitors.

However the introduction of facilities competition has only had a small effect on prices (compared to the technical innovations of the previous years) -- mainly because Optus was also forced to sink the major part of its costs, at a time when the country became flooded with Telstra bandwidth. This led to tacit collaboration, and the maintenance of high prices, and with Telstra, a rebalancing of prices to place more emphasis on its monopoly components.

During these duopoly years, both Labor and Liberal governments managed to extract billions of dollars more that just the normal dividends, in terms of "special dividends" -- which was effectively nothing more than transferring government debt to Telstra under the guise of "correcting a lazy balance sheet". Gullible business journalists bought this line.

After full open competition in 1996, Telstra still made so much money that it was able to lose billions more in its overseas ventures, without suffering significantly. However in the height and hype of the dot-com boom the Government then managed to extract billions more (in a one-off payment) from the part privatisations.

The Government then imposed a GST on services (which had never had value-added taxes before) so extracting billions of dollars more each year on a regular basis.

In the light of this history, the proposed split-up appears to cut the government's share of revenues substantially. However:

- The government will still collect the GST on all current and future activity.

- It will get half the ROI dividend from the NTSC operations.
- It will save itself enormous sums if the development of true competition lowers the price of telecommunications to government organisations.
- It might make a little from the sale of residual (if any) shares in Telstra, if the full allocation isn't taken up by private shareholders.

Furthermore, such moves will promote decentralisation and open the telecommunications network to new service and content businesses, including many which will help the elderly, the sick and the disabled. This infrastructure, properly managed, has the potential to boost the whole economy. Currently, it is playing a part in limiting it.

Yours,

Stewart A. Fist
Technical Journalist.

A McMahon
Committee Secretary
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