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Submission No. ....

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Friday, May 06, 2005

To the secretary of the committee  
Via e-mail: cita.reps@aph.gov.au

## **Re: Inquiry into the uptake of digital television in Australia**

Dear Secretary,

Please accept my contributions to this enquiry. (Microsoft Word, A4 size pages). I will be pleased to assist further.

Yours sincerely

Allan J Williams

Director

Attach: "Enquiry into the uptake of digital television in Australia" May 2005

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# Inquiry into the uptake of digital television in Australia

## Part One

### A fast track forward

Australia has rather a simple and straightforward way to re initiate the digital transition program. A more complex program must follow as explained below, to realize the huge efficiency gains from the completion of a digital transition program and its continually progressive activities that will emerge. This will re establish, in Australia, the alignment with the international digital transition standards that was planned to replace all analogue services with one vastly more efficient integrated digital carriageway system.

This far more efficient system permits seamless transport carriageway to be so flexible that each could be used to transport all public electronic services, free, pay once or subscription services. These include telecommunication, television and interactive multi media services, including via the Internet system, also for television up to HDTV, on any public electronic carriageway using cable, satellite or terrestrial TV channels. The most professional management of "Telecom Australia" positioned Australia as a world leader to fully support this opportunity.

This was the government digital transition program and policies in Australia, mid 90's at a time when Australia, a most respected world leader in digital transition, had built the worlds most modern and by far the largest telecommunications, television and multi media infrastructure for the internationally co-ordinated digital transition program. Telstra is the most relevant key element in the efficient and effective digital transition program, the convergence of analogue to digital for all electronic services.

All homes now connected to broadband cable could have high quality "free to air" digital TV almost immediately! A simple directive from government will achieve this. This directive, as well established in most countries, is to mandate that digital television receivers sold in retail stores be optionally available to receive interactive digital television via satellite, cable and terrestrial, for all free and subscription TV programs. This could also be a directive for all Internet multi media services using computers. All digital receivers are mandated to operate within the limits of international standards. All service providers are mandated to operate within the limits of international standards.

Telstra is then mandated to carry, **without the involvement of Foxtel**, "free to air" services at studio source quality to any cable connected home. Any home with a cable broadband connection should be permitted to have this service available for a nominal monthly cable rent or annual fee according to use. TV receivers sold in retail stores should be optionally available for any service from any or all satellite, cable and terrestrial services, free or subscription. Only a smart card or a register key code (as nationally standardized) is necessary to discriminate between alternative subscription service providers.

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## **The corruption of the digital transition program**

The world's largest infrastructure build by Telecom Australia, was a threat to media owners as it provided a simple way for government to diversify media ownership. Since government publicly committed Australia to a digital transition program, government has succumbed to the whims and fancies of a most powerful media cartel. This cartel has contrived and successfully for them, taken from government the authority for the digital transition program. Modern cable systems are an integral part of digital television program. The cartel has now authority over the technical, commercial and financial management of Telstra. This public's \$60 billion asset has been deployed for one private cartel monopoly of TV on cable, a cartel that has also used public funds to extend the public's digital electronic carriageway operation to be an exclusive commercial media monopoly for the media cartel!

Instead of completing the digital transition program, government has succumbed to the authority of a most powerful media cartel. Rather than instruct Telstra to carry studio quality "free to air" as an option for any household, via cable, government is being inadvertently "programmed" to be completely disloyal to the public by promoting the sale of Telstra. This is the means for one cartel to achieve a most generously publicly financed cable system that already has been used to monopolize digital TV on cable. Surely, this has to be a government that, by being totally misinformed of the vastly efficient attributes of the new digital technologies on cable relative to radio and ADSL and copper etc, is blindly supporting a corruptive trade and anti social practice. This sale of Telstra permanently places Australia under the authority of a media cartel for public telecommunications and television policies.

The media cartel partners in Foxtel not only have monopolized the worlds largest publicly owned cable system to the home but also contrived to use this as an opportunity to also block the government digital transition program. This ensured that the media cartel would not only block all competition in pay TV but would gain even more concentration of media markets than ever.

Government policies have been replaced by policies under the authority of the Foxtel partnership that has destroyed the efficient digital convergence program for all Australians! In normally regulated markets, this would be corruption. But as explained below, Australia no longer supports normally regulated markets.

Australia still sells almost as many analogues TVs as ever while in Germany, PAL TV is no longer broadcast in all their major cities. Even the large flat panel LCD and Plasma TVs manufactured especially for Australian markets include analogue, not digital, built in TV's.

It is still possible for government to act responsibly and resurrect the digital transition program. Telstra is the essential element. Government can regain its rightful and democratic authority for the public to repossess control over the public's \$60 billion telecommunication, television and interactive multi media asset of Telstra. Government, for the public, can regain authority over digital television and telecommunications policies. Government can reclaim

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responsibility for the public's infrastructure that was built to provide Australians with the world's most modern and most efficient telecommunications, television and multimedia carriageways to service openly, competitively and far more efficiently, all markets.

The Telstra cable can simply be technically re modified to its original objectives and with the "Page Report" extensions, to provide almost all homes the opportunity to connect to cable. This cable is a carriageway for telephony, television, radio, music, and multiple free and subscription services to compete in open markets to provide the carriageways for vastly more efficient and competitive broadband services. Copper wire for telephony is now almost redundant.

This transition program eliminates the need for costly and ugly antennae over homes and buildings. It allows excellent quality TV to be available where difficult reception exists. It allows for the longer-term orderly dismantling of the old now inefficient and antiquated copper telephone systems as Telecom Australia originally planned.

Telstra can offer, for a small fee, the use of the public electronic carriageway, the cable for, any or all, electronic services. These services can easily be provided to any home in any or all rooms, to any office or to any mobile situation – trains, cars and buses, via one single most efficient cable system that has efficiently engineered interfaces with terrestrial and satellite TV channel extensions. The upgrade of cable throughout buildings where existing cables are inadequate for digital TV and broadband will permit the efficient replacement of one new cable for all services. This was Telecom Australia's original plan now long forgotten by Members of Parliament. This was to provide the vastly new and efficient opportunities for the flexible electronic carriageways to support mobile services that also integrate telephony, television and inter active multi media for all markets. Terrestrial and satellite TV channels can be efficiently engineered to compliment cable in mobile serviced zones and in more problematic areas.

## **The dispersion of misinformation**

Major flaws exist in the repetitive arguments that support more "competition" in telecommunications infrastructures. In particular, Mr Murdoch, internationally, promotes these arguments that are used to subtly support further media concentration and monopolistic control on the dispersion of information to the public. One can see these "promotions" via "Reuters" releases via the Internet networks almost daily.

International engineers have been working towards common standards to be internationally deployed in the public domain for satellite, cable and television services, free and subscription. This work is to make available to all governments and all markets, the vastly more efficient deployment and commercial applications of the public's use of nature's gift to mankind, the electromagnetic spectrum. Australian's opportunities for a far more efficient deployment of these major publicly available assets have been blocked. The digital transition program, promoted by the Australian government during the 90's, that supported the build of

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the world's largest cable investment for the public to international standards for television and telecommunications, has been corrupted by News Ltd proprietary modifications.

The continual media arguments that now internationally promote ADSL and "copper" for the future for broadband and promote the privatisation of telecommunications in parallel with the idea of self-regulations and competition in infrastructures, are contrived dispersion of misinformation to deceive the public and the government. Mr Murdoch employs experienced electronic engineers for the very special purpose of maximizing his opportunities with cable to the home as he has done with Telstra, while our government no longer has such facilities for advice or understanding of the public good in these matters. Few understand the value of optical fibre over ADSL or copper or radio spectrum (etc) more than Mr Murdoch. These well promoted arguments leave opportunities for the media cartel's objectives wide open for their exploitation, to use the public's infrastructure to monopolize the cable for TV.

Fibre to the home has the capacity for millions of telephone calls and near a thousand of interactive multi media TV programs at the same time. TV for wall size displays of HDTV in any room of any home or office, all flexible options at any time and with the potential for internet to also include HDTV are all the new digital electronic options. The media cartel in Australia already has locked out their competitors, and all in industry and all in commerce, from participating in this **"future" cable and internet opportunities for all market.**

The best of radio (or ADSL on copper) will permit, if you are in a good reception area perhaps one TV program for a distance of about 5, with promises to 20 kilometers. This TV program would be "postage stamp" size of a display on battery equipment that may last two or three hours. Excellent for individual local mobile voice and low data services that must use entry to cable for national or international connections. This local radio is no where near the requirements to service the rapidly expanding traffic in telecommunications, worldwide, for all industry, for all commerce and for all consumers that is achievable by cable or terrestrial TV channels. But in Australia, these cable and terrestrial TV channels are controlled to service one media cartel, in particular, and block out all competition in television on cable or flexible alternatives for terrestrial TV spectrum.

The media cartel's objective is to have total authority and proprietary use over this huge carriageway capacity for all electronic media traffic. With this objective, it is unlikely that media owners will intelligently inform the public of the public's options and rights to the use of the electromagnetic spectrum.

The second major flaw is that two or more telecommunications infrastructure in parallel and in competition is more efficient. This is impossible when two infrastructures must service one community. The traffic for "fair competition", over two or more electronic transport infrastructures would be divided by the number of infrastructures in parallel, with recovery of cost increasing exponentially by the number of infrastructures in parallel. No way is this an efficient technical or financial proposition. This idea becomes a danger for the super fund investors

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while government promotes privatisation of public electronic carriageways, to be built in parallel, as the chart in the attachment III will show. These grossly irrational ideas, continually promoted by the media, are to deceive the public from their rightful ownership and efficient management of the public use of the electromagnetic spectrum and **the far, far greater real value of cable, especially when publicly owned.**

While government has no intention to claim the public's rightful authority over telecommunications, the public remains exposed to continually worsening abuse. Without this authority by government, Australians have little chance to be protected from this most abusive and mischievous monopolistic behaviour we experience in Australia.

My submissions in the past have explained how the media cartel has contrived and gained authority over the government's management of spectrum to achieve their monopolistic objectives.

Australia's consumers are exposed to three most serious problems that concern information security, information dispersion and the public rights to open and competitive markets employing the use of the electromagnetic spectrum.

1. Australia has no means to administer Law and Order in the management of telecommunications and media investments in Australia. This is because Australia has no authoritative means to test digital public communications standards to international standards that should be used to legally protect industry and commerce from information security breaches, or media market suppliers, customers and consumers from abusive marketing practices. This is compulsory for the physical transport industries. Without this legal authority by government over the electronic transport industries, the media cartel controlling Foxtel and Telstra operate outside the Law.
2. While government permits News Ltd to operate a proprietary system for Foxtel on the Telstra infrastructure, **the government has lost all authority over information management and on public media and information dispersion.** This is the result of the Hilmer report (1995) that promoted privatisation of public utilities, with deregulation and self-regulations. Self-regulations leave consumers out of the regulatory system. This is a most significant danger to democratic principles and the rights of citizens.
3. The owners of superannuation funds (\$150 Billion or more – soon to be near \$600 billion or more) should be offered participation directly into a government managed investment in Telecommunications infrastructure. This is the public's existing Telstra infrastructure plus the "Page Report" public extension without middlemen to take charges and commissions and most generous salaries and bonuses and with monopolistic objectives with their market opportunities.

Telecom Australia (Telstra), for decades in the past, was one of the most solid and sound financial investments in Australia for the entire public. Its technical expertise was world class. To sell Telstra puts this huge public, now increasingly less efficient investment into the hands of the media cartel, whose

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social values and commercial management is more for their directors and their media alliances rather than for their shareholders and certainly without the public's long term interests. These objectives are in direct conflict compared with Telstra's once public objectives, as a public service, with public social values and also with excellent earnings, far superior to the media cartel's earnings. To privatize the infrastructure has to be a most disloyal act to the public.

There is no doubt that the public will be far more democratically serviced if investment for the "Page Report extension" as part of Telstra was a public opportunity. As analogue TV services close down or move to cable as digital services, TV terrestrial spectrum, engineered as an extension to the public cable carriageways system, could compliment this concept of cable to cover urban and rural services. This could be a special opportunity for super fund investment while government held majority and controlling shares. At the same time, the government, still with the responsibility for Telstra, can use its agency to re modify Telstra to international standards for all TV services as well as all telecommunications and Internet services. Strict government discipline and actions without the need to publicly attack News Ltd or the cartel could achieve this. Then real competition and efficient markets can be realized. This would be a most democratic outcome as well for the public, for all industry and for all commerce.

The idea of industry and infrastructure development was the publicly stated intention when the idea of the compulsory savings was originally promoted and now, like the digital transition program, never mentioned. The idea of "self regulations" has corrupted these objectives. The media make sure that this is so. The superannuation scheme is now wide open to exploitation by monopolists. To say that Telstra must be sold to earn money for infrastructure build is shallow and totally false in its cause and outcome. The media cartel's manipulation and control of Telstra's \$60 Billion of capital investments has to be an excellent example of these serious dangers to all (but these risks and abusive practices would not be published or explained to the public by Australian media).

I was the coordinator between Telecom Australia (later Telstra) and Philips re the TV and telecommunications digital engineering for the Telstra telecommunications cable expansion program. This was a \$2.4 \$Billion engineering and component supply contract, awarded to Philips by Telecom Australia (later Telstra) for Telecom Australia \$6.5 billion for the build of cable now to pass about 6 million households. Telecom Australia contracted out the cable build that was installed along the public roadways.

At that time, I was personally responsible to Philips for bringing the new digital TV technologies to the government's Melbourne and Canberra laboratories, where the digital engineering for the management of the nation's new telecommunications, television and interactive multimedia cable system was being developed. These engineers operated for the electronic industries, conformance testing to international standards. Many Philips and DVB / ITU industrial consortium members supported the engineering program in Australia to international standards, including the EEC council. Telecom Australia's "cable to

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the home” program was a world first.

Government originally supported the worldwide digital transition program. This program was to replace analogue TV and telecommunications by international digital standards so that extremely far more efficient, flexible and multi competitive markets and media diversity could be developed for all markets.

**As explained in past submissions and as can be checked by references to Hansard, News Ltd “market forces” gained total authority over government telecommunications and digital media policies and thereby achieved the use of the Telstra public assets to monopolize the public’s digital television cable system. This blocked the digital transition program and media diversification. No longer was Telstra’s enhanced infrastructure open to any media cartel competitor. The media markets and consumers are locked out of the government’s digital transition program. It is destroyed. Australia does not support international digital multi media and telecommunications standards across all markets.**

The World Bank warns with privatisation of infrastructures, of the near irreversible dangers:

*“... the potential abuse of market power in services that effect many consumers creates pressures for governments to intervene through intensive regulations on private suppliers or through provision by the public sector.”*

In addressing the constraints to the economy and the investment climate, the World Trade Report includes:

***“Improving domestic regulations:***

*Too often, governments pursue regulatory approaches that fail to achieve the intended social objectives because of wide spread informality, yet harm the investment climate by imposing unnecessary costs and delays, inviting corruption, increasing uncertainty and risk and creating unjustified barriers to competition.*

*The key is to strike a better balance between market failures and government failures, ensuring that approaches are adapted to local conditions and by enhancing transparency. Successful reforms remove unjustified burdens and streamline procedures. They reduce regulatory uncertainty and risk by curbing discretion and expanding consultation. And they remove unjustifiable barriers to competition by reducing regulatory barriers to entry and exit and by tackling anticompetitive behavior by firms”*

*- World development report 2005 -*

The two laboratories that were supporting digital engineering for open and competitive digital TV and multimedia markets, (Melbourne and Canberra) were run down, the equipment involved in digital transition engineering was sold or



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dumped and the engineers dismissed or transferred. **Government is without any authoritative means to correct the actions of News Ltd.**

The world direction in electronic communications technologies now includes free and subscription digital television and inter active multi media, the total digital integration of any or all services on one carriageway to international standards and with seamless networking. Australia has succumbed to the media cartel monopolist objectives by allowing the installation of a digital proprietary technology on the public's infrastructure. This is to achieve a vertical monopoly on the telecommunications cable for TV. This has corrupted any opportunity for vast efficiency gains in all markets possible from digital standardization. **This empowers even more authority for the media cartel over public information dispersion, the major objective of the media cartel.**

Without the means to measure the standards and the conformance of the traffic on electronic public service electronic carriageways, Government does not have a regulatory regime. If it had Australia would not have a media cartel that could use the Telstra public assets to monopolize the Pay TV markets. The intellectual property of electronic industrialists and the rights of consumers and suppliers in the Australian markets have no legal protection. Consumers are not protected from the most abusive trade practices of Foxtel and Telstra.

A simple corrective action is to introduce, conformance testing to international standards within a public university program. The standards can then be called up to legally correct the technical operations and thereby commercial behaviour over the digital public electronic transport infrastructure of Telstra. This will also protect consumer from the major abusive and worsening practices they must currently tolerate. This will permit efficient consumer products to be sold competitively in retail stores. This will ensure that the public digital electronic carriageways, the digital electronic transport infrastructure of Telstra plus the "Page Report" extension, will support vastly more efficiently, the transport of far more flexible commercial and consumer products and services in far more efficient multi competitive markets. This will expand the efficiency of mobile services that many times must compulsorily link via cable. It will provide for Australian industries and commerce, vast efficiency gains not possible if Telstra is privatized and while Foxtel is a Telstra partner with total authority over government electronic public service policies.

**You will also read below why this issue is about a far more serious and democratically more dangerous issue than "regulations" and "privatisation of Telstra", the digital divide between the public and the monopolists.**

I have proposed a reform program for government to regain authority for telecommunications, television and interactive multi media. The reform program (see appendix I) will be an opportunity for Telstra to dramatically improve profitability and earn funds to finance the "Page Report" program as further extension to Telstra to provide Australians with the world's most efficient and possibly the most profitable infrastructure for Australians and for Australia.

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## Standards

We read in the Financial Review “Nationals’ telecom plan attacked”. (FR May 4th P3). Again, this is another (consorted?) example that is endemic in the media, an article that is completely misleading to totally confuse the public and government’s understanding of what should be intelligence re standards making processes.

“Customer service standards” is a system in Australia developed from the “self regulations” (de-regulation) policies that permit commercial behaviour to be under the authority of the private sector, not government. Standards Australia is under the same anti democratic influences where “Self-regulated” industry group members have the authority for “ standards” making that best suits their business group objectives. These business groups use the government regulator agencies as an interface to government thus bypassing any direct public involvement in standards. No longer does the public or consumer have any participation.

The usual course, prior to de regulations, was via government foundations that participated in standards processing via learned institutions such as universities and / or government agencies with their own laboratories and experienced engineers. This formal government participation in the standards processes with relevant industry involvement, resulted in standards that were legally adopted for the protection of consumers for efficiency in trade, industry and commerce and for social protection. The university and / or government agency involvement was the process that ensured consumers and their markets were protected from abusive practices and social risks. Consumers no longer have such a system for market protection. The abusive behavior of the Telstra board with its support for a monopoly PayTV cartel on a public infrastructure using public finance to do so, is a clear example of the anti democratic and anti social trends and consequences of deregulation.

Today the government agencies and universities no longer act as a protector of the public and protector of consumer interests. The policies of the Hilmer Report changed all that. Instead, by self-regulation, each industry group has by its own authority the setting out of their concept of “Customer service standards” and “Standards Australia” industry standards. These processes have nothing to do with efficient engineering processes for all in industry and for all in commerce or for any concerns for social efficiencies or efficient consumer markets, or compliance to international standards across all markets. They are processes to satisfy, with minimum public interference, the private objectives of the most prominent board members represented. This is stimulating the achievement of the more powerful “market forces” board members to become increasingly more monopolistic in their objectives and self-rewarding processes.

In a similar way “Partnerships in Research” also omit the public and the “Partners” competitors from their direct participation in local research. “Partnerships” in university research place major constraints on universities to “openly and publicly” share new intelligence.

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These are serious undemocratic trends that are creating inefficient markets and social constraints and are the major cause of the loss of control by government of the digital transition program.

Essential to any and **all in industries and all in commerce** is university participation in public standards and public education and training that are planned and programmed in parallel with commercial developments as **openly shared programs for all**. The successful outcome of university programs are most likely when they interface with agricultural, industrial and social needs and commercial directions of interest for the public, in international trends in technologies and consumer needs, not as a partnership with one or two “private company” members. Like the media cartel’s private use of Telstra assets, this is also a misuse of public monies, public monies to finance a very privileged few. (By whom and for what?)

Most industrialists have their own investments in research. Once ready for a market opportunity, any industrialist will want the participation of a leading public university to support and drive their researched program into any local market that has commercial promise. There is no reason why the public should share in financing a few selected “Partners”. The industrialists’ successes in local commercial developments, in many cases especially with sophisticated technologies, rely on local university participation. This automatically attracts government and the public’s attention as well. This attention to university programs was a very special attribute of Churchill’s. (Mr Murdoch changed that approach also in the UK when he monopolized PayTV in the UK in 1985). **This has to be the most important policy consideration for a democratic government concerned about efficient and competitive market developments.**

Efficient government policies will stimulate industrialists to create alliances with their competitors to maximize the opportunity for common standards in open markets. In converse, “Partnerships” in universities is a simple way in any country for “Partners” to constrain or even lock out new market opportunities for new technologies that are being developed by the “Partners” competitors who must rely on local university support to establish each local market. Any government policies that permit private monopolistic interference in common standards are also inhibiting the interests of the public for otherwise optimum efficiencies and fair trade in all markets. Telstra is such an example of this abusive industry group practice. The abusive and worsening trade practices in Australian markets are a fall out from the irrational economic policies promoted by the “Hilmer Report”.

The effectiveness of international alliances of industrialists for a common market approach is well understood by many governments but not the Australian government. These industry / government / university alliances are well supported in Europe and in China as special examples. Australia does not support or participate in these as local or international programs for the public utilization of the electromagnetic spectrum, or even for other technologies becoming available for the public good. (Water, energy and transport).

In contrast, USA government has a continual and costly battle to control privately owned monopolies and now with trends to escape by public ownership, (Philadelphia as one city) from the inefficient market behaviour. Australia is

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easing into the market inefficiencies and market-abusive problems that USA experience, and now Australia is falling far behind world trends in digital transition. But worse, because of the interference by a monopolistic cartel, that is financed in Australia by public funds to block efficient and competitive markets!

Technical colleges via commercial trade links (one step below the university for continuity of training programs) are essentially supported by the continuity of research and engineering to both commercial applications and social needs in societies.

It is clear that nations that integrate universities with industries and agriculture, supported by commerce, not as partnerships but as sharing in participation, are by far the most successful in economic and social developments and in trade liberalization. In severe contrast, the Hilmer report policies has resulted in constraints on trade liberalization so clearly visible with Telstra and television.

*"Efficient and well priced telecommunications services have a positive impact on the volume of trade and effect the pattern of international specialization. A good telecommunications system is crucial for cross-border trade in services and in just-in-time delivery of goods. State owned monopolies in some countries, lack the financial and technical resources to upgrade infrastructure and services to meet the requirements of businesses and consumers. Reform will generally involve at least some privatisation as well as trade liberalization in order to ensure adequate services. Governments still have a regulatory role in guarding against anti-competitive practices affecting access to networks and ensuring universal service."*

- World Trade report 2004

**Liberalization of regulatory disciplines, particularly with communications, has resulted in market behaviour that has limited competitors access to consumers and increased the price and choice constraints on consumers. It has put severe constraints on trade liberalization.**

Seldom do private companies invest in business or partnerships with public research or public infrastructures for the economic and social benefit of all communities. Government must intervene with open and sound policies for the expansion of institutions and public infrastructures under government control and authority that support the development of horizontal efficient competitive markets open to all, and that also service the social needs of all communities. This support for local development provides the potential for international market opportunities for Australians in other markets that mandate international standards to ensure open, fair and efficient markets. **This is the efficient capitalistic system.**

The development of talented engineers to participate in international forums for the public interchange of ideas re the integration of television and telecommunications on one carriageway, and for international standardization of processes used in commercial and consumer environments is the key to sound economic policies and efficient public infrastructures. Some mistakes will be made but none so severely damaging to telecommunications efficiencies and social constraints as the abusive

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outcome from media influences on government policies in Australia and their monopolistic authority over the \$60 billion public investment.

Universities are a cost today but a major investment for the future. In opposition to these policies, the media owners and private monopolists do not want to lose their authority over “information” dispersion and “market forces” power. Their “self regulations”, too often aided by the dispersion of false information, are to support their “all out” means to maintain authority, control and status.

A public electronic transport infrastructure is no longer just an expansion of an electronic transport system to service the convergence of electronic media with physical media and with local, national and international television and telephony services. It is rapidly becoming a major resource to integrate electronic communications and multi media services to control and to vastly improve the efficiency of physical goods movements as well as new opportunities with movement of people. (Note the expansion in freight and vehicle information and automation control systems, especially in Europe). Commercial media or any private investors have no right whatsoever to claim control of a public electronic carriageway system that are so involved with trade and commerce matters, for their private and **proprietary commercial objectives and market interference.**

Public monies invested in universities for these focussed subjects, will be far more economically and socially effective, long term, than \$50 million allocated here and \$150 million allocated their to independent non aligned private ventures as proposed by the lobbying from “self regulated” private enterprises.

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## Part Two

### Telecommunication Regulations

Currently without the powers and resources to regulate

## A new commission to regain government authority for the public over digital television, telecommunications, interactive multimedia and the Internet

### Overview

Australia is the only country with a government that has a responsibility for the security to the public of its \$60 billion market capital public investment in a television, telecommunication and inter active multi media carriageway infrastructure that is also the most technically advanced system in the world. It already has over 1.5 million kilometres of optical cable in its network. It is the only infrastructure in Australia with copper phone service to almost 100% of all homes and offices. It is by far the most advanced infrastructure in the world having a fully integrated national optical / fibre digital telecommunications cable infrastructure for local, national and international services for all in industry and for all in commerce.

This system is already capable to service over 6 million homes with telecommunications, television and multimedia services and high quality Internet including large display HDTV. It is the result of an expansion project developed by Telecom Australia to place Australia as a world leader in digital communications technologies and to replace in due course, the technically antiquated copper wire telephony infrastructure. The original target was to have this replacement completed by about 2006.

It is simple to show that to fully privatize Telstra and place its technologies for telecommunications, television and interactive multimedia under the authority of private "market Forces" is destructive to the opportunity for vast efficiency improvements in telecommunications and multi media services for all markets. It is simple to show that the idea of efficiency improvements by permitting telecommunications to operate as private companies in parallel is economically irrational and technically most inefficient. It is simple to show that the privatisation of telecommunications provides a media cartel more opportunities and even more powerful authority over information access and dispersion throughout societies. This is a major threat to democracy and social justice.

**But Telstra is about a far more serious matter, a matter that is already leading to undemocratic bullying tactics in high places to protect. This is about whom has the public authority over digital communications technologies. Economists would have no way of understanding this issue. But the digital software engineers of News Ltd are fully aware of its extreme value and power over communications and information access and**

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**dispersion, and its power over authority. The Telstra experience in Australia is a simple example to the world of this absolute power.**

The media continued promotion to sell Telstra is about a far more serious economic and social matter than the continual extremely false propaganda about the efficiency of telecommunications. The media's public diversion program is to steer the public away from an understanding of their rights and real values of their public assets and away from understanding the public's potential for vast efficiency gains from the new technologies.

It is about the authority over the deployment and privileged access and control of information in a society using the advanced digital technologies for public communications and information dispersion throughout all markets.

**This is a most serious international question. It is the challenge between media cartels and governments, for authority and control over public communications and information dispersion. This comes under the simple heading, the "digital divide", authority by the state or authority by a private monopolistic group, over public digital communications systems.**

Australia has the world's most powerful players involved in this question. The media cartel operating in Australia has already claimed this authority from government over Telstra. The media cartel is already in Australia a law of its own. Australia already has near a decade of proof that the public, the suppliers to markets, all, other than Foxtel, that are dependent on open electronic telecommunication, television and interactive multi media networks to service their markets, already have no means to protect their economics of marketing and their social rights.

These are extremely special and generous privileges, provided by government, to the media cartel controlling Telstra. This authority by a media cartel over public assets and information dispersion remains whether Telstra is public or private. The sale of Telstra is not for the benefit of shareholders, or to gain funds for new infrastructures. It is already a most generous privilege from all Australians, for the most special benefits, from its special communication and information attributes, to be under the authority of a most powerful media cartel. This abuse of market power can only be reversed by a new and firm measure from government.

Technologies are by far the fastest growing economies in the world. Digital technologies are a major sector of this economic growth with vast efficiency improvements for industry and commerce, as planned by Telecom Australia. Telstra has nowhere near achieved the profitability and efficiency gains that are possible from the new digital technologies that the infrastructure was engineered to achieve. Telstra's engineering objectives have been corrupted by News Ltd's plan that replaced efficient engineering with a proprietary technology to monopolize the PayTV market, using the Telstra assets to do so. Telstra is not deploying its network for its originally engineered intentions. Telstra's progress is now under extreme efficiency constraints.

The communications and information efficiency for trade and commerce depends entirely on the potential of our nation to foster the public education and provide throughout our nation, the software engineering resources to understand and deploy the attributes of this revolutionary system. Conformance to

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international standards that are open to all markets, is the essential requirement for the successful realization and fulfillment of its planning for a far superior efficiency and diversity in telecommunications and television markets.

The objectives and success of the Telecom Australia most advanced program can only be realised by mandating a common system of standards throughout the total public telecommunications and television infrastructures and for common standards interfaces between all connected processes. This is because the system must automatically read and write about the activity and directions for all the traffic on its carriageways. At any time the "Read and Write" information, the common "language" is interfered with, the system is corrupted and the efficiency opportunities for all markets are destroyed. This "common language", the open digital "language" is the international standards, engineered for all in industry and commerce and for all manufacturers of home equipment to understand. This is to ensure maximum competition in all markets and to ensure the maximum efficiency for the production and distribution of goods and services in all markets.

News Ltd proprietary language corrupts these efficiency opportunities in all markets. Only News Ltd proprietary systems can understand the News Ltd proprietary language. The Foxtel box is a proprietary closed box. The Foxtel proprietary technology on Telstra is a closed technology. The objective is for News Ltd to lock out all competition. Only the Foxtel Box to Foxtel technology is available for Foxtel PayTV and multimedia. This corrupts the efficiency potential for all markets. This is completely in opposition to government's claim to privatize to create competition.

This perverse activity is the major contribution towards the abusive losses for all Australians, now a decade of lost opportunity, through the total neglect and respect for the advanced digital technologies and engineering. This complete disregard for the efficient management of public assets has resulted in severe damage to the economic and social values and to the vast efficiency opportunities for our nation and for all Australians, well in excess of \$10Billion, excluding lost opportunity costs.

The proof that government has lost all authority over Telstra, and over an efficient digital transition program, and the interests and motives for the welfare from a huge public investment for all Australians, is staring us all in the face, every day.

We must question why is it that Foxtel is the only company that advertises "Can your television do that?" when the engineered attributes for such digital television receivers are from intellectual properties, researched and engineered by a consortium of international industrial engineers for all in consumer markets? Why is it that "Foxtel" is the only company permitted to distribute digital television to the home, on the Telstra and Optus telecommunications infrastructures? Why is it that government has permitted the public assets of Telstra to be manipulated in a way that has resulted in an exclusive total monopoly of PayTV for one media cartel?

Automation of digital carriageways for the efficient integration of all services on any carriageway is no longer possible. Television receivers for digital free to air will not receive PayTV services! Digital PayTV receivers, and the cable system, are modified in such a way that cable TV is only available for Foxtel,



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via Foxtel proprietary receivers! Surely all members of government must recognise that even this is already extreme wasted money and inconvenience for all consumers. This is a clear demonstration of how completely false the continued propaganda that telecommunications infrastructures can be more efficient by privatisation.

Optus, once Australian owned, is another major loss for Australians investors. As can be read from Hansard, this loss was also due to government giving way to "Market Forces" to create competition, the policies of the "Hilmer Report" that competition and private ownership of public services infrastructures is economically more efficient. News Ltd won, Optus lost, as we can read from Hansard, when Optus requested the shared use of the Telstra cable. The outcome and heavy losses for the public investments in Optus and in Telstra is clear proof of the vast waste from such irrational economic philosophies that have been steering government policies for near a decade.

All these actions of Telstra and Foxtel demonstrate the extreme power and authority of one media cartel over government and for power over management appointments to manipulate media cartel control of public assets. This power even extends to the appointment of a News Ltd Lawyer on the Board of the ABC!

Telstra is the public nerve system for the transport of intelligence and information for all Australian industries, commerce and private affairs of individuals. It is irresponsible that this nerve system of electronic public carriageways be placed under the authority of a private media cartel, but worse, with private proprietary technologies as directed by News Ltd. Already the security of the public network is under continual threats. Privatized, the intelligence leaks would not be known. The market abuses will continue, possibly worsen, if Telstra is privatized.

**USA has directed that digital television receivers, capable to receive both "free and PayTV", via both cable and terrestrial services, will be supplied by any manufacturer and sold competitively in retail stores. This directive is to stimulate the digital transition program. Such a proposal from the Australian electronic industrialists, was made a decade ago, but was completely ignored, and the repeated claims and advice completely ignored ever since, by government, by the ABA, by the ACA and by the ACCC. News Ltd's objectives for News Ltd's proprietary technical control of Telstra prevailed over public engineering objectives that are engineered for far more efficient and flexible markets. The media cartel's commercial trade practices and technical devices are completely contrary to the intent of the "Trade Practices Act"!**

An international consortium of brilliant engineers continue with their work to research and engineer digital technologies, to provide the public of the world, and Australia, a most efficient and modern public telecommunications system. In the past, but not now, Australian engineers participated in these advanced engineering programs. No longer is Australia a participant in these international objectives. Instead, government now permits a most powerful media cartel to have total authority over telecommunications, television and interactive multi media technologies and markets, and the economics of Telstra.

This irrational idea of competition in infrastructures, continually expounded by

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newspapers, has already contributed to unbelievable waste, lost opportunity and a complete destruction of a new industry for Australians. It has destroyed the once existing businesses for Australians in digital communications technologies and engineering for open networks to international standards in international markets, including the engineering for infrastructures in China.

The rationale of PayTV is the concept for the public to have, as an option, TV without commercials. Advertising was the income for free to air services. The idea of choice between free TV with advertising, and PayTV without, is no longer an option. Foxtel has ended that policy. No longer does Foxtel need to buy Sports Rights as all free to air broadcasters that buy the rights, can be viewed via Foxtel's million or more viewers. Foxtel does not produce or broadcast educational programs. That is left as a public cost via the ABC.

Choice and options are continually and increasingly being constrained. The vast range of sub standard programs on the PayTV channels must be paid for as a bundled package, even when the only useful channels are three or four, or even when the reason is that free to air is not available due to reception problems. The real cost and values of programs are not exposed to the public. The public can only watch parliament via very small "icon like movies" via "BigPond" (same cable as Foxtel use) while Foxtel is permitted to transmit 50 -100 analogue and digital programs in normal TV quality right throughout Australia. Free to air broadcasters (those excluded from a partnership in Foxtel) are constrained to only advertising income, far from a level playing field and far from a multi competitive horizontal markets with equality of access to and for consumers!

### **A "set top box" to destroy digital transition**

By repetition and promotion, media have convinced markets and government that the PayTV digital set top box is an exclusive subscription TV necessity. They do not explain that it is a contrived digital television receiver, a dedicated Foxtel digital television receiver that purposely will not work with Free to Air services. It is contrived not to work with any competitive services. With digital, the proprietor of the scheme is manipulating the industry to his advantage. News Ltd has convinced the government, the consumers and retailers that it is a "set top box" essential for Foxtel PayTV, as is used by PayTV operators all over the world!

No one else in the world has a national public optical cable for digital, television, telecommunications and interactive multimedia. Foxtel does not own the cable. If Foxtel owned the Telstra telecommunications cable infrastructure, Foxtel could nominate the "box". But this is not an infrastructure owned by Foxtel. It is an infrastructure financed and owned by the public of Australia. This infrastructure has been built at a cost of about \$800 per person with annual profits for the public of about \$200 per person. Therefore, only the public has the right to define the "box".

The "Set Top Box" is "the digital television receiver", without the display or speakers. **This receiver is an extremely critical element in the destructive actions with the government digital transition program.** Interference that

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uses proprietary instead of international standards with this set top box and proprietary management for this "box" on the Telstra infrastructure, corrupts open access to the Telstra infrastructure and completely corrupts the digital transition program for Australia. The media cartel well understood this. This is not the simple box in front of an analogue TV that controls the renting of a privately owned coaxial cable in front of an analogue TV. In Australia, this is a "the digital television receiver" modified for the media cartel to claim control, not only of who can access the Telstra infrastructure but also a very financially privileged use of the publicly financed national optical fibre cable. This cable was once already fully prepared for telecommunications, television and interactive multi media public services to digital international standards.

The method of controlling the renting of a private cable belongs to the private cable owner. A private cable owner should be able to control their investment. The owner has the right to set the control system for the payment of cable rent. Private cable owners, as the owners of their proprietary switch (set top box) in front of an analogue TV, have done this. The set top box analogue "cable switch" is their control of the cable rent and it does not interfere with the programs delivered to the analogue TVs.

These, are in a sense, switching devices to switch off the cable to those people who did not pay the cable rent. The cable owner would never even consider letting a customer set the standards of his switching device in front of an analogue TV. That would be irrational management on his part. Each private or public cable company has the right to switch off services if the electronic carriageway use was not paid.

**In Australia, the public owns the Telstra cable, the electronic carriageways used for PayTV. Therefore the public, not News Ltd, not Foxtel, the public has the right to set the standards of a cable TV receiver. The government has not protected the public rights of ownership and technical management of the public system. Government has not provided the public with the means to set standards for an efficient digital transition programs for home equipment to use the advanced new digital technologies in an open and multi competitive market. This process is left to the manipulative "market forces" of the media to monopolize the consumer market.**

With analogue TV markets, the set top box-switching device never interfered with the television receiver. All switching devices still required the analogue TV after them. The "set top box" cable switching later became a channel switch as well as a cable switch for instance to control the sales of TV programs to a hotel room. This started the trends towards anti trade and anti competitive abuse. A set top box owner with this additional device not only controls the cable but also control the channels, controls the information flow to the public.

This became abusive when PayTV operators started to exploit suppliers and consumers by restricting, constraining and filtering channels, and then using bundling that further constrained consumer program values and choice. Pornography was added to their scheme as a major incentive for PayTV. Electronic industrialists recognised these anti fair trade practices and social

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constraints developing as for instance when News Ltd started these practices in the UK in 1985.

Industry never developed a universal technology for analogue TV subscription. Analogue transmissions and programs were complimentary, so there was no simple engineering solution that would satisfy commercial objectives without strict government controls. This was not achieved because the media owners of television entering the PayTV business already had more influence on the drafting of PayTV encryption legislation than electronic industrialists had.

The digital boxes are now extremely abusive as they are used to control consumer access to programs, via cable, satellite and terrestrial electronic carriageways, not for the public or private owners of the carriageways but for the proprietor of the box and encryption. International consortiums of electronic industrialists do not support this abusive behaviour and monopolistic control on suppliers and distribution to consumer markets. It is of special and significant interest for only media cartels.

Subscription TV and subscription multi media is not about the cable rent or use, its about buying programs from suppliers and selling them to customers. The FCC and the EEC understands that we are not talking about a switch in front of the standard analogue TV when we talk about digital television and inter active multimedia. The FCC and the EEC have their own engineering groups to study these issues. The Australian government does not have such a facility.

Telstra rents the telephone, with few exceptions, to all consumers and enterprises. Some people use the Internet to buy for instance from e-bay auctions. Telstra has no right to control where and how a telephone line user can buy goods. Telstra has no right to control the distribution channels of e-bay. But Telstra does have the right to switch off services if the public electronic carriageway rental and use is not paid.

Proprietary set top boxes or proprietary mobile phones should not exist. No one should be compelled that a new telephone or another digital TV must be purchased or rented to change service suppliers or view programs from different suppliers or in a different room or location. This is completely ignoring one of the major market efficiency objectives from the engineering for digital standards and seamless transport systems.

These "proprietary Foxtel set top boxes" and "proprietary mobile phones" are abusive devices for the public. They are abusive to program suppliers who are denied access to any market alternative distribution source or market distribution channel unless by special arrangement not from Telstra nor Singtel, the cable owners, but from Foxtel as controlled by the media cartel. They are abusive to the consortium of industrialists that engineered the open market planning for efficient and multi competitive markets. **An open market concept, that should be respected and protected by government, applies for any public spectrum used for telecommunication, television and interactive multi media public carriageways.**

The World Trade Organization comments that:

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*“Governments have a responsibility to the public to ensure that private agents cannot frustrate market opportunities by rendering markets incontestable”*

- World Trade report 2004

Australians have had to tolerate this abuse for a decade. The Board of Telstra permits and promotes that Telstra public investment remain a tool for a media cartel to vertically monopolize PayTV and television distribution and multimedia via cable and promotes its privatisation to ensure such a tool is cemented in place for a media cartel. **Telstra is a medium for a media cartel to frustrate market opportunities by rendering markets incontestable.**

The FCC of USA has issued a code of practice for Digital television to be “plug-and-play” for free and subscription services via terrestrial and cable networks anywhere in USA.<sup>i</sup> These standardized digital receivers will be sold in retail outlets. The FCC explains “This is crucial towards building products and developing services to help spur the digital transition”.

This was the initial policy, for Australia, the world’s first major program, that has been blocked by Foxtel. The Fairfax paper never mentioned the new directives from the FCC even when offered.

I attach here a news release from the ITU as follows:

“Press Report WTSA-04 ii

**PRESS REPORT ON THE WORLD TELECOMMUNICATION  
STANDARDIZATION ASSEMBLY: MAIN HIGHLIGHTS**

**New Study Group on next-generation networks**

Next-generation networks represent the future evolution of current fixed and mobile networks. The fundamental difference between NGN and today’s network is the switch from current ‘circuit-switched’ networks to ‘packet-based’ systems such as those using Internet Protocol (IP)<sup>iii</sup>. NGN is expected to give fixed line and mobile users completely seamless communication and to offer unrestricted access by users to different service providers in a multi-service, multi-protocol, multi-vendor environment. The need for global standards for NGN is therefore critical as most operators expect to move to an IP infrastructure.”

This was the objective of Telecom Australia with the near \$6.5 Billion upgrade build of a national optical fibre cable to the curb.

Telstra already has optical cable to within 500 metres of over 60% of Australian households. Telstra has over 1.6 million kilometres of optical fibre cable, making it the largest totally integrated television and telecommunications system in the world. The “Page Report” clearly defines a program to extend this

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infrastructure to rural communities for about \$350 per person in Australia. Telstra could recover this cost over three or four years. This is a low price to provide equality of services to all Australians for all flexible service and supply options re telecommunications, television and multimedia services, with the capability of around a thousand TV programs, including HDTV. These and other flexible options are listed in the "Page Report".

It is not necessary for homeowners to spend one or two thousand dollars on new external antennae when the same service could be available from the cable passing the home. Australia makes antennae reception a complex problem by locating different channel transmitters in different locations. Cable bypasses this frustration.

Telstra once had a policy to support and use international standards to make Telstra compatible, world wide, with standards as set by the International Telecommunications Union (ITU).

One of the prerequisites of this as a global seamless network is the establishment of international standards to make sure that digital services for software engineering, for seamless and automated switching, have inter operable capabilities with consumer products competitively supplied in open markets. For the realization of vast efficiency gains with a digital TV / telecommunications infrastructure, international standards must apply throughout the total network. Telstra has a full understanding of this and once had already engineered for this. (See Telstra Classroom, website, "The story of interactive telecommunications", section 6, page 1, 3rd and 4th paragraph. This clearly describes Telstra's future market service expectations for all Australians that have since been corrupted by its replacement by a proprietary system).

ETSI, EBU, ITU and DVB are the main forums for worldwide international standards for seamless electronic carriageways for open and competitive markets. Any digital service provider can use their own "Applications" on open carriageways to allow everyone, with the opportunity to buy any brand of home equipment offered in any store and to have the opportunity of the experiences described next.

**Paris, March 8, 2005:**

**"Alcatel and Microsoft create an industry-leading solution for IP Television**

Collaboration agreement to accelerate innovation and adoption of Next-Generation Television services by broadband service providers, world-wide\*

**Paris, France, and Redmond, Washington - February 22 2005 -** Alcatel (Paris: CGEP.PA and NYSE: ALA) and Microsoft Corp. (Nasdaq: MSFT) today announced a global collaboration agreement designed to rapidly accelerate the availability of Internet Protocol Television (IPTV) services for broadband operators world-wide. Alcatel and Microsoft expect that this precedent-setting agreement between a leading provider of Triple Play (voice, data, video) solutions and a leading provider of software solutions will help expand the quickly-growing ecosystem of

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IPTV industry partners and enable telecommunication providers to take advantage of global economies of scale fueled by large-scale IPTV deployments planned across the globe.

As a result of this agreement, Alcatel and Microsoft will develop an integrated IPTV delivery solution. The integrated solution builds upon Alcatel's leadership in broadband, IP networking, development, and integration of end-to-end multimedia and video solutions, and Microsoft's leadership in TV software solutions and connected-entertainment experiences across consumer devices. The Alcatel/Microsoft® integrated solution can help IPTV service providers reduce deployment costs and shorten time-to-market for IPTV services as they transition to mass-market deployments of IPTV.

Alcatel and Microsoft believe that consumers around the world can benefit from receiving unique, personalised services through multiple devices, including the television. On-demand video streaming applications, interactive TV, video and voice communications, photo, music and home video sharing, and online gaming, all delivered seamlessly, are just a few examples of the services that consumers could receive through their multimedia-connected home networks.

As part of the agreement, the two companies plan to pursue a series of joint initiatives, including:

- Developing and customising new applications to meet the unique needs of different cultures and markets around the world,
- Enhancing application and network resilience for better reliability in large-scale deployments,
- Integration of content, security and digital rights management to ensure secure delivery of high-quality content, to and throughout the home,
- Managing quality of service through intelligent video packet handling, and
- End-to-end integration of management systems for the application platforms and all components of the network including the home network.

"We are excited to cooperate with Microsoft and benefit from its leadership in TV software delivery platforms and innovative consumer experiences delivered across devices in the multimedia-connected home," said Serge Tchuruk, Chairman and Chief Executive Officer of Alcatel. "We are committed to integrate the current Alcatel video solutions with Microsoft TV IPTV Edition, resulting in a market-leading integrated offering."

### **About the Microsoft TV Platform**

The Microsoft TV platform is a family of software solutions that help network operators create and deliver new digital TV services that delight consumers. Designed to help cable providers and telecommunications

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companies derive more value from their digital video and network infrastructure investments, the Microsoft TV family supports a full range of services including interactive program guides, digital video recording, high-definition TV, on-demand programming and Internet Protocol TV (IPTV) services. The Microsoft TV platform works across a full range of set-top boxes and TV devices. More information about Microsoft TV can be found at <http://www.microsoft.com/tv>.

## **The commission to service the public**

The evolution of the telephone has proved that it works most efficiently as one public integrated network with open access to all. The new digital technologies for telecommunications, television and multimedia public services involve extremely sophisticated software engineering, to provide very flexible, seamless and a most efficient extension of the plain old telephone network which it should soon replace. It is one complete package.

**A society that has open and flexible access to the dispersion of intelligent information and communications, to incentives and opportunities in the new advanced technologies and engineering are critical elements to a progressive economy and the protection of social justice. A reform program for Australians will rapidly repair these major defects and constraints and will re-empower the authority of government over public policies.**

The reform of telecommunications is essential if the vastly improved efficiency gains for the economy, from a digital transition program, are to be realised. It requires government to re establish authority over telecommunications and media policies.

Two steps will work in parallel.

Government sets up a department within a university for digital electronic engineering in telecommunications, television and multi media carriageway and transport systems. This engineering department will be responsible to government for conformance testing of digital television, telecommunications and interactive multi media components, products and processes for conformance to international standards.

Government mandates that all public telecommunications systems, processes and consumer products conform to international standards as directed and supervised by the telecommunications commission. This body will report to government, not the Minister as with digital technologies, the services to markets are far wider and more complex for its optimum benefits to industry and commerce. This will soon be recognised once the new commission is operational.

The commission will plan and control the progressive build of a technically advanced and internationally competitive digital telecommunications infrastructure. This commission will assist Government so that all in Government and all communities can closely study and monitor long term plans



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and integrate objectives within the communities, for their effective supportive roles, education, training and subcontracting and software management of systems.

Telstra's nearest competitor, Singtel,<sup>iv</sup> is now the owner of Optus. A rather straightforward and inexpensive way to assist in the repair of the vast damage and near two decades of delay to Australia's digital transition program is to merge Telstra and Singtel. Only Telstra has copper phone lines to almost every home and office that were planned to be replaced by optical fibre to the home from the existing (and further expansion) of the optical fibre to the curb. Singtel has satellites that cover Australia, New Zealand and Asia. Telstra has investments in international undersea cable routes. They both have national and regional cable and mobile phone infrastructures and trunking. The board of Singtel is focussed on the telecommunications business.

The proposed merging of Singtel and Telstra would consolidate the commercial and the technical opportunities into a solid and sound foundation without conflict. Singtel's natural plan would be to integrate into a standardized seamless infrastructure.

This will also give Australia an opportunity to regain a stake in the emerging new satellite technologies that was lost from Australia with the privatisation and then the collapse of Optus. Government should consider the idea that the merged Telstra / Singtel group also has participation from Macquarie Communications Infrastructure Group.<sup>v</sup> This company also manages the transmissions of public television spectrum (ABC and SBS) that is an essential element in the digital transition program. The terrestrial spectrum used for TV is a major component of an efficient digital transition program.

**A total re evaluation of all spectrum, including the terrestrial spectrum allocated to commercial TV, is an urgent and essential program before any further commitments that could relate to Government's "long term" digital transition plan. Without the Government's control of the Telstra cable, the Government will have lost control of such an opportunity and flexibility. This would be an ideal result for the media cartel. Media ownership diversification would then be almost impossible. This would be a devastating loss for Australian consumers, Australian industrialists and Australian commercial enterprises with a long- term negative impact on the economy and on social justice and democratic objectives.**

The merged groups will be an efficient institution, a partnership between the Singapore Government, the Australian Government and the public, as users and as shareholders. The new telecommunications board or commission appointments could follow a system similar to the FCC with its own legal and technical departments directly responsible to the commission. This commission could be set up to also represent the commercial interests of investors, operators and users of public spectrum. They would assist private businesses to evaluate the commercial aspects of technical trials, to steer the time frames for market entry, of new commercial applications with media involvement but without media interference.

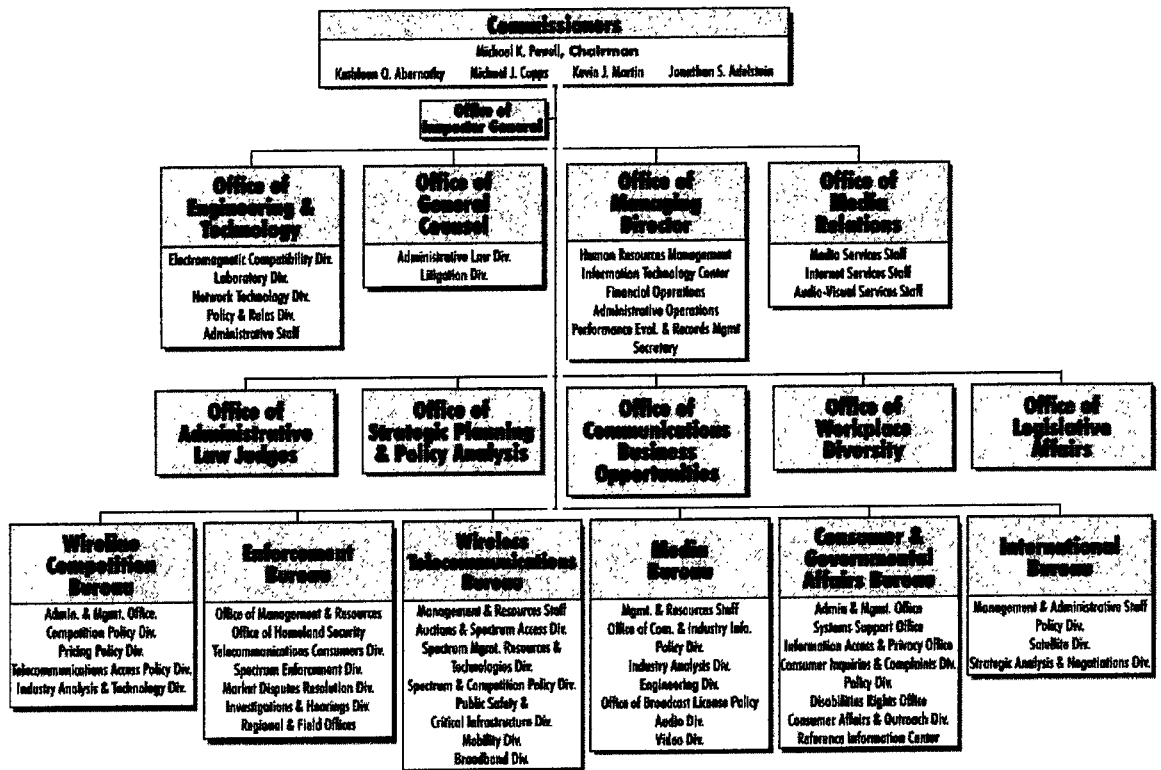
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The new commission, an institution, a foundation, will operate with public and commercial participation as a public reference, a university link to centres of competence that understands and disciplines all the essential technologies and applications related to public market activities. These technologies are sophisticated, far too sophisticated for one private company to ever manage efficiently and far too sophisticated that these tasks are the responsibility of one minister. This is an unfair burden for one Minister when matched with the power and bullying tactic of the media cartel and supporting regime. These tasks now concern all in industry and all in commerce. Therefore the commission will report to all in parliament with the commission appointments, the authority of the Prime Minister or cabinet.

Foxtel separated from Telstra, as a privatized company, could operate, on the public cables of Telstra and Singtel but in time, strictly operating to international standards as regulated for Australia by the commission (assuming Singtel is a member of the commission). Foxtel could change out of their proprietary boxes over time and use normal consumer products.

The commission would supply the public service information required for the operation of consumer products as described in international standards. It will coordinate the continuing developments of conformance testing facilities within the equipped universities as technologies advance with even more efficient technologies than currently available. This compliance testing to international standards is fundamental for the components in the network and consumer products so that all systems work without conflicts in multi competitive commercial and consumer markets. The commission would ensure that standards committees observe the "ITU WTSA-04" continually progressive objectives and mandate the standards, as they become available for international markets

The FCC organization chart:



The Australian regulations, (about 550 pages) have far too many ambiguities and anomalies and conflicting elements with today's infrastructures and technologies.

The new regulation should consist of a few pages, perhaps about 30-40 that anyone will understand.

The commission will have its own planning and procedures manual etc to support the intent of the regulations.

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## Appendix I

### The commission for the reform program

#### Immediate Objective: (as a starter)

Draft of completely new and much more simplified regulations with special attention to digital technology and attributes for electronic public carriageways to service and to support telecommunications, television and interactive multimedia devices commercial activities and using also Internet protocols, with some of these these devices in multi competitive horizontal markets.

Markets can be simply disciplined by publicly available systems and procedures in operation to ensure conformance to international standards and Australian regulation for telecommunications, television and inter active multi media throughout all electronic public carriageways and for relevant consumer products expected to be sold into consumer markets.

All public electronic carriageways conform to the regulations as set out by the commission and approved by parliament, to permit seamless open access from anyone to anyone on open public electronic carriageways. (Think "logistics" for the physical transport industry and the of physical carriageways. Electronic carriageway should have the same intent except by electronic rather than physical means.)

#### The proposal:

Set up the commission, three members from the Government and two from the opposition:

(Alternatively Australian / Singapore Governments,)

Within the public domain, to be responsible for disciplinary and regulatory control of:

Technologies  
Standards  
Spectrum

Within the public domain, to be responsible for disciplinary and regulatory control of:

Satellite  
Cable  
Terrestrial (- mobile phones, radio and television, interactive multimedia, etc)

And including telephone copper wire pair systems as they are phased out.

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**Objectives: To restart the Government program for digital transition and repair Telstra to be open to multi competitive markets**

To mandate the standards to be used for digital telecommunications, television and interactive multi media in Australia. The process of standards to be adopted for Australia is a simple and straightforward process. These are all complete and available from international standards organizations. The adoption process for Australia is mainly administrative.

To inspect Telstra and thereafter, all operations for financial, technical and legal irregularities and to report to Government.

To inspect for covenants or arrangements that may be used by Telstra that have not been disclosed to the public. (Penalty contractual commitments by Telstra to News Ltd for example.)

To initiate repair actions, component and software engineering to replace proprietary systems with components and systems, conforming to international standards.

A legal department to define for Government, the non-compliance activities re technologies, finance, commerce and regulations

To draft program time table for a total digital transition

To allocate to Standards Australia committees, work schedules, to quickly adopt the international standards for digital telecommunications, television and interactive multi media to international and inter operable (seamless) standards. These can then be called up in regulations and used if necessary for legal disciplinary actions. There should be no need for local changes, if so they would be minor. These will be the documents as input for universities to set up compliance testing.

To install all necessary testing equipment with training to qualify engineers for the technologies within a university unit, to report to the commission, standards compliance and non-compliance of hardware and software for networks and consumer products.

To ensure that all the public networks are under the engineering control and discipline the commission

To ensure that network operations exclude commercial operations that compete in markets (as for roads). (Special cases for Government commitments to private networks for an interim period

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only, strictly regulated)

To set up a research and engineering within university groups that may participate with consortiums of private companies for trials of new public service systems and processes and plan technical and commercial proposals to support market competition and expansion in all markets.

Plan and implement the expansion of digital carriageways to service consumer markets (implementation of the "Page Report" rural cable system).

Modify all non-conformance electronic public carriageways systems to conform to international standards

To supervise all network engineering and build proposals and contracts, using open market competitive contracting to do so.

**(Telstra disposes of all commercial activities.)**

**Phase two (option): To evaluate whether Telstra, Singtel, Macquarie Communications, (and Telecom New Zealand) could be members of the consortium of telecommunications companies**

**Phase three (option):**

**Merge as one foundation, financed by public and private shareholders, with government's ownership dominant.**

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## Appendix II

### **Brief History of Telecommunications in USA**

In 1837 Samuel Morse invented the Telegraph. This was a digital system. With state finance, he formulated a company in 1845. By 1851 there were 50 telegraph companies servicing railroads, newspapers, banks and Government. In 1856 the Western Union Company was formed. By 1866 Western Union had absorbed all telegraph companies.

In 1876 Alexander Graham Bell patented a "voice" system. With a financier to back Bell and his partner Watson, they formed a company that soon had 600 subscribers connected by wire pairs. Ringing codes were used to identify users. By 1876 the plug and socket switching was invented, using "exchange" operators. Western Union adopted the Bell system and a dispute followed. An out of court settlement resulted in Western Union buying out Bell. Western Union established many Bell franchised regional operators across USA that did not interconnect.

In 1885 AT&T was formed to build and operate long distance lines to interconnect regional Bell franchisers. By 1911, the regional companies were re organized into large companies known as the Bell associated companies using the Bell system headed by AT&T. With electricity available to cities and with progress in switching technologies, major progress was made in efficiency improvements.

(Internationally, Governments were adopting the system as a public utility. The system was recognised as a natural monopoly with the infrastructure builds on public property. The Government ownership of the telephone monopoly, was accepted as efficient policy, until interrupted by an economist proposal that spectrum was valuable and could be auctioned by Governments.)

By 1947, the transistor contributed to major changes and efficiency improvements.

It was recognised in USA that wide spread general-purpose communications could have significant national benefits if and only if they were developed in a uniform and compatible and inter operable way. The State and Federal Governments considered the concentration of private investments in only the more populated centres was not good enough. What was needed was universality, the ability of a person at any telephone to communicate with a person at any other

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telephone. It was also recognised that telephone companies should make a fair profit for their investors and for the risks they were taking.

Several Regulatory requirements emerged, interference, spectrum management and standard numbering systems. Common carrier regulations emerged to ensure a limit on the number of companies that provided public services. The idea was to prevent the duplication of services and waste on capital intensive infrastructures. Private companies are regulated in return for which they are permitted to be a monopoly in their territory.

In 1910, the "Interstate Commercial Commission" (ICC) was formed to control standards and prices across States and to ensure remote areas were supported with phone infrastructure builds. Conflicts and confusion developed as rural populations expanded and became part of the urban population. AT&T were forced by the regulators to divest its large monopoly into many regional smaller monopolies of non-overlapping networks.

Political issues included whether ICC was more concerned with transport than telephony and radio. In 1934 the Federal Communications Commission (FCC) was formed to regulate telephony and television, while ICC concentrated on physical transport. More recently the FCC was made responsible to the President for regulating satellite, cable and terrestrial spectrum for telecommunications, television, radio and interactive media including investments from USA in international circuits.

The President appoints the commissioners. Only three of the five can be appointed from the ruling party. None are permitted to hold interests in FCC markets.

As explained above, the FCC has released a directive, a new initiative, for the consumer open and competitive markets for Digital TV, a common platform for PayTV and free to air terrestrial and cable receivers to be sold in retail stores. This, they explain, is to stimulate the digital transition program.



Appendix III Security Name	Tick	PE	Yld	Fr%	Dv/E	Close	P/A	\$ Income	Net Ass	Income including Gvt	% profit	M Capital	Including Gvt	% Capital
Hutchison Tele	HTA	0	0	0	0	\$0.33	-0.2	-551,722,496	-1,289,388,288	-551,722,496	-12.02	220,553,248	220,553,248	0.27
UNWIRED GROUP	UNW	-6	0	0	0	\$0.59	2.4	-23,671,518	60,883,536	-23,671,518	-0.52	143,685,136	143,685,136	0.18
Flowcom	FLO	-1	0	0	0	\$0.02	0.8	-16,563,908	13,412,070	-16,563,908	-0.36	10,059,053	10,059,053	0.01
Entertainment Media & Tele.	ETC	-1	0	0	0	\$0.01	0	-9,035,000	0	-9,035,000	-0.20	5,560,001	5,560,001	0.01
Pracom	PCO	0	0	0	0	\$0.01	-0.2	-6,302,221	-9,155,768	-6,302,221	-0.14	1,983,750	1,983,750	0.00
Future Corp Australia	FUT	0	0	0	0	\$0.03	0	-5,997,539	0	-5,997,539	-0.13	2,300,426	2,300,426	0.00
Cape Range Wireless	CAG	-17	0	0	0	\$0.05	0	-5,673,831	0	-5,673,831	-0.12	96,455,128	96,455,128	0.12
Qpsx Ltd	QPX	-6	0	0	0	\$0.13	0	-3,474,276	0	-3,474,276	-0.08	20,529,810	20,529,810	0.03
Gps Online Com	GPO	-3	0	0	0	\$0.05	0	-1,908,685	0	-1,908,685	-0.04	5,164,676	5,164,676	0.01
Quadrant Iridium	QAD	-11	0	0	0	\$0.05	2.7	-1,742,279	7,259,497	-1,742,279	-0.04	19,237,666	19,237,666	0.02
Broadband Comm	BRO	-1	0	0	0	\$0.01	0	-1,426,745	0	-1,426,745	-0.03	1,630,566	1,630,566	0.00
Datafast	DFT	-21	0	0	0	\$0.02	0	-1,104,551	0	-1,104,551	-0.02	23,668,946	23,668,946	0.03
Sirius Telecommunications	SIU	-8	0	0	0	\$0.15	2.1	-918,150	3,213,525	-918,150	-0.02	6,886,126	6,886,126	0.01
Macquarie Corporate Tel	MAQ	-39	0	0	0	\$0.16	0.5	-814,401	63,116,068	-814,401	-0.02	31,558,034	31,558,034	0.04
Neighbourhood Cable	NCA	-43	0	0	0	\$0.29	14.5	-311,635	930,253	-311,635	-0.01	13,488,663	13,488,663	0.02
Stratatel	STE	-39	0	0	0	\$0.13	6.5	-206,738	1,252,955	-206,738	0.00	8,144,205	8,144,205	0.01
Circlecom	CCO	0	0	0	0	\$0.01	0	0	0	0	0.00	2,294,363	2,294,363	0.00
Mithril Res	MSO	51	0	0	0	\$0.09	4.6	223,146	2,479,400	223,146	0.00	11,405,240	11,405,240	0.01
Tele-ip	TEE	18	0	0	0	\$0.03	0	286,113	0	286,113	0.01	5,185,801	5,185,801	0.01
Easy Call	EZY	26	0	0	0	\$0.09	1.2	824,654	17,492,666	824,654	0.02	21,241,094	21,241,094	0.03
Amcon Tele	AMM	43	1.4	100	58.1	\$0.19	1.2	1,577,493	58,697,400	1,577,493	0.03	67,868,872	67,868,872	0.08
Mobile innovations	MOB	7	36.4	100	237	\$0.17	1.8	2,846,556	10,126,089	2,846,556	0.06	18,564,496	18,564,496	0.02
Queste Communications	QUE	1	0	0	0	\$0.18	0.2	8,041,422	20,735,562	8,041,422	0.18	5,112,879	5,112,879	0.01
SP TELEMEDIA LTD	SOT	44	0.7	100	30.6	\$2.14	4.4	17,308,370	173,083,696	17,308,370	0.38	755,916,608	755,916,608	0.94
B Digital	BBB	18	1.9	100	33.3	\$0.54	9	17,640,736	35,281,472	17,640,736	0.38	317,533,280	317,533,280	0.39
Powertel	PWT	10	0	0	0	\$1.44	0	18,765,094	0	18,765,094	0.41	193,012,416	193,012,416	0.24
Singtel	SGT	11	2.2	0	24.5	\$2.11	8.4	100,058,552	133,198,280	250,146,380	5.45	1,124,193,408	2,810,483,520	3.48
Telecom NZ	TEL	15	4.9	0	76.5	\$5.83	9.3	733,588,800	1,227,193,088	733,588,800	15.98	11,356,406,784	11,356,406,784	14.06
Telstra	TLS	16	5.1	100	100	\$5.28	5	1,979,036,160	6,356,903,424	4,038,849,306	87.98	31,664,578,560	64,621,588,898	79.98

Close = Share price, 25 Feb 2005

P/A =Price over Assets

\$ Mill =Share value trade 25 Feb 2005

4,590,455,358

100.00

80,797,519,682

100.00

TLS 49% Double this for full public value. Government owns the other 51%

**Telstra virtually has no competition**

UNWIRED GROUP

This is the company that AFR told the public, recently that it is "rolling out" faster than Telstra!

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**The FCC announces a common digital platform, Announcement 2004**  
[www.fcc.gov/cqb/emailservice.html](http://www.fcc.gov/cqb/emailservice.html)

**ii ITU announcement,**

*see also concerns RESOLUTION [www.itu.int/osg/spu/resolutions/2002/res2.html](http://www.itu.int/osg/spu/resolutions/2002/res2.html)*

**iii DVB Organization –International standards**

*Consumer Access “The DVB set of IP networking protocols will be network independent...” [www.dvb.org](http://www.dvb.org)*

*ETSI – international technical standards [www.etsi.org](http://www.etsi.org)*

*See also European Broadcasting Union website.*

**iv Singtel Board of Management –**

*see Singtel website for organization structure.*

**v Macquarie Communications Infrastructure Group  
(MCG)**

*listed August 2002) see their site for clear explanations of businesses.*