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Friday, September 09, 2005

Dear Louise Gell,

Please accept the following as input into the enquiry "Transition to full private ownership".

The key issue with Telstra is that Australia is not supporting and therefore, for government intelligence, no means to understand the international digital transition program and the progressive steps for vast efficiency gains in all markets.

The international program converts usable spectrum from "Pipes" (one pipe for one service) to "highways". The electronic highways can be shared, as roads can be shared, for a mix of many public and private services, any mix, telephony, e-mail, radio, TV, free, purchase and subscription, via satellite cable or terrestrial spectrum, any option as per road mapping for the most efficient route. This is a far more efficient use of spectrum. This is the "Next Generation!"

This is only possible when government has full authority over spectrum engineering, management and commitments for the licensing of all private and public traffic, the users of the electronic public roads system. This engineering and organization is way beyond any private company to engineer, manage and build for the nation.

The natural electromagnetic spectrum is divided by international government agencies and allocated for management by each nation for discrete purposes. This unique and most valuable natural resource is then committed to commercial and social purposes by each member nation. Under licenced agreements, (and unfortunately, by auction) the government's responsibility is the local commitments of usable spectrum in relation to technologies and engineering, for private and public use.

The electromagnetic spectrum used for telecommunications, television and radio etc has been allocated as exclusive use for one private operator for one discrete purpose. Channel 9 has one channel, a private electronic highway but operating strictly to international standards and local regulations. There was no technical alternative. One radio band is split into radio channels for public and private radio stations. Microwave channels are used for telecommunications. The responsible government agency (now the ACMA) has to decide which of the divisions are for private or public use, TV, radio, aircraft control, telecommunications, military, sciences and research, etc. Copper wires are used for telephones to one common standard. Eventually, science and engineering came to the limit, nations have run out of usable spectrum.

During the 1980's, new science discoveries and sophisticated engineering changed all that. Three major breakthroughs emerged. First, fibre cable is now an economical system to duplicate the public's natural electromagnetic spectrum. Second, a channel that had been used discretely for TV can now be used for telecommunications, television, radio and interactive multi media, Internet etc, at the same time. The third breakthrough is that digital, with a common language, can manage spectrum exactly as we manage and control traffic on roads and rail, but invisibly, automatically, silently and without exhaust fumes!

This is the real and most important issue! People with the “common language skills” can “Talk to” and “Instruct” spectrum, as digital signals, for almost any specific purpose, to send a radio and a TV program, with an email attached for example, all in one container to anyone or everyone, to automatically collect GST and customs duties etc.

A file transported to a computer will instruct the computer to “manufacture” a product. A file can instruct a computer to “manufacture” an interactive high definition television system and a digital radio receiver, and with a simple satellite, cable or terrestrial tuner (or all of these) this computer now is a receiver for standard TV, high definition TV and digital radio programs. A file will “manufacture” within a computer, a phone, (voice over). This is the electronic industrial revolution! This is a completely new way of doing things, a paradigm shift! These traffic routes are available to everyone in the same way as roads, and rail, but with government authority over the electronic management of spectrum, as government has authority over the physical management of land and its uses for road and rail.

This is not a business! It is an electronic system to support business, to support trade and commerce in open and competitive markets, to support social needs. It is not a business.

To have this in the most efficient way, government must own and control the electronic highways, just as government owns and control physical highways, a public support infrastructure, the electronic traffic routes, for trade commerce and social need. These highways must not become a commercial private business for one business owner, with someone else to build another commercial private highway. This is irrational. This is competition in the most capital waste, spectrum waste and socially constrained and abusive manner possible.

Like all processes, the efficiencies achieved are entirely dependent on disciplined education and training. Essential to this system, is one common public infrastructure system, the management of spectrum, satellite, cable and terrestrial spectrum as one “integrated” public highway system, open to all. Essential to this system is one common language.

These essentials demand the expansion of the ACMA to include the technical and engineering skills and authorities. ACMA have new tasks, to support the digital language and public dictionary and the public uses for the “digital language” and to map the public highways. ACMA could replace the Telstra Board. This would be another saving and removal of conflicts, with a renewal of focus on engineering and a renewal for the public, the ACMA Vision 2020 program. Anyone in industry, commerce and social services can then be supported by ACMA for the use of digital engineering to international standards for vastly more efficient public and

private electronic processes, business communications and administration processes in any and all public and private businesses, in a vastly more efficient way.

The attached charts will explain the issues, legislative defects still in the sense of 1977 regulations and influenced by media interference (self regulations). The government commitment to a promise of privatisation has distracted and destroyed Australia from participating in the international transition program, as now mandated even in USA.

This is a problem created in Australia from the Hilmer report that government heeds, “Self Regulations” to replace government regulations, and privatisation of public assets to use “market forces” to drive improvements in efficiencies. Telstra has proved that the Hilmer Report is based on False Premises. The most powerful “Market Forces” in media is News Ltd. News Ltd now controls the public cable for TV without any competition!

The idea of “codes”, (“Market Forces” self-regulations) that no longer relate to the interests of efficient consumer markets, nor the engineering, nor the international standards, nor the vast efficiency improvements from the convergence and seamless interchange across satellite, terrestrial and cable, for digital Television and Telecommunication. We already experience these severe constraints with the Telstra cable and the proprietary digital management system, unique to Australia, the News Ltd authority over public assets to eliminate competition.

The convergence of digital television with telecommunications places public service networks, using natural spectrum (satellite, cable and terrestrial), and duplicated spectrum (by way of fibre cable etc), exactly with the same government authority and public management as we have for roads and rail etc, a public electronic highway.

For instance, in the proposed legislation, “carrier” is a word for analogue engineering (pipes) but conveys no technical, operational or commercial meaning and completely hides from public scrutiny the potential from digital engineering for electronic roads or highways.

Australia no longer has an engineering group, knowledgeable in this international engineering. The top priority for government is this group, responsible to government, that has the new intelligence and experience to understand the extremely valuable opportunities from the Telstra cable system, at present monopolized by News Ltd.

The “Transition to full privatisation” leaves News Ltd in full authority of spectrum management on cable, and therefore full authority on any future planning of the digital transition program and media ownership. This is financially, socially and democratically unsuitable for a digital age.

The charts are to highlight these discrepancies and how and why they exist. They are far too important to be allowed uncorrected, and should not be permitted to distort government policies. They form the foundation program for the privatisation of Telstra to advantage one media cartel.

These issues have been brought to government many times, over the last decade, but still ignored due to government’s refusal to participate in international technology forums via government’s own research and development engineers for the public.

Please note. Contrary to newspaper articles of how far behind Australia is to other nations, Telstra, under government authority, could be repaired to the international digital transition program “The Next Generation Network” and world best practices, within two or three years!

The reason for this is simple.

Telecom Australia built the worlds largest and most modern cable system, engineered for the digital transition program and to international standards. Post completion, government permitted News Ltd to remove the international management system to be replaced by a proprietary system for News Ltd to have the monopoly on PayTV. If Telstra remains in majority ownership, and ACMA re establishes the engineering expertise, and if government mandated international standards, as have USA Federal government, with the responsibility to parliament, not to a minister, for cable and terrestrial digital transition program, Australia will within 2 –3 years be a world leader in this digital transition program.

Telstra sold, this is not possible. News Ld will manage the program and control government policies, just in the way the public cable has been monopolized for on media cartel. This has also corrupted the digital transition program for Australia.

Systems cannot be more efficient by “competition”. Only processes can be more efficient by competition. Telstra is one system for the nation. To duplicate the system in the name of competition means that Australia has two systems. These two systems must recover their costs from the same population, which means, half each! Owners, cost recoveries per user have to double, even before profits are realized. This is vast capital waste.

Systems become more efficient by continual improvements and upgrades, engineering and technology improvements.

A home is a system. The living in the home are processes for the family. To double the number of homes in one year while the population increases by 3% is capital waste in systems. Builders build homes, the processes. These processes in competition become more efficient. Science and engineering can make a home far more efficient. The digital transition program will reduce costs of home equipment per family to near 15% of current costs. To double the number of power stations (in competition) is capital waste in systems. When people switch on the lights they start a process. Science and engineering has reduced power consumption for lighting to 30% in less than 10 years.

The real fight for democracy and social justice is this battle against the private monopolists who will continue to complain about governments in control of public monopolies. The more power they have to complain the noisier will be their complaints. This is the process to date - privatisation of Telstra for a private monopoly. This has already destroyed the vast efficiencies in both systems and processes for Australians in telecommunications, television and multi media products and services. The government Productivity Council Studies has ignored previous contributions re this issue.

To offset this public propaganda for private profiteering of public support systems, government support departments and agencies could use the Telstra system. This is to parallel the News Ltd processes, to communicate with the public, digital TV channels, on the Telstra public cable for instance, knowledge channels with interactive “open” home systems, that also receive free to air channels. This would prove to all Australians and to the world that Australia does possess “The Next Generation Network”!

A far more economical and efficient process is continual improvements to one national system, one national system of roads, rail, power generation, water, the advanced cable system that Telstra has and is not using for the public. This is the gross error with Telstra. Telstra should be a public support system, not a business enterprise for a media cartel while government “wish plan” is to have several competitors. (Telstra book value \$12 Billion, 89% of all investments in Australia, where is the competition?)

The government has had a decade to regulate Telstra so that the “new cable”, built to replace the old wires, could be used for “Television, Telecommunications, interactive multi media” and to build seamless systems for the consumer market. The inefficient copper phone system should already have been replaced in most cabled areas, and eventually completely dismantled, (10 – 15 years seems reasonable.) This has not progressed since commitment a decade ago.

Telstra is a foundation, with a capability to reduce costs across the board to about 15% of current costs, an institution, like roads and rail, one system to support the nation. Instead it now is managed by a proprietary system from News Ltd to control the Telstra cable for TV with no competition, a most privileged commercial enterprise, private monopoly financed with public assets.

Telstra is a national system, to interface with international networks involved in trade and commerce support functions, like public roads and rail, a public support system that should not be involved in competition with industry and commerce. The News Ltd modifications have corrupted the potential for Australia to benefit from standard engineering practices to service the public, from the digital transition program. Telstra sold puts all these issues in News Ltd command and out of government authority, no matter what the regulations may be. Either government manages spectrum, or private media manages spectrum. There are no other alternatives for Australia.

The confidential agreement between Telstra (government) and News Ltd would expose the potential and intent for News Ltd once Telstra is sold, easily achieved while dealing with a government unsupported by engineering knowledge and experience.

When time permits, I can expand on these extremely serious issues. No other nation has yet built one and a half million kilometres of cable as modern as Australia’s. This program promoted and supported by government would place Australia, as a world leader, with the international digital transition program. This would focus world attention on Australia, attention to the progressive objectives of the Australian government and Australian engineering, and central to international electronic trade and commerce, central to new social opportunities, not possible if Telstra were sold!

Please phone me over the weekend if queries arise.

Allan J Williams

Director

Australian Regulations 1977 Legislation & Amendments	Influenced by:	The Digital Transition Program International Science and Engineering Consortium	Democratic, Social Fair Trade & Economic Issues
<p>Pay TV</p> <p>No involvement by ACMA</p> <p>Depends entirely on confidential agreements between Telstra Board and News Ltd</p> <p>Senator Coonan insists that PayTV is a separate issue!</p> <p>Surely it is the first and prime issue, of far more social and economic and fair trade importance than privatisation</p> <p>An issue prohibited from the public arena!</p>	<p>News Ltd</p> <p>Telstra Board</p> <p>Reinforced, it appears, by management imported from USA</p> <p>Comments:</p> <p>No other nation in the world has built a public telecommunication, television and interactive multimedia cable and permitted this system to be managed by one commercial company for exclusive marketing of programs.</p> <p>If PayTV companies are allowed to advertise, why does government regulate that “Free to air” TV companies, dependent on only advertising, are prohibited from marketing programs! (sales)</p>	<p>Not supported</p> <p>The digital transition program permits complete consumer choice in one system. “Free”, “subscription” or “purchase”, from anyone, just as we use the internet!</p> <p>PayTV is the prime reasons for the digital transition program to be aborted in Australia. Without the digital transition program, without government authority over the management systems for spectrum, open markets and fair trade in the electronic and media industrial and commercial markets are virtually impossible.</p> <p>One PayTV operators is allowed to advertise and has extremely privileged use of the public cable for TV, a complete monopoly with subscription, with advertising and with a “set top box” that excludes “free to air” access for the home. This is to ensure the consumer cannot have a choice without considerable expense and without considerable inconvenience. Why is it that the ACCC insists that Telstra should have competition and leaves this severe Australia only market and consumer abuse uncorrected?</p> <p>DHL would never be permitted exclusive use of the national rail network, a public railway line used to transport goods and services for anyone without discrimination!</p> <p>Patrick would never build another private rail in parallel with DHL’s if the public rail was privatized as exclusive line for DHL. Freight costs would rocket!</p> <p>The public has had this abuse for a decade in full view of government and in full view of the ACCC. This subject is prohibited from public debate by all media.</p>	<p>Abuse of program producers, electronic manufacturers, retailers, and most of all consumers (no competition and price bundling).</p> <p>The first TV programs were public broadcasts. Private companies could not finance a national service infrastructure for TV. As the receiver population increased, and private enterprise demanded private access to the TV receivers for commercial purposes. Governments permitted this with competition, using public spectrum, strictly regulated to government-managed technologies and international standards.</p> <p>In most countries, TV spectrum has been socially managed between four main groups, Public, private, universities and institutions, and government public information channels.</p> <p>Studies have proved that “Market forces” from advertisers influence commercial TV “content” in an anti social direction. However, in Australia, government has committed spectrum to a high concentration of commercial users. Commercial TV specially dominates Australia, relative to most nations.</p> <p>PayTV was once a system for private companies to build cable and offer good quality TV in poor reception areas (skyscrapers in New York etc). It developed with private offers of movies via VCRs in addition to TV, into many private PayTV companies.</p> <p>When governments were persuaded to auction public spectrum for PayTV, the legislation constrained PayTV operators from advertising. This was for three reasons: One, to counterbalance the “sponsorship bias” and Two: in order that “free to air” could survive as free TV, and Three: for the consumers to have a choice between “Free to Air” with advertising or “PayTV” without. (The elderly and handicapped could still use the TV system.)</p> <p>Post the Telecom Australia cable build, even after government sold licenses to many, News Ltd was the only company permitted to use the Telstra public cable for PayTV – without advertising. After several years, News Ltd was able to persuade government that advertising should be permitted! News Ltd (now a partners with PBL and Liberty of USA) is the only company that has a private monopoly of the public cable system built by the nation for national services to all , and is also allowed to advertise while “Free to Air” are prohibited from PayTV, a most privileged and unique arrangement between government and one media operator, and only in Australia!!!.</p>

Australian Regulations 1977 Legislation & Amendments	Influenced by:	The Digital Transition Program International Science and Engineering Consortium	Democratic, Social Fair Trade & Economic Issues
<p>Set Top Box</p> <p>No involvement by ACMA</p> <p>Depends entirely on confidential agreements between Telstra Board and News Ltd</p>	<p>News Ltd</p> <p>Comment:</p> <p style="text-align: center;">THIS and the PayTV ISSUES are AUSTRALIANS' "TOP PRIORITY" IF DEMOCRACY AND SOCIAL JUSTICE IS TO PREVAIL</p> <p>News Ltd would not accept the plain old telephone system, (correctly a Telstra monopoly) to be separated from the cable system before privatisation as interactive TV still depends on direct inter connections with the plain old telephone.</p> <p>ACMA have not yet even considered the interactive terrestrial and cable standards for legislative adoption in Australia.</p> <p>After privatisation, government will be even more powerless for management of spectrum regulations for public service systems efficiencies and information security.</p>	<p>Not supported</p> <p>The News Ltd box is a proprietary box that can only be used for PayTV from Foxtel via the Telstra cable.</p> <p>This has been challenged for a decade.</p> <p>The only Minister responding from government to this issue was Mr Daryl Williams who explained that a PayTV provider has the right to define the set top box.</p> <p>The industry response is that this is correct in the situation where the cable is privately owned. In all PayTV markets, where coaxial cable or private lease of satellite spectrum has been used for PayTV, the PayTV operator specifies the "set top box". It would be a most stupid cable owner or satellite lease holder that allowed his supplier(s) to define the set top box!</p> <p>The consumer industrialists representing the support of the digital transition program explained to Mr Daryl Williams that the public, not News Ltd, owned the cable. Therefore the "set top Box" should be specified by the public (government engineering authority over spectrum) to provide most efficient and flexible options and social opportunities for the public, not one only program distributor.</p> <p>Mr Daryl Williams resigned early from the Ministry before any corrective action commenced.</p> <p>This issue still remains without response from Government or the ACCC</p>	<p>Monopolistic abuse on consumers, program producers and electronic industrial producers.</p> <p>Completely destroys open market competition in electronic consumer markets.</p> <p>Completely destroys the digital transition program</p> <p>Severely constrains consumers' access to knowledge and information services.</p> <p style="text-align: center;">If ACCC were honest and sincere about competition, this would be top priority.</p> <p>If Telstra remains a majority public owned institution, all electronic operators, including universities, schools and public libraries, art and cultural organizations will install most advanced inter active multi media systems to the advanced levels now operational in Europe and by the BBC in the UK. These are most valuable social systems, not even mentioned in any Australian government policies.</p> <p>Australia was once set to be first!</p> <p>Private owners of a public service infrastructure would not spend their capital to support social services.</p>

<p style="text-align: center;">Australian Regulations 1977 Legislation & Amendments</p>	<p style="text-align: center;">Influenced by:</p>	<p style="text-align: center;">The Digital Transition Program International Science and Engineering Consortium</p>	<p style="text-align: center;">Democratic, Social Fair Trade & Economic Issues</p>
<p>Multichannelling</p>	<p>FACTS (Federation of commercial TV stations)</p> <p>This forces government into commitments that block “Channels” to be (optionally) shared, and inhibits digital transition program technical efficiencies, attributes and flexible options to be realized in practice!</p>	<p>Has no meaning.</p> <p>A “digital channel” permits one or several TV programs, radio, text, data, any variation or assortment at any time – or none!</p> <p>Any channel can be shared at any time by anyone, by commercial arrangements!</p>	<p>The Media Propaganda for privatization objectives, is to maintain 1977 regulatory management of spectrum to be under private control and use.</p> <p>This is no longer necessary, a constraint, and should not be a government permanent commitment. Licensing of commercial or social enterprises for the sale and distribution of electronic products, programs and services are the tasks of government as a trade, commerce and media ownership program. This program should now be divorced from spectrum planning and engineering, that is the digital electronic highway mapping and engineering.</p>
<p>Infrastructure system management permitted to sell and market “Content”</p>	<p>News Ltd</p> <p>FACTS</p> <p>“Content” are commercial and social products to be transported (distributed) or “sold” directly by the “owners” or via distributors, (distribution channel in marketing terms) to their customer via any “channel” (highway in digital electronic terms) that has available traffic capacity. This must be connected to the customers’ premises or to a customer’s mobile terminal, such as a mobile phone, car system, bus train or aircraft multi media system, or to update a navigation system. Freedom of access to the customer, as a road. This is the social justice system, destroyed by PayTV which blocks access except for one operator!</p>	<p>Not supported</p> <p>This idea is to monopolize the very markets public infrastructures are built to support.</p> <p>Corrupts flexibility of digital systems</p> <p>Eliminates government revenue from being efficiently managed for instance, the collection of GST on programs, products and services in their electronic formats.</p> <p>The digital Transition Program provides a system for anyone to purchase a product, a program or a service optionally as a free, direct purchase or a subscription from any seller of goods and services in electronic formats.</p>	<p>A special attribute of the Digital Transition Program is that for the first time ever, any owner of a program or a product in its electronic format can decide to sell direct to the public or use a distributor or offer as a “Free program” (sponsored).</p> <p>This means that electronic Programs Products and Services can be regulated exactly in parallel with physical Programs, Products and services in open and competitive markets exactly as for any and all commercial (private enterprise) and public markets and public social needs. Media ownership is entirely a social issue, authority over the dispersion of knowledge, information attitudes, beliefs and propaganda, and nothing to do with “convergence”. (No longer, the auctioning of spectrum to one operator to access a market! This is capital waste)</p> <p>Telstra should not be selling mobile phones or TV boxes or bundled services used to hide values! These activities destroy open markets and competition!</p>

Carrier	Telecommunications and broadcasting regulatory history under the authority of the international spectrum agency (Telecom Australia and ACA - now ACMA)	Not supported Spectrum division and mapping as digital channels and digital transport systems.	The very essential re planning and re mapping of “channels” the digital highways, (an essential public science and engineering program) the public transport system for product, programs and services, in their electronic formats, the distribution networks to and from local nation and international customers and suppliers.
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Australian Regulations 1977 Legislation & Amendments	Influenced by:	The Digital Transition Program International Science and Engineering Consortium	Democratic, Social Fair Trade & Economic Issues
Data casting	Facts News Ltd ACCC	<p>Not supported</p> <p>This is legislation that again results in fair trade interference. All digital electronics transmissions from one source to everyone, is data casting, broadcasting of digital data in its various formats:</p> <ul style="list-style-type: none"> Audio Video Music Pictures Interactive controls Conversations Stock exchange information Store prices for Woolworth's Farm produce prices Books Magazines Etc <p>Data can be "cast" by anyone with spare capacity on their licenced channels and service areas.</p> <p>Special attributes of cable as duplication of the natural spectrum include:, energy efficiency and consistency. Terrestrial and satellite spectrum is exposed to natural variables, snow, temperature variations, buildings and mountains, electrical interference for example.</p> <p>Therefore, all cable channels should be technically regulated for optimum efficiencies in costs and distribution of market user equipment. Cable channels as mapped by the ACMA should be licenced to only Telstra for Telstra to manage all traffic on the public cable as electronic highways open to any one with a commercial licence to market or distribute as free electronic products and services.</p> <p>Legislation should not "force discrimination" between any commercial electronic operator from choice of using public's natural spectrum and / or the public's cable duplicated spectrum for transport of goods and services in their electronic format.</p>	<p>Data casting, PayTV, multi channeling, Universal service obligations, in Australia, are "Australian commercial media inventions" to use legislation to inhibit fair trade and competition.</p> <p>These terms are inhibiting the open market and fair trade potential in Australia that the digital engineering is engineered to provide for consumer markets for all nations.</p> <p>The regulations influenced by media are without any means for government to support public social and economic objectives achievable from the sciences and engineering.</p> <p>The neither "Fish" nor "Fowl" remark that Prime Minister Howard made several years back, is true.</p> <p>The legislation is completely Foul in its support for competition, fair trade democracy and social justice.</p> <p>This leaves media markets to play very fishy tricks.</p> <p>The repair is for government / Telstra engineers, working within international forums, to reform the legislation for efficient use of natural spectrum together with the commitments for the duplication of the natural spectrum as is the Telstra cable spectrum.</p> <p>The Australian legislation, to be democratic, and to permit the progression of the digital transition program must have these terms removed from the regulations. Legislation and regulations need total reform for the digital transition program.</p> <p>They require a complete re write to remove these severe economic, social and democratic constraints.</p> <p>Telstra would be far more efficiently managed under the authority and control of the ACMA government agency, and as a fair trade program. Government must expose to the public the confidential agreements between Telstra Board and News Ltd.</p>

Australian Regulations 1977 Legislation & Amendments	Influenced by:	The Digital Transition Program International Science and Engineering Consortium	Social/ Economic Outcomes
<p>Concept of “Competition” in public service infrastructures and private ownership</p>	<p>News Ltd</p> <p>Commercial Media</p> <p>Media employed “Economists”</p> <p>Liberal Party</p> <p>(now without access to international Knowledge and without government research)</p> <p>ACCC</p> <p>Special Note:</p> <p>No longer has the public any means what so ever of protecting their own rights re the commitments of spectrum!</p>	<p>Not supported.</p> <p>The FCC of USA regulates against the development of infrastructures in parallel, (the breaking up of the “Big Bell” that started to overlap existing infrastructures)</p> <p>The FCC shows proof by experience that: Infrastructures in parallel are a waste of capital, and results in one survivor that has a monopoly on “prices” and applications.</p> <p>Therefore USA FCC regulates strictly against infrastructures being built in parallel. It offers the private owners the compromise of a government-protected monopoly but with strict price regulations and demands from private owners that they build in remote areas to have equality with urban areas. (This is due to adverse historical experiences – see my “Brief History in USA”, in my submission to the Minister.</p> <p>Trend now in USA that modern infrastructures be publicly owned (Philadelphia for example) on the basis that private companies can no longer offer the available technologies as progressive engineering develops more efficient applications.</p> <p>The FCC has mandated international standards for terrestrial and cable digital transition program.</p>	<p>There is no engineering experience to prove that privately owned infrastructures in parallel for competition provide more efficient services.</p> <p>I personally have been involved in design / engineering of the world’s largest projects, and have no information or have not been exposed to any experiences of build commitments or technical proposals to the contrary.</p> <p>In Australia, government has “forced” privatisation by auctions of spectrum for PayTV and Mobile phones.</p> <p>Most have failed or are operating at extensive losses now over \$10 Billion. (See earlier submissions). Mobile phone operator survivors are negotiating or have completed the sharing of infrastructures, even with Telstra, to reduce costs and with the objective to return to a profitable operation!</p> <p>Simple arithmetic: By far, the highest cost is the infrastructure capital costs and then maintenance.</p> <p>When five infrastructures are built in parallel, (Willoughby, Sydney for example) the 500, 000 phone owners are now split between five infrastructures.</p> <p>This means that for each independent operator to survive, the phone costs for each call must be 25 times higher than if all operators shared the one infrastructure.</p> <p>The capital expenditure would have been far more efficiently invested for cable to remote towns, with one local radio system from the remote town for local mobile services.</p> <p>A far more efficient system is for government engineers to design and specify one efficient infrastructure and tender in an open market for the build or sharing of the build of the public infrastructure, shared by all to complete the digital transition program.</p> <p>History has ample proof that one open, standardized infrastructure (an institutional public support system not a business) is the most efficient public support for industry, commerce and social needs.</p>

Notes:

Issues with no public attention or explanations! It is urgent and essential for government to understand the extremely important differentials between regulations that provide the government with the authority over the transport systems, and regulations to protect efficient trade and commerce and open markets and entrepreneurial growth. These public democratic and social justice issues are to be completely independent from the decisions on the ownership of commercial radio and television stations, service operators and web operators. This is the option of government, to continue the monopoly on the one hand of Commercial TV over producers, and on the other, the freedom for the producers of electronic products, programs and services to choose how their output will be distributed to markets. Government and the ACCC policies are completely up side down, they claim division of spectrum as competition and support the monopoly of media over the producers and consumers! Social justice is the issue of open access for all to electronic public highways for their access to markets!

Government and ACCC policies are totally focussed on targeted division of spectrum to private media owners who then have this private control of spectrum to monopolize producers and consumers! PayTV is the worst case! Other industrialists, commercial and social and essential, optional and personal needs are entirely excluded from any government consideration!

A “channel” is strictly a science and engineering issue and an international commitment. The channel engineering for tuners (one way receivers) and modems (two way, receive and transmit, essential for interactive multi media), by nature's laws of physics, is a compromise between frequency and bandwidth. The lower the frequency the narrower the bandwidth. Bandwidth should no longer be a legislative commitment. It is an engineering commitment to tuners and modems in relation to the frequencies used in the transport system. There are no options. This is a science and progressive engineering issue way beyond any private enterprise to manage. As is the case with transport modulation systems (DVB-S for satellite, DVB-C for cable, DVB-T for terrestrial DVB-H for mobile,) and program compression systems, (Meg 1 for audio, Meg 2 for video, MPEG 4 for other TV flexible options, MP3 for music etc (flexibility for end users). Small screens for phones or large for home theatres, these are progressive systems gained from engineering knowledge and experiences. It makes no sense to transmit HDTV with information for a three-meter wide screen to mobile phones with 3 –5 cm screens! This is why the engineering provides flexible multi program options, not fixed multichannelling that destroys this flexibility. These issues are being used in legislation proposed by commercial uses of spectrum to constrain competition and consumer choice in consumer markets! The International digital transition program and standards provides the options for a broadcaster to transmit HDTV when the commercial operator knows that the consumer market is watching HDTV and any broadcasters to use alternative formats at any time for phone users or small screen uses. The consumer will sit down to watch HDTV. Other consumers may want to watch the news on a 20cm screen while preparing meals. This program will use far less data than a HDTV program will demand. These are international engineering consortium and standards issues and by these processes, is the way to gain continual improvement in efficiencies of spectrum for public, private, and social objectives. These are the means for flexible options, including free or subscription or once off purchases. The ACMA with its own laboratories should have engineers involved internationally with these technologies and standards. If the Australian government had not aborted this program a decade ago, Australia would have been a world leader in these technologies and market efficiencies. Legislation should not be used to inhibit these market options and fair trade and flexible service options, as is used in Australia to constrain open market competition.

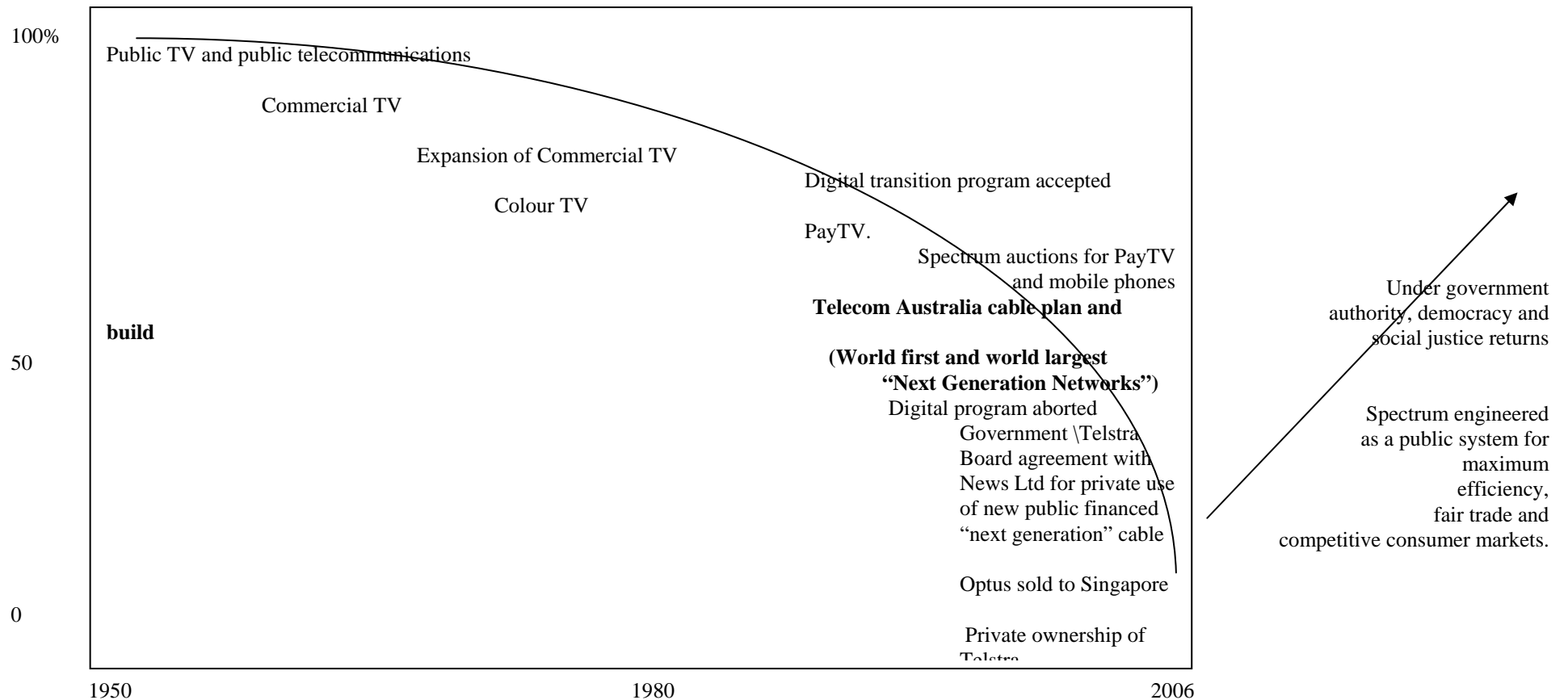
This engineering parallels in complexities to nuclear power, travel in space, the replacement of fossil fuels with hydrogen and fuel cells, in their international trade and commerce and social issues where government should also be sharing in international forums the progressive engineering knowledge, for and with the public. Telstra privatized locks Australia out of government involvement in these High Tech issues. (The space program now uses the sophisticated internationally engineered telecommunications, television and internet active multi media software that Australia refuses to support! It is far cheaper and far more efficient than the space program's private efforts.)

Channels used for analogue TV are like pipes with taps always on., constant flow of energy, energy describing the TV program and the transport system, constant flow through pipes. With digital, the transport system is a transport system in the channel, in each channel. The program is not. For instance a still picture displayed on a TV screen needs only 1/50th of a second of transport time, the picture remains on the TV screen while the electronic highway is empty of traffic. This channel could be used at any time to transport several other programs or services even from some other supplier, up to the traffic limits of the electronic highway's transport system!

Telstra a business? Telstra is a public institution to provide to the public the most efficient public highways and public transport system for electronic goods and services. Telstra, by becoming a PayTV operator by default, a decision by the Telstra Board under the influence of News Ltd, has become a “media” business. It should be a world class engineering institution! This destroyed, has been the means for a media cartel to destroy competition in TV on cable. Phones, TV receivers, music, DVD's, Free and PayTV, advertising companies etc, are the commercial businesses that should be confined to open and competitive markets, via retail stores, broadcasters, publishers etc etc. Telstra was built to support, interconnecting routes between people, like roads and rail, for all markets and all social needs. Telstra should not be involved in any commercial activities. Telstra should not be a partner with News Ltd. Telstra should not be competing with markets that it was built to support! Telstra should not have competition. Its prime objectives are to support industry and commerce, their access to all markets, to achieve for industry and commerce the optimum in competitive and open markets and to support public and private social needs. **“Competition” in**

telecommunications is a powerful media program of distortions, extravagant and powerful claims without any examples of proof, a program against open markets, fair trade and efficient use of capital, distortion of the worst kind that the ACCC and Australian regulations still support!

Chart “Decline of Public authority over spectrum”: (private control of the public’s electronic local, national and international electronic highways (the electromagnetic spectrum, one of nature’s special gifts to mankind). As an integrated system, convergence of telecommunication with television and inter active multi media, essential for vastly more efficient applications re knowledge and information dispersion, public and private industrial and commercial communications and information interchange. This once was the responsibility of democratic governments. Private control of the public cable has already destroyed a decade of opportunity for Australians. Privatisation is extreme power for one private Media Company, extreme expectations that the public must have complete trust in a private media operator over the nation’s nerve system!
Adopting international engineering practices under government authority can easily and quickly reverse this damage (2 – 3 years).



The Trend in Australia: Public Monopoly on Knowledge dispersion and access to communications systems replaced by private control of information dispersion and private control on private and public information distribution, and private control on public’s access to electronic transport systems. Telecom Australia was originally established to support trade and commerce and essential and personal social needs. Now, the ratio of commercial media use of spectrum to public’s social industrial and economic uses now exceeds 50:1. And now with no mentioned in Senator Coonan’s ABC address, other than media objectives, no allocation to local, national and international needs of industries, economic services, administration and social needs (education, training and public information from government - far more democratic needs than “advertising”. Telstra has been abused to become a commercial activity that has social constraints on public issues, a tool for the commercial objectives of one private media company.. This has to be a steep decline in democracy and social justice and fair trade re the commitments of the electromagnetic spectrum!