

## **New Technology and the Universal Service Obligation in Australia: Drifting towards Exclusion?**

By Mike Kent

The ability for citizens to communicate with each other and the state is an enduring foundation of democracy. In a country such as Australia, with its relatively sparse and widely dispersed population, the ability to link the citizenship remotely through technology facilitated the development of nationalist ideologies when the separated colonies united at the time of Federation in 1901. The Universal Service Obligation is the mechanism that ensures that every Australian is linked through the telephone network, and potentially through the Internet. However the system is not without its flaws. There are serious implications for those who fall outside this 'universal' ability to communicate.

This article tracks the development of the Universal Service Obligation: the mechanism through which the Australian Government requires telecommunications companies – primarily Telstra – to provide a minimum level of telephone service to all Australians. Exactly what constitutes that basic service, how, and at what level it is provided is a subject of debate that centres on how the words *universal*, *service* and *obligation* are interpreted and defined. The colonial past provides the framework for the current debates about the rollout of new telecommunications infrastructure. The development of telecommunications in Australia and the role of government in that development have changed significantly over time, from the Postmaster-General's Department as a government department through the deregulation of the telecommunications sector and the privatisation of Telstra. The history of language and ideology of access to the telecommunication network informs its present positioning.

On February 6, 2002, ten-year-old Sam Boulding died when he suffered an asthma attack while at his home, an isolated property in Kergunya in northeast Victoria. His mother Rose Boulding who is blind was unable to call for help because her phone was not working despite having travelled to a public payphone to ask Telstra to repair it

ten days earlier.<sup>1</sup> Her partner ran to a neighbouring property to call for an ambulance, and they eventually drove to a nearby post office to again call for help and meet the ambulance after the child had collapsed. Telstra admitted that it had failed to fix her broken phone line in a timely manner despite her request that they do so (which she was only able to make with considerable effort by travelling to a public telephone in a nearby town).<sup>2</sup>

This case is a tragedy but it does highlight important arguments about telecommunications service in Australia, and specifically what is considered a level of acceptable service. Access to essential services is made through the telephone. In this case the 'essential' service was not just an ambulance, although this was the most crucial, but also not without some sense of irony, a telephone was needed to report a fault in the telephone service. This access via the phone to these services is of greater importance in rural areas where there are fewer alternative forms of access to services that are provided through the telephone network,<sup>3</sup> and fewer alternate locations to source access to the telephone network, such as public telephones.<sup>4</sup>

The fact that the family eventually travelled to a post office to access a telephone and to meet the ambulance also serves to illustrate the role of building and institution as both a point of access to public services, and also its historic link to telecommunications in Australia. Rose Boulding's disability also highlights questions of access to the telephone network for those with disabilities and whose responsibility it is to provide these services. Finally, the perceived role of Telstra, a private company, albeit at that stage still half owned by the Australian Government, to provide telephone services to the Boulding family, and their failure to provide timely repairs raises the question of who bears social and economic responsibility for access to the telephone network in Australia and how services are delivered.

Five years later Telstra Corporation, the company that did not live up to the communities expectations in 2002, has just had its final shares transferred out of the control of the Australian Government and into the Northern Trust managed Future Fund,<sup>5</sup> as its transformation from a publicly held asset to a fully independent private entity is completed. Some of the consequences of this are already highly visible in the increasingly acrimonious relationship between the government and the company's

management,<sup>6</sup> as the corporation looks to put profit before any notion of public service, a not unreasonable position for an entity that exists to generate a return for its shareholders. The level of public service provided by the Australian telecommunications network is now, more than ever, dependent on competent government regulation.

At the same time previously separate areas of communications are beginning to converge digitally online. Government mediation of this ‘old media delivered in new ways’ is struggling to adapt to this new environment and the scope of what is derived through the telecommunications network. The telecommunications infrastructure that has until this point been used to deliver the Internet to households in Australia, is starting to reach the limits of its potential bandwidth. Both major political parties in Australia – leading into the federal election due later this year – have policies to promote the rollout of the telecommunications systems that will replace the existing copper wires first installed when telecommunications was still a public utility. The high level of geographic dispersion of the population in Australia creates distinctive problems for the rollout of any new infrastructure. While at the same time, both the greater number and quality of services potentially enabled through this network and the potential loss through exclusion to that network, is growing at a rapid rate.

New services require new types of regulation, if the objectives of the Universal Service Obligation are to be met. Whereas in the past these objectives were seen as an implied mission of nationally owned telecommunications carriers, in the new deregulated and privately owned Australian environment there is no such mission. Telstra Corporation has already announced that it does not consider its new 3G service designed to provide access to telephony, fax services and broadband Internet to its rural customers, to fall under its universal service obligations.<sup>7</sup> As such the fact that emergency calls on the 000 number will not be available soon after a power outage occurs is not considered a critical problem, or at least not one that breaches its legal obligation.

A relatively sparse population spread over a large geographic area is a particularly challenging environment for telecommunications services in Australia, especially with regard to maintaining services to remote and isolated small communities, as opposed

to the populous centres around the cities of the country's eastern seaboard. Many of these communities would be difficult if not impossible to provide communications services to without some form of government intervention. There are insufficient economic drivers for services to be delivered profitably or affordably. Some kind of intervention beyond market forces will need to be applied if telecommunications services are to be made available. The USO has, in the past, been the mechanism that provides this impetus.

### **Telecommunications Provision and Regulation in Australia.**

The first telephone exchange in Australia was opened in Melbourne in 1880 with 23 subscribers. This was taken over by the Victorian Government in 1887, at which time it had more than 1000 subscribers. In 1901, the first year of Federation, the new Australian Government passed the Post and Telegraph Bill 1901. In this Bill, telephony was made the responsibility of the Postmaster-General's Department (PGD).<sup>8</sup> At Federation the national telephone system had a total of 33000 subscribers.<sup>9</sup> Today there are over 10 million landline telephone subscribers,<sup>10</sup> as well as more than 19 million mobile telephone subscriptions.<sup>11</sup> While there was no mention of any form of Universal Service Obligation in the Post and Telegraph Bill, the formation of the PGD prompted debate on this issue. Postmaster-General James Drake favoured a commercial approach, however others argued for better 'services to the bush'. With the excess cost paid for from consolidated revenue.<sup>12</sup> While the Postmaster-General's position prevailed, the subsequent spread of telecommunications across the country – particularly to rural and remote areas, rather than just the more profitable urban areas – indicates that some form of geographical universal service was an implied mission of the PGD.<sup>13</sup>

In 1975, the PGD was disbanded and the Australian Telecommunications Commission – trading as Telecom – was formed with the *Telecommunications Act 1975*. Telecom was given responsibility for domestic telecommunications services. While there was no explicit obligation under the universal service banner placed on this new entity, the Act specified that Telecom would:

Best meet the social, industrial, and commercial needs of the Australian people for telecommunications, and shall, so far as it is, in its opinion,

reasonably and practicable to do so, make its telecommunications services available throughout Australia for all people who reasonably require those services – section 6 (1).

The special needs for telecommunications services for Australian people who reside or carry on business outside the cities (section 6 (2) (b) iii).<sup>14</sup>

The newly independent statutory authority, taking over the role of telecommunications provider from the previous government department, was then free to determine its own priorities for providing access to telecommunications services to meet the needs of the Australian people.

In the late 1980s the *Australian Telecommunications Corporations Act* (ATC) 1989 obliged Telecom to provide ‘standard telephone service’ to all Australians on an equitable basis wherever they lived or carried on a business. While this was not a dramatic change to existing practice, the Act began the more specific codification of telecommunications obligations expected from the service provider. At the same time it potentially narrowed the level and scope of services that were necessary and essential to be provided and accessed by all people. While the obligation was now officially in place for all Australians to have this access – which had not previously been explicitly stated – the network was now more tightly defined. Previously the type of network had not been specified. It was now codified in terms of the standard telephone service.

In 1990, the judiciary made its debut in the development of the USO in Australia. The plaintiff in the Yarmirr case, resided upon by the Federal Court, was a group of individuals who asked the court to enforce provisions of the Universal Service Obligation. In the *Yarmirr et al v Australian Telecommunications Corporation* (1990), Justice Burchett found that the Universal Service Obligation was a ‘political duty’ of ‘general and indefinite character’ imposed by the Parliament, rather than a ‘right’ of the public, and as such the court was unable to enforce any requirements.<sup>15</sup> There was according to this ruling no ‘right’ to these services for individual citizens or organisations outside the legislated framework.

The *Telecommunications Act* 1991 introduced competition into the Australian telecommunications industry. A duopoly was fashioned in the telecommunications

market with the introduction of Cable and Wireless, trading as Optus. At this time the Universal Service Obligation was defined specifically as access to the standard telephone service comprising both private lines and payphones. This Act placed the USO in the licence conditions of the telecommunications companies. The social welfare responsibilities of telecommunications were separated out from the USO, and were to be paid out of consolidated revenue.<sup>16</sup> This moved the burden of funding for the USO directly to the increasingly privatised telecommunications industry, and once again tightened the definition of what the USO constituted and what it did not.

On 1 July 1995 Telstra became the domestic trading name of what had previously been Telecom.<sup>17</sup> This was ostensibly done to prepare the industry for greater competition. It was argued that a new name would not cause confusion with other operators. The decision may also have been influenced by political factors: distancing the organisation from the previous statutory authority (at least in name and public identity) would make it easier to privatise the company.

Prior to the name change in June 1995, there was an additional change to the way that the Universal Service Obligation was delivered. Rather than coming from legislation dealing specifically with telecommunications, it came from a Human Rights and Equal Opportunity Commission (HREOC) ruling on Telstra's compliance with its USO responsibilities under the *Disability Discrimination Act 1992*. The HREOC ruled in the case of *Scott and Disabled People's International (Australia) (DPI (A)) V Telstra* that Telstra must provide teletypewriters to deaf people as part of its commitments under the Universal Service Obligation, as outlined in the *Telecommunications Act 1991*. This was an important interpretation of the telecommunications legislation made in conjunction with the *Disability Discrimination Act, 1992* which determined that Telstra's responsibilities were broader than the corporation's prior interpretation of standard telephone service provision. The courts having determined earlier in the decade that there was no 'right' to Universal Service now determined once again the primacy of the legislature in this area. Under this ruling the USO became more expansive, although ironically and concurrently, more tightly defined.

In July 1997, the telecommunications market was further deregulated when open competition was permitted in the sector. New providers were subject to the regulation of the Australian Communications Authority (ACA) and conditions of their operators licence. In November of this same year, the government sold 33.3% of its shareholding in Telstra through a public listing. In September 1999 a further 16.6% of the Commonwealth's initial ownership was sold. These sales, T1 and T2 as they were known respectively, attracted a large number of small investors who acquired shares for the first time. While T1 was a great success for those involved, T2 was less so.<sup>18</sup> The final instalment of shares sold to market, T3 was completed in late 2006, and the remaining 17% of the corporation was transferred into the governments independently managed Future Fund in February 2007.

The sale had a number of important implications. Firstly the corporation now had a fiducial duty to its shareholders to generate a return on investment that would now take precedence over its duty to serve the citizens of Australia who had previously been the sole owners. Therefore any social obligation the organisation might have possessed within its mission would now require legislation to enforce. The company directors were bound by corporations' law to generate a return for investors. In addition to this, the sale of shares, especially through T1 and T2 were specifically targeted to be sold as small parcels of shares to numerous investors who were first time share buyers. These shareholders now form a large group within the electorate who will be directly affected by any changes to government policy that would impact on Telstra's share price. This reflected a change in the government's conception of citizens and citizenship which was reflected on both sides of Australian politics. The conceptualisation of the 'share-holding citizen,' holding their stake in the nation's wealth as individuals through share ownership in large institutions, came to replace the previous citizen who participated in collective management of government assets through public ownership and control. The potential for excluding individuals from this corporate view of 'citizenship' is obvious. This re-conception also serves to align the interests and wealth of these share-holding citizens, with the profitability of large public companies, and through them the wealth of the economic elite in Australian society. The balance shifted between rights and responsibilities.

In 1999 while the sale of Telstra was proceeding, the Consumer Protection and Service Act 1999 was passed by Federal Parliament. This legislation once again defined the Universal Service Obligation and outlined how fees to meet this obligation would be paid by telecommunications providers in Australia. The new act outlined the plan to divide Australia into different areas for Universal Service provision. The delivery of services to these areas would be subject to tender from competing companies. The winner would then become eligible for the USO subsidy for that particular area.

Telecommunications began in Australia as a public utility. This seems appropriate due to the nature of the Australian environment of a widely dispersed and relatively small population that would require considerable investment, of limited return, to connect remote communities to each other, and the rest of the country through a common network. This is a situation that is unlikely to have been expedited by private investment, given the marginal economic nature of providing service to remote, small and isolated communities. From this situation, the government-run department became a statutory authority, and then a government-owned corporation. This was then privatised, while at the same time losing its position as the monopoly operator in this sector in Australia. A certain level of competition within this sector has been shown to produce good outcomes for consumers in other OECD countries.<sup>19</sup> The privatisation of Telstra changed the corporation's focus to the 'duty to shareholders', replacing its previous 'duty to the citizens'. Ultimately it would seem that the debate in the PGD has been determined, with telecommunications in Australia operated as a business, rather than a public service. The Universal Service Obligation, that was previously inherit in the role of the government department, is now enforced on private operators through an industry specific tax that funds the cross subsidisation from more profitable services to areas where the competitive market would not be able to provide service. In this context, the USO is a mechanism designed to maintain the status quo, to maintain, but not improve the existing level of service. How such a process can be altered to meet with the requirements of new technology and services remains to be seen.

### **Changing Definitions. Shifting Paradigms.**

Previous ideologies leave a residue in present institutions. Whatever is set in place at the origin of a discourse or framework is difficult to displace, particularly when institutions are formed on this foundation. When a discourse is established, at that point, the boundaries of that discourse will serve to limit the modes and types of expression that can be used within that discourse. Those who first establish the framework then determine the grammar or rules and limitations of the debate. In the case of the USO there are some added twists to this concept. This is due to the changing nature of the discourse, with different ideologies being introduced over time that are able to better stake out their position as the organisations in which they manifest change, or more accurately are replaced by new types of institution. While a trace of each incarnation of the telecommunications provider in Australia can be seen to have continuing influence, it has also been subject to greater change than might otherwise have been the case by the dramatic changes in the underlying administrative and chartered structure of the provider of this service from government department, through to competing private companies in the deregulated marketplace.

There has been considerable debate within Australia about the changing nature of the USO, particularly leading up to the full privatization of Telstra, and concurrent debate around the development of national infrastructure able to deliver high bandwidth Internet access. Debates have revolved around the major changes to the structure and regulation of the telecommunications environment in Australia over the past century. The definition and evolution of the terms 'Universal' and 'Service' are central to these considerations. Meanings will change over time.<sup>20</sup> However it is important to also focus on the nature of 'Obligation.' How the meaning and understanding of this word can be seen to change over time is fundamental to tracking changes in the USO in Australia.

The Universal Service Obligation changes and technology transforms. Such a statement is not technologically determinist, but a recognition of how expectations of expected services change, along with the role of government in providing these services. Arguments could be postulated that the Universal Service Obligation is being met by each city having access to a single pay phone provided by a private company and unfretted market forces left to determine on the cost to users. At the

other extreme, the USO could be determined as each person in the country having their own third generation mobile phone with universal coverage, high bandwidth Internet access, and operating with no charge, or more accurately the government paying as a public service from consolidated revenue. Within current definition of the USO, geography – rather than technology – is the dominant factor of consideration. However there are other considerations that can also be seen as an impediment to telephone access, including economic and social factors, physical disabilities, such as blindness or deafness that may impede accessing a normal telephone and may require additional equipment, and finally what telephony is actually used for by its consumers/citizens. To illustrate these issues better it is useful to separate the analysis of the changing nature of each aspect of the USO.

### **Service**

Of the three components of the USO, the changes that have occurred to the meaning of ‘service’ are the most obvious and easiest to track. As new technology develops and others are rendered obsolete, what people expect, and need from telecommunications services will change. Thus ‘Service’ may move from an initial telegraph service to access to a dial tone and a limited quality voice line, through to high bandwidth data transmission. All can be viewed as service at some level. The minimum standard of service accessible to all will change as the demand for, and uses of, telephony and communications services changes.

These changes impact on two areas. As technology develops, previous systems become redundant and unsupported. There is no point in maintaining a national telegraph system when the technology has been superseded both in terms of sophistication of service and simplicity of use. More importantly, as that communication format is no longer supported throughout the world such a network would be obsolete. At the other end of this spectrum, new technologies are developed. However not everything that is devised will necessarily be developed to the point where it is available to the public at large. New technologies may require government support or regulation before they are implemented. Within Australia, both pay and digital television are examples of technology that was only available after development of, and changes in, government policy.<sup>21</sup>

When new services become available, they are generally offered as a non-essential service with distribution limited by economics and geography.<sup>22</sup> Over time, some of these services come to be considered universally available, and access to them is assumed for people who participate as full members of society. At this point one medium may be used by government to communicate messages to all their citizens, such as television and radio, with other technologies utilised for the citizens to communicate back, such as voice telephony. In addition, the government can be seen to have a responsibility to provide these services, or more specifically to ensure that all citizens have the ability to access this level of service so as to be able to fully participate in society. The use of services on the Internet by both major political parties leading up to the current federal election, particularly the use of you tube to announce government policies and decisions,<sup>23</sup> point to the Internet as a service that has now entered this realm.

With broadcast systems such as TV and radio, the government actively regulates the organisations that are responsible for broadcast and ensures that signals are available in remoter areas, and regulates the content that is available through those broadcasts.<sup>24</sup> The government does not provide access to the reception devices, television and radio sets. Within the voice telephone network however, partly because it is a network of individual nodes on a closed network rather than a radio wave broadcast system, the government legislation does allow for the provision of equipment to access the network, as well as the network itself.<sup>25</sup> Interestingly, government regulation of the Internet in Australia treats the medium far more like a broadcast system with a focus on content and geographic access, rather than a guarantee of access to the network.

Determining the level of communications technology needed to be a full participant in society, and thereby requiring government intervention, is necessarily a political decision, influenced by a particular view of what equitable membership of society entails. If the government does not act to provide access to an appropriate level of service then those who do not have this will become excluded from society, or non-citizens, as they are unable to meet the minimum requirement for citizenship. The definition of access to what type of service is required for this requisite level of participation is one that by its very nature will change over time.

The definition of service in relation to the USO has become more tightly defined over time. The initial PGD had no explicit type of technology or line quality it was mandated to deliver. Rather it was charged with the overreaching responsibility for the postal, telegraph and telephone network. As telecommunications regulation and provision and the USO have developed, this broad responsibility was narrowed further towards a standard voice line, either at a public payphone or at a place of residence or business. Parallel to this change in definition of what was an acceptable level of service was the change in the nature of the provision of the service from a broad obligation to be provided, through to a cost to be paid for other agencies to deliver a specific product. This has also paralleled the change in the language of the debate from one where there was a public service approach to users, or citizens, to one of a market of consumers for telecommunications products.

This tighter definition has come into conflict with a broad range of new data and mobile telephony, both Internet mediated and other propriety networks. This is the friction point of when these new services may be seen as essential to participate in society, and thus create a role for, and obligation on, government to act to ensure that access to these services is adequately distributed. This 'new wave' of data and mobile telephony is at odds with the trend to a tighter definition of what service should be.

Can the current communications policy discourse cope with changing nature of service beyond voice telephony? The last 'big shift' in dominant telecommunication platforms from telegraph to telephone services happened prior to USO in an environment where the role of the PGD was widely interpreted. The government to date is treating the Internet similar to broadcast media. It regulates content, but not access. Is this an appropriate paradigm, and – if not – how could it be changed?

### **Universal**

The notion of what is 'Universal' in regard to the USO changes in the different contexts of both services and obligation. Within Australia, access to the standard telephone service is guaranteed regardless of location, however this guarantee is dependant on your 'location' being at home or at work, both of which are tightly defined in Telstra's policy documents that respond to its Universal Service

Obligations<sup>26</sup> and in many cases will be satisfied by a single shared pay phone to service entire remote Indigenous communities.

Prior to Federation in 1901, one of the areas of close inter-colonial cooperation had been in the telecommunications sector. As early as 1856, Victoria, New South Wales and South Australia had agreed to cooperate on an inter-colonial telegraph system and from the 1890s their were bi-annual post and telegraph or P&T meetings attended by the relevant politicians and public servants from all the Australian colonies, and New Zealand.<sup>27</sup> However while the delivery of telecommunications services was clearly an important priority in Australia after European colonisation the services provided would not meet any current definition of universal. All the colonies were eventually linked through the telegraphy system both to each other and then to the international network. The fact that this could be considered a form of universal coverage for the colonies (albeit to only the major population centres), serves to illustrate how the term is subject to change over time.

The Postmaster-General's Department took over the role played by the separate colonial administrations and while it had no chartered obligation to provide universal service, it is clear that it became part of its implicit mission to broaden the reach of telecommunications services across the continent. In 1975, Telecom was given the more explicit mission to 'make its telecommunications services available throughout Australia for all people who reasonably require those services'. In the Telecommunications Act 1989 this obligation became one where all Australians were to have equitable access to the standard telephone service, at least at their place of residence and business. This was essentially a 'geographic' guarantee to a phone connection, with little regard for other areas of exclusion. In 1991, new legislation determined that payment for this Universal coverage would come from the telecommunications companies as part of their licence conditions. In 1995 The Human Rights and Equal Opportunity Commission ruling determined that there was more than just a geographic component to the Universal aspect of the USO with its ruling that special services for people with disabilities were also required to be delivered. The Telecommunications (Universal Service Levy) Act 1997 further defined how the now open telecommunications industry would fund the USO, and began the introduction of potential competition into the provision of these services.

As the service component of the USO has become more tightly defined, so too has the notion of what is considered universal, along with who is responsible for the funding for, and actual provision of, this service. Universal within the Australian USO context tends to focus on the geographic delivery of services to people, albeit with the inclusion of special access conditions for disabled telecommunications users. However not all people in Australia who want access to a phone line maintain this service. This is in part due to the USO being covered by the provision of public telephones, but also points to the fact that there is more to providing universal coverage than just the geographic aspect. While the historical perspective shows that for the PGD this may have been a major issue early on in the development of Australia's telecommunications industry, it is not the only factor that will influence people's ability to access the network. This is particularly important given the role that telecommunications plays in creating informed citizens. As technology becomes more sophisticated, and the ability to deliver this technology expands, then the demand for what is universally available will also change. What is Universal is ultimately inseparable from what is Service, however the level of sophistication of telecommunications delivered, how they are delivered, and by whom will depend on the changing understanding of Obligation.

### **Obligation**

Service is becoming more narrowly defined, and provision of these services (who provides it, how much it costs) is being made more explicit. These are the trends in change to the understanding of Service and Universal. They can be best understood through the changing nature of Obligation in the USO. In many analyses, this is omitted. Indeed, Obligation often not included in the label.

In Australia, the USO becomes more tightly defined each time it is reinterpreted and reapplied. The role of the government has moved from one where it was the provider of these services to one where its role is to regulate these services as they are both provided and funded from the telecommunications industry. This can be understood as a change in the type of public good that government is using to inform its telecommunications policy. In 1739, David Hume outlined the concept of public goods in his *Treatise of Human Nature*.<sup>28</sup> A traditional public good should have the

quality that it is both non-excludable and non-exhaustible. An individual cannot be prevented from using a public good, and each additional individual accessing a public good will not add to the total cost of providing that good. Common examples of public goods are national defence and the environment. In both these cases the public good will effect all the people using it within the Nation State, ether by having a military to ward off attack, or clean air to breath, and by and large each additional individual partaking of the good will not add to its overall cost.

Telecommunications was initially seen as a public good that was provided by government for the benefit of all. Such an open-ended deployment and definition reveals synergies with the defence of the country. The provision of services need not be tightly defined in this case, as the commitment is to an extent both open ended, and likely to change over time as technology develops. It also allows the government to regulate the provision of this type of 'good' in changing environments as it sees fit, to serve the interests of the nation at large. Thus the Royal Australian Navy can be used to turn back asylum seekers on the high seas, even though this is not the role for which it is constituted. Understanding telecommunications in this way also helps inform why the USO has been so geographically grounded. This is a reflection of the desire for everyone to have access to the network and fulfil the non-exclusion requirement of the public good. As it is provided by government this becomes a central feature of a successful outcome. Similarly, the defence forces are designed to defend all Australian territory, not just the easily defended areas of mainland Australia.

Government policy in relation to telecommunications over time has shifted. Earlier understandings of a good to be provided by government has transformed into a public good that must be regulated by the government, more analogous to the environment. This new understanding then relies upon a number of assumptions, the foremost of these is that these services are abundant or at least available everywhere. This premise is obviously not always the case as the Boulding family tragically illustrated.

The USO is now used as the mechanism that is supposed to make up for these areas where the resource is not so abundant as to only require regulation rather than provision. The other problematic assumption with this understanding of the

telecommunications industry is that the technology does not change and is like the environment, a relatively static resource for government regulation.

The technology does change, and these changes can create different problems for access especially once they are established to the point where access can be seen to be essential to participate as an active member of society. In this aspect telecommunications services are still analogous to the changing nature of national defence as a public good both in terms of what technology is required and the changing environment in which it is applied. The failure of this understanding of telecommunications as a 'regulated' public good is not immediately apparent, as it takes time for any technology to reach the point where universal access to the service will be essential for full participation in society, however once it does reach this point this understanding will make the process of change difficult to administer.

This second type of regulated public good is much better suited to the neo-liberal small government ideology that informs the Howard Liberal/National government in Australia with its commitment to 'small government', than the previous understanding. Public goods that are government provided must be paid for out of consolidated revenues through taxation, whereas regulated public goods are largely revenue neutral, and may actually produce revenue through taxation and fines used as part of any regulatory regime. Once the obligation of government in relation to the USO is seen as one where it acts as a regulator, rather than provider, then there are obvious gaps that will appear in the areas that can be regulated, where no service currently exists, or will exist. It then becomes the role of the USO to be the mechanism that 'fills' these gaps, where the government pays for the service to be provided where it would not otherwise appear. This is different from the government providing the service itself, as it now becomes a package of telecommunications products that must be purchased and paid for from private companies with no open ended commitment to the citizens that the government serves, thus the products deemed essential must be tightly codified.

### **Home, Hearth, and Fibre to The Node?**

The convergence of communications and media through the Internet is particularly significant in relation to the USO as a mechanism for 'filling the gaps' in an otherwise

universally distributed resource that merely requires government regulation, rather than provision. The USO is limited by the role of historic discourse and residual ideologies from understanding or embracing these convergent media or technologies. Thus the idea of ‘future proofing’ telecommunications in regional Australia<sup>29</sup> is impeded by discourse that fails to understand the scope of the field it is dealing with currently, let alone into the future. As a mechanism designed to provide service to those who need it and would otherwise miss out, the USO, as it is currently constituted, will be the only service that these people most at risk will receive. The more tightly defined USO means that as potential services (those that fall outside this tight definition) increase, then those who rely on the USO for their telecommunications needs will necessarily be left behind. The more ambiguous the definition of the USO, the greater the reach it will have. The reverse of this maxim is also true. Finding a way to expand this discourse to confront this convergence of services in the future thus takes on a priority. If every new media is legislated on the basis of the mistakes made in the previous media, as is most often the case, then this task is made more difficult.

All technology is transitory technology. All technology is liminal, and all liminal sites are ambiguous. It is a fallacious notion that any technology is an end point, or an end game for public policy. The last major upgrade to service from the public telegraph to the private telephone took place when both forms of telecommunications were public goods provided through government via the Postmaster-General’s Department.

Both major political parties in Australia have policies regarding the future of high bandwidth Internet access for Australia. The government initially resisted any form of intervention, preferring instead market forces to produce such a network.<sup>30</sup> By contrast labour proposed to spend A\$4.7 billion, partly funded from the money generated from the government’s previous sale of Telstra shares, and currently in the Future Fund, in a joint venture with private enterprise to produce a A\$9 billion high speed broadband network that would cover 98% of the population. The government has since responded by proposing a A\$2 billion plan to provide 99% of Australians with broadband access including the use of wireless networks to cover regional areas, notably this investment involved the government working with a consortium of smaller communications companies rather than with Telstra.<sup>31</sup> Meanwhile Telstra has

announced that it has put plans to invest in its own A\$4 billion network indefinitely on hold until it gets a more favourable regulatory environment to enable it to protect its new network from being forced to provide access to its competitors, as currently occurs with the copper wire telephone network.<sup>32</sup>

It seems that all involved share the understanding that any future telecommunications network will be constructed by private companies, although understandings of the type of network, how much, if any, government subsidies it will receive and the regulatory requirements associated with any new network vary between different participants in the debate. Significantly there seems to be no commitment to provide 'universal access', simply better access, and no linkage between these debates and the USO. While the understanding of Service has evolved with the new network, understandings of Universal have retreated, and those of Obligation are in dispute. How any new network is constructed and regulated is an issue of critical national importance.

On one level, the greater the penetration of access, the better the marketplace for buyers and sellers enabled through that medium, and the less potential for market distortions. To live in a consumer culture, the ability to consume is an important part of participation in society. Thus to be able to use the telecommunications system to allow for access to goods, and service, and indeed to consume the access itself is necessary in order to be a 'citizen' of a consumer society. As Lee articulated, 'Cultural capital must be seen through consumption'.<sup>33</sup> However on a more fundamental level the USO provides citizens access to their government, particularly in countries like Australia with its high levels of geographic isolation. This access provides an avenue to government services, fellow citizens, and critical emergency services. Access to telecommunications is inexorably linked to citizenship. As the new network is rolled out in whatever form it takes its construction and regulation will need to be carefully crafted to ensure there are no more tragedies like Sam Boulding, and avoid the risk of drifting to exclusion for those left outside of access.

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1 AAP. 'Fed: Switkowski promises on boy's death are just "platitudes": union', AAP. 14<sup>th</sup> March 2002.

2 Price Waterhouse Coopers, *Report to Telstra Corporation Limited on improvements required to the provision of priority service based on an examination of the facts surrounding the maintenance and supply of services to Ms Rose Boulding*. March 2002.

3 Examples include banking services, access government services and information.

4 Katter, B. 'There's no way a privatised Telstra will maintain services to remote areas', *Online Opinion*. 21<sup>st</sup> July 2003.

<http://www.onlineopinion.com.au/view.asp?article=560> [accessed 12.8.2007].

5 The Australian Government has set aside the Future Fund in order to cover the future costs associated with the government's obligations to pay superannuation for retired public servants.

6 Best, J. 'Telstra: Govt broadband 'all about money and labor'', ZDNet. Australia. 20<sup>th</sup> August 2007. <http://www.zdnet.com.au/news/communications/soa/Telstra-Govt-broadband-all-about-money-and-Labor-/0,130061791,339281330,00.htm> [accessed 20.8.2007];

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<http://www.theaustralian.news.com.au/story/0,20867,21657209-601,00.html> [accessed 20.8.2007].

7 Lewis, D. 'Telstra pulls 000 plug on bush', *The Sydney Morning Herald*. August 11<sup>th</sup> 2007.

8 The Federal Government is granted the power to make laws with respect to "Postal, telegraphic, telephonic, and other like services" in section 51 (v.) of the Australian Constitution.

9 Perth, the capital of Western Australia, would still not join the national network until the end of 1930, ironically as John Forrest the first Australian Postmaster-General was a Western Australian and former premier of that state (although he only held the position for two month before moving to defence following the death of James Dickson just two weeks into the inaugural administration, which given Forrest's strong views against the federalisation of communications services in the first place, may have ultimately aided the development of the national network).

10 *Telstra's Universal Service Obligation Standard Marketing Plan*.

[http://www.acma.gov.au/webwr/telcomm/universal\\_service\\_regime/lr-378758%20uso%20policy%20statement%2024%20june%2005-%20clean%20version21.pdf](http://www.acma.gov.au/webwr/telcomm/universal_service_regime/lr-378758%20uso%20policy%20statement%2024%20june%2005-%20clean%20version21.pdf) [accessed 12.8.2007].

11 *Snapshot of Industry: The Australian Wireless Industry*. Invest Australia, Canberra: Commonwealth of Australian.

<http://www.investaustralia.gov.au/index.cfm?id=9A0C9842-D0B7-180C-16403701E984FDFB> [accessed 12.8.2007].

12 Moyal, A. *Clear Across Australia: A History of Telecommunications*. Melbourne: Nelson, 1984.

13 *Ibid*.

14 Bourk, M. *Universal Service? Telecommunications Policy in Australia and People with Disabilities*. <http://www.tomw.net.au/uso/laws.html> [accessed 12.8.2007].

15 Raiche, H. 'Universal Service in Australia', in B. Langtry (ed). *All Connected, Universal Service in Telecommunications*. Carlton: Melbourne University Press, 1998, p. 11.

16 The proponents of this approach some 90 years earlier at the inception of the Postmaster-General's Department finally having some of their proposed policy implemented.

17 Senate Environment, Recreation, Communications and The Arts Reference Committee, *Telstra, to Sell or Not to Sell*. Canberra: Australian Government, 1996.

18 Webb, R. 'T3: the \$600M call', *The Age*. 30<sup>th</sup> January 2005.

<http://www.theage.com.au/news/Business/T3-the-600m-call/2005/01/29/1106850157986.html> [accessed 12.8.2007].

19 Boylaud, O. & Nicoletti, G. *Regulation, Market Structure and Performance in Telecommunications. Economics Department Working Paper No. 237*. Paris: Organisation for Economic Co-operation and Development, 2000.

20 Bourke, M. J. *Universal Service? Telecommunications Policy in Australia and People with Disabilities*. Belconnen: Tomw Communications, 2000.

<http://www.tomw.net.au/uso/> [accessed 12.8.2007].

21 Although this example might better serve as a warning for how public policy can be hijacked by the industry it is meant to regulate, often with dubious outcomes for the public good.

22 Although when the analogue television signal, like the analogue mobile phone system before it is turned off, and enforces obsolescence on devices that rely on it, anyone wishing to have even the same level of service will be forced to upgrade.

23 Murphy, K. & Catalano, C. 'Surgical Strike', *The Age*. 2<sup>nd</sup> August 2007.

Howard, J. 'The Prime Minister John Howard's Tasmanian Hospital Announcement', *YouTube*. The Commonwealth of Australia 31<sup>st</sup> July 2007.

<http://www.youtube.com/watch?v=y1qU2nQ-1gY> [accessed 12.8.2007]; Cartrel, T.

'John Howard Asleep on Climate Change', *YouTube*. The Australian Labour Party, 16th July 2007.

<http://www.youtube.com/watch?v=IMnygl-VvYY&mode=related&search=> [accessed 12.8.2007]; Best, J. 'Rudd calls on Facebook mates in campaign', *ZDNet Australia*. 8<sup>th</sup> August 2007.

<http://www.zdnet.com.au/news/business/soa/Rudd-calls-on-Facebook-mates-in-campaign/0,139023166,339281021,00.htm> [accessed 12.8.2007]; 'Howard pushes message on YouTube – again', *Mercury*. 1<sup>st</sup> August 2007.

<http://www.news.com.au/mercury/story/0,22884,22170396-421,00.html> [accessed 12.8.2007].

24 This is primarily done through the Australian Broadcasting Authority

<http://www.aba.gov.au/>. There is no equivalent to the television licence fee in

Australia. See Dick, N. 'The Road to Television Networking', *Media International Australia, Incorporating Culture and Policy*. May 2001, number 99, pp. 67-71.

Green, L. '(Not) using the remote commercial television service to dispel distance in rural and remote Western Australia', *Media International Australia, Incorporating Culture and Policy*. August 1998, number 88, pp. 25-39.

25 Mobile phones that serve as an addition to the traditional phone network interestingly hold a position more like that of television and radio as the government invests and regulates to ensure greater coverage for their signal 'footprint', as well as regulating related content through anti SMS Spam legislation. At the same time there is no provision for guaranteeing access to this network for individuals.

26 *Telstra's Universal Service Obligation Standard Marketing Plan*.

[http://www.acma.gov.au/webwr/telcomm/universal\\_service\\_regime/lr-378758%20uso%20policy%20statement%2024%20june%2005-%20clean%20version21.pdf](http://www.acma.gov.au/webwr/telcomm/universal_service_regime/lr-378758%20uso%20policy%20statement%2024%20june%2005-%20clean%20version21.pdf) [accessed 12.8.2007].

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