

*This working paper has been produced for the inaugural conference of the Australian Communications Consumer Action Network (ACCAN). The paper is intended to generate debate and discussion on aspects of universal communications and will inform further work in this vital policy area.*

## Realising Universal Communications<sup>i</sup>

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### 1. Introduction

The right of consumers to fair, affordable and accessible communications is a key issue around the world. Despite great advances in communications, many Australian consumers do not enjoy access to the essential services required to participation in society.

This comes as a surprise, given that the dramatically changed nature of the communications and media environment overall in Australia, in which:

- 100% of the population is covered by fixed-phone services, which are used by 90% of households;
- mobile services at over 24 million people exceeds the population;
- there are 8.4 million Internet subscribers (including 7.3 million non-dial-up);
- 2.5 million people use voice over Internet (VoIP) protocol services at home. (2008-2009 figures, cited in AMCA, 2010)

Ensuring access to essential communications for all consumers has been an important priority for the Australian Communications Consumer Action Network (ACCAN), and, for a long time, for the wider consumer movement. Consumers are concerned that while major policies about the future of Australian communication infrastructures, services and content are being determined currently, there is no effective, comprehensive, updated framework for essential communications.

The universal service obligation is well out of date. The review of universal service commenced by the previous Liberal-National party coalition government in 2007 was not completed. For its part, the present Labor government has embarked on a highly significant and ambitious national broadband network (NBN) program. The evolving arrangements for the NBN now include a specific policy for the universal service obligation entailing a USO Co. However, in other key respects, the government has not clearly articulated how it wishes to address the ranges of pressing issues concerning universal service.

As a contribution to a much-needed debate on the characteristics and requirements of universal communications, this paper sets out some key consumer issues and questions in the current Australian policy moment. As such it aims to complement Holly Raiche's paper for the 2010 ACCAN conference, which discusses the universal service obligation and issues raised by the NBN (Raiche, 2010).



## 2 The Universal Service Obligation c.1990s: A Dead End?

In telecommunications the goal of achieving access for all to essential or necessary services has been termed 'universal service'. In her paper Holly Raiche sets out the background in Australian policy for the development of what became the 'universal service obligation' in the *Telecommunications Act 1991* (Raiche, 2010). Subsequently there were a range of policy developments and debates about the nature, breadth, and funding of universal service that saw important changes in the 1999 legislation, and a series of minor changes thereafter. A review of the universal service obligation was commenced by the Coalition government in 2007, but not completed (DCITA, 2007).

With the advent of the National Broadband Network, there have been a number of key documents which discuss aspects of the universal service obligation (Rudd & Conroy, 2009). On 20 June 2010, the Federal government announced its most specific initiative on the universal service obligation since it took office (Rudd, Tanner, & Conroy, 2010). This is the government's intention to establish a new entity, USO Co. The government means USO Co. to take responsibility for lion's share of the current universal service obligation. Thus Telstra would be relieved of responsibility for standard telephone services, payphones and emergency call handling from 1 July 2010. At one stroke, then, the government hopes to take the issue of the universal service obligation out of the negotiations with Telstra over its role in NBN. It also safeguards the universal service obligations, by ensuring in principle there is a structure and mechanism that can deliver these regardless of ultimate infrastructure and market outcomes.

The crucial details of USO Co. are sketchy at present, however this novel and ingenious idea poses many questions. From my perspective, the central limitation of USO Co. is that it appears to be structured around, and assume the premises of, the 1990s universal service. Simply put, USO Co. takes the current universal obligation, and provides a new institutional framework for delivering it.

The main weakness of USO Co. — at least on what information is currently available — is that it is another instance of the outdated and limited view of universal service represented by the current obligation.

The fundamental problem with the current universal service obligation as a way to capture and safeguard issues of citizen and consumer rights to communications is that it has been deliberately seen as a legacy, minimalist entitlement to voice telecommunications or its equivalent. Consequently both industry and government have been reluctant — for a host of reasons — to take it seriously as a contemporary and future-looking policy for consumer participation in a society where digital communication is key.

It appears that USO Co. (in its version 1 at least) also continues this minimalist view of what universal service should be.

Briefly, I would summarize the problem with the current universal service obligation (USO) as follows:

- the USO is too focussed on the essential service of the early 1990s, rather than the 2010s and beyond;
- the model underpinning the USO is based on voice telephony or its equivalent in data communications — not the necessary technologies in society today, and the infrastructures, capabilities, and content that underpin these;
- accessibility is only included in the USO in a very limited way (for people with disabilities, for instance, this occurred in the important 1999 reforms);



- affordability is cut off from the USO: the affordability aspects of universal service are cordoned off in limited government programs or out-dated licence conditions on one carrier (evidenced in Telstra's Low-Income Measures program);
- equality of service offerings is not adequately addressed: many consumers still receive services of far lesser quality and range than the majority of consumers (for instance, rural and remote consumers).

It is my argument that the universal service obligation has given little or no recognition to the kinds of services or principles that underpin essential communication services in Australia today, and in the future (Feijóo & Milne, 2008). These services and new facets of social and technical innovation include:

- access to high-speed broadband;
- the widespread use of Internet applications such as voice over Internet protocol, or video via the Internet;
- the emergence of mobile communications as the most widely used form of telecommunications;
- the fast rise of mobile and wireless broadband, and also mobile Internet, as important consumer services;
- accessibility of commonly used broadband, Internet and mobile services;
- existing and new affordability issues with a range of essential communication services;
- quality of service and standard service definition issues in mobiles, Internet and broadband issues.

In contrast, the USO is unhelpfully married to a policy framework predicated on a communications industry structure, that is an artefact of the 1990s. Namely the transition from a monopoly government carrier (now carrier of last resort — viz. Telstra) to a diverse market of carriers, service providers, services and consumer options.

As an OECD report suggests (albeit from a quite different philosophical perspective): 'In an NGN [Next Generation Network] environment where new technologies are competing, a question that arises is whether an approach towards universal service that was framed for a legacy network is still the appropriate policy?' (OECD, 2006). Relying upon the USO of the last century leads to all sorts of problems — of definition, market, policy and regulation, finance and industry contribution, real user needs and societal requirements — that are cast into stark relief by the Federal government's visionary plans for national broadband.

For these reasons, I suggest it is time to declare that the universal service obligation circa 1990 is dead. Further, as we bury the old universal service obligation it is a good time to say: long live universal communications.

No longer can consumers, industry, and government be content with an inadequate, out-of-date approach to essential service provision. Rather there is now the imperative — especially with the implementation of the national broadband network — to adopt a policy framework for realising universal communications in Australia for the twenty-first century.

It is the idea of universality of communications, in my view, upon which we should be focussing. It is this universal communications — belonging to the twenty-first century — that lies before us, to be articulated, debated, put into practice, and safeguarded.



The challenges we face in realising universal communications are profound. They include:

- the role of consumer choice in realizing universal communications;
- the need for policy on universal communications to apply equally to all market participants;
- a comprehensive framework that brings together and safeguards all important principles — universal availability, accessibility, affordability, access to new technologies and participation in society — as well as new principles such as mobility, and access to content, applications and ideas;
- adequate funding of universal communications by industry, rather than just by government.

The remainder of this working paper sets out some ideas and issues regarding this new, much-needed vision for consumers.

#### **4 Consumer Needs, Uses & Aspirations ('Demand') & the Infrastructures, Technologies & Services ('Supply')**

The lives, experiences, uses and aspirations of consumers are an important, and still often neglected, starting point for thinking about what is essential and universal service in communications. Steadily since the 1980s, there has been a recognition that universal service is complex and multi-faceted, and that greater consultation with consumers themselves, as well as much more detailed and rigorous research, is needed. Such knowledge is vital to provide evidence upon which policy can be based — and against which its implementation can be understood and gauged.

An assessment of what we know about essential, universal communications service in Australia is beyond the scope of this paper, but it seems to me that the principles articulated in the 1993 Consumers' Telecommunications Network report *Reforming Universal Service* are still fundamental (Wilson & Goggin, 1993). In 2010, I would slightly update and rephrase these as:

- availability
- accessibility
- affordability
- social inclusion and participation;
- access to essential new technologies.

There are one or two potentially new principles, or at least novel aspects, that are worth consideration. These include:

- *the role of content, and where it fits into policies of universal communications*; this a reprise of an old topic in debates on universal service, and also information society — but a new, urgent emphasis is ushered in with the role played by issues of intellectual property, copyright, and digital rights management;
- *affordable access and use of applications as well as platforms and technologies*; for instance, search is ubiquitously provided by the good offices of Google and competitors, but in the future other applications may arise that form part of essential services.

Such principles help to reframe universal communications 'to make it relevant to consumer usage and preferences' (CTN, 2007, p. 8). This provides deeper foundations for the 'demand' side of universal side to intersect with the 'supply-side'.



Of course, the relations between ‘demand’ and ‘supply’, consumers and production in digital communications are now very much enmeshed — as befits an era of where users play a vital role in generating their own media, and also in creating value for industry (ACCAN, 2009). This underlines the importance of generating a model for universal service that is embedded in today’s communications environment. The infrastructure that support communication services feature a mix of networks. Next-generation broadband networks are assuming a central role, because of the capacity of fibre-optic (Berkman, 2010). Mobile and wireless networks will deepen their importance also. Other kinds of networks will also come to the fore, with a range of sensing, mesh, radio-frequency identification, and other networks. Finally, there are the television and radio broadcasting network infrastructures, the continuing importance of which is highlighted by the policy discussions over the yield of the ‘digital dividend’ and the implications of broadcasting shifting to the NBN.

These network infrastructures are one important part of the environment that will shape our notions of essential services. There is also the burgeoning role played by devices themselves, and the move in intelligence, capability, and computer power to the ‘edges’ of the network. The rise of the smartphone is a recent example of this — with the Apple iPhone, for instance, providing a still relatively expensive (and at times inaccessible) but vibrant platform for user and developer innovation (Goggin, 2011).

Finally, services, applications, and content themselves are no longer things that are carried over, and simply use, the network infrastructure — allowing a simple division between ‘carriage’ and ‘content’. Rather, often these are closely bound up with, if not also constructing the networks — especially from the perspective of consumers.

## 5 A New Approach

Having briefly considered the consumer (‘demand’) and also the producer (‘supply’) side of universal communications, I will try to sketch the elements of a new approach.

For a long time, it has been evident that the old USO:

- in its definition fell a long way short of what a modern society required in terms of essential and universal service;
- neither comprehensively recognised nor met consumer needs and expectations;
- was very far removed from the contemporary telecommunications, convergent media and communications platforms of networks, technologies, and applications.

Over some years, Consumers’ Telecommunications Network (CTN — ACCAN’s predecessor organisation) documented and pointed out the shortcomings of the USO. CTN argued for an expanded understanding of what we mean by essential service and what should be provided to all universally, noting that ‘the USO needs to be reframed to make it relevant to consumer usage and preferences’ (CTN, 2007, p. 8). Since this time, there is growing concern that the situation has worsened, and that a profound gulf is opening up between ‘information haves’ and ‘information have-lesses’ (Qiu, 2009).

My contention is that we now need to recognise that the aim of universal service policy is to realise universal communication for all. To achieve this goal, the old USO does not suffice.

Further — and this is the real danger we face now — that we can neither adequately grasp nor deliver universal communications if policy is split between a fossilised USO, on the one hand, and a NBN environment which is dynamic but silent or unclear about universal service, on the other hand.

Thus, we need to bring all elements of universal communications into a comprehensive, clearly articulated and inter-related framework. For sake of debate, let me present six of these elements.



## **Broadband for All**

With its NBN plans the Federal government has explicitly suggested that broadband is an essential service in today's society. This is one powerful reason for taking broadband availability and access to be the benchmark and minimum standard for universal communications in Australia. This goal lies behind much of the analysis and discussion in the NBN Implementation study about the kinds of infrastructure, services, and providers that could be used, and at what cost, to widen access towards the 100 percent mark (McKinsey & Co & KPMG, 2010). We need a much more explicit, comprehensive and public debate, however, about such a goal, and how that such universal broadband might be achieved.

## **A New Deal on Affordability**

Under the regime of the old USO, affordability has been a very poor second cousin. This is odd, for many reasons — but especially because poverty and social exclusion is an area where there are so many innovative approaches burgeoning (Eardsley et al., 2009). So, it is worthwhile to consider:

- how to move beyond Telstra as an increasingly inappropriate 'carrier of last resort' where it comes to measures to provide services and programs for low-income consumers;
- a fundamental recasting of government welfare 'concessions' for poorer consumers;
- the need for serious funding from industry to at least match that the government puts into measures to address affordability issues;
- how to embrace mobiles as a technology rich in promise for creating options for low-income consumers.

If there are significant issues concerning affordability and telecommunications to date, the next-generation and broadband networks environments will raise even more issues. For all consumers to be able to benefit from broadband, it must be affordable. This raises the question of what mechanisms we deal to ensure affordability issues in broadband Internet are tackled in a comprehensive, thoroughgoing way. For instance, ACCAN has suggested that:

a broadband service at a reasonable price should be a universal right ... The NBN is a publicly funded initiative and it should serve community needs. The Government therefore has an obligation to work with retailers to deliver specific services for low income consumers and other classes of consumers for whom the market alone may not deliver adequate or appropriate services. (ACCAN, 2010, p. 4)

## **Accessibility is Always On**

The principle of accessibility of the standard telecommunications service, especially for people with disabilities, was recognised in Australian legislation in 1999. Since this time, there has been growing recognition of accessibility issues across communications. However, actual policy responses and programs remain fragmented and not sufficiently clearly articulated.

Hence I would argue that the accessibility principle should always be included in all communications services. Further that accessibility is a core principle of universal communications — and, as such, should be stated in whatever policy and mechanisms government creates in pursuit of this goal (whether core legislation, regulatory agencies, or new public-private entities such as NBN Co. and USO Co.)

Presently key issues of disability and accessibility are being pursued through the National Disability Strategy, and, with involvement both relevant ministers and their departments, through the Disability Equipment Fund feasibility study. Close co-operation between parts of government dealing with communications and accessibility is to be commended, and encouraged further. What is lacking still, however, is the clear recognition in the communication area itself of accessibility as



an always present principle. In the case of the Disability Equipment Fund, this idea underscores that the accessibility principle was missing from the overriding imperative and goal on competition in telecommunications in the past twenty years — namely consumer choice.

### **Choice and Competition**

To realise universal communications, policy has to grasp the nettle of consumers having real choice.

Choice and competition has often been used as a rhetorical device to place the responsibility for safeguarding essential service in the hands of individual consumers (as the case of disability reveals). The old USO struggled to incorporate the important goal of consumer choice. If it had been successful, the Coalition government's experiment in tendering for the USO might have meant that some regions were served by a different carrier — yet this bears only a glancing relationship to how real consumer choice should work.

Instead, there should be real choice for consumers across providers to ensure all have universal communications as they need, and wish, to use them. This element of choice in universality is something that CTN argued could be take the form of a guarantee in which 'all consumers, regardless of their location, should be able to nominate their preferred any-to-any service type and provider that allows for voice or voice equivalent communication' (CTN, 2007, p. 4).

### **Quality**

Quality of service has always been an important but overlooked part of universal service. With the old USO, detailed service, policy, and regulatory measures regarding definition and safeguarding quality of service were developed through the 1990s. With new components of universal communication, quality of service goes to the core of what consumers actually receive as a service. This is because new services like VoIP, mobiles, or broadband Internet, have been developed using different technologies, standards, protocols, and configurations, compared to the public switched telecommunications network that provided the basis of conceiving the old USO. There is now demonstrable potential for consumers to receive lower quality of service that previously expected (as VoIP or mobiles respectively demonstrate — with potential threats to quality of emergency service, or the problems of coverage and call drop outs). Further, the new structure of markets in communications, and the introduction of new wholesale entities (such as NBN) or co-ordination entities (USO Co) which involve new relationships between public (government) and private (market) pose considerable challenges for guaranteeing service levels for universal communications.

### **Cross-Media Communications**

With convergence of communications — to be seen in the particular ways in which hybrid services are emerging such as VoIP, mobile Internet, TV over Internet or NBN or television platforms — we need to have policies that recognise that consumers live in a multi-platform, multi-media world. The advent of the NBN itself underscores that communications occurs in consumers' lives across many platforms now. Accordingly it is a very good time to consider how to match up, or even integrate, requirements of universal communications that presently apply in different forms as they have evolved historically in distinct realms of telecommunications and broadcasting — but also, much more recently in mobiles and Internet.

### **Contented Consumers: Ideas, Applications and Universal Communications**

Content, services, applications, and access and use of ideas are at the heart of the contemporary experience of consumers, as well as the dynamic development of telecommunications and convergent media industries. While these were sometimes raised in earlier times in regard to universal service — for instance in debates in the first half of the 1990s — they are questions that



present themselves insistently. Many of the mooted benefits and imagined uses of the NBN — for instance, in the area of health, welfare, or government services — are predicated on assumptions about consumers being able to easily and affordably access particular kinds of content or applications.

Also critical to a new vision of universal communications are policies regarding intellectual property (IP). If IP is not adequately addressed, this can have serious implications for the access of citizens and consumers to content and services. Because of the dual-role of consumers as producers now — in the world of user-generated content from Facebook (social networking systems) to Flickr (photo-sharing sites) — new questions are raised about consumer stakes in content and applications, as well as their access to these.

## **7 Conclusion: The Need for Public Debate on Universal Communications**

This working paper represents an early and incomplete effort to discuss the shortcomings of present policy frameworks on the USO — and to develop a conception of universal communication, and how policy responding to this might be developed.

Perhaps the most important and obvious thing I would suggest about universal service for the future is that Australia does actually need a robust and wide-ranging public debate. While, there has been some attempt to consult on policy in this area (as in the 2007 review), more often there has not been sufficient research or debate to marshal knowledge and evidence, identify options, and develop good policy that takes into account the interests of all stakeholders.

At present, the lack of public discussion of universal service is most concerning in the context of the development of the NBN. While there have been some government consultation and inquiries, and some invitation from industry groups for public participation in the complex technical and standards developments of NBN, a consolidated, comprehensive and public opportunity for citizens and consumers, as well as industry, to discuss universal service is imperative. The fact that important policy regarding universal service emerges from private negotiations between government and Telstra (as the idea of USO Co. did) raises concern. Much better, and much needed, are policy and decision-making processes and opportunities, underpinned by research and analysis, in which all may discuss how to realize universal communications.

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<sup>i</sup> The ideas of this paper draw on many sources, especially the work of the consumer movement, government and industry policy documents, and academic literatures. The views expressed here, however, are my own.