

1 November 2007

USO Review
DCITA
GPO Box 2154
CANBERRA ACT 2601

By email: uso@dcita.gov.au

Please find attached a brief paper entitled *Universal Service: options for reform*. This report discusses the appropriate considerations for a review of Universal Service arrangements, and consciously avoids the use of the concept of the Universal Service Obligation.

The paper concludes that it is important to be clear about the objectives of the arrangements, and that includes that universality is not one of those objectives. It then suggests ways in which different scheme structures could be developed. The first Appendix to the paper arose from a presentation I was invited to give to ATUG's NSW CrossXConnect forum on 19 September, and covers the history of the concept of universal service. The paper has been provided to some providers for their information.

I have also attached answers to the questions posed by the DCITA *Telecommunications Universal Service Obligation (USO) Review Issues Paper*. These answers are based on the details in the report.

If I can be of further assistance to the review process please contact me through the address details above.

Yours sincerely,



David Havyatt
Principal

Universal Service: Options for reform

Introduction

1. This paper is a brief survey of the issues involved in the Universal Service scheme for telecommunications. It attempts to identify the embedded assumptions included in most discussions and hence highlight the decisions most important in any development of the scheme.
2. The paper contains five further sections;
 - Problems – in which the need for development is specified
 - Objectives – in which the objectives of the scheme are discussed
 - Delivery – in which alternative delivery methods are discussed
 - Funding- in which the options for funding the scheme are discussed
 - Conclusions – in which a program for scheme development are specified

Problems

3. The current scheme is deficient in three main areas;
 - Reliance on cost modelling
 - Inability to vary the service description
 - Lack of clarity on who is actually benefiting from the scheme

Reliance on cost modelling

4. The reliance of the scheme on cost modelling has resulted in the cost base of the scheme being shrouded in dispute since its inception. The only simple way of avoiding this outcome has been the proposal in the 2004 review to require the Primary Universal Service Provider to “wear” the cost of the scheme. This recommendation itself is partially though a recognition that the cost model has never successfully estimated the intangible benefits of being the USO provider.

Inability to vary the service description

5. The scheme as designed was created to preserve what was thought was an existing arrangement of universal provision of the standard telephone service. It is not amenable to extension into other services.

Lack of clarity on beneficiaries

6. As the cost modelling approach rightly seeks to model loss making areas rather than loss making customers, there is no clarity of who the actual beneficiaries of the scheme are. As a consequence there is at least the suspicion that some quite wealthy customers are receiving benefits – especially in the case of providing new connections. This is compounded by the existence of further customer discounts in areas covered by the USO, for example the National Farmers Federation

affinity plan marketed by Telstra. At the political level this means that the scheme is either not valued by people receiving a benefit, or over valued by people who are receiving no benefit.

Objectives

Need for clear objectives

7. The USO regime as currently structured fails to clearly specify an objective for the scheme. This is first evident in the fact the scheme continues to cover each of a “standard telephone service”, payphones and services for people with a disability.
8. This weakness is a consequence of the origin of the scheme. The regime remains structured around a promise starting in 1988 that, while the telecommunications regulatory regime would change, there was nothing really different. This included the “codifying” of a vague objective (telephony for all) and the “institutionalising” of a supposed pre-existing cross-subsidy arrangement (see Appendix 1 for a very short history).
9. Separate objectives and schemes need to be designed for each of these three areas. It should be noted that the needs of people with a disability are partially met by the definition of standard telephone service and the additional program to fund the National Relay Service. While there need to be separate objectives and programs, there can still be common application, as there is with the use of eligible revenue for the purposes of computing USO levies and NRS levies.
10. It is particularly important to note that the problems being addressed here are not instances of “market failure”. (This is addressed in detail in Appendix 1.) These are problems created by the fact that markets are effective in resulting in cost reflective prices, and that the cost of service in some areas will be higher than the price consumers are willing to pay.¹
11. This outcome is compounded by an entitlement mentality that seems to apply to telecommunications that does not apply to any other service (all of which are delivered by States), such as electricity, water, sewerage and sealed roads. The consequence of the entitlement mentality is that consumers present to the market a distorted view of what they might be prepared to pay.
12. This submission will discuss the standard telephone service obligation exclusively (for clarity this will be referred to as the **STS Scheme**).

Nature of the STS obligation

¹ The discussion paper refers in section 1.2 to the policy framework including “targeted funding to support improvements in advanced services,..., where the market has not been fully effective.” This seems to imply a concept of market failure, but merely reflects the fact that consumers are unwilling to pay cost.

13. It can be argued (as in Appendix 1) that the STS scheme was always flawed, that it had an unclear objective and that the cross-subsidy was indeed a myth (that is, that the cross-subsidy was a piece of designed policy to enable additional connections).
14. Over recent years the vagary of the objective has become clearer. There is a degree of confusion as to whether the STS scheme is delivering an equitable service Australia wide, or is merely guaranteeing the availability of a minimum acceptable service (including price and service standards) to all Australians.
15. As an example of this confusion note the language in the discussion paper.

The USO's stated purpose is to enable all people in Australia, wherever they reside or carry on business, to have reasonable access, on an equitable basis to standard telephone services.
(Overview P.5)

The USO...should be seen in the context of the Australian Government's policy framework, which aims to provide reasonable and equitable access to telecommunications services for all Australians...
(Policy Framework P.5)

The Australian Government continues to recognise the need for a voice service safety net.
(Historical context of the USO in Australia P. 8)

16. The first two statements are framed as statements about equity, referring to a "standard telephone service" or a "universal service". All of these imply a common service. In contrast the third statement refers to a "safety net", that is a minimum service that should be available while not necessarily being the same as all others receive.
17. This lack of clarity has added to the "scope creep" accompanying the Universal Service concept. If the regime is perceived as being about universality then all Australians everywhere can expect the same service as any other. This is reflected in the kind of thinking that people seem to think they should have the "right" to establish a business anywhere (especially a content business), whereas businesses need to otherwise consider geographic factors (are there transport routes for manufacture, is there power for a smelter, is there land to run a sheep station, is there sufficient rainfall for crops).
18. Unpalatable as it is for any government to be clear about this, it is essential for the establishment of effective telecommunications policy that the STS scheme be clearly defined as a "guaranteed minimum access scheme" that specifies a minimum that will be available to all customers.

Designing a guaranteed minimum access scheme

19. From here on this submission will consider the design of a scheme that is explicit in its goal of ensuring "minimum access".

20. The first question to be asked is “minimum access to what?” Clearly the purpose of telecommunications is connectivity to others (people or machines in other locations). In the current structure of the Australian fixed voice market there are two concepts. The first is of an access and local service provider. This provider is the one who meets the various statutory obligations, including ability to call emergency services and the provision of an untimed local call. The service also provides the ability to make calls to various fee and “local rate” services (13, 1300, 1800) and premium services (1900) and to contact a “long distance” provider either by pre-selection or choice of a dialled code. The second is of a “long distance” or “pre-selectable services” provider.
21. The dividing line between these two is entirely arbitrary, but has basically been established by the adoption in the 1997 Act of the “local call” from the 1960 Community Telephone Plan².
22. A further distinction made in the Australian regulatory regime is between a carrier and a service provider. The distinction being that the former is someone who owns and operates “network units”, while the latter is a person who provides services to the public. A single person can be engaged in both activities, but to refer to the party by one title when involved in the other is careless at least and potentially misleading.³
23. The two services described above, “access and local service provider” and “pre-selectable services provider” are both activities of service providers.
24. The situation with mobile voice is more confusing, given that the mobile network operators have not facilitated choice of long-distance provision, and have not been required to (the ACCC deciding against declaration in 1999). A consumer could use their mobile phone to choose an alternative provider, however the current pricing of local-rate and free-phone rate numbers by mobile operators suggest there would be little benefit for consumers.
25. The provision of internet services is also slightly confusing. The provision of “dial-up” internet easily met the same model as the fixed line provider provided the means to establish the connection, while the ISP provided the “internet connectivity”. In the world of broadband it is more usual that the customer acquires both access and connectivity from the same supplier, though some connectivity applications can be acquired from others. The most common example is customers acquiring Voice over IP from an application provider other than their

² A question of the appropriateness of the Australian regulatory regime also importing this concept from the US is a topic for another time, suffice to say that there the distinction between interstate long distance and other services had a long history embedded in the constitutional difference of the telecommunications industry in the US being a State responsibility, Federal responsibility only coming from the interstate trade power.

³ In this regard it is important not to refer to firms like Optus and Telstra as “carriers” if the discussion is actually about their role as “service providers”.

ISP, though there is an increasing incidence of customers also acquiring their e-mail service elsewhere, such as through Google's gmail service, given the "portability" of e-mail address this provides.

26. This means that a design choice exists in any scheme as to whether the protected minimum service is providing just an access service or is providing a "complete" service.
27. The design choice also has implications for costing the scheme. The more the design of the scheme can mimic a market or elucidate information the better. An example of this is the ongoing concern that there are intangible benefits to Telstra from the existing scheme which are not captured in the costing model. Most specifically Telstra places a lot of brand value on being "the Australian company" and includes lots of images of what it does in regional Australia in its advertising and other communications.
28. The person best able to evaluate that benefit is Telstra, but they have no incentive in the current scheme to do so. Delivery models of "contestability" between providers can result in the providers placing a value on the brand benefits, but to be effective the contestability model has to be fully effective which creates its own design problems.
29. One solution to the problem is to remove branding from the services provided under the scheme in total. This means that providers make the decision as to whether customers are "uneconomic" including the full brand benefit of serving the customer, and only allow the customer to become a scheme customer when the cost is greater than direct revenue plus intangible benefits.
30. Finally, a decision needs to be made in the scheme objectives of whether the purpose of the scheme is the ongoing provision of services at an affordable price or whether it also encompasses the connection of new customers to the network. The examples Telstra gave in August 2006 when abandoning their discussions with the ACCC on FTTN of the exorbitant cost of USO provision were all instances of high connection costs.⁴
31. The distinction between connecting to a network and subsidising an existing network connection is significant. The approach to policy makes a significant difference to the building of services in new estates and the connection of subdivided rural properties, as well as the role that subsidised broadband infrastructure can play in the delivery of services.

Delivery Options

The nature of delivery options

32. The design of a scheme is dependent on the objectives. The delivery options considered here assume that the scheme objectives are

⁴ See [weblink](#)

focussed on achieving network access and that the scheme objectives will define a “voice service” so that it can genuinely be delivered by alternative technologies. This requirement is simply that the service can be used to make voice calls to any other geographic or mobile number (including 1800, 1300, 13 and 000) and that it is capable of supporting a device that can communicate with the NRS (allowing for any-to-any text connectivity being implemented), and access to directory services.

33. However, each option can be assessed on its ability to be extended into a different (wider) set of service characteristics, most notably for a broadband internet service.

34. To avoid the concept of “universal service” where previous discussions would have referred to a “Universal Service Provider” this description of options will refer to a “Guaranteed Minimum Access Service Provider”, or GMASP for short.

35. The options to be described are;

- Nominated GMASP per area.
- Multiple GMASP’s per area
- Provider subsidies for connecting customers unprepared to pay market rates.
- Rebates to consumers.
- General obligation on providers to serve customers.

Nominated GMASP per area

36. The original version of the USO scheme as created in 1991 and perpetuated in 1997 is a scheme which nominates Telstra as the single GMASP for the whole of Australia.

37. There are a number of variants for such a scheme. The major decision points are whether the nation is subdivided into different areas, whether the service provided is an access service or a complete service, what the applicable price and service standards are and how the provider is chosen.

38. The initial model answered these questions by leaving Australia as one area, making the service a complete voice service, relying on generic retail price controls and a CSG to specify service levels and simply perpetuating Telstra’s responsibility.

39. The most common variant is the concept of “tendering” areas for service provision. As was discovered with the tender for the untimed local call in the extended zone this always suffers from the problem of the benefits of incumbency for Telstra. More specifically, if Telstra loses the tender their existing infrastructure is worthless so they will always price in a tender to meet the opposition. While this might result in Telstra “costing” its network at efficient replacement cost, it equally doesn’t result in efficient replacement and results in no expansion in available services (e.g. broadband data).

40. In the absence of a tender, it is hard to avoid cost modelling in this scenario with all its attendant problems.

Multiple GMASP per area

41. This model is what the contestability model as currently "trialled" amounts to. Once again the dimensions can vary according to the nature of the service being offered.

42. The experience with this model has been that the new providers have to meet a set of criteria determined on the basis of the existing service, and thus very hard to meet with other than the existing service. Further, it is still dependent on cost modelling. If the cost model accurately identifies the efficient replacement cost then no provider will build new infrastructure. To create competitive entry the model needs to offer a premium over the efficient cost – but such a premium winds up being paid to the incumbent which utilises the above cost return to engage in marketing strategies to deter entry. The most common example is below cost pricing in any geographic area experience threat of infrastructure entry.

Provider subsidies

43. The next alternative is to try to make the market work as effectively as possible in meeting consumers' needs and having very specific targeted subsidies for a "basic" service. The purpose of this model is to encourage providers to attempt to meet customers needs, including providing service at above the "standard telephone service" price for enhanced service.

44. If a customer is unable to find a service that meets their requirements at an acceptable price the customer is able to request from a provider a "GMA" service. This service offering is a "deconfigured" offering and specifically cannot include the bundling of any other service, including long distance, information services etc. If these products are also acquired from the provider they must be provided at an "unbundled" price that would be available to a customer using a different GMA provider.

45. This model assists in the development of a "next generation" access scheme as the service can be specified as broadband plus voice, or there can be two services at different price points.

46. The service provider is subsidised the difference between cost and the "guaranteed" price. It is essential that branding and bundling benefits are minimised so that there is an incentive for the provider to be in a position to offer a retail service rather than a subsidised one.

47. It is also important that the service is provided by a service provider as service provider, rather than a carrier as carrier. To reduce the power that an infrastructure heavy provider has, a simple modification of the standard access regime is required. Where a carrier makes a service available to itself to enable it to offer the "guaranteed" service, that service must be available wholesale to other providers.

48. The extent to which this scheme can vary from existing schemes is the extent to which care is taken to specify a minimum access service that is exactly that, the guaranteed minimum and not an attempt at “universality”. The more the specified service is defined as relating only to access the greater the likelihood that providers will compete for full service offerings.

Rebates to consumers

49. The opportunity for direct rebate to consumers is limited. The major difficulty with a rebate scheme is defining what creates the rebate entitlement and what the quantum is.
50. While the delineation point may be the same as a provider subsidy scheme, there is less ability for the scheme designer to influence the nature of the services being offered. Similarly if the rebate is the difference between price and a “guaranteed” price point, the scheme designer has less control over the cost of the service. If the rebate is a “flat rate” it doesn’t provide the essential guarantee.

General obligation

51. The suggestion has been made that the obligation could be placed on all infrastructure owning operators. The major deficiency with this proposal is that it conflates the distinction between carrier and service provider.
52. The service provider subsidy model can achieve the same outcome without the design flaw because each of the providers can access the relevant infrastructure.
53. As a general policy principle just as the words “universal service” should be avoided, so too should the word “obligation”

Other delivery issues

54. The models have focussed on delivering service in the presence of infrastructure. This is appropriate as for all customers there is already existing infrastructure able to serve them.
55. Where there is not infrastructure for new services (e.g. broadband) the Government is pursuing policies of subsidising infrastructure investment. The guaranteed access policy needs to be designed to incorporate the utilisation of this infrastructure.
56. The remaining issue is of new housing/industrial estates and “tree change” subdivision. In the first case any of the delivery models can be adapted – for example the estate developer can procure a GMASP for the estate. The only model that doesn’t work is the existing USO structure. For the “tree change” group there is a need to ensure that the civil engineering works for telecommunications connections are shared with the works for electricity connection. The simplest way to ensure that is to reduce the expectation of what will be delivered through the guaranteed access scheme.

Summary

57. These five delivery options have been compared in tabular form in Appendix 2.

Funding

Funding assumptions

58. The existing USO funding arrangement has been created on the assumption that the pre-existing policy was one of internal cross-subsidy and, therefore, a preservation of cross-subsidy is appropriate.
59. The consequence of externalising the cross-subsidy is to create a hypothecated tax. Elsewhere in the economy hypothecated taxes are not favoured. Examples where public policy specifically rejects them are proposals to tie fuel excises to roads funding and to tie public broadcasting funding to commercial broadcasting licensing.
60. Once the subsidy becomes part of explicit public policy the standard theories of efficient taxation apply. These at least include that taxes should be recovered from as broad a base as possible, and that where discrimination can be applied then the tax should be heaviest on the most inelastic good.
61. These principles suggest that taxing telecommunications users is an inappropriate method.
62. There was some justification of a tax on telecommunications services in 1997 as the application of consumption taxes was uneven across the economy, with services undertaxed. However, that situation changed with the introduction of the GST in 2000. If the telecommunications industry had not been sidelined by issues such as the impact of the GST on local calls and indeed the whole costing of the USO, the industry would have argued that the USO Levy was a consumption tax that should have been abolished with the introduction of the GST.
63. As it stands the current operation of the USO Levy means telecommunications services have a consumption tax of about 2% applied to them.

Replicating a cross subsidy

64. The idea that the USO levy simply externalised a cross-subsidy glosses over a number of methodological questions.
65. Should an externalised cross-subsidy tax revenue or profit? If the cross-subsidy is raised by taxing revenue, which revenues? Generally the approach to USO subsidy has been to separate it from access pricing, however, there is an equally strong argument that all providers of local access should expect a contribution to access costs from all calls made over the network.
66. The approach that would most closely mimic a true cross subsidy would be for a mark-up on originating PSTN access in interconnection pricing. This is similar to the concept of the "access deficit

contribution" but would differ in practice as (a) it would apply to all PSTN access providers, (b) it would be instead of (not in conjunction with) a USO levy, and (c) it would not apply to PSTN terminating access. Such a scheme would have created a greater incentive for efficient entry in infrastructure based entry (and avoided the long mess of ISP terminating access arbitrage).

Funding approaches

67. The issue of funding the USO is usually confused with the issue of costing the USO. The benefit in the current funding arrangement is that it has enlisted the help of the non-Telstra providers in assessing Telstra's cost claims.
68. A better outcome will always be obtained by creating the opportunity to contest for the funding. However, under the existing regime all the non-Telstra providers have a motivation to primarily view the scheme as a tax.
69. The more the funding program can be divorced from a political calculation, the more providers will look to the opportunity.
70. In the immediate term, if the scheme is not redesigned in any meaningful fashion the best approach is that of the 2004 review and remove the levy and subsidy.

Conclusion

71. The review of the Universal Service regime needs to result in the end of the term "Universal Service." It is economically (and technically) impossible to provide all consumers in all of Australia with the same high quality service.
72. It is possible to specify what the minimum service consumers in the whole of Australia should be able to access. This minimum service should be capable of supporting an ordinary residential consumer or small business in conducting their economic and social affairs.
73. Specifying exactly what that service entails is the essential first step in developing the new scheme.
74. Once the objectives are clear there is an opportunity to change the delivery model. Of the options above the service provider subsidy model is advanced if the objectives are explicit. If the objectives and service description remain vague the existing scheme with no funding is to be preferred.

APPENDIX 1 – Institutionalising the USO in Australia

Since the Universal Service Obligation has been a part of Australia's regulatory regime since 1997, it has become accepted wisdom that it was (a) the continuation of a pre-existing policy that was pursued by the PMG and Telecom Australia under the instruction of the Australian Government and (b) that this policy was pursued by the conscious operation of a series of cross-subsidies.

In reality the concept itself was imported from the United States where it had been employed by incumbent telecommunications providers as an argument against market liberalisation. The concept was imported to Australia for the same purpose.

*Universal Service: A Concept in Search of a History*⁵

The term "Universal Service" was invented in 1907 in AT&T President Theodore Vail's slogan "one system, one policy, universal service". This slogan was introduced at the time of competing local exchange operators in the US, where the carriers typically did not interconnect. Vail's use of the phrase "universal service" meant what we would today call "any-to-any connectivity".

The modern meaning of "government policies to promote the affordability of telephone services and access to the network", represents an aspect of liberal egalitarianism, not market failure. Market failure implies that a transaction in which a person who would value a service above its cost could not acquire it. The policy is that people who are not prepared to pay the cost should be provided with the service.

The modern US version of "universal service" comes with a version of its historical origins as a reason for the Communications Act 1934 and its preamble;

*to make available, so far as possible, to all the people of the United States, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.*⁶

In the US regulation of local service remained a responsibility of State Government. The interaction between local service and long distance service came about because of the need for State regulators to determine the price local access companies could charge for service. The dispute was whether the accounting for a long distance call for regulatory purposes should be "station-to-station" or "board-to-board". The Bell system had an interest in the accounting being the latter as the local

⁵ Title of Chapter 2 of Milton Mueller *Universal Service: Competition, Interconnection, and Monopoly in the Making of the American Telephone System*. MIT Press 1997

⁶ *ibid* P.151

operations were under strict price control, so keeping the cost of local service high enabled higher retail tariffs.⁷

The matter was settled in *Smith vs Illinois Bell Telephone* which concluded that the costing should be "station-to-station", and hence there was a component of long distance revenue that contributed to the costs.

This argument was developed into an art form in the 1970s and 80s in response to deregulatory pressure in the United States, as the more threat of competition was introduced the greater the role of the contribution to local access became. But the original court decision had nothing to do with a policy of universal access as a policy decision, it was merely a question of efficient cost allocation.

An Australian History: Importing a concept

The Australian experience has been entirely different. With federation in 1901 post, telecommunications and telegraph were established as a Federal responsibility. In fact the Post and Telegraphs Act was Act 10 of the Commonwealth. Debate on that Bill focussed on desirability of widespread services, but it was nowhere included as an objective.

In addition we imported the concept from Europe that the government should be the provider of post, telegraph and telephone. This is the second major distinction from the USA. Though the first major inquiry in Australia, the 1910 Royal Commission, heard evidence from the then permanent secretary that the service should be privatised to access capital for growth.⁸

A false claim has been raised in recent debate that the principle of universal service was first adopted in the Community Telephone Plan 1960⁹. However, that plan was simply a plan for automation of the network to meet demand, not a plan to extend subsidised service.

In fact there is direct evidence that Government did not accept a policy of Universal Service. In considering the changes to telecommunications service that eliminated the "part privately erected line" process in 1968 the cabinet submission by then Post-Master General Alan Hume said in relation to remote services.

In considering any liberalisation of the current conditions, it is necessary to exclude the vast remote areas served by the radio

⁷ The Bell system was a monopolist at both local and long distance service, but local service was limited to cost-plus pricing, so the theory was that having higher costs in local service resulted in higher overall revenue.

⁸ Eli Noam in *Telecommunications in Europe* OUP 1992 claims that the postal monopoly was a sole source of revenue monarchs could spend without parliamentary approval and so was zealously preserved. Robert Townley Scott's evidence to the Royal Commission was in an era when the "vertical fiscal imbalance" ran the other way, the new Commonwealth had few revenue sources, primarily tariffs and excise duty.

⁹ This is certainly the claim made by Telstra in its submission to the Senate inquiry into the Australian Telecommunications Network. "The explicit policy goal of a universal telecommunications service, first detailed in Australia with the adoption of the 1960 Community Telephone Plan 1960 ..." (fn P.21)

communications systems of the Royal Flying Doctor Service and other Outpost radio networks. The capital cost of serving these sparsely settled areas with conventional telephone facilities would run into more than \$50m.... Strong pressures will continue to be exerted by those excluded but it would exceed all reasonable bounds for the Post Office to bear the huge cost of provision and maintenance of normal telephone services in such areas, especially as there would be the prospect of only very small financial return from most of the services. No other country in the world with anything like comparable areas accepts such a responsibility.

First known statement of an objective was the objects in the Telecommunications Act 1975. Senator Richard Alston has described these provisions well.

The relevant legislative provisions were vague and their interpretation has largely been left to Telecom which has jumped at the chance to assume a number of self-defined CSOs.¹⁰

As debate about competition and privatisation swirled, the status of the Community Service Obligation was elevated in the arguments of Telecom and its unions (importing the US concept)

Evans and beyond: The 1988 Statement and 1989 Laws

The Evans statement (1988) articulated objective "to ensure universal access to STS throughout Australia on an equitable basis at affordable prices" This then became incorporated in the *Australian Telecommunications Corporation Act 1989* in section 27.

27. Community service obligations

(1) Telecom shall supply a standard telephone service between places within Australia.

(2) The public switched telephone service shall be the standard telephone service.

(3) Telecom shall supply the standard telephone service as efficiently and economically as practicable.

(4) Telecom shall ensure:

(a) that, in view of the social importance of the standard telephone service, the service is reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business; and

(b) that the performance standards for the standard telephone service reasonably meet the social, industrial and commercial needs of the Australian community.

¹⁰ Richard Alston "Time for some real competition: Is Telecom's Universal Service Obligation Still Relevant?" P. 372 in Mark Armstrong (Ed) *Telecommunications Law* Australian Perspectives Media Arm. 1990.

(5) *In this section:*

"Australia" does not include an external Territory to which this Act extends.

Once again Senator Alston neatly summarised this development "Whilst the Evans Statement is at great pains to emphasise the continuing validity of the universal service objective it spends little time or space on assessing the extent to which it has already been achieved".¹¹

The 1989 regime presumed the eventual entry of competitors and the Bureau of Transport and Communications Economics was set the task to assess the cost of the CSO.

Competition and Levy: The 1991 Laws

When competition was introduced with the 1991 regime the provision of the standard telephone service was referred to in legislation as the USO. The regime introduced the concept of Net Loss Area, and apportioned the levy on "timed minutes" of traffic

The concept of a "Net Loss Area" is important to understand. The amount of "loss" is highly dependent on the definition of area. For example, if the whole of Australia is the area there is no loss. If each consumer is an area there is no internal cross-subsidy within the area and so the externalised cross-subsidy become greater.

Disputes about the costing from BTCE resulted in Telstra, Optus and Vodafone and AUSTEL commissioning Bellcore to model cost

Open market: Levies and costs

The 1997 Act changes base to eligible revenue and all carriers, recognising that there were increasingly carriage revenues that were not long distance minutes and that the mobile operators with higher per minute charges weren't paying much of the levy.

The Bellcore model resulted in Telstra's cost claim becoming \$1.8B which resulted in two work streams;

1. Reviewing the model, issues include sample areas, technology choices, cost of capital – this left an unresolved issue "intangible benefits"
2. Proposals for contestability of the obligation (or right to the subsidy)

In the end the Minister determined the cost at \$253M

In 2000, a contestability model was introduced (ultimately flawed) and the "tax base" was expanded to service providers exceeding a Ministerially determined revenue threshold (never implemented)

¹¹ *ibid.* P. 373

A important question emerges, that really underpins the failure of the "contestability" approach:

Has the concept of a "standard telephone service" ever been satisfactorily defined as the underpinning of legislation?

Welcome to broadband: The cross-subsidy debate revisited

The resurgence of USO discussion in 2007 has been a consequence of the development of broadband services, and the ongoing process of pricing (costing) the ULL.

In its simplest form there is an argument from Telstra that can be paraphrased;

If the ACCC says the cost of copper in Band 4 is \$100/month and the line rental is \$30/month, then a \$70/month loss on those customers equals a cross-subsidy of \$1.4B. If ULL is priced at \$30 it is OK. If ULL is priced at \$17 we need a bigger USO subsidy.

There are three fundamental flaws in this argument.

The first is that it is a variant of the "net loss area equals each customer" model. We know such an approach would over-compensate the provider.

The second is, that like the cost model, it ignores the value of intangibles.

But most importantly it ignores the realities of pricing. While we have an environment promoting cost-reflective prices, the realities are that providers regularly chose "price points" to cover a range of different circumstances. That is, different input prices can result in average prices.

The best example of this is in the pricing of long distance telephony. It was forecast that with deregulation of long distance there would be price declines on thick routes and increases on thin routes. City customers would benefit and rural customers lose. The reality is that competition has eliminated all the charge bands.

APPENDIX 2 – Delivery Options

Delivery Model	Single GMASP per area	Multiple GMASP per area	Provider subsidies	Rebates to consumers	General obligation
Description	A provider is designated GMASP for an area. Existing Universal Service arrangement is an example where Telstra is designated for all of Australia.	Same as existing contestability scheme but remove the geographic limitation on areas where contestable services could be offered.	Subsidy paid to provider for connecting a home that would otherwise not be connected.	Rebate to consumer who acquires service.	General obligations on providers who have infrastructure
Implementation issues	Currently relies upon a “cost modelling” approach. Intangible benefits to PUSP not recognised. Sensitive to definition of “net loss area”. Can be allocated by tender, but Telstra has a benefit of incumbency to make tender ineffective as an alternative costing approach.	The underlying difficulty of the contestability arrangements were that the ACA was so determined that the alternative service shouldn’t vary from the STS that they basically specified a service that was delivered by twisted pair.	Suffers from a costing problem – how much is the subsidy. Also needs to be ongoing not one-off. Could be viable if subsidy was paid as difference between providers offer and benchmark cost and providers “competed” for designated customers.	There is little competition for the customer so the rebate would be set to recover the “monopoly” price (or higher). If the rebate is lower or a fixed amount it doesn’t guarantee delivery. Hard to determine the appropriate customers.	Definition of “who has infrastructure”. Confusion between carrier (infrastructure) and service provider. Creates multiple cost modelling problems (assuming subsidy).
Consumer outcomes	Reduced choice for affected consumers. “Competition for the market” doesn’t create or facilitate consumer choice.	Unlikely to create a changed environment.	Customer would have to take service from provider who needed the lowest subsidy to connect them.	Double handling by consumer of money, timing of rebate to bill, lack of choice.	Notional choice but only if there is infrastructure.
Competitive outcomes	Telstra gains all kudos. Hidden cross subsidies enable Telstra to still “pocket price”. Examples are pension discounts, NFF affinity plan.	Creates more of a justification for Telstra to “dare” everyone else to the game. Optus may decide to play with OPEL, but at the retail not wholesale level. Would require ACMA changing definitions.	Provides opportunity for all providers. Telstra and Optus may be able to selectively price below cost. May be overcome with appropriate rules. Also question over whose brand appears on the bill.	Unlikely to change outcome from today.	Without subsidy creates disincentive to build network into other areas until high usage levels elsewhere.

Delivery Model	Single GMASP per area	Multiple GMASP per area	Provider subsidies	Rebates to consumers	General obligation
Policy outcomes	Subsidies apply geographically, customers who would be prepared to pay cost don't. A version of middle class welfare" Tendering unlikely to reduce cost	Unlikely to have any effect other than additional ACMA cost preparing for something that doesn't happen.	Creates competition and allows for maximum utilisation of alternative infrastructure. Process of "finding a provider" could be administratively complex but could be built fairly easily on the back of the Comms Alliance EIE – might face an issue to do with competitive tendering for IT projects.	Administratively complex, unlikely to create savings.	Either results in reduction in competition, or a highly complex regime tracking who has infrastructure where.

Response to Questions

Chapter 1

- Q 1.1 Should the USO continue to operate as an obligation on service providers to serve all customers, or should it be recast as a consumer right or guarantee (in tandem with commercial service delivery)?

No. The program needs to be recast as a “scheme” not an obligation. The title needs to be changed to reflect that it is a “basic access” scheme not one that purports to deliver a “universal” service.

- Q 1.2 Is it still appropriate to have a single provider solely responsible for providing all Australians with a safety net voice service?

No.

Chapter 2

- Q 2.1 Should the defined legislated service linked to the USO, the STS, continue to be the benchmark service for the universal service providers?

A basic voice access service should be properly described and “de-coupled” from the choice of pre-selected service provider. Any extension of the definition to a high speed internet access service needs to be similarly limited to the access component.

- Q 2.2 Which features of the current STS should be provided as part of universal access to basic phone services, and which features could be optional?

None. There should be no scheme designated “universal”. For a “basic access” scheme it is a voice service capable of making calls to local numbers. All the other aspects (DA, calls to emergency services etc) are covered as standard obligations. The basic access service shouldn’t be bundled with the long distance service.

- Q 2.3 What types of network technologies are suitable for the delivery of basic phone services? For example, could universal service be delivered by mobile networks or over a broadband data network using VoIP?

Anything that enables a voice call. The “powered line” feature that is inherited from the fact that telephones preceded electricity is not an essential feature of the service.

- Q 2.4 In what ways does the existing regulatory framework constrain technologically feasible options for the delivery of basic phone services?

By being vague, and by primarily being constructed as a scheme to promise that with competition and privatisation nothing changed.

Q 2.5 What service standards should apply to basic phone services delivered by a universal service provider?

The CSG standards and the line rental and local call fee cap. The CSG should be removed from all other services. No other service standards need apply.

Q 2.6 What interim or alternative arrangements, or associated compensation, should be available to consumers when a universal service provider does not connect or repair their basic phone service on time?

The CSG arrangements.

Q 2.7 What aspects of the current universal service arrangements for basic phone services work well and should be maintained?

None of it and it should all be scrapped and redesigned. It doesn't even work well politically because to the extent anyone gets credit for it it is Telstra not the Government.

Q 2.8 What aspects should be changed?

All of it.

Q 2.9 What would be the ideal approach to providing universal service for basic phone services?

One that (a) is clear in its objectives (b) recognises the distinction between carriers and service providers (c) allows different firms to offer to provide the subsidised service (even if over the same infrastructure elements) and (d) decouples the funding arrangement from being a pretend "cross subsidy"

Q 2.10 Is the level of service standards that applies to Telstra USO services (as set out in the Standard Marketing Plan) reasonable? Is it too flexible and lenient on Telstra? Or is it overly prescriptive in an environment where consumers are choosing other features and functionality as more valuable to them in the new telecommunications environment?

It is just poorly described.

Q 2.11 Does the concept of a Standard Marketing Plan provide an effective regulatory mechanism? What alternatives exist?

No. The specification of the service to be delivered by Government is a better option.

Q 2.12 What if any obligations should apply to all providers?

The existing standard licence conditions on carriers and service providers.

- Q 2.13 Does the very high take up of mobile services mean that service standards can be altered?

No. but it might mean that some customers do not also need a fixed line phone.

Chapter 3

- Q 3.1 With the widespread uptake of mobile phones, in what circumstances should there be a requirement to provide a public payphone?

The provision of public payphones should be devolved to local government and let local communities decide what payphone service they want. Those communities should be free to choose their own providers of the service.

- Q 3.2 What aspects of the current payphone arrangements work well and should be maintained?

The historic penetration. Telstra has also been very receptive over the years to the design needs for disabled consumers and the design improvements to support reliability.

- Q 3.3 From a community perspective, what should be changed?

see Q3.1.

- Q 3.4 From an industry perspective, what should be changed?

See Q3.1. The cost should not be recovered through a hypothecated tax. We don't tax water consumers to put bubblers in parks.

- Q 3.5 What would be the best approach to providing universal access to payphones?

See Q 3.1.

Chapter 4

- Q 4.1 What parts of the current universal service arrangements work well for remote Indigenous communities and should be maintained?

Remote indigenous communities are just that – both communities and remote. Communities can make their own technology decisions. If they are remote they have more option to do so because they are not just a small part of a bigger market – there aren't lost economies of scale by them making their own choice. The existing regime doesn't work well for such communities.

- Q 4.2 From a community perspective, what should be changed?

Let the communities be their own providers – or make their own choice of

providers. If funding is required let the community decide how to spend it – not one USO provider.

Q 4.3 From an industry perspective, what should be changed?

See Q4.2.

Q 4.4 What would be the best approach to providing universal service in remote Indigenous communities? Should universal service providers offer customised payphone services in requesting Indigenous communities, along the lines of the community phone model?

The best approach is decided by the relevant community.

Q 4.5 What is the best way to ensure the ongoing maintenance of community phones in remote Indigenous communities?

Make them the responsibility of the community – including training the community in maintenance.

Chapter 5

Q 5.1 How should universal service be provided in areas with several competing telecommunications networks?

By clearly defining the minimum access service and price and offering to subsidise customers who can't get a commercial service that they prefer, then selecting the provider who is closest to the guaranteed price.

Q 5.2 How should universal service be provided in new housing estates?

By housing estate developers being required to deploy FTTH and an open access regime. Then the remainder of the proposal in Q5.1.

Q 5.3 What obligations, if any, should apply to a provider who rolls out telecommunications infrastructure in a new housing estate?

Open access. Ideally to a set of standards developed through Comms Alliance and O&P procedures delivered over ACIF's EIE infrastructure.

Q 5.4 What should be the role of a universal service regime in a competitive environment?

Same as elsewhere – see Q5.1 and 5.2.

Q 5.5 What would be the best approach to providing universal access to basic phone services?

See Q2.9.

Q 5.6 What would be the best approach to providing universal access to payphones?

See Q 3.1.

Q 5.7 What should be the role of a universal service provider? For example, should a universal service provider be required to deliver a service to any customer who requests a phone connection, or should this requirement only come into effect if the customer cannot otherwise get a connection on a commercial basis?

There should be no universal service provider.

Q 5.8 What would make competitive delivery of the universal service regime attractive to service providers?

The clear distinction between the role of carrier and service provider.

Q 5.9 What information would need to be available to interested providers to make competitive delivery of universal service feasible?

Clarity about which customers are currently genuinely not supplied with commercial service.

Q 5.10 Is there a rural deficit?

No.

Q 5.11 How can there be an assurance that services will be provided to metropolitan, rural and remote customers on an equitable basis?

There can't – just as you can't guarantee equitable ability to graze sheep, have equitable access to a beach, or equitable access to building products like steel. It is the wrong objective and needs to be more accurately and honestly described.

Q 5.12 What approaches to costing the USO could be adopted to overcome the inherent problems of costing models?

Competitive provision is the best solution. To the extent that competitive provision might use shared infrastructure then the access pricing regime for that infrastructure is superior to the Net Loss Area approach.

Q 5.13 When considering the cost of providing universal services, what elements should be factored in?

Cost – despite what people seem to imply – is a well defined concept. The cost should be based on efficient replacement cost using competitive (not monopolistic) rates of return.

Q 5.14 What arguments are there for subsidising the cost of delivering the USO through a cross subsidy?

There are no good arguments. The original one was that this replicated the pre-existing arrangement but there is no basis for this. The second argument is that it enlists the expertise of other providers in monitoring the cost modelling of the provider.

Q 5.15 What would be the best approach to funding universal service subsidies?

On the assumption the regime were changed to a guaranteed minimum access scheme with clear objectives and contestability between providers for the subsidy, it should be raised from general revenue. With the introduction of the GST a new nett tax of 6-8% was applied to telecommunications services. Had the industry been better organised in 2000 we would have had the USO Levy repealed as part of the New Tax System.

Q 5.16 How could the existing arrangements for the assessment, levying, collection and distribution of universal service contributions be improved?

By scrapping them. If the scheme is not redesigned implement the 2004 recommendation and end the subsidy to Telstra. If the levy remains for a redesigned scheme institute the 2000 amendments and broaden the tax base.

Q 5.17 For the purposes of the USO, what threshold level, if any, should be applied to eligible revenue? What impact would this have on administrative costs for ACMA and small carriers? What financial impact would this have on the remaining eligible carriers?

There should be no threshold. Once thresholds are introduced they simply create an opportunity to argue for it being increased. The end point would be that only the big five carriers would be levied.

Q 5.18 On what basis should carriage service providers be required to directly contribute to USO subsidies?

None.

Q 5.19 What is the most efficient and effective way to monitor and ensure compliance with the universal service regime?

Not having a universal service regime but a minimum access scheme instead.

Q 5.20 How could the administrative burden associated with the universal service regime be streamlined or reduced, while still maintaining adequate oversight and compliance?

By redesigning it from the bottom up.

- Q 5.21 How can consumers be made more aware of the respective roles of organisations involved in oversight and compliance of the universal service regime?

By a concerted program between DCITA, ACMA, the ACCC, the TIO and Comms Alliance to create a single website where ALL the consumer rights and information are stored – and not just a duplication of what is on their own sites – this one site is where each of the other sites would point when you click on “consumer rights”. Once the site was built other information campaigns might occur. Ideally the building of this site would be the responsibility of Comms Alliance and the other agencies work with it – after all self-regulation is the Government’s policy.

- Q 5.22 In what ways could the respective functions of regulatory organisations be improved and/or clarified?

See Q5.21. Also getting on with the review of all legislation to match the formation of the merged regulator in ACMA. Making an amendment to the TELCo Act to exempt telcos from State Fair Trading laws and covering them (any that aren’t corporations) with the TPA alone. Creating more powers for the agencies to delegate functions to each other.