Attachment B:

TELSTRA CORPORATION LIMITED

Submission

Feasibility Study into an
Independent Disability Equipment Program

PUBLIC VERSION

17 April 2009

Contents

Abbreviations

3G	Third Generation Cellular Communications System
ABS	Australian Bureau of Statistics
ACCAN	Australian Communications Consumer Action Network
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ADSL	Asynchronous Digital Subscriber Line
AG's	Attorney-General's Department
AMTA	Australian Mobile Telecommunications Association
ASL	American Sign Language
BDSL	Business (Grade) ADSL
CAPTEL	Captioned Telephone
CSO	Community Service Obligation(s)
CSP	Carriage Service Provider
DBCDE	Department of Broadband, Communications and the Digital Economy
DDA	Disability Discrimination Act 1992 (Cth)
DEH	Disability Enquiry Hotline
DEP	Disability Equipment Program
DEPCAG	Disability Equipment Program Consumer Advisory Group
DIAC	Department of Immigration and Citizenship
FaHCSIA	Dept. of Families, Housing, Community Services and Indigenous Affairs
FTTH/N/P	Fibre To The Home/ Node/ Premise
HACC	Home and Community Care
HFC	Hybrid Fibre-Coax
ICT	Information and Communication Technologies
IM	Instant Messaging
IP	Internet Protocol
ISDN	Integrated Services Digital Network
LIMAC	Low Income Measures Assessment Committee
MBPS	MegaBits Per Second
MMS	Multimedia Messaging Service
MP3	Moving Picture Experts Group-1 Audio Layer 3
NBN	National Broadband Network
Next G™	Telstra's trademark name for its 3G mobile network
NRS	National Relay Service
PSTN	Public Switched Telephone Network
PWD	People with Disability
Regulations	Telecommunications (Equipment for the Disabled) Regulations, 1998
RPH	Radio For the Print Handicapped
SMS	Short Message Service
TCPSS	Telecommunications (Consumer Protection & Service Standards) Act 1999 (Cth)
TIS	Translating and Interpreting Service
TTY	Teletypewriter
USO	Universal Service Obligation
VoIP	Voice over Internet Protocol
ZTE	Zhong Xing Telecommunication Equipment Company Limited

A   Overview

A.1   Introduction

1   Telstra welcomes the opportunity to provide feedback on the Government's feasibility study into an Independent Disability Equipment Program (DEP). As the major provider of telecommunications disability equipment, Telstra has the knowledge, insight, and experience to make authoritative comment on any such program. Further, Telstra has a significant interest in this study, given the current and potential impacts on its business.

2   Telstra contends that the key consideration for Government in this feasibility study is not whether access to telecommunications for Australians with disability is available, but whether that access is *affordable*. In this regard, Telstra submits that affordable access to telecommunications is a matter for Government consideration in its social inclusion and incomes policies for *all* Australians – with and without disability – including for those on low income, pensions or otherwise disadvantaged.

3   Telstra notes that only a consistent and consolidated policy approach across Government, including DBCDE, FaHCSIA, AGs, and all other relevant Government Departments, will ensure the necessary support, including public funding, to deliver on the Government's Social Inclusion policies (including its National Disability Strategy and particularly Article 9 of the United Nations Convention on the Rights of Persons with Disabilities – access to Information, communications and other services, including electronic services and emergency services).

4   In this submission, which broadly follows the terms of reference for the feasibility study, Telstra will address some of the key issues and questions raised in the discussion paper for public consultation, including current Disability Equipment Program (DEP) arrangements in Australia, access to mobile phones, the Internet and other services not in Telstra's or other existing DEPs. Telstra will also comment on regulatory considerations; and on the role of Government and public funding to ensure social inclusion for all Australians.

A.2   Executive summary

5   Telstra submits that the overarching model for the supply and maintenance of telecommunications disability equipment in Australia should be consistent with, indeed form a part of, the Government's National Disability Strategy. The Strategy recognises 'the need for a new whole-of-government, whole-of-life approach to disability issues which tackles the social and economic divide between people with disability and those without.'

6   Greater benefits will accrue to people with disability if Information and Communication Technologies (ICTs) are 'mainstreamed' into general service provision rather than made subject to a separated telecommunications industry specific program. For example, Independent Living Centres already display accessible communications equipment. Vision Australia already provides a range of technological aids for people who are blind. All Government (funded) programs that provide services to people with disability should be a conduit for the provision of appropriate communications technologies for their clients.

7   A 'social inclusion' model for the provision of telecommunications disability equipment has a number of advantages:

(a)   it integrates ICTs into supporting people with disability in their lived experience, such as accessing education, employment, health care, information and

advice, as well as promoting a greater sense of community connectedness through the engagement that modern ICTs can enable

(b)   it does not confine or limit the type of ICT equipment or service that can be made available to suit a person's particular needs. It can make use of new technologies and market offerings as soon as they are reasonably available, and from a multitude of providers who would have greater incentive to innovate knowing there is a national market with multiple channels through which customers might be served

(c)   by integrating ICTs within existing programs and services for people with disability, the issues of information and awareness will be more effectively addressed at the point of need.

8   Information and awareness is a key to resolving many of the issues faced by people with disability in finding, acquiring, using and maintaining relevant telecommunications products and services. The appropriate context for applying this information is at the point of need and should thus be incorporated into all disability services provided. Further, ACCAN could play a coordination role in awareness-raising among its community members and consumer constituency.

9   Recognising that there is a relatively small need for specialised products and for auxiliary equipment required by people with complex needs, these could readily be implemented within an Independent DEP funded by Government from Consolidated Revenue as part of a social inclusion strategy for people with disability.

10   The regulatory structure that would underpin an Independent DEP is a fundamental issue that cannot be overlooked in this feasibility study. Disability equipment should also be considered in the light of the Government's review of the Universal Service Obligation (USO), which is necessary with the advent of the National Broadband Network (NBN).

11   In a multi-service provider, multi-network, multi-applications competitive industry environment, with a very diverse customer base, it would make no sense for people with disability to have their choices and opportunities limited through outdated legislation which entrenches outdated technologies provided by a very small minority of telecommunications service providers.

12   In shifting responsibility for providing disability equipment to an Independent DEP, the Government would need to review the disability equipment sections of the *Telecommunications (Consumer Protection & Service Standards) Act 1999* (Cth) (TCPSS) and related *Telecommunications (Equipment for the Disabled) Regulations, 1998* (Regulations), with a view to repealing existing disability equipment regulations. Doing so would allow the *Disability Discrimination Act 1992* (Cth) (DDA) to operate in a much more flexible manner in response to new communications technologies and services.

13   Since the National Relay Service (NRS) is an integral service part of the current accessibility solution that disability equipment is meant to resolve, the funding basis of the NRS should also be reviewed so that it is included in the Government's broader social inclusion agenda, rather than a narrow USO/ Standard Telephone Service (STS) focus.

14   As the ageing population becomes a significant market segment, manufacturers are adding accessible features to standard, commercially available fixed and mobile products, and thereby mainstreaming what in the past would have been specialised products.

15   While noting the potential usefulness of mobile phones for improving social inclusion, and perhaps providing a telecommunications solution where none existed before for

people with severe/ profound disability, Telstra does not believe that mobile phones in general should be added to a disability equipment program. Similarly, Telstra would strongly query any moves to include additional third party software as part of a telecommunications disability equipment program. Telstra would, however, see mobiles and related software as appropriate under a government funded social-inclusion program.

16   Telstra would strongly query any moves to introduce CAPTEL type services, which involve technology risks and significant start-up and ongoing costs for service providers.

17   Telstra believes that the market is already supplying affordable equipment and services that enable reasonable video calling, which can be used by almost all Australians wherever they live or work, and in particular people who are Deaf, to enhance their communication experience.

18   However, Telstra does believe that targeted, additional Government funding should be made available for service providers such as the Independent Living Centres and Novitatech to undertake specialist modification activity to provide a telecommunications solution where required, in the cases of severe, profound or complex disability.

19   Telstra concurs with the Department of Immigration and Citizenship's (DIAC) objectives on its national Translating and Interpreting Service (TIS) program, and submits that a video relay service must be regarded as a translation and interpreting service, which improves social inclusion for people who are culturally Deaf, in exactly the same way that the national TIS does, in assisting other culturally and linguistically diverse communities. As such, any Video Relay Service (VRS) should be provided and funded as part of the Commonwealth Government's TIS service, as part of its Access and Equity strategy and social inclusion agenda.

20   Through this feasibility study, the Government has a unique opportunity to make a difference to social inclusion for people with disability through enabling access to a wide range of communications options. This would provide an independent, broad-based equipment program that resources existing 'whole of living' disability service providers and people with disability themselves, through relevant income support, to obtain their preferred communications solutions.

21   Significant efficiency gains would be made by funding the provision of the USO, the NRS, an Independent DEP and other programs provided on behalf of the Government in meeting its social policy objectives directly from Consolidated Revenue. This approach is consistent with the Government's own competition policy announcements, and would maximise competitive neutrality and efficiency. Further, sole Telstra funding of a DEP and industry funding for the USO and NRS are neither appropriate nor sustainable.

A.3   Recommendations

22   R1   That the Government implement and fund from Consolidated Revenue an Independent DEP as part of its National Disability Strategy and Social Inclusion agenda.

23   R2   That the Government utilise and resource existing disability services providers to supply relevant information and communications technology solutions at the point of need for people with disability.

24   R3   That targeted, additional Government funding be made available for service providers such as the Independent Living Centres and Novitatech to research, develop and install specialised equipment fitted to suit individual requirements in the cases of severe, profound or complex disability.

25   R4   That the Government revisit, with a view to repealing, existing disability equip-
            ment regulations and shifting responsibility for providing disability equipment to an In-
            dependent DEP. This process would involve reviewing the disability equipment sections
            of the TCPSS and related Regulation.

26   R5   That any Independent DEP and related services include appropriate industry rep-
            resentation in their governance structures in order to assure efficiency, and technical
            and network capability.

27   R6   That enabling reasonable access to mobile and computer and Internet technolo-
            gies for people with disability, where additional equipment or software is required, be
            considered as a social equity issue, and as such a matter for Government Social Inclusion
            policies, and not a matter for Telstra or the telecommunications industry.

28   R7   That a full cost-benefit study be undertaken before any move to introduce CAP-
            TEL or a similar service is contemplated.

29   R8   That the Government review the funding basis of the NRS, so that it is included in
            the Government's broader social inclusion agenda.

B   The Australian Market

B.1   Current arrangements in Australia

30   Telstra is very aware of the opportunities that modern communications technologies
    can provide to all Australians and in particular to Australians with disability, to improve
    social inclusion. For example, the recent Low Income Measures Assessment Committee
    (LIMAC) 2009 report, *Telecommunications and Community Wellbeing*, provides an exten-
    sive review of the literature in this regard noting that 'digital inclusion' needs to be rec-
    ognised as an important basis for social inclusion.[1]

31   Since 1981, Telstra's DEP has enabled Australians with disability to access a standard
    telephone service on the Public Switched Telephone Network (PSTN) at no additional
    cost to standard telephone rental. Telstra's DEP has been focussed on voice or equivalent
    access to the PSTN, with incremental improvements over time, such as the addition of
    TTYs in 1998; the re-introduction of Braille TTYs in 2003 (after a period of non-availability
    from the US Supplier); the inclusion of volume control as a standard feature in Telstra's
    standard rental handset in 2003; and the introduction of the Telstra Big Button Multi-
    purpose phone in 2005, which includes a number of features to suit people with disability
    and older people, including large keys and large numbers on the keys, volume control,
    voice aid, hands free, and a number of other accessible features, all in the same device.[2]

32   Regular consultation with representatives of consumers with disability through Telstra's
    Disability Equipment Program Consumer Advisory Group (DEPCAG) has ensured the on-
    going relevance of this program for Australians with disability. This dialogue has re-
    sulted in the addition of new equipment and the improvement or addition of new
    features on existing equipment to improve access to fixed network telecommunications
    for people with disability.

---

[1] *Telecommunications and Community Wellbeing: A review of the literature on access and affordability for low-income and disadvantaged groups.* Final report for the Telstra Low Income Measures Assessment Committee (LIMAC). UNSW Consortium: Social Policy Research Centre and Journalism and Media Research Centre. March 2009.
[2] See www.telstra.com.au/disability

33   Further, Telstra's Wholesale DEP makes the program available to most CSPs on resale. As far as Telstra is aware, DDA provisions ensure equivalent pricing to standard equipment for end users in this resale environment.[3] Telstra is aware that Optus also has a small DEP for its direct customers, but is not aware of any other service provider programs.

34   There are many components that go to make up a comprehensive DEP such as Telstra's and deliver it to eligible customers, including the following:

    (a)   the DEP application process, including the Disability Enquiry Hotline (DEH) call centre and appropriate eligibility criteria

    (b)   activation and service assurance, including a holistic approach to fault rectification, interim services and Priority Assistance for those who have a diagnosed life threatening medical condition

    (c)   related and auxiliary products and services that together provide an individual solution

    (d)   consultation with representatives of end-users by way of Telstra's DEPCAG to ensure relevance and customer satisfaction surveys to monitor performance

    (e)   product research, development, testing and delivery via commercially based arrangements with third parties expert in technical/ engineering, distribution/ delivery and customer service

    (f)   marketing, promotional activities and partnerships with community/ grass roots/ government funded disability service provider agencies to display DEP products

    (g)   wholesale arrangements

    (h)   funding.

35   Telstra is willing to supply further details about these aspects of its DEP if necessary.

36   In this time of rapid change in communications technologies and customer preferences, most developments in technology and communications usage have occurred outside of Telstra's DEP and the PSTN. Take-up of mobile phones and the Internet has rapidly increased in a multi-service/ service-provider environment. New devices, such as the hip-top® slide mobile phone on Telstra's network provides unlimited SMS, MMS, Windows® Live Messenger, Yahoo Messaging, Email, mobile internet browsing on a fixed monthly plan.[4] PC-Internet based services such as video-chat, IM, Email and Web 2.0 applications such as Facebook and Twitter have transformed the available communications options for people with disability.

37   Telstra understands that a relatively small number of Australians, such as those with mobility, dexterity *and* speech impairment, have very complex living needs, making ready-access to a fixed or mobile network handset a challenge. In many cases specialised and often purpose-built additional equipment is required to be expertly fitted, and the customer provided expert instruction, to meet their individual needs. In these cases, Telstra has relied on specialist disability agencies to undertake this work, which might

---

[3] See www.telstra.com.au/customerterms/docs/wp.pdf
[4] See www.telstra.com.au/mobile/phones/hiptop/index.html

utilise the Big Button Multipurpose phone or commercially available mobile handsets for use with specialised switch mechanisms.

38   The above service provision is a current example of Government-funded service providers, such as the Independent Living Centres or Novitatech, providing a communications solution utilising commercially available products as part of a 'whole of living' approach to empowering people with disability.

39   *Telstra submits that the Government, through its social policies and programs, has a key role to play to ensure fair and equitable outcomes for all stakeholders, including for Australians with disability that enable greater access for consumers in the competitive market place of these generally available goods and services.*
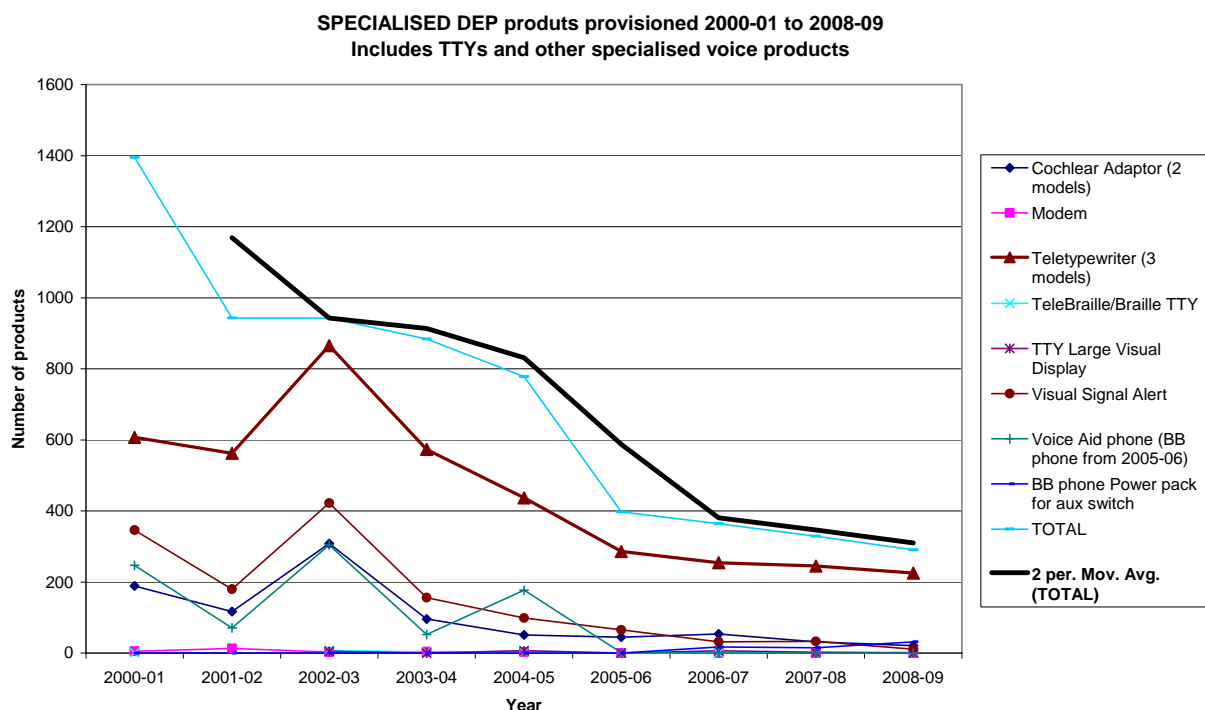
B.2   Demand

40   **Attachment 1** provides Telstra's DEP data for 2000-01 to 2008-09. Telstra has provided the data up to 2007-08 to the Australian Communications and Media Authority (ACMA) for their annual communications reporting. The 2008-09 data has been extrapolated from internal data for the first 8 months of this year. The following graphs are sourced from that DEP data.

41   The chart below, *ALL DEP products – OVERALL TREND*, clearly shows a significant downward trend to 2004-05, then a flattening out of demand.


ALL DEP products 2000-2001 to 2008-2009 - OVERALL TREND
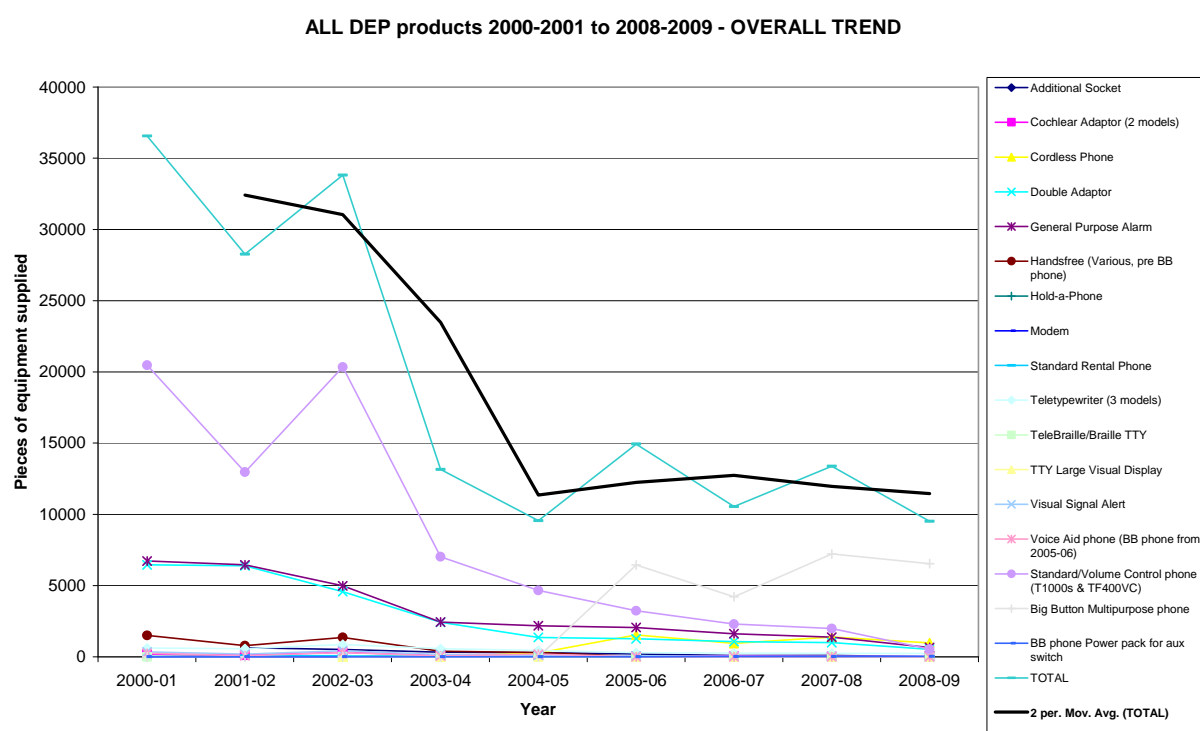
42   The main reason for the significant decrease in the supply of DEP products is that in 2003-04, Telstra introduced the new, improved T1000S as its standard rental telephone handset, with inbuilt *Volume Control* for the first time in a standard rental handset. The T1000S also has an additional port, which alleviates the need for a double adaptor if a General Purpose Alarm is also required for a customer with more severe hearing impairment. The previous TF400VC handset remained available for customers for some time after the introduction of the T1000S, on request.

43   What the data table at *Attachment 1* and the above chart do not show, is that a significant additional number of Telstra customers (and others) have benefited from the inclusion of Volume Control as a standard feature on the Telstra standard rental phone. Customers can now rent the T1000S as a standard rental phone, without the need to submit an application for a standard phone, modified to include Volume Control phone through Telstra's DEP. Telstra believes that many people with disability are therefore now being served by this mainstream product.

44   Consistent with this view, the chart below, *Specialised (non-mainstream) DEP products (including TTYs and modems used for text communication),* shows a very clear decline in demand for specialised products to the extent that around only 350 pieces of specialised, non-mainstream equipment will be supplied in 2008-09.

45   This is due to improved mainstream products continuing to provide better access. For example, the voice aid function is now part of the Big Button Multipurpose Phone. A power pack for an auxiliary switch (e.g. puffer, jellybean, lever switch) was introduced in 2006-07 for the Big Button Multipurpose phone, enabling many people with severe physical and dexterity impairment to use the (standard) Big Button Multipurpose phone. These refinements to a standard product have alleviated the need for some specialised products.

SPECIALISED DEP produts provisioned 2000-01 to 2008-09
Includes TTYs and other specialised voice products

46   In particular, the chart below, *TTYs and Modems provisioned,* also shows a clear decline in demand for these products to the extent that just over 200 pieces will be supplied in 2008-09. Recent studies indicate that this is due to people who are deaf/ Deaf using other communications products and services, including mobile phones for SMS, MMS, video telephony, and indeed email and Instant Messaging, including through the IP Relay service; and video telephony, email, Instant Messaging, including through the IP Relay service and even SMS and MMS, via PC and internet services.

**TTYs and Modems provisioned 2000-01 to 2008-09
to provide voice-equivalent text services**
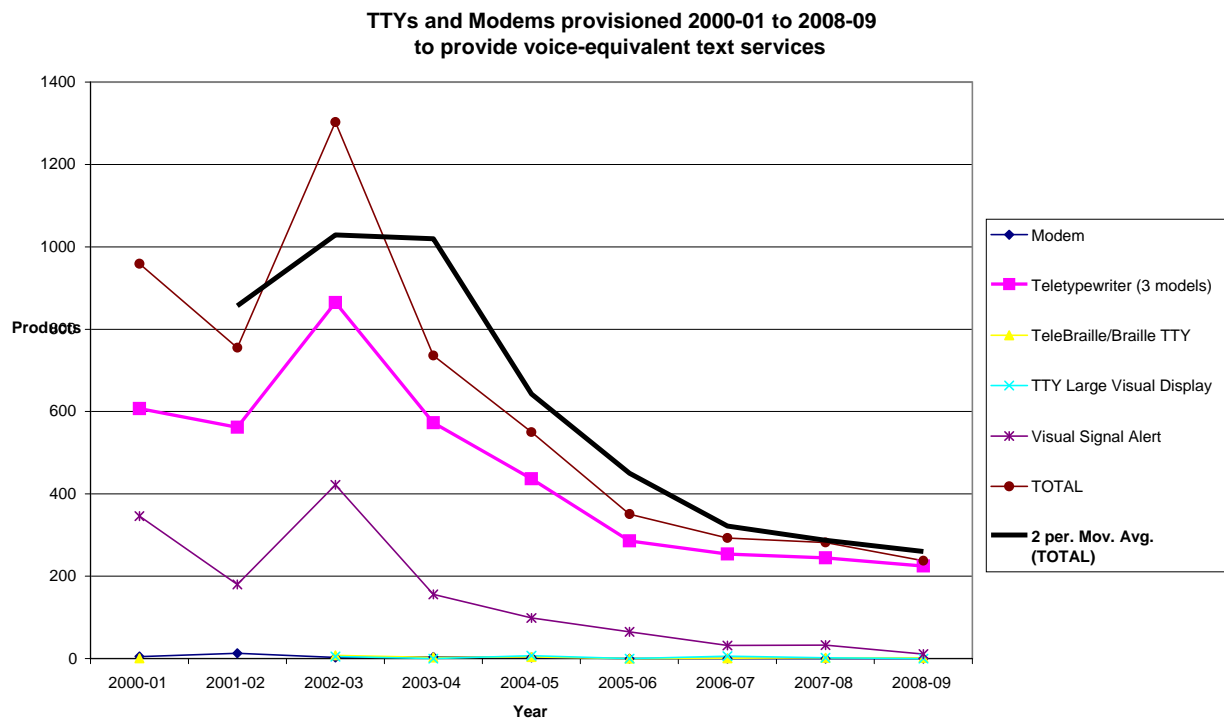
47   Finally, Telstra notes that the demand for mainstream products is now on a small (possibly) upward trend, as shown in the chart below, *Mainstream products provisioned as part of Telstra's DEP.* Telstra's view is that this graph gives the best estimate of demand, at least for the foreseeable future, from an ageing population, with an estimated 10 000 pieces supplied in 2008-09 and mainly driven by requests for the Telstra Big Button Multipurpose phone. Telstra notes that the Telstra Big Button Multipurpose phone, developed for its rental market, is also available as a sale item at reasonable cost for those who prefer to buy rather than rent DEP products.

Mainstream products provisioned 2000-01-2008-09
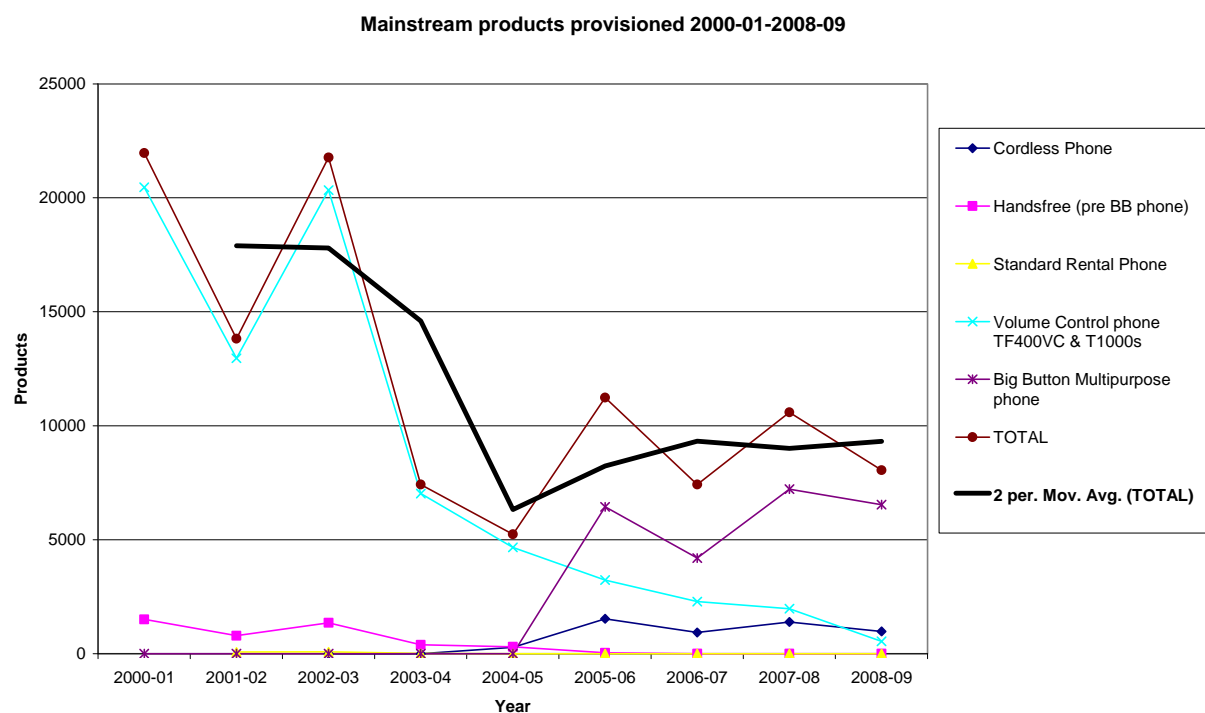
48   The overall trends in the supply of DEP products should be considered in light of the significant change in the take up and number of mobile and fixed line services in operation during the period shown.

49   While it does not appear to include specific data on people with disability, ACMA's *Convergence and Communications Report 1: Australian household consumers' take-up and use of voice communications services* (ACMA, April 2009) provides some useful data on (general) consumer use of mobiles and fixed lines in recent years.[5]

    (a)   the number of mobile phones in Australia has nearly trebled from 8 million to 22.1 million services between 1999-2000 and 2007-08

    (b)   the number of fixed-line services has remained relatively steady/ flat from 10.6 million to 11.3 million during that time

    (c)   the number of mobiles passed the number of fixed lines in 2001-02

    (d)   the number of mobiles has been almost double the number of fixed lines since 2005-06.

50   Quoting Roy Morgan research data, the ACMA report shows that:

    (a)   older Australians are more likely to have a fixed line phone

    (b)   older Australians, retirees and unemployed are less likely to take up and use a mobile service, e.g. the user profile for mobile phones is 95 per cent of people aged 25-49; 71 per cent of people aged 65-69, and 52 per cent of people aged 70 and over.

51   It is clear from ACMA's survey that reliance on fixed network services is diminishing in favour of mobile services, especially among younger people, some of whom are substituting mobiles for fixed lines fully (e.g. one third of 18-24 year olds v 2 per cent of 65-69 year olds). At the other end of the age scale, however, older people (e.g. 96 per cent of 65-69 year old) are likely to retain their fixed line as their primary/ only means of communication.

52   *Telstra concludes that there is a continuing market demand for fixed network phone products that suit the needs of older people, at least for the foreseeable future. Telstra believes this can be best achieved by way of the current, mainstream products, which are not necessarily included in any DEP but provided as standard handsets.*

53   *Telstra also concludes that there is a relatively small need for specialised products and for auxiliary equipment required by people with complex needs. These could readily be funded by Government from Consolidated Revenue as part of a social inclusion strategy for people with disability.*

B.3   International programs

54   Telstra is aware of a number of diverse overseas arrangements that provide specialised telecommunications equipment and services to people with disability. The discussion paper provides examples in 'comparable' overseas countries such as Canada, New Zea-

---

[5] See www.acma.gov.au/webwr/_assets/main/lib100068/convergence_%20comms_rep-1_household_consumers.doc

land, the UK, Sweden and the USA – specifically in California, although Telstra is aware that some other US states offer similar programs.

55   The Californian model, for example, provides 'free' equipment required to access a fixed voice phone service or equivalent for *eligible* Californians with disability.[6] This model (equipment *and* access to relay services) is required of public utilities by California State legislation. It is funded by a surcharge/ levy on telephone accounts of *all* Californian fixed line users. The surcharge appears on phone bills as the 'CA Relay Service and Communications Devices Fund'.

56   Telstra's understanding is that these overseas arrangements are quite varied in respect of the equipment supplied, eligibility criteria for the equipment, the user contribution towards outright purchase or ongoing rental/ monthly fee for service, and auxiliary services. Further, different arrangements can apply in different jurisdictions (e.g. federal or state), within states, and even within counties. This makes comparison difficult.

57   Telstra observes that other than as reported for the Swedish example (and even there only in the provision of access to fixed network services); none purport to provide a holistic, social inclusion approach to access to telecommunications for people with disability.

58   *Telstra also observes that some consumer advocates, seeking to gain additional options for their constituents and arguing that current arrangements in Australia are inadequate, invariably pick and choose the best possible aspects of the various international programs, and conflate them together, often citing these as common in many overseas jurisdictions. Rarely, if ever, is fiscal/ commercial reality and fairness for all parts of the community considered – people with disability and people without disability, consumers and suppliers. Telstra submits that the diversity of the overseas programs reflects negotiated outcomes appropriate to those jurisdictions and cannot necessarily be duplicated 'in toto' in Australia.*

59   Indeed, the December 2006 Allen Consulting Group report to DCITA found that:

(a)   Suggestions that the equipment that is available through the equipment arrangements in Australia is 'ten to twenty years' behind the rest of the world is not supported by the evidence examined in this review. Some other countries may have a wider range of telecommunications products available (such as more sophisticated mobile phones that can place calls through a text relay service, web cameras, faster Internet connections, etc) available. However, not all of these products are offered at a subsidised rate or through that country's equipment arrangements.

(b)   Australia's current arrangements for providing telecommunications disability equipment to consumers with a disability is comparable with the best of those in the countries discussed in this report.[7]

60   In Telstra's view, the validity of this conclusion has not changed.

61   Telstra is not aware of any international equipment program that provides mobile phones and computer equipment to people with disability via a national or other scheme.

---

[6] See www.ddtp.org
[7] See www.dbcde.gov.au/__data/assets/pdf_file/0017/58400/Provision_of_telecommunications_equipment.pdf

62   Telstra is aware, however, of a US state government supported mobile phone program 'SafeLink' that provides a free basic mobile handset and airtime (68 minutes/ month) for income-eligible customers (i.e. on a pension or a low income).[8] It is currently available in ten US States (Delaware, Florida, Tennessee, Georgia, Massachusetts, Michigan, New York, North Carolina, Pennsylvania, and Virginia), with plans to expand to a further four states. Interestingly the program does not appear to apply in California. The program includes a very basic mobile handset, with basic features *that may not be suitable for many people with disability*. Other handsets may be available, but these appear to be at a cost to the user. It would appear, therefore, that this program is aimed at general social inclusion goals rather than specific disability equipment provision.

B.4   Future demand

63   Telstra is aware of the following Australian reports on ageing and disability that may inform this study.

(a)   The 2003 Australian Bureau of Statistics (ABS) study on Ageing, Disability and Carers found that an estimated 4 million Australians identified/ reported they had disability – 20 per cent of the population. Over 6 per cent (1.2 million) reported a profound or severe 'core activity limitation'. The ABS also recognises an increasing rate of disability with age, noting, for example, that 45 per cent of people aged 65 to 74 have disability; 63 per cent of people aged 75 to 84 have disability and 82 per cent of people aged 85 and over have disability.[9]

(b)   The June 2008 report, *Disability in Australia: trends in prevalence, education, employment and community living,* provides projections on the number of people with disability between 2006 and 2010. It concludes that the number of Australians with severe or profound limitations is projected to increase to around 1.5 million (from 1.2 million in 2003). The greatest growth is projected to be in those aged 65 years and over (13 per cent or 81 600 people) and those aged 45–64 years (10 per cent or 32 800).[10]

64   Telstra's fixed network DEP has around 85 000 services in operation (around one percent of the total number of Telstra's fixed basic access services in operation) which has been relatively stable over the last few years. This relatively moderate number of DEP customers is despite generous eligibility criteria, and, based on Telstra surveys, wide community knowledge that Telstra has a disability program.

65   As the ageing population becomes a significant market segment, manufacturers, including those which manufacture Telstra-branded products, are adding accessible features to standard, commercially available fixed and mobile products, and thereby mainstreaming what in the past would have been specialised products.

66   The telecommunications industry in Australia provides a very competitive market place. To ensure that this continues and provides good customer choice and benefits, there is a need for fair, commercially viable outcomes, for example, through focussing on accessible features in standard product offerings.

---

[8] See www.safelinkwireless.com
[9] See www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/978A7C78CC11B702CA256F0F007B1311/$File/44300_2003.pdf
[10] See www.aihw.gov.au/publications/index.cfm/title/10495

67   Technological developments, in particular, will continue to reduce the need for special-ised equipment.

(a)   For example, as a result of customer demand, technology and economies of scale, Telstra included a volume control on its hearing aid compatible standard rental telephone handset (the T1000S), which has made the phone more ac-cessible to many older people, and people with hearing impairment.

(b)   Another example is the Telstra Big Button Multipurpose phone, which includes a number of features to suit older people and people with disability, including large keys and large numbers on the keys, volume control, voice aid, hands free, and a number of other features, all in the same device. Previously, a num-ber of different specialist devices were required.

(c)   The above handsets with improved/ more accessible features were introduced following extensive consultation with Telstra's DEPCAG and resulted in a sig-nificant reduction in the demand for specialised equipment (e.g. the TF400VC rental handset) to access the standard telephone service from over 36 500 pieces of equipment in 2000-01 to 13 000 in 2007-08 to 9 500 projected for 2008-09.[11]

(d)   For mobile handsets, mobile device manufacturers such as Nokia, Blackberry and ZTE are including more and more features suitable for people who are blind or have vision impairment as either standard or at no/ little additional cost as downloadable software options.

(e)   Earlier concerns about interference and hearing aid compatibility for mobile phones has all but disappeared in recent years. Testing has confirmed that 3G/ Telstra Next G™ handsets are compatible with hearing aids, and do not cause interference (unlike many GSM handsets). Telstra, for example, has a range of Next G™ mobile devices, from different manufacturers, that can be used with confidence by Australians who wear hearing aids. This has been verified by tests conducted by the National Acoustic Laboratories as part of Telstra's on-going commitment to provide access to mobile services. That testing was cor-roborated by tests with end users with hearing aids and cochlear implants, including with members of Better Hearing Australia and Deafness Forum.[12]

(f)   For computers (e.g. PCs, laptops, netbooks) operating system software such as MS Windows and Apple OS X now include basic screen reading (speech output) capability at no additional cost.

(g)   IP based services and software driven applications such as Instant Messaging (IM), Email, MMS, video-calling, video-messaging, and voice output of SMS and other mobile handset functions and features will continue to improve access for people with disability as a matter of course, through continuing software development and improvement.

(h)   Also important are the commercially available, affordable call plan options such as capped plans that include voice, video and text (SMS/ MMS), and af-fordable, 'all you can eat' text and data plans offered by Telstra (hiptop® slide

---

[11] See Attachment 1.
[12] See www.telstra.com.au/abouttelstra/advice/mobile/hearing.cfm

$30/ month plan) and at least one other service provider, with unlimited SMS, MMS, Email and internet access for a low monthly fee.

68   *Telstra submits that manufacturers of hardware, devices and software should be en-couraged to include more accessible features wherever possible. In this regard, Telstra has worked co-operatively with handset manufacturer ZTE to develop a mobile handset with a number of accessible features, suitable for older people, and many people with disability, viz. the Telstra EasyTouch® Discovery. Telstra notes that this is a standard, off-the-shelf phone which Telstra offers to customers on a commercial basis and which has been very popular.*

69   *In conclusion, Telstra submits from our own experience in delivering a DEP, that it would be naïve and fiscally irresponsible to take a 'supply it and they will come' approach to meeting demand by developing and promoting novel telecommunications equipment in the Australian market. Our experience is that many if not most older people can use, and indeed prefer to use, standard/ off-the-shelf equipment, which is becoming more and more accessible. See particularly under E.2 Mobile phones below.*

B.5   Eligibility and affordability issues

70   Under current DDA/ USO arrangements Telstra provides the *additional* equipment re-quired by eligible customers with disability (or a member of their household with disabil-ity) to access a basic (fixed) voice telephone service at no *additional* cost to standard handset rental.

71   *Telstra is aware that some consumer advocates have sought to extend eligibility for dis-ability equipment and other associated services to include family members living sepa-rately who do not have a disability. This is not an eligibility criterion under Telstra's DEP arrangements, nor is Telstra considering a change to the eligibility criteria. Telstra ac-knowledges that such an extension of the program would be consistent with a social in-clusion strategy for people with disability, however, Telstra submits this takes it beyond the ambit of a specialised DEP and is a matter for Government to consider and to fund as an integral part of a social inclusion strategy.*

72   Telstra understands that under current DDA/ USO arrangements additional equipment must be supplied at no additional cost otherwise there may be a claim of indirect dis-crimination (unless the supplier can argue under the provisions of the DDA that this would cause significant financial hardship for the supplier). Therefore, Telstra does not apply an income test in regard to supply of such equipment and would see little merit in doing so if a DEP remained restricted to such specialised additional equipment.

73   *Telstra notes that a significantly higher proportion of people with disability is dependent on Government income support and/ or has lower income than the population in gen-eral.[13] Therefore, affordability is a particularly relevant issue for this group, particularly where additional specialised equipment or services are required to enable accessibility, and where they only come at much greater cost. However, as argued elsewhere, Telstra submits that mobiles, PCs and Internet are generally accessible at the same or similar cost by all Australians. Therefore, affordability, user education and skills are the critical issues for all Australian on low incomes.*

---

[13] Page 25, **People with disability**, *Telecommunications and Community Wellbeing: A review of the literature on access and affordability for low-income and disadvantaged groups.* Final report for the Telstra Low Income Measures Assessment Committee (LIMAC). UNSW Consortium: Social Policy Research Centre and Journalism and Media Research Centre. March 2009.

74   Finally, if a whole of Government, whole of living, social inclusion approach is taken to providing relevant communications solutions to people with disability in Australia, and funded by Government, then eligibility criteria, subsidised equipment, means testing, and the needs of Australians with disability compared to the needs of people without disability but otherwise disadvantaged, such as those on low income, pensioners, or homeless, for example, are matters for Government decision, as part of its National Disability Strategy and social inclusion considerations.

C   Delivery Models

C.1   Social Inclusion

75   *Telstra submits that the overarching model for the supply and maintenance of telecommunications disability equipment in Australia should be consistent with, indeed form a part of, the Government's National Disability Strategy. The Strategy recognises 'the need for a new whole-of-government, whole-of-life approach to disability issues which tackles the social and economic divide between people with disability and those without.'*

76   The Strategy seeks to 'prioritise the national actions that best tackle the physical, *technological* and attitudinal barriers that prevent people with disability from realising their aspirations and achieving full participation' (emphasis added).

77   *One of the key Principles of the Strategy is 'accessibility' and Telstra submits that communications technologies will play a key role in achieving all of the core outcome areas so that 'people with disability enjoy choice, wellbeing and the opportunity to live as independently as possible'.*

78   *Telstra submits that greater benefits will accrue to people with disability if Information and Communication Technologies (ICTs) are 'mainstreamed' into general service provision requirements. For example, Independent Living Centres already display accessible communications equipment. Vision Australia already provides a range of technological aids for people who are blind. Telstra submits that all Government (funded) programs that provide services to people with disability should be the conduit for appropriate communications technologies for their clients.*

79   A 'social inclusion' model for the provision of telecommunications disability equipment has a number of advantages:

    (a)   Firstly, it integrates ICTs into supporting people with disability in their lived experience, such as accessing education, employment, health care, information and advice, as well as promoting a greater sense of community connectedness through the engagement that modern ICTs can enable.

    (b)   Secondly, it does not confine or limit the type of ICT equipment or service that can be made available to suit a person's particular needs. It can make use of new technologies and market offerings as soon as they are reasonably available, and from a multitude of providers who would have greater incentive to innovate knowing there is a national market with multiple channels through which customers might be served.

    (c)   Thirdly, by integrating ICTs within existing programs and services for people with disability, the issues of information and awareness will be more effectively addressed at the point of need.

80   In a multi-service provider, multi-network, multi-applications competitive industry envi-
ronment, with a very diverse customer base, it makes no sense for people with disability
to have their choices and opportunities limited through outdated legislation which en-
trenches outdated technologies demanded from a very small minority of communica-
tions service providers.

81   There are a range of disability service providers who could undertake the role of Subject
Matter Experts in the field of communications technologies. The Independent Living Cen-
tres have already been mentioned. They maintain a searchable national online data-
base of useful equipment and aids, which could be extended to ICTs that are generally
and commercially available.

82   In respect of equipment that is not commercially available in Australia, but is required
for accessibility purposes, then some form of procurement program would need to be
maintained with ongoing contracts for supply and maintenance of such low volume spe-
cialised equipment (e.g. Braille TTYs).

C.2   Information, knowledge, understanding and outreach programs

83   *Telstra believes that information and awareness is a key to resolving many of the issues
faced by people with disability in finding, acquiring, using and maintaining relevant
telecommunications products and services. Telstra acknowledges that this is a special-
ised field, requiring in-depth understanding of the nature of specific disabilities and the
opportunities that various features of telecommunications products and service may
provide. However, Telstra submits that the appropriate context for applying this infor-
mation is at the point of need.*

84   Telstra notes that awareness-raising about telecommunications issues is challenging
enough in the broader community, and even more so for specialised matters such as dis-
ability equipment. Telstra's approach for such targeted programs, e.g. low income
measures and disability services, is to use targeted channels for information provision
and awareness-raising, including service providers, community organisations and other
interested parties who are likely to have actual contact with the client group in question
at the time of actual need. This is complemented by comprehensive web-based informa-
tion that allows customers and service providers to locate relevant products and services
of interest.

85   Specifically, targeted channels can include consumer, community and disability service
provider organisations' websites/ magazines/ events; local Government programs for
people with disability/ older people; specialised communications for older people, nurs-
ing homes magazines; television and radio for people with disability such as Radio For
the Print Handicapped (RPH) and Deaf TV.

86   Telstra also actively encourages the above organisations, and indeed any other con-
sumer/ community organisation to provide a link from their web sites to Telstra's DEP
pages on www.telstra.com.au/disability.

87   One of the hurdles faced by Telstra in raising awareness about programs for disadvan-
taged Australians is the inability (it seems) of Government agencies to promote market
products and services on the basis that this would be seen to be anti-competitive, or fa-
vouring one provider over another, or of giving consumer advice. For example, Centrelink
will not promote any specific information about telecommunications benefits available
to its clients, even when eligibility for those benefits is based on Centrelink criteria and
verification. It simply directs clients to ask their service provider if concessions are avail-
able.

88   Telstra believes, in fact, that competition would be given further incentive and consumer benefit increased if such agencies were able to specifically promote relevant products and services based on their client's needs or eligibility. There are some examples of this still. The *Australian Government Directory of Services for Older People* has to date included information about specific Telstra programs for older people who may be on a low income, with disability and/ or from an Indigenous community. Telstra is aware that Australian Hearing (Department of Human Services) is considering how it might provide suitable mobile phone services to its customers who have a hearing loss thus building on its National Acoustic Laboratories testing of such devices.

89   Telstra believes that the best strategy for awareness-raising is to locate information provision at the point of need. This could be achieved for people with disability if all related Government (funded) programs include access to relevant communications options in their case management policies and processes. This would contribute to the Government's social inclusion strategy and provide a very low cost method of increasing awareness and information provision at the point of need.

90   Telstra, on a number of occasions, has raised the issue of how relevant information for people with disability on telecommunications could be aggregated and made easily available. Telstra has suggested exploring the use of a Wiki platform, where users themselves, as well as service providers, could generate content based on their own experience of what is available and what works in various situations. Telstra believes that this would be an efficient and effective way for the community sector, service providers and customers with disability to share relevant information. Further, Telstra notes that the Australian Communications Consumer Action Network (ACCAN) potentially has a role to play in awareness-raising among its community members and consumer constituency. ACCAN could play a coordination role in this type of development.

91   Service providers, such as Telstra, already have an obligation to provide information about the retail customer equipment it offers under the Communications Alliance Industry Code C625:2005 *Information on Accessibility Features for Telephone Equipment*. Telstra is still working on the best way to make this information publicly accessible on its web site.

C.3   Regulatory changes

92   The discussion paper does not seem to envisage, discuss or propose a regulatory structure to underpin any proposed Independent DEP. Furthermore, the discussion paper does not address how the current regulatory landscape will be affected by the introduction of the proposed program. Telstra believes that these are critical issues and should not be overlooked during this process. Telstra expects that a number of changes to the current regulatory regime will be required to accommodate an Independent DEP, which will have varied effects on carriage service providers.

93   *Telstra appreciates that the appropriate regulatory structure to underpin an Independent DEP will depend on a number of factors that are yet to be determined, such as the delivery model, funding source and governance structure. It will also depend on what the Government intends for the current carrier-funded disability equipment regime (and the NRS and USO). Telstra sets out some potential areas where reform may be required below.*

94   First, if an Independent DEP is to assume responsibility for providing disability equipment to people with disability in Australia, certain legislative obligations relating to the provision of disability equipment would need to be reviewed, including:

(a) the **TCPSS Act**, which requires Telstra (as primary USO provider) to ensure that people with disability have reasonable access to voice telephony or (if that is not practicable because of the person's disability) an alternative form of communication that is equivalent to voice telephony, plus equipment; and

(b) the **Regulations**, which specify the:

(i) features and equipment that must be made available for people with disabilities to have access to a standard telephone service for the purposes of the USO; and

(ii) types of equipment that must be available for people with disability to access the NRS (e.g. TTY and telebraille).

95 A problem with existing legislation, such as the Regulations, is that it has had the effect of entrenching certain technologies, such as the TTY, as 'the solution' for people with particular disabilities. However, this is an inflexible approach and does not account for technological developments or changes in technological needs, an important point relevant to this feasibility study. Indeed, this approach is not consistent with the social inclusion approach underpinning the Government's National Disability Strategy. Telstra believes that there would be real benefits in removing these prescriptive obligations, as it would allow for more modern and appropriate technologies to be offered to customers with disability to better cater for their individual needs.

96 *Accordingly, as a starting point, Telstra submits that the Government should consider revisiting – with a view to removing – the existing disability equipment provisions in the TCPSS Act and the Regulations in shifting the responsibility for providing disability equipment to a centralised Independent DEP. Telstra notes that any changes of this nature would also have flow on effects for the USO. In Telstra's view, removing the prescriptive technology requirements imposed by the current legislation will also enable the DDA to operate in a much more flexible manner with respect to new and emerging communication technologies and services to the benefit of all.*

97 Secondly, if the responsibility for providing disability equipment is transferred away from the carriers and to an Independent DEP, the Government should ensure that carriage service providers are protected from the reach of the DDA insofar as they rely on an Independent DEP to supply disability equipment to customers.

98 *Accordingly, Telstra submits that if responsibility for providing disability equipment will shift to an Independent DEP, the Government, either in the regulatory structure that underpins an Independent DEP or in the DDA, should make it clear that carriage service providers will not incur any liability for not providing disability equipment to customers where that equipment has been or should have been provided by an Independent DEP.*

99 Thirdly, the Government should consider what will happen to the NRS if an Independent DEP is introduced. Currently, the NRS is funded by industry (by way of special levy). Telstra suggests the Government consider whether the NRS should continue and, if so, consolidating the program in a Government-funded Independent DEP. Indeed, if it is not included in such a program, there would be potential for unnecessary duplication in programs, unnecessary costs and confusion and inconsistency in the services and equipment provided to people with disabilities. Real benefits could be realised by consolidating the various disability equipment programs in a single Independent DEP.

100 If the NRS is integrated in an Independent DEP, Part 3 of the TCPSS Act will need to be reviewed. Should the Government decide that carriers are no longer responsible for funding the NRS, it may be appropriate to repeal Part 3 of the TCPSS Act entirely or in part

(retaining sections 95 and 97, with due consideration to the appropriate body to manage and monitor the performance of the NRS provider).

101 Finally, in determining the appropriate regulatory structure for an Independent DEP, Telstra would also encourage the Government to revisit and review the USO in relation to obligations to provide a standard telephone service to people with disability. In Telstra's experience, a key downside of the current USO is that it only requires Telstra (as the primary USO provider) to supply a standard telephone service and any required disability equipment in all instances. This means that, other than subject to unspecified requirements in the DDA, other carriage service providers who do not wish to be burdened with the supply of such equipment may simply refuse to connect customers *even where* they have network available or have access to the equipment via Telstra's commercially-available wholesale equipment. This does not support competition objectives of the USO, nor does it support the overall objectives of the National Disability Strategy. In Telstra's view, this is particularly problematic in new estates, where a non-Telstra service network provider may be the only option for residents. Telstra has already raised these issues with the Department in regard to USO policy.

102 *Telstra therefore believes that disability equipment must also be considered in the light of the Government's overall review of the USO, which is necessary with the advent of the NBN. Telstra would also recommend that the Government review the NRS as part of this process, since it is an integral service part of the current accessibility solution that disability equipment is meant to resolve. Therefore, the funding basis of the NRS should also be reviewed so that it is included in the Government's broader social inclusion agenda, rather than a narrow USO/ STS focus.*

D   Governance

D.1   Governance structures

103 If a whole of government, whole of living, social inclusion model is adopted as suggested, then governance requirements might be minimised since existing programs and channels would be used for the implementation.

104 *Telstra submits that for an Independent DEP, there should be clear obligations on any Board, Council and management to operate efficiently and effectively – including cost-effectively. Access to telecommunications for Australians with disability should be based on real needs, and on terms, conditions and pricing that is fair for all Australians, including people with disability but also others who may bear some of the costs.*

105 *Telstra further submits that it would be sensible to include Carriage Service Provider/ Industry representation in any oversight and compliance arrangement for an IDEP, to not only ensure the above but also to ensure other issues such as network compatibility and interoperability are pro-actively managed.*

E   Equipment

106 Telstra will discuss a number of products and services that may provide improved access to fixed, mobile and computer/ internet services, and our view on the provision of these as part of a specialised disability equipment program.

E.2   Mobile phones

107 There is no doubt that mobile phones are transforming the way people communicate today. It is a well-known fact that there are more mobile phone services in operation than

there are people in Australia. Mobile phones also bring opportunities for people with disability and older people, enabling greater independence and confidence, especially when undertaking journeys outside the home. Also, for economic reasons, some people may choose to substitute their fixed line with a mobile phone.

108   Mobile phones are becoming more and more multipurpose devices. For example, the one mobile device can be used to make and receive: a voice call, an SMS, e-mail, or MMS, an AUSLAN video call, or initiate an Instant Messaging (IM) session with or without the IP relay service[14] and access the internet. A mobile phone device can also typically include a radio, a voice recorder, a calendar, a clock and alarm, a camera, a calculator, and a video and audio player (e.g. MP3 player), as well as an array of additional applications, including games.

109   Telstra notes that there is a very large array of mobile phones and pricing plans available in the market today. Telstra itself has over 100 different mobile phone handsets on offer. Prices start from $59 for a prepaid service, including handset, and $20 per month for a post paid service, including a handset, or $10 per month not including a handset. Telstra also has a range of capped plans and data plans that can provide cost-effective access to voice, video and text communication, as well as web surfing and emails.

110   Many of these devices also have useful accessibility features such as voice output for SMS and numbers dialled, large buttons, large screens and fonts, voice dialling of regular phone numbers, and certification for hearing aid compatibility.

111   Telstra notes that in the case of at least two examples of specially designed mobile phones for people with disability that these have not met with success even in their intended market. A French designed phone for the Blind was not popular because it did not have a number of desired features. A US designed phone for older people again was not popular when tested with focus groups of new users because people felt that it was too limited. In designing its own phone for older people and people with disability, the Telstra EasyTouch® Discovery, Telstra was mindful of these earlier attempts and sought to ensure that any phone intended for such a specific market segments had most features so that people could explore them when they are ready to.

112   Telstra, through the Australian Mobile Telecommunications Association (AMTA), is in continuing conversations with mobile phone manufacturers, such as Nokia and Research in Motion (Blackberry) regarding future improvements to accessibility features such as voice output that will become standard in these handsets.

113   Telstra, through the Communications Alliance, and the Mobile Manufacturer's Forum, has also been working to make available information about the accessibility features of its mobile phones and other customer equipment. This process is not yet complete, partly because some manufacturers have been unwilling to provide the relevant information according to the Communications Alliance code, and partly because we are still working on the most appropriate web enabled database technology to implement a public information service for intending Telstra customers.

114   *While noting the usefulness of mobile phones for improving social inclusion, and perhaps providing a telecommunications solution for people with severe/ profound disability where none existed before, Telstra does not believe that mobile phones in general should be added to a disability equipment program. Telstra submits that the real issue is information and awareness by the customer about the features required. Telstra rec-*

---

[14] Telstra has worked co-operatively with the IP Relay provider to ensure the IP relay is accessible to its mobile handsets and PDAs.

ommends that all government departments and funding programs that interface with people with disability should initiate a greater focus on communications equipment that would empower their clients in the relevant education, employment, or health situation that is in view. Telstra further recommends that ACCAN can take a role in improving awareness and information provision about suitable communications equipment, and cost-effective Plan options, for mobile phones in particular, through its outreach programmes.

115   Telstra accepts that a relatively small number of Australians, such as those with mobility/ dexterity and speech impairment, have very complex living needs, including the use of a mobile phone as their communications solution. Telstra notes that in this regard, DoCITA-funded research undertaken by Regency Park Rehabilitation Engineering (now Novitatech) found that off-the-shelf mobile devices, installed on wheelchairs with a car kit and additional, specialised equipment fitted to suit individual requirements, were able to be used effectively by people with severe physical disability affecting movement and speech.[15]

116   Telstra therefore submits that targeted, additional Government funding should be made available service providers such as the Independent Living Centres and Novitatech to undertake this activity where required, in the cases of severe, profound or complex disability.

E.3   Software for mobile phones for people who are blind

117   Telstra recognises that mobile phones and mobile devices have great social inclusion potential for people who are blind, enabling them to more confidently undertake outside journeys, for example, utilising 'turn by turn' instructions from a Telstra Whereis®, GPS enabled mobile handheld device.

118   However, we would argue that access to basic communications using a mobile device is now readily available to people who are blind without the need for special additional software. Further, handset manufacturers are increasingly including additional functionality and features in new models or operating system updates.

119   Telstra currently chairs the AMTA Accessibility Committee, which includes some handset manufacturers and has contact with others, and is aware that advances are being made to include more speech output functions on upcoming devices.

120   Telstra pro-actively promotes the Nokia 6120 Classic and Nokia E51 as two handsets that have speech output for SMS and a number of other functions. The E51 'voice aid' function, for example, reads out *recent calls* [missed calls, received calls, dialled numbers and frequent calls], *contacts* from the contact list, from which the user is then able to initiate a call, *dialler* [speaks out numbers on the keypad as they are pressed], *voice mailbox* and *clock* (reads out the time and date]. Telstra is aware that Nokia is considering the addition of voice output for battery and cell signal strength as an inbuilt or no additional cost feature, and a 'Talking Theme' which could be easily set as a default. In this regard. Telstra is in regular contact with Nokia and encouraging the inclusion of these features on that basis. Telstra's own EasyTouch® Discovery handset also has speech output for number dialling.

121   Telstra notes that in Western Australia, the State Government, through its Lotteries Commission and the WA Independent Living Centre, funds the purchase of specialised

---

[15] See www.dbcde.gov.au/__data/assets/pdf_file/0004/38731/MobilePhoneAccessForPeopleUsingAACFinalReport_2.pdf

additional software for people who are blind if they require it. In addition, the Government JobAccess initiative provides for workplace modifications or adjustments that include screen reading software for employees with vision impairment. Telstra assumes that this would include such software for mobile devices.

122 Further, the December 2006 Allen Consulting Group report to DoCITA on the Review of the provision of telecommunications equipment to consumers with disabilities (6.3, Equipment)[16] found that at the time of the study, mobile handset costs were high for people who are blind, citing $900 for a suitable handset in addition to the $350 required for speech output software. The Nokia 6120C handset is now available as prepaid for $250, and on a $20/ month call plan, and the Nokia E51 is available for outright purchase for under $500 or on a $30/ month Plan from Telstra.

123 For these reasons, Telstra would strongly query any moves to include such additional third party software for mobile phones as part of a telecommunications program, however, would see it as appropriate under a government funded social-inclusion program as exists in WA today.

E.4 Computer technologies and the Internet

124 *Telstra submits that access to computer technologies and the Internet is widely available to all Australians, including those with disability, as is third party software that enables access to both computers and the Internet (e.g. screen reading software such as Jaws, that provide access to computers generally for people who are blind, and speech recognition software such as Naturally Speaking, for people with physical and dexterity impairment).*

125 Telstra understands that a relatively small number of Australians such as those with mobility/ dexterity and speech impairment have very complex living needs, including to access computer technologies. In addition to standard off-the-shelf computer equipment, they may require additional, specialised, and often purpose-built equipment to meet their individual needs. This additional equipment can and should be expertly fitted by Government-funded service providers such as Independent Living Centres or Vision Australia and funded through existing Government funding arrangements such as HACC and/ or JobAccess.

126 *Telstra submits that enabling reasonable access to mobile and computer and Internet technologies for people with disability, where additional equipment is required is a social equity issue, and as such a matter for Government Social Inclusion policies, and not a matter for Telstra or the telecommunications industry. Additional equipment can and should be expertly fitted by Government-funded service providers such as Independent Living Centres or Vision Australia and/ or funded through existing Government funding arrangements such as HACC and/ or JobAccess.*

E.5 CAPTEL Service

127 Telstra recognises that in theory a CAPTEL service may provide a more natural, real-time, communication option for hard-of-hearing people at home, however, we question whether the benefits would outweigh the significant implementation and ongoing operational costs.

---

[16] See www.dbcde.gov.au/__data/assets/pdf_file/0017/58400/Provision_of_telecommunications_equipment.pdf

128   The basic functionality of CAPTEL is already available in Australia utilising a 'UniPhone 1150' TTY and the NRS for existing Speak and Read (Voice Carry Over).

129   CAPTEL is a proprietary technology, which introduces a number of supply and implementation risks, as well as higher costs compared to competitively provided handset equipment. It typically requires additional network services, for example, the installation of a second telephone line, or broadband Internet connection to allow for the two 'channels', outgoing voice and incoming text, as well as possibly the enablement of prefix codes in carrier networks to route calls via a relay service. All of these upgrades would only come at significant cost.

130   It requires a relay service equivalent that is staffed (presumably 24/ 7) using voice recognition technology to provide the text relay part of the service, for each individual call. Again, a significant ongoing cost, in addition to significant establishment costs.

131   Since CAPTEL is a home phone option, actual market demand is likely to be highly uncertain, given the general migration to mobile and messaging type communications solutions, and a general preference for off-the-shelf devices. The vast majority of older people utilise standard phones with volume control with or without a hearing aid. There is a distinct probability that many people might request a CAPTEL option due to 'just in case', or even as a novelty, rather than on the basis of actual enablement of communication where not otherwise possible.

132   Finally, with the rapid pace of technology innovation (including a soon-to-be NBN environment), particularly in the voice to text field, it is possible that CAPTEL as it exists today may be overtaken by other more generally available automated technologies. Telstra's Voice-2-Text MessageBank service is one indication of this technological advancement and can provide an improved experience for customers with hearing impairment.

133   For these reasons Telstra would strongly query any moves to introduce CAPTEL that involve technology risks and significant start-up and ongoing costs for service providers. We would strongly recommend that a full cost-benefit study be undertaken before any move was contemplated.

E.6   Video Communication for Australians who are (culturally) Deaf and use AUSLAN as their preferred language

134   Telstra notes that the 2006 Census recorded around 7000 Australians use sign language[17] (5,536 recorded AUSLAN, 1,405 recorded an unspecified sign language and 206 recorded Makaton, which is derived from Australasian Signed English and AUSLAN).[18]

135   With the advent of ubiquitous 3G mobile networks in Australia, video calling over a mobile phone is now a reality. In particular, Telstra's Next G™ network covers 99 per cent of where people usually live or work thus offering the general opportunity for people who are (culturally) Deaf (and indeed people who use other sign languages) to have conversations in AUSLAN via Next G™ mobile phones.

136   Through its Fourth Disability Action Plan (DAP), 2007-09, Telstra is exploring options to improve the video quality on Telstra's Next G™ mobile handsets, such as supporting the H.264 codec, and monitoring international initiatives to improve video quality. One such

---

[17] See www.immi.gov.au/media/publications/research/_pdf/poa-2008.pdf
[18] See Table 7 at www.immi.gov.au/media/publications/research/_pdf/poa-2008.pdf

initiative is the Washington University's video compression project *MobileASL*, supported by US carrier Sprint and mobile manufacturers Nokia and HTC. This initiative is designing American Sign Language encoders that are compatible with new H.264/ Advanced Video Coding (AVC) higher compression standards.[19] The Nokia Accessibility Manager in the US has expressed an interest in the network and handset issues that may arise from this study.

137 Further, with the growing popularity of wireless broadband, again with 99 per cent Telstra Next G™ network coverage, video calling via the Internet is also now generally available using a laptop with a (built-in) web camera. Telstra notes the growing supply of small, cheap laptops 'Netbooks' which provide Internet connectivity along with other functions, some of which are being subsidised when purchased in conjunction with wireless Internet plans.

138 Further still, Telstra has a range of 3G/ Next G™ capped plans that include video calling, making the cost overall of video calling relatively comparable to voice calling for people who are Deaf. Indeed, as part of its Fourth DAP, Telstra is currently exploring the feasibility of developing a mobile call plan, including video calling, targeted to the Deaf community.

139 Finally, in addition to Telstra's Next G™ mobile network, fixed broadband Internet connections are available to many Australians via Telstra's and other service providers' ADSL and HFC cable networks. The Government's recent announcement that the new NBN network will connect 90 per cent of all Australian homes, schools and workplaces with speeds up to 100Mbps means that high speed broadband services will in time become widespread.

140 Telstra notes that video calling over the Internet has its limitations due to the 'best efforts' nature of the public Internet. Telstra is developing video calling and conferencing solutions that overcome these limitations, however, at present they are very much business grade applications. For example, they require a dedicated 2Mbs symmetric business broadband connection to Telstra's Next IP™ network together with proprietary customer equipment. This ensures a high quality of service outcome but is limited presently to Telstra's own network in order to guarantee that quality. Obviously, future developments such as the NBN may provide a platform for ubiquitous delivery of better-quality video calling services in the home.

141 While video calling using the Internet may not be feasible on the lowest price broadband plans that are available, it is reasonably feasible on those plans which do not charge for extra download or upload data. Telstra calls these plans its 'Liberty' broadband plans. These plans generally provide the highest download speeds that are available subject to the technology limitations, a generous data monthly allowance, and a high enough upload speed to enable two-way video communication.

142 Telstra therefore believes that the market is already supplying affordable equipment and services that enable reasonable video calling, which can be used by almost all Australians wherever they live or work, but in particular people who are Deaf, to enhance their communication experience. We note that being able to see the other person, their expression, their body language, their gestures, and even their lips moving and eye gaze, improves communication. However, this is common to all inter-personal communication. Telstra therefore does not believe that video calling equipment should be added to a specialist disability equipment program.

---

[19] See http://mobileasl.cs.washington.edu/

E.7   Video relay service

143   Telstra acknowledges that there may be some circumstances where it is extremely important for clear and accurate communication to take place between a person who is Deaf and people who are not Deaf. For example in medical situations, court situations, counselling situations and others. The use of AUSLAN in these situations may make a critical difference to the outcome.

144   According to the Department of Immigration and Citizenship (DIAC) website[20], DIAC provides the National Translating and Interpreting Service (TIS) *for people who do not speak English and for the English speakers who need to communicate with them.* TIS is available on 13 1450 24 hours a day, seven days a week for any person or organisation in Australia requiring interpreting services. Further, DIAC notes that it has over 30 years experience in the interpreting industry, and access to over 1300 contracted interpreters across Australia, who speak more than 120 languages and dialects.

145   The DIAC website notes that the Australian Government aims to achieve fairer and more accessible government services and programs through its Access and Equity strategy, with TIS arguably playing a key role in that Strategy.

146   The DIAC website also recommends that (TIS National) interpreters should be used:

(a)   to ensure accurate communication between people who have different language needs. because effective professional practice requires both parties to have a clear understanding of each other

(b)   because in times of crisis or stress, a person's second language competency may decrease

(c)   because all Australians have the right to access services freely available to English speaking Australians – irrespective of their ethnic background and first language preference.

147   *Telstra concurs with DIAC on the objectives of its TIS program, and submits that a video relay service is a translation and interpreting service, which improves social inclusion for people who are culturally Deaf, in exactly the same way that the national TIS does, in assisting other culturally and linguistically diverse communities. As such, any VRS should be provided and funded as part of the Commonwealth Government's TIS service, as part of its Access and Equity strategy and social inclusion agenda.*

148   Telstra also notes that the Victorian Government Department of Human Services, under its Cultural and Linguistic Diversity (CALD) program, has taken the responsibility to establish and fund an *Auslan Video Relay Interpreting* (VRI) *Service* that 'will improve communication for Deaf and Hard of Hearing people in a range of health and community settings'.[21] The Victorian Government web site notes a commencement date of March 2009 for this service.

E.8   Adjunct services and network issues

149   While the Independent DEP Feasibility Study restricts itself to the consideration of specialised disability equipment only, rather than services, Telstra notes that there is often

---

[20] See www.immi.gov.au/living-in-australia/help-with-english/help_with_translating
[21] See www.dhs.vic.gov.au/disability/improving_supports/cultural_and_linguistic_diversity/auslan-video-relay-interpreting-service

an important link between the equipment and the network it is attached to, and the interoperability of the other equipment, networks and services which may provide part of the accessibility solution for the customer.

150   An example, in Telstra's case, is the provision of a telephone service to people who have a severe physical disability and who may only be able to operate a single 'switch' mechanism to get the phone 'off hook'. Telstra supplies its Big Button Multipurpose Phone as the equipment, and a power pack for an auxiliary switch (e.g. puffer, jellybean, lever switch). However, we also provide a *Call Connect* fee exemption (normally a chargeable service) as the service that enables the customer to verbally request a customer to be called and be put through. The equipment and the service are integral parts of the solution and in this instance provided by Telstra at no additional cost to the standard telephone handset rental.

151   Another example is the role played by the NRS in regard to TTY equipment users: the equipment is not a full accessibility solution unless able to link, by all networks, to the NRS service.

152   Secondly, equipment generally must be checked for compatibility for connection on a particular network. In a competitive market, with different infrastructure providers, there is a multiplicity of networks. In Australia these include different wireless mobile networks (e.g. operating on different frequencies), the PSTN, ADSL, BDSL, ISDN, Satellite, HFC, and FTTP.

153   For example, Telstra undertakes intensive testing of any mobile phone device that it intends to offer to customers for use on its network. This testing takes time and is not without considerable expense. It may also involve changes to handset software and other features in order to ensure compliance and compatibility, with, for example, access to the Emergency Number and hearing aid compatibility.

154   Telstra believes these matters must be fully investigated before any overseas equipment, such as CAPTEL telephone handsets, are contemplated by an independent program. For example, in this instance, Telstra understands that such equipment requires a PSTN connection as well as a data connection, and therefore may be dependent on network technical characteristics as well as services available over that network.

155   *Telstra therefore submits that any Independent DEP may have to widen its focus beyond just the equipment to ensure that it is tested and certified to be compatible with all intended telecommunications network, will work in the customer's desired locations, and is able to work with any required services in order to provide the required accessibility solution.*

F   Funding Issues and Efficiencies

156   Telstra operates a DEP to fulfil its Universal Service Obligation under the *Telecommunications (Consumer Protection & Service Standards) Act* as well as to comply with the *Disability Discrimination Act*. While the DDA generally requires all STS providers to provide equipment and services to all customers on an equitable basis, including customers with disability, Telstra is the only telecommunications provider required by the USO to provide disability equipment, which is specified in the Regulations. In order to comply with the spirit of the DDA, Telstra provides equipment which enables equivalent access to customers with disability, on the same terms and conditions (including price) as standard customer equipment, and as a result, Telstra supplies this equipment at below cost.

157   Telstra's DEP is not included in USO funding arrangements, which only makes provision for Telstra's STS and public payphones obligations. Therefore, the DEP is fully funded by

Telstra. This funding arrangement is inconsistent with Government competition policy as it imposes a regulatory cost disadvantage on Telstra, both compromising the Government's objective of competitive neutrality and serving as a disincentive to innovation.

158   To ensure the overriding aims of economic efficiency and competitive neutrality are realised and to enhance the consumer benefit through greater transparency and choice in a competitive market, social policy/ social inclusion objectives and associated welfare funding should reside within the domain of Governments. Indeed, in other industries, Governments compensate private companies for the delivery of the Government's social policies and objectives via CSOs, such as energy and water concessions to people on a low income.

159   Further, the current industry-funded CSO model, which involves collecting taxes/ levies from industry participants to fund (separately) the USO and NRS, is complex, inefficient and costly to administer. For example:

(a)   in the case of the USO, ACMA collects carriers' contributions and reimburses Telstra. This process generally takes at least six months after the financial year in which Telstra has provided the USO

(b)   in the case of the NRS, ACMA collects carriers' contributions quarterly in advance, based on projected NRS operation and Outreach Program costs (the annual cost of the NRS, including the NRS Outreach Program is approximately $15m). These are reconciled against actual costs in a subsequent quarter. Further complexity is that carriers with less than $10 million eligible revenue are not required to contribute to the NRS Levy[22] *because of the administrative burden (on ACMA) of collecting contributions from these carriers*. This serves to further highlight the inefficiencies of this type of funding.

160   As a result of these and other similar arrangements, Telstra notes that ACMA is the third largest collector of Government taxes and levies, typically collecting more than $250 million from CSPs annually, including the USO and NRS levies[23]. In its submission to the recent Government Review of Australia's Future Tax System, ACMA stated that:

(a)   '...there is considerable scope for simplification; both from an economic and administrative efficiency perspective...Many of the existing taxes in communications have developed over time in a disparate way that has resulted in inefficiencies and inconsistent approaches to similar issues. In turn, this results in a higher than necessary cost to both ACMA and industry...'.[24]

161   In general, these tax collection costs are likely to increase over time, with increasing numbers of telecommunications providers and a rapidly expanding number of revenue-generating services which contribute to the 'eligible revenue' basis for these levies.

162   Another consideration for the NRS is that while industry is required to fund the service, ACMA to administer it, and two third parties to deliver it, the chain of accountability is broken, and the incentive to ensure that the service is delivered cost effectively is removed. In this regard, carriers, as taxpayers, have limited visibility of the performance of the NRS program. In Telstra's view there is no clear evidence that either the NRS or the

---

[22] www.comlaw.gov.au/ComLaw/legsilation/LegislativeInstrument1.nsf/0/B9D9453B6A0E9257CA2570C80009122E/$file/EXPLAN+STATEMENT+Participating+Persons+Det_final.doc
[23] ACMA submission to Australia's Future Tax System Review, November 2008, p.1
[24] ACMA submission to Australia's Future Tax System Review, November 2008, p.iii

NRS Outreach program are delivered cost-effectively. If Government funded this service directly, improvements in administrative and operational efficiency could be expected, given the stronger link to the public service which should ensure public money is spent efficiently.

163　Moreover, in the case of the current DEP (and indeed the NRS), the amount of money involved in relation to other Government-funded programs is relatively small, and could be easily absorbed by Consolidated Revenue. This is consistent with Government Competition Policy[25] and would spread the tax burden over the whole of society. This is appropriate since it is the community in general that derives benefits from the DEP by enabling those with a disability to interact and communicate effectively with the rest of the community. It would appear to be illogical to only tax a narrow subset of communications industry participants (carriage service providers) when other participants, including for example, Internet Service Providers, handset and equipment vendors, software and application providers, telecommunication service users and the Government itself, all benefit from the program.

164　*The Discussion Paper seeks views on a user pays model. Telstra submits that this is a matter for Government. However, given provisions in the DDA for discrimination on the basis of price, Telstra observes that it is unlikely that a user-pays model would be considered acceptable by the disability community or the general public.*

165　*Telstra therefore submits that Government should directly fund, from Consolidated Revenue, an IDEP and other programs provided on behalf of the Government in meeting its social policy objectives. This is consistent with its own competition policy and maximises competitive neutrality and efficiency. Sole Telstra funding of the DEP and industry funding for the USO and NRS, are neither appropriate nor sustainable.*

G　Other Issues

G.1　Transition arrangements

166　As the largest supplier of disability equipment for the Standard Telephone Service in Australia, Telstra recommends the following issues need to be considered to ensure a smooth transition to an Independent DEP:

(a)　Due to the limited market, vendors generally require assured contracts before committing to the manufacture and supply of specialised equipment. Telstra would not want to be caught with an ongoing contract that was suddenly made obsolete by the advent of the Independent DEP.

(b)　The impact of the Government's NBN announcement will impact on this study and will have transition implications for any Independent DEP.

---

[25] Australian Government National Competition Policy Annual Report 2004-05, Chapter 2.1.3 and Kevin Rudd, 'The Rudd Government's Economic Agenda: Address to CEDA's 2008 State of the Nation Conference', 5 June 2008

H   For More Information

~~167   Tony Warren,~~
~~Executive Director Regulatory Affairs~~
~~Telstra Public Policy and Communications~~
~~Email: Tony.Warren@team.telstra.com~~
~~Telephone: (02) 9578 5553~~

168   Bert Ciavarra
Manager Disability Services
Regulatory Affairs
Telstra Public Policy and Communications
Locked Bag 4960
MELBOURNE VIC 3001
Email: Bert.Ciavarra@team.telstra.com
Telephone: (03) 9634 5686

ATTACHMENT 1

A   Telstra DEP supply & trends 2000-01 to 2008-09

A.1   Telstra DEP products provisioned Raw Data*

DEP Equipment \/ Reporting period	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08[+]	2008-09[#]	2009-10[#]
Additional Socket		634	506	330	280	203	82	100	1	0
Cochlear Adaptor (2 models)	189	117	308	96	51	45	54	32	17	42
Cordless Phone			0	0	274	1,528	933	1,390	941	934
Double Adaptor	6,453	6,382	4,574	2,416	1,365	1,256	1,063	988	501	2,126
General Purpose Alarm	6,725	6,451	4,986	2,431	2,175	2,052	1,614	1,376	616	2,150
Handsfree (Various, pre BB phone)	1,500	784	1,356	387	298	33	2	3	0	0
Hold-a-Phone	21	35	59	0	1	0	1	1	0	0
Modem	5	13	3	4	3	0	0	0	0	0
Standard Rental Phone		73	77	13	3	2	0	0	0	0
Teletypewriter (3 models)	607	562	865	573	437	286	254	245	216	256
TeleBraille/ Braille TTY	1		8	3	4	0	1	2	3	0
TTY Large Visual Display			5	0	7	0	6	2	0	0
Visual Signal Alert	346	180	422	156	99	65	32	33	10	65
Voice Aid (BB phone from 2005-06)	247	71	304	52	177	1	0	0	0	0
Standard/ Volume Control (TF400VC & T1000s)	20,463	12,964	20,339	7,023	4,658	3,225	2,286	1,977	542	190
Big Button Multipurpose phone	0	0	0	0	0	6,444	4,197	7,218	6,468	6,532
BB phone Power pack for aux switch	0	0	0	0	0	0	17	15	26	12
TOTAL	36,557	28,266	33,812	13,154	9,552	14,937	10,542	13,382	9, 341	12,316

*   Published in ACMA Performance reports 2000-01 to 2006-07
+   2007-08 not published in ACMA performance report
#   2008-09 data extrapolated from available data from first 8 months of 2008-09 year