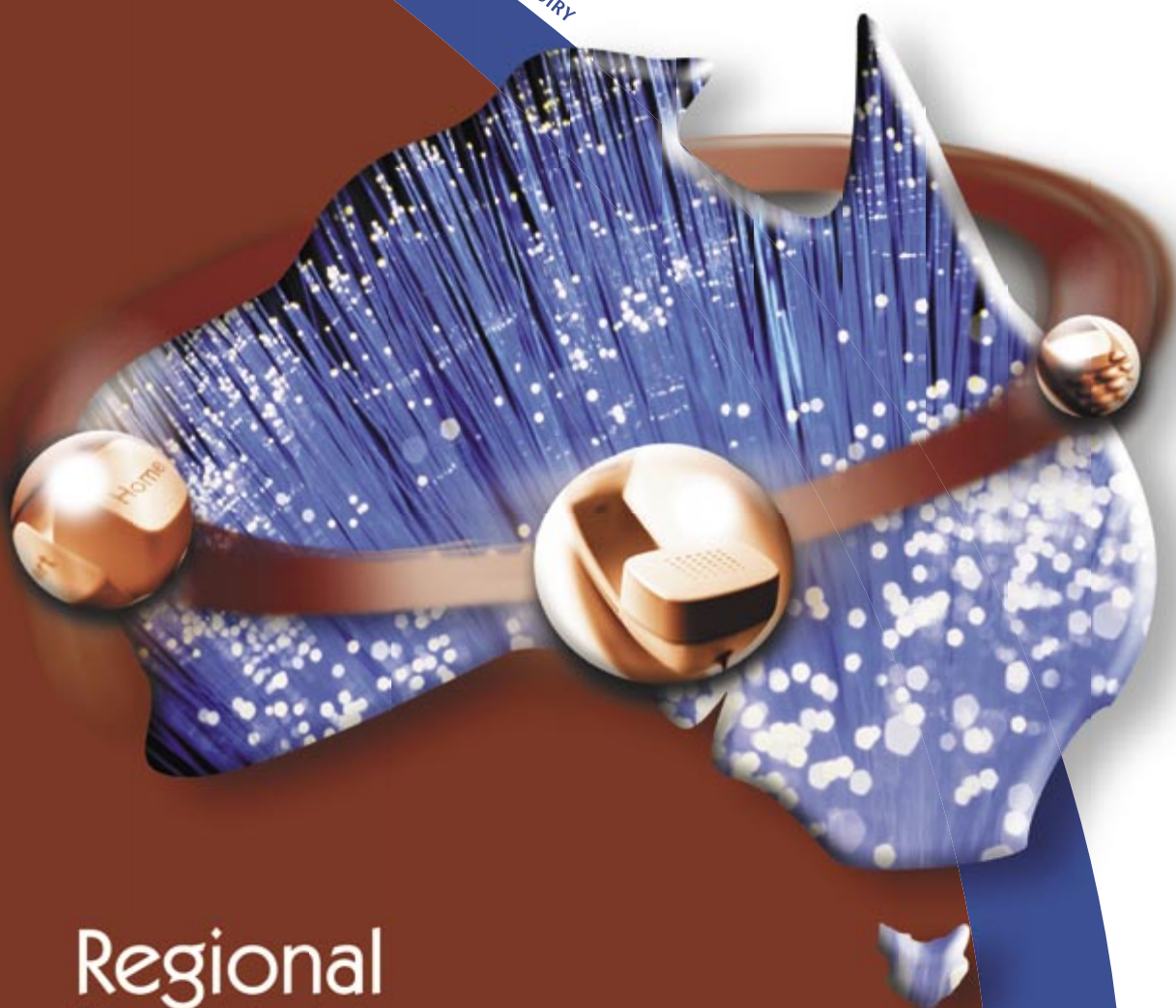


# CONNECTING REGIONAL AUSTRALIA

THE REPORT OF THE REGIONAL TELECOMMUNICATIONS INQUIRY



Regional  
Telecommunications Inquiry

# CONNECTING REGIONAL AUSTRALIA

THE REPORT OF THE REGIONAL TELECOMMUNICATIONS INQUIRY

## **DISCLAIMER**

This report was developed for the Commonwealth by the independent Regional Telecommunications Inquiry. It draws on information, opinions and advice provided by a variety of individuals and organisations during the Regional Telecommunications Inquiry. This report does not necessarily reflect the views of the Commonwealth or indicate its commitment to a particular course of action.

© Commonwealth of Australia 2002

ISBN 0 642 75126 9

Online ISBN 0 642 75132 3

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth available from the Department of Communications, Information Technology and the Arts. Requests and inquiries concerning reproduction and rights should be addressed to:

The Commonwealth Copyright Administration  
Intellectual Property Branch  
Department of Communications, Information Technology and the Arts

GPO Box 2154  
Canberra ACT 2601

Tel: 02 6271 1000

Fax: 02 6271 1800

Email: [dcita.mail@dcita.gov.au](mailto:dcita.mail@dcita.gov.au)

Produced by the Commonwealth Department of Communications, Information Technology and the Arts.

# CONTENTS

LETTER OF TRANSMITTAL	vii
EXECUTIVE SUMMARY	ix
Consultation	ix
Methodology	x
Overall assessment of adequacy	xi
Recommendations for the future	xii
Findings and Recommendations	xii
 PART ONE: BACKGROUND	 1
CHAPTER 1: INTRODUCTION	3
Background	3
Terms of Reference	3
Approach to the conduct of the Inquiry	5
Context	6
Structure of this report	7
Key findings of the TSI report	7
The Government's response to the TSI report	8
 PART TWO: ASSESSMENT	 17
CHAPTER 2: FIXED TELEPHONE AND PAYPHONE SERVICES	23
FIXED TELEPHONES	23
Introduction	23
Service availability	25
Service connections	38
Service pricing	54
Call service quality	65
Reliability and fault repair	69
Appointment keeping	86
Customer service, complaints and complaint handling	89
Special needs	91
International comparisons	93

PAYPHONES	94
Introduction	94
Availability and siting of payphones	94
Performance in installing payphones	100
Payphone charges	100
Payphone reliability and fault repair	101
Customer satisfaction and complaints	103
People with disabilities	104
Remote Indigenous communities	106
Inquiry's assessment	106
Summary of Findings and Recommendations	107
 CHAPTER 3: MOBILE PHONE SERVICES	 113
Background	113
Coverage and competition	114
Price	131
Connection and repair	136
Quality of service and reliability	137
Consumer awareness	143
Summary of Findings and Recommendations	145
 CHAPTER 4: INTERNET SERVICES	 147
Coverage and competition	147
Prices	150
Service quality, reliability and performance	152
Connection	160
Summary of Findings and Recommendations	161
 CHAPTER 5: OTHER KEY SERVICE ISSUES	 163
Introduction	163
Remote Indigenous communities	163
Payphones in remote Indigenous communities	167
Education and health services and telecommunications	173
Training, awareness and support for consumers	184
Online public access	191
Summary of Findings and Recommendations	195

PART THREE: FUTURE ACTIONS	199
CHAPTER 6: HIGHER BANDWIDTH INTERNET ACCESS	203
The need for bandwidth	203
Scope of Inquiry's investigation	205
Summary of service improvements since the TSI report	206
Government initiatives	210
Current state of play	212
Some possible barriers to take-up	218
Price barriers to take-up	221
Is there a solution to these price problems?	225
Solutions for the future	226
Summary of Findings and Recommendations	235
CHAPTER 7: EFFECTIVE LEGISLATED CONSUMER SAFEGUARDS	237
Introduction	237
Background	238
Overview of consumer safeguards	240
International comparison	245
Compliance, enforcement and penalties	245
Monitoring and reporting	247
Effectiveness of current legislated safeguards	250
Expansion of the USO	261
Public awareness of legislated safeguards	266
Effectiveness of monitoring and reporting	269
Effectiveness of enforcement	273
Summary of Findings and Recommendations	282
CHAPTER 8: TELSTRA'S LOCAL PRESENCE	285
Introduction	285
What is TCW?	287
How TCW operates within Telstra?	289
What TCW has delivered	292
Assessment of TCW	297
What are the benefits of a local presence?	299
Providing for an ongoing local presence	301
Operation of a local presence requirement	303
Summary of Findings and Recommendations	306

CHAPTER 9: SHARING BENEFITS INTO THE FUTURE	307
Introduction	307
Need for, and role of, a future proofing mechanism	309
Principles for a regular review process	314
Core elements of a review process	315
A strategic plan for regional telecommunications	317
Funding of future service delivery initiatives	318
A better focus on regional, rural and remote Australia	323
Summary of Recommendations	326
 APPENDIX A: SUBMISSIONS, MEETINGS AND CONSULTATIONS	 329
Submissions and Meetings	329
Consultation	331
List of submitters	334
 APPENDIX B: TELSTRA'S CSG COMPLIANCE— ANNUALISED DATA BY STATE	 351
 APPENDIX C: COMPARATIVE DISTRIBUTION OF DISTRIBUTION AREAS (DAS) BY FAULT RATE, 1999 AND 2002	 357
 APPENDIX D	 359
 GLOSSARY OF ACRONYMS AND TERMS	 363

# LETTER OF TRANSMITTAL

## Regional

Telecommunications Inquiry

Senator the Hon Richard Alston  
Minister for Communications, Information Technology  
and the Arts  
Parliament House  
CANBERRA ACT 2600

Dear Minister

On behalf of my colleagues, Ms Jane Bennett and Mr Ray Braithwaite, I have pleasure in submitting to you the report of the Regional Telecommunications Inquiry. We are confident that this report comprehensively addresses the Terms of Reference that you provided to us when you established the Inquiry on 16 August 2002.

To assist its considerations the Inquiry has met with a wide range of key organisations, including State and Territory government agencies and representatives, telecommunications industry players, the National Farmers Federation and representatives of regional and rural communities. The Inquiry also sought and received a large number of public submissions. The Inquiry was impressed by the quality of submissions and representations made to it, and was appreciative of the generally constructive and thoughtful views put forward.

In response to the Terms of Reference, the report contains an overall assessment of service adequacy in regional, rural and remote Australia, as well as more detailed findings and recommendations on specific service areas. In addition we have proposed policies for the future, aimed at enabling all Australians to share equitably in the benefits of future technology advances.

We thank you for the opportunity to be involved in this very important task, and we commend this report to you.

Yours sincerely



Dick Estens  
Chairman

6 November 2002



# EXECUTIVE SUMMARY

On 16 August 2002 the Minister for Communications, Information Technology and the Arts, Senator Richard Alston, established the Regional Telecommunications Inquiry (the Inquiry), to assess the adequacy of telecommunications services in regional, rural and remote Australia, and to advise on a number of other policy issues as set out in specified Terms of Reference.

The Terms of Reference require the Inquiry to consider and report on two key areas:

- a detailed assessment of the adequacy of telecommunications services to regional, rural and remote Australia (preamble and Terms of Reference 1 and 2). The Inquiry's approach to assessing adequacy is fully set out in the introduction to Part 2 of this report, but it is worth emphasising the importance the Inquiry has placed on the findings of the Telecommunications Service Inquiry (TSI) report in undertaking its assessment. Particular attention has been given to the TSI report's finding that key concerns related to rural and remote areas rather than regional centres, and that the service areas of concern were the connection, repair and reliability of basic telephone services, coverage of affordable mobile telephone services, and reliable access to the Internet; and
- advice on whether, and if so what, arrangements should be put in place to address some specific policy concerns identified by the Government. (Terms of Reference 3, 4, 5 and 6.)

## CONSULTATION

Shortly after it was established, the Inquiry advertised widely in the national and regional print media for public submissions. Invitations were also issued to key representatives of consumers (including the National Farmers' Federation and others from regional, rural and remote Australia), state, territory and local governments and the telecommunications industry, to meet with the Inquiry. These meetings were designed for stakeholders to put their views forward in person. Over the period of the Inquiry, 41 meetings were held, including some meetings in Western Australia and Queensland.

A total of 606 public submissions from individuals and organisations from all parts of Australia were received—a pleasing result. The key themes which emerged from these submissions were:

- a continuing priority on expanding affordable mobile services to the greatest extent possible;
- the need for improved speed of Internet services; and
- some issues with the reliability of telephone services.

The submissions received on Internet speed demonstrate a greatly increased awareness in regional, rural and remote Australia of the value of higher bandwidth Internet services, and a rapidly growing, real level of demand for these services.

A number of submissions also commented on the possible further sale of Telstra. This issue is not within the scope of the Inquiry, as set out in the Terms of Reference, and has therefore not been considered.

## METHODOLOGY

In undertaking its assessment of service adequacy, the Inquiry has been strongly guided by the extent to which problems identified in the TSI report have been addressed and overcome. The extent to which gaps between service levels in rural and remote areas compared to those in metropolitan areas and large regional centres have been bridged, or are being addressed, was also considered. Service improvements that are underway were also addressed, especially where there is a high degree of certainty that the improvements will be delivered, where the improvements are clearly identifiable and quantifiable, and where they will be realised within specific and acceptable timeframes.

Service adequacy was therefore judged against a range of criteria:

- the extent to which service problems identified in the TSI report have been addressed and overcome;
- the extent to which gaps between service levels in large regional centres, compared with metropolitan areas, are being addressed;
- service improvements currently underway that will provide identifiable and quantifiable improvements within specific and acceptable timeframes;
- the degree of government support for service improvements; and
- relevant international comparisons.

In interpreting service performance against this range of criteria, the Inquiry's overall judgement on service adequacy is whether the identified key services are broadly accessible and 'fit for purpose'. In other words, whether they are provided in a timely way, are of good quality, are reliable, and are priced at a level that enables broad access and take-up by regional, rural and remote consumers.

## OVERALL ASSESSMENT OF ADEQUACY

The Inquiry's overall assessment is that the Government has responded positively and comprehensively to the TSI findings, and that the arrangements that have been put in place are addressing the community concerns identified in the TSI report.

While key responses to the TSI report in relation to extending terrestrial mobile phone coverage are still being implemented, the Inquiry finds that these Government programs are sufficiently locked-in, through contractual arrangements, to provide a high degree of assurance of service adequacy in this service area in regional, rural and remote Australia.

Concerns have been expressed, through submissions to the Inquiry, about the reliability of Telstra's telephone network, and the speed of available Internet services in regional, rural and remote areas. The Inquiry finds that there are particular areas in rural Australia where improvements need to be made to network reliability. The Inquiry finds that the Government's Network Reliability Framework, strengthened according to Recommendation 2.9 in this report, should deliver adequate services.

In relation to Internet services, the Inquiry finds that the Internet Assistance Program (IAP) has benefited those who have accessed it, but it needs to be more widely promoted, and benefits should be guaranteed into the future for all Australians through a licence condition on Telstra.

It is noted that continuing Government support and action will be required to fully resolve some concerns, such as improving service levels in remote Indigenous communities.

To consolidate improvements, a number of further modifications to existing programs and arrangements are recommended, including in relation to ensuring the upgrade of analogue and digital radio concentrator (ARCS and DRCS) systems in remote areas, and addressing the issue of poorly performing pair gain systems. These recommendations are intended to consolidate and complement Government actions taken over the past two years, and to ensure that commercial commitments are delivered.

## RECOMMENDATIONS FOR THE FUTURE

A number of major new initiatives are recommended, in direct response to Terms of Reference 3, 4, 5, and 6, all of which request the Inquiry to consider whether and how arrangements should be put in place to provide a greater level of certainty of future ongoing benefits to regional, rural and remote communities.

The Inquiry has noted particularly the growing priority, expressed in submissions, for equitable access in regional, rural and remote Australia to higher bandwidth services. This is a particularly important development which has emerged since the TSI report two years ago. Strong Government support for this objective would resolve much of the concern in regional Australia about slow Internet access.

In the Introduction to Part 3, the Inquiry also proposes a set of principles to guide the Government into the future. These principles strongly reinforce the approach proposed by the TSI report, and broadly relate to supporting competition, and ensuring that Government actions are fair, well-focused and address the particular needs of regional, rural and remote communities.

The Inquiry is confident that arrangements that have been put in place over the past five years (including the TSI response), together with commercial developments, and the Inquiry's further recommendations, will create an environment into the future where regional, rural and remote Australians will be able to benefit fully from advances in telecommunications technology and services.

## FINDINGS AND RECOMMENDATIONS

### FIXED TELEPHONES AND PAYPHONES (CHAPTER 2, TERMS OF REFERENCE 1 AND 2)

#### Fixed telephones

##### FINDING 2.1

Basic telephone services are readily available to Australians and there is a high rate of connections. Telstra has undertaken further substantial improvements to the availability of enhanced telephone features over its network, and the number of customers without access to these services, as a proportion of the total customer base, is small. While desirable, the Inquiry does not consider these services essential to be provided universally.

## FINDING 2.2

The arrangements Telstra has in place to provide customer premise equipment to people with disabilities in regional areas are generally adequate. Telstra has made a strong effort to meet the needs of people with disabilities. There are some policy and operational issues which the Government and/or Telstra need to examine. Meaningful consultation with people with disabilities is important to this process.

## FINDING 2.3

The Universal Service Obligation (USO) contestability pilots have not yet delivered competitive outcomes, suggesting any further Government action in this area should be carefully considered and any additional resources well justified. As a matter of principle, USO contestability is supported, but further work is needed to validate its practical utility.

## FINDING 2.4

Telstra's performance under the Customer Service Guarantee in providing connections in regional, rural and remote areas is high and has been steadily improving. Performance in rural and remote areas has been comparable to, or exceeded performance in urban areas. This performance needs to be viewed in the context of the length of the connection timeframes for minor rural and remote areas, which are still very long.

## FINDING 2.5

New Telstra pricing packages, such as Wide Area Call and Regional Call, have improved consumers' options, but are not well promoted by Telstra or widely understood by regional consumers.

## FINDING 2.6

In most regions faults per 100 services in operation in Telstra's Customer Access Network have increased slightly, but overall fault levels remain broadly consistent with historical levels, and are reasonable. The evidence suggests there continue to be localised pockets of particularly fault-prone services, requiring specific attention from Telstra. The Government's Network Reliability Framework, Telstra's Rural Networks Taskforce and other Telstra initiatives are expected to reduce fault levels with the full benefits flowing through over time.

## FINDING 2.7

Compliance with the Customer Service Guarantee timeframes for fault repair is high, with rural and remote performance exceeding urban performance. The provision of interim services where repair is delayed provides regional, rural and remote consumers with additional reassurance. Ongoing effort needs to be put into improving processes to expedite the repair of faults.

## FINDING 2.8

Priority assistance services now available to consumers with pre-diagnosed life-threatening medical conditions exceed those available when the TSI reported. The arrangements put in place by the Government and Telstra are comprehensive and sensible, and will reassure those in regional, rural and remote communities who face a possible emergency medical situation.

## RECOMMENDATION 2.1

Telstra should continue to work with representatives of people with disabilities to resolve any service concerns, and consider their practical suggestions for service improvements. The Government should consider any national policy issues raised with the Inquiry, relating to access to telecommunications for people with disabilities.

## RECOMMENDATION 2.2

The Government should review arrangements for the costing and funding of the Universal Service Obligation. This should also include whether current arrangements are impeding the development of competition in regional, rural and remote Australia.

## RECOMMENDATION 2.3

Where extreme cases of Customer Service Guarantee (CSG) non-compliance arise (i.e. more than five working days late), they should receive direct priority attention by the service provider, and should be notified to the Australian Communications Authority and/or Telecommunications Industry Ombudsman as technical breaches of the CSG.

## RECOMMENDATION 2.4

Telstra should report publicly on the outcome of its trial with the National Farmers' Federation to reduce connection times in minor rural and remote areas where infrastructure is not readily available, and identify what follow-up commitments it will make. Should the Telstra trial not lead to a significant and ongoing improvement in service outcomes in this area, the Government should review regulatory arrangements, including Customer Service Guarantee timeframes and interim service arrangements, to assess whether further changes to timeframes are appropriate.

## RECOMMENDATION 2.5

Telstra should report to the Government on the outcome of its project to improve the coordination of new service connections. The impact of any changes should be monitored with a view to determining the need for any further follow-up action.

## RECOMMENDATION 2.6

The Government should examine the issue of network extension and trenching costs, to consider whether such costs should be removed from subscribers, and either borne by Telstra as part of its Universal Service Obligation provision, or supported by the Government through subsidies.

## RECOMMENDATION 2.7

Telstra should promptly confirm to the Government that it has an effective strategy for improving as soon as possible the quality of telephone services affected by the use of 6/16 and similar pair gain systems. Telstra should give a formal undertaking to the Government including providing timeframes in relation to any actions required to implement such a strategy. Progress in meeting this strategy should be monitored by the Australian Communications Authority and reported on publicly.

## RECOMMENDATION 2.8

Telstra should provide a formal undertaking to the Government to complete its upgrade of digital radio systems (ARCSs and DRCSSs) under its Remote Australia Telecommunications Enhancement (RATE) program, and according to a publicly available timetable.

## RECOMMENDATION 2.9

To immediately target the worst performing Exchange Service Areas (ESAs) in regional, rural and remote Australia, the Government should require the Australian Communications Authority (ACA) to identify these ESAs as soon as possible after the Network Reliability Framework commences in January 2003. Telstra should then be required to provide a formal undertaking to the Government on its strategy for raising the performance of these ESAs. Telstra's strategy should include specific timeframes and commitments of funding, and its implementation should be monitored and publicly reported by the ACA.

## RECOMMENDATION 2.10

The Government should adjust and refine the Network Reliability Framework (NRF) as necessary over time to improve its operation. These refinements should include expanding the range of fault information provided under the NRF, and providing greater clarity for Telstra and regional, rural and remote consumers about strategies to improve reliability under the Framework.

## Payphones

### FINDING 2.9

Despite the decline in the number of payphones, Telstra operated payphones under the Universal Service Obligation still play a very important role in enabling equitable access to telephone services. Telstra has maintained the number of payphones in regional, rural and remote areas in recent years. However there are a number of areas of payphone provision and maintenance where improvements need to be made.

### RECOMMENDATION 2.11

Telstra should be required to better inform the public about its policies for providing payphones, including ensuring that criteria for providing payphones are clearly and simply stated. Telstra's criteria and processes for payphone installation decisions should be reviewed by the Government. The Government should establish a clear policy on future payphone availability.

### RECOMMENDATION 2.12

The sites of Telstra-operated payphones, together with the numbers of payphones at each site, should be made publicly and readily available. Consideration should be given to including payphone locations at least in local telephone directories in regional areas.

### RECOMMENDATION 2.13

Telstra should report as soon as possible to the Government on the causes of low levels of performance in meeting payphone repair timeframes, and put forward a strategy for raising performance to an acceptable level.

### RECOMMENDATION 2.14

The Government should review the provision of payphone services to people with disabilities. In particular it should take steps to ensure that competition in the supply of payphones does not impact adversely on access to teletypewriter (TTY) payphones.

## MOBILE PHONE SERVICES (CHAPTER 3, TERM OF REFERENCE 1)

### FINDING 3.1

By the time all current Government-supported contracts are fully implemented in 2004, more than 98 per cent of Australians will have access to terrestrial mobile phone coverage. The Government has funded the capital costs of a large number of new base stations, and Telstra has extended its CDMA network well beyond what was required to replace its analogue (AMPS) network.

Under existing industry cost and revenue structures, it would be difficult to extend terrestrial mobile coverage significantly further even with Government support for capital costs.

### FINDING 3.2

Prices for terrestrial mobile services are standard across Australia, with strong competition resulting in prices for all Australians that rank well in international terms.

For the two per cent of Australians for whom terrestrial services are not available, satellite mobile services are supported through significant Government subsidies for handsets. These subsidies have reduced the cost of satellite handsets to levels comparable to terrestrial handsets. Call charges for satellite mobile services are still significantly higher than for terrestrial services but are trending down.

### FINDING 3.3

Call drop-out and congestion rates for Australian mobile networks are satisfactory, and compare well with overseas experience. Call congestion is less likely on more lightly used rural base stations. User concerns about call drop-outs in rural areas are more likely to be caused by coverage limitations than quality of service performance.

The range of value-added services provided through mobile phone technology is extensive, with users across all networks having access to these features.

### RECOMMENDATION 3.1

The Government, in conjunction with the carriers, should identify areas where extending terrestrial mobile phone service is still feasible through Government support for capital costs. The Government should consider providing funding support to such areas, which might include small population centres and key highways in regional areas.

### RECOMMENDATION 3.2

The Government should consider extending the scope of its satellite phone subsidy scheme to cover all users with an appropriate need for a satellite service, and provide sufficient funds to meet full demand for the scheme.

### RECOMMENDATION 3.3

The Government and industry should inform consumers about mobile phone services, including technology and coverage limitations, fees and charges, mobile number portability, and contract issues. The Australian Communications Authority's Mobile [phone] Tool Kit has provided a valuable resource in this respect.

## INTERNET SERVICES (CHAPTER 4, TERM OF REFERENCE 1)

### FINDING 4.1

All Australians can now access an Internet Service Provider (ISP) for the cost of an untimed local call, and at equitable ISP charges. A large number of ISPs now offer national dial-up access at the rate of an untimed local call.

### FINDING 4.2

Prices for dial-up Internet services are equitable between metropolitan and regional, rural and remote subscribers, and competition has driven price levels down.

### FINDING 4.3

The Internet Assistance Program is achieving its objectives, but further promotion is necessary to ensure that consumers have full access to the service.

### FINDING 4.4

The ISP Guideline is a good start in better informing consumers of ISP service performance. The Guideline could be strengthened by providing additional information on ISP service performance.

### FINDING 4.5

There is a need for Telstra and other service providers to more effectively promote and facilitate access to faster and more effective services, such as ISDN (as an immediate substitute for dial-up service) and Asymmetrical Digital Subscriber Line (ADSL) for the next generation of speed and functionality.

### RECOMMENDATION 4.1

The benefits provided by the Internet Assistance Program for users of dial-up Internet services should be guaranteed into the future. A licence condition should be placed on Telstra that would require all Australians to be guaranteed dial-up Internet speeds, or equivalent throughput, over the Telstra fixed network of at least 19.2kbps. As part of the licence condition Telstra should be required to report on its compliance with the requirement, and on the data speed performance of its regional network more generally, which should be maintained at least at current levels.

## RECOMMENDATION 4.2

Telstra should be required to demonstrate that it has an effective strategy to address any dial-up data speed issues arising from poorly performing pair gain systems. Telstra should provide a formal undertaking to the Government in relation to any actions necessary to implement such a strategy.

## OTHER KEY SERVICE ISSUES (CHAPTER 5, TERM OF REFERENCE 1)

### Remote Indigenous communities

#### FINDING 5.1

Remote Indigenous communities remain the most disadvantaged telecommunications users in Australia and face unique difficulties in accessing adequate services. These difficulties are closely linked with broader social disadvantages faced by these communities.

#### FINDING 5.2

The Government has put in place a strategic and accepted framework to resolve the difficulties faced by remote Indigenous communities in accessing appropriate and affordable telecommunications services. The direction of the Telecommunications Action Plan for Remote Indigenous Communities is supported as providing a holistic and well-targeted way forward. Significant funds are currently being applied to meet the needs of remote Indigenous communities, but fully meeting the needs of these communities presents a long-term challenge, and further funding will be required in the future.

#### FINDING 5.3

Telstra needs to continue progress in implementing payphone improvements in remote Indigenous communities as part of its Universal Service Obligation (USO). Telstra's activities in this area need to be well integrated with the provision of other appropriate telephone services under the USO and the Telecommunications Action Plan for Remote Indigenous Communities.

### RECOMMENDATION 5.1

Telstra should place a high priority on the provision of payphones, or alternative community phone systems, in those remote Indigenous communities currently without access to telecommunications of any kind.

### RECOMMENDATION 5.2

Telstra should commit to improving the delivery of appropriate Universal Service Obligation services to remote Indigenous communities, particularly through the deployment of specialised call centre staff and Indigenous liaison officers.

### RECOMMENDATION 5.3

There should be more effective data collection and monitoring of telecommunications needs and services in remote Indigenous communities. The Australian Communications Authority should take a leading role in this area.

## Education and health services

### FINDING 5.4

The National Communications Fund has stimulated the development of services to meet the higher bandwidth needs of the education and health sectors, and has been successful in promoting collaboration and partnerships, both across the sectors and with telecommunications service providers.

### FINDING 5.5

The education and health sectors have a critical need for high quality Internet access in regional, rural and remote areas. Needs range from reliable low cost dial-up access for remote residences and small organisations, to higher bandwidth services for schools and larger health organisations.

### FINDING 5.6

Governments across Australia are working to provide access to higher bandwidth services in the education and health sectors, often aggregating demand to obtain a better outcome. Where governments aggregate demand, there is a need to ensure that benefits obtained for education and health users in regional, rural and remote areas are made broadly available to the wider community. There is also a need to balance the benefits of demand aggregation with the longer term need to encourage and promote competition to the maximum extent possible.

## Training, awareness and support for consumers

### FINDING 5.7

Awareness of consumer rights and commercial products in non-metropolitan Australia is still relatively low. Ongoing Government support for increasing awareness would be valuable.

### RECOMMENDATION 5.4

The Government should consider providing ongoing support for IT training and support services in rural and remote areas of Australia, where there are not the same opportunities as in urban areas. Further support should build on existing programs, such as Networking the Nation and State and Territory based initiatives.

## Online public access

### FINDING 5.8

Online access centres provide important services for regional, rural and remote communities, including online public access, training and support, and government services online. Online access centres can also play a strong role in assisting people with disabilities to access online services.

### RECOMMENDATION 5.5

All tiers of government should work together to support online access centres in regional, rural and remote Australia, and to enable these important community facilities to remain viable.

## HIGHER BANDWIDTH INTERNET SERVICES (CHAPTER 6, TERMS OF REFERENCE 1 AND 3)

### FINDING 6.1

Access to higher bandwidth services is becoming vital for the economic and social development of regional, rural and remote Australia.

### FINDING 6.2

Since the TSI report, the commercial provision of higher bandwidth services has expanded considerably, with services delivered over a range of platforms and through a number of competing providers.

### FINDING 6.3

The Government has provided support, through a variety of policy and program initiatives, to improve access to higher bandwidth services in regional, rural and remote areas.

### FINDING 6.4

The major impediment to regional, rural and remote Australians having equitable access to higher bandwidth services is the higher prices that users in some areas pay for these services.

### RECOMMENDATION 6.1

The Government should investigate whether the timeframes for connection and repair of ISDN services that are required under the Digital Data Service Obligation should be more closely aligned with regulated timeframes applying to telephone services.

## RECOMMENDATION 6.2

Some Telstra pricing arrangements for ISDN services seem discriminatory, and would appear to unduly favour Telstra over other providers. This should be brought to the attention of the Australian Competition and Consumer Commission.

## RECOMMENDATION 6.3

The Government should establish an incentive scheme for the provision of higher bandwidth services to regional, rural and remote areas, to enable all Australians to have access to services at prices comparable to those prevailing in metropolitan areas. A preferred model for the scheme is provided in this report.

## RECOMMENDATION 6.4

The Government should provide further support to communities to undertake demand aggregation strategies, and other activities that would support the take-up of higher bandwidth services. Support should also be considered to assist consumers and small businesses to make effective use of higher bandwidth opportunities.

## LEGISLATED CONSUMER SAFEGUARDS (CHAPTER 7, TERM OF REFERENCE 4)

### FINDING 7.1

The existing framework of legislated consumer safeguards is considered effective, and provides a strong level of protection for telecommunications consumers. However there is always scope for fine-tuning and 'continuous improvement', as market conditions change.

### FINDING 7.2

Compliance with legislated safeguards by carriers and service providers is generally high. However there is a lack of clarity in relation to the expected level of compliance with percentage based compliance measures, such as under the Customer Service Guarantee.

### FINDING 7.3

The Universal Service Obligation is not an effective mechanism for providing broad consumer access to an increased range of services into the future. There are a range of other more appropriate policy options available to the Government to achieve equity objectives in the future. These various mechanisms need to be well integrated and publicly articulated as part of the regional telecommunications plan proposed in Chapter 9.

### FINDING 7.4

The ability to seek compensation for loss of business from carriage service providers, including via the Telecommunications Industry Ombudsman, is not sufficiently well known and could be given more prominence in industry and Government publicity material.

### FINDING 7.5

Through its complaint resolution processes the Telecommunications Industry Ombudsman scheme provides an effective and practical means of 'enforcement', and is of more practical value to individual consumers than prolonged, involved and expensive legal action.

### FINDING 7.6

The Australian Communications Authority has adopted a well-reasoned approach to regulatory enforcement, focusing principally on compliance and cooperation, and on enforcement to back up this approach where necessary.

### RECOMMENDATION 7.1

Measures should be taken to provide telecommunications consumers with a simplified statement of their legislated rights, and to get the message to them more effectively. A one-page Summary of Telecommunications User's Rights is recommended. The Government should explore all relevant channels to ensure that information is provided to consumers where and when they most need it.

## RECOMMENDATION 7.2

Data on telecommunications compliance and performance should be collected at an appropriate level of disaggregation to allow ready assessment of relative performance levels. The Australian Communications Authority should put in place a data collection framework, to ensure comprehensive, disaggregated, standardised and meaningful collection of data on regional, rural and remote telecommunications services and service performance.

## RECOMMENDATION 7.3

The Australian Communications Authority should examine how it can best communicate to the public and consumer representatives its regulatory philosophy and approach, and examine whether and how it should provide greater clarity and certainty about its regulatory enforcement activities.

## TELSTRA'S LOCAL PRESENCE (CHAPTER 8, TERM OF REFERENCE 5)

### FINDING 8.1

The establishment of Telstra Country Wide<sup>®1</sup> (TCW) has significantly improved Telstra's capacity to respond to local telecommunications needs and issues. TCW is generally accepted and valued by regional, rural and remote customers, although there is still a need to better inform customers of its benefits.

### RECOMMENDATION 8.1

Telstra should be required to maintain an ongoing local presence in regional, rural and remote Australia. The requirement should only apply to Telstra consistent with its status as the Primary Universal Service Provider. The requirement should not be unduly prescriptive or burdensome, and should be broadly compatible with Telstra's commercial interests.

---

1 <sup>®</sup> Registered trademark of Telstra Corporation Limited ABN 33 051 775 556

## RECOMMENDATION 8.2

Telstra should be required to develop and publish a local presence plan to set out the range of activities and strategies it would deploy in regional Australia to address the Government's broad objectives. Telstra would be required to regularly report on its achievements against the plan and to demonstrate to the Government, and to regional communities, that it was providing an effective and beneficial local presence.

## SHARING FUTURE BENEFITS (CHAPTER 9, TERM OF REFERENCE 6)

### RECOMMENDATION 9.1

The Government should put in place a process to regularly review telecommunications services in regional, rural and remote Australia, and to assess whether important new service advancements are being delivered equitably in those areas.

The review process should be linked to a strategic plan for regional telecommunications, and underpinned by ongoing arrangements that provide a high degree of certainty that Government funds will be made available to support service improvements in regional, rural and remote Australia, where they will not be delivered commercially within a reasonable timeframe.

### RECOMMENDATION 9.2

Establishing a structure for future reviews of regional, rural and remote telecommunications services should:

- provide certainty for regional, rural and remote communities;
- ensure that reviews are independent from executive government;
- allow for flexible and appropriate policy responses to meet the range of needs in regional, rural and remote Australia; and
- promote competition and commercial service delivery as the most effective and sustainable service outcome.

### RECOMMENDATION 9.3

The scope of regular reviews of regional, rural and remote telecommunications services should be flexible, but there should be a core focus on assessing whether important new telecommunications services are available equitably across Australia.

### RECOMMENDATION 9.4

Future governments should be legally obliged to respond publicly to the recommendations of future reviews, and to justify responses that are not in accord with review recommendations.

### RECOMMENDATION 9.5

The Government should provide funding for future service improvements in regional, rural and remote Australia, rather than imposing financial obligations on industry.

### RECOMMENDATION 9.6

The Government should ensure that regular reviews of regional telecommunications services are supported by organisational arrangements that provide a strong focus on monitoring and assessing regional, rural and remote service levels. The Australian Communications Authority would be an appropriate body to undertake this function.

The background is a solid blue color with a pattern of thin, white, diagonal lines and small white dots, resembling a stylized representation of a network or a starry sky.

# *PART ONE*

## BACKGROUND



# CHAPTER 1

## INTRODUCTION

### BACKGROUND

On 16 August 2002 the Minister for Communications, Information Technology and the Arts, Senator Richard Alston, established the Regional Telecommunications Inquiry (the Inquiry), to carry out an independent assessment of the adequacy of services in regional, rural and remote Australia.

The members appointed to the Inquiry panel were Mr Richard (Dick) Estens (Chairman), Ms Jane Bennett and Mr Ray Braithwaite. Both Ms Bennett and Mr Braithwaite served on the Telecommunications Service Inquiry (TSI), undertaken in 2000. The Inquiry was assisted by a secretariat drawn from the Department of Communications, Information Technology and the Arts (DCITA), and the Department of Transport and Regional Services.

### TERMS OF REFERENCE

The Terms of Reference state:

‘In September 2000 the independent Telecommunications Service Inquiry (TSI) concluded that Australians generally have adequate access to a range of high quality basic and advanced telecommunications services. However the TSI also concluded that a significant proportion of those who live and work in rural and remote Australia have concerns regarding key aspects of services which, at that stage, were not adequate.

In May 2001 the Government responded to the 17 recommendations of the TSI by committing to regulatory changes and \$163 million of new funding programs. In April 2002 the Government announced a range of further enhancements to the telecommunications competition regime.

In its 2001 Federal election policy the Coalition stated that it would take no further steps toward the full sale of Telstra unless and until it was fully satisfied that services in regional, rural and remote Australia were adequate. It is therefore timely to conduct an independent assessment of progress toward the delivery of adequate telecommunications services to all Australians.

The independent panel will report to the Minister for Communications, Information Technology and the Arts by 8 November 2002 on whether telecommunications services to regional, rural and remote areas of Australia are adequate and the arrangements that should be put in place to ensure that all Australians continue to share in the benefits of further service improvements and developments in technology.

In conducting its assessment the panel will advise the Minister on:

1. The extent to which the Government's response to the TSI, other Government initiatives and further commercial developments have so far addressed the community concerns identified in the TSI report, particularly with regard to:
  - the timely installation, repair and reliability of basic telephone services;
  - adequate mobile phone coverage at affordable prices; and
  - reliable access to the Internet,and whether ongoing delivery of the Government's response will meet the TSI concerns within a reasonable timeframe.
2. The performance of Telstra, as the primary Universal Service Provider, in meeting Customer Service Guarantee (CSG) standards on the timely installation, repair and reliability of basic telephone services in regional, rural and remote Australia, compared with its performance in metropolitan markets and with overseas carriers in reasonably equivalent markets.
3. Additional Government action that may be taken to remove impediments to the delivery of Internet services at 64kbps or better and wireless-based technologies in regional, rural and remote Australia.
4. The current provision of legislated consumer safeguards including the Universal Service Obligation, the Customer Service Guarantee, untimed local calls and the Telecommunications Industry Ombudsman and whether further action is required to ensure these safeguards are enforced into the future.
5. The ongoing commitment of Telstra to a local presence (such as Telstra Country Wide) in regional, rural and remote Australia.
6. The most effective means by which the Government can ensure that people in regional, rural and remote Australia can share reasonably equitably—in terms of availability and cost—with residents in metropolitan Australia in the benefits of future advances in telecommunications services resulting from competition and new technologies.

In conducting its assessment the panel will be expected to consult with representatives of regional Australia, including the National Farmers' Federation. It will also take submissions from the public.'

## APPROACH TO THE CONDUCT OF THE INQUIRY

The Inquiry interpreted the Terms of Reference as requiring the Panel to consider and report on two key areas:

- Firstly, a detailed assessment of the adequacy of telecommunications services in regional, rural and remote Australia (preamble and Terms of Reference 1 and 2). The Inquiry's approach to assessing adequacy is set out in the introduction to Part 2 of this report, but it is worth emphasising the importance the Inquiry has placed on the findings of the TSI report in undertaking its assessment. Particular attention has been given to the TSI's finding that key concerns related to rural and remote areas rather than regional centres, and that the service areas of concern were the connection, repair and reliability of basic telephone services, coverage of affordable mobile telephone services, and reliable access to the Internet; and
- Secondly, Terms of Reference 3, 4, 5 and 6 require the Panel to advise on whether, and if so what, arrangements should be put in place to address some specific policy concerns identified by the Government.

Unlike the TSI, this Inquiry was not asked, nor did it see the need to undertake any detailed analysis of consumer need. It has been assumed that the valuable research and analysis of consumer need undertaken by the TSI remains largely valid. The one change since the TSI has been demand for higher bandwidth services, which (as predicted by the TSI) appears to have grown in the past two years as the broadband market continues to mature. Increasing interest in, and demand for, such services is reflected in the submissions made to the Inquiry.

In undertaking its investigations the Inquiry, again according to its Terms of Reference, sought to consult as widely as possible with regional stakeholders. Shortly after the Inquiry was initiated advertisements were published in national, state and regional newspapers, seeking submissions. In addition a website and 1800 help line were established and promoted, providing information on how to make a submission to the Inquiry.

A range of key stakeholders were invited to meet with the Inquiry—in order to provide advice and views on the adequacy of regional services in general, and on the Terms of Reference in particular. Key organisations consulted were the National Farmers' Federation and Telstra Country Wide<sup>®2</sup>.

In summary, the Inquiry received 606 written submissions, and held 41 meetings with 40 organisations, including meetings in Western Australia and Queensland. Three of the submissions included surveys conducted by independent members of the House of

---

2 <sup>®</sup> Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

Representatives. The Inquiry was supplied with and advised of approximately 7375 responses to the surveys. Further details of submissions provided, and meetings held, are at Appendix A of this Report.

While submissions and meetings provided valuable information on regional, rural and remote service levels, particularly from a user perspective, the Inquiry also sought comprehensive data from telecommunications service providers, the Australian Communications Authority (ACA), and the Telecommunications Industry Ombudsman (TIO), to assist its analysis of service adequacy. The Inquiry also requested extensive information from DCITA. Given the volume of such material, the Inquiry has not attributed information received from DCITA in footnotes.

In summary the information and advice provided by these various sources has enabled the Inquiry to undertake a detailed assessment of regional, rural and remote telecommunications service levels, with a particular emphasis on improvements implemented or put in place over the past two years. The Inquiry wishes to thank all those who have contributed to the Inquiry in this way.

## CONTEXT

The Inquiry took place while a number of other processes were underway. These included:

- The Senate Environment, Communications, Information Technology and the Arts Legislation Committee conducting inquiries into:
  - ~ The Telecommunications Competition Bill 2002; and
  - ~ The Australian Telecommunications Network.
- The House of Representatives Standing Committee on Communications, Information Technology and the Arts conducting an inquiry, An Inquiry into Wireless Broadband Activities; and
- The Broadband Advisory Group preparing high level advice to Government on broadband development.

The Inquiry took the opportunity to consider a number of public submissions made to these processes.

## STRUCTURE OF THIS REPORT

The report is set out as follows:

Part 1 is an introduction to the Inquiry and includes a summary of the Government's response to the TSI report.

Part 2 of the report consists of the Inquiry's assessment of telecommunications service adequacy in regional, rural and remote Australia. It includes four chapters, three of which deal with the three key service areas raised by the TSI report—fixed telephone services, mobile services and Internet services. In the latter chapter the Inquiry examines mainstream dial-up Internet services, (the TSI report's primary focus). Higher bandwidth services are dealt with in Chapter 6. The fourth chapter of Part 2 examines a number of service and consumer support issues that have been identified by the Inquiry as important to the adequate delivery of communications services to regional, rural and remote areas. They are the delivery of communications capacity to the education and health sectors, the delivery of telecommunications services appropriate to the needs of remote Indigenous communities, the provision of training to regional, rural and remote users, awareness of consumer rights and the provision in regional Australia of public access to the Internet and other online services.

Part 3 of the report examines and reports on the particular issues identified in terms of reference 3, 4, 5 and 6 (Chapters 6, 7, 8 and 9). As indicated these are essentially issues about protecting and enhancing consumer benefits into the future. In proposing strategies to the Government, the Inquiry recommends that Government action be guided by some key principles, which are set out in the introduction to Part 3. These are generally consistent with the principles the TSI report identified as important for guiding future government action.

## KEY FINDINGS OF THE TSI REPORT

Given the importance of the TSI report findings and the Government's response to those findings, it is worth quoting in full the certificate provided by the TSI to the Government.

### TSI INQUIRY CERTIFICATE (2000)

'The Inquiry has concluded that Australians generally have adequate access to a range of high quality, basic and advanced telecommunications services comparable to the leading information economies of the world. The Inquiry research indicates Australians who live in metropolitan and regional centres enjoy good telecommunication services and are

generally satisfied with them. However, a significant proportion of those who live and work in rural and remote Australia have concerns regarding key aspects of services which, at this stage, are not adequate. Their concerns relate primarily to:

- the timely installation, repair and reliability of basic telephone services;
- mobile phone coverage at affordable prices; and
- reliable access to the Internet and data speeds generally.

The Inquiry's analysis suggests that the continued development of competition throughout Australia, combined with key government initiatives (such as USO contestability) will have a positive effect on services over the next few years. These developments are likely to materially improve the services available to rural and remote consumers.

The recommendations which follow provide a framework in which to address identified areas of concern to ensure the telecommunications sector will continue to improve the services available to all Australians.<sup>3</sup>

## THE GOVERNMENT'S RESPONSE TO THE TSI REPORT

The Government announced its response to the TSI report on 15 May 2001. This response addressed each of the specific TSI recommendations, but also proposed a range of initiatives to address the general concerns of the TSI, set out in the TSI certificate quoted above. These related to the timely connection, repair and reliability of basic telephone services, access to affordable mobile phone services, and reliable Internet access.

The 17 specific Government initiatives, and reported progress in implementing these initiatives, are set out below.

### 1. Improved service connection times

In response to concerns raised in the TSI about the timeliness of installations and repairs and reliability of basic services the Government announced it would reduce maximum telephone service connection times in remote areas from 12 to six months. The Government also announced it would improve the availability of interim services—thus ensuring no one need wait more than 30 working days to access a telephone service.

---

3 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.5

### ***Implementation status***

Arrangements to reduce connection times and improve availability of temporary services commenced on 15 October 2001. This followed amendments to Telstra's Universal Service Obligation Standard Marketing Plan and the Customer Service Guarantee Standard, following public consultation undertaken by DCITA and the ACA.

2. Mobile phone coverage for towns with a population of 500 or more  
In response to concerns raised in the TSI about mobile phone service coverage in regional areas, the Government announced a three-year program for extending terrestrial mobile coverage to towns with a population of 500 or more, subject to community need and ongoing viability. Contributions were to be sought from communities broadly consistent with the current Networking the Nation (NTN) program.

### ***Implementation status***

Telstra has been awarded the contract to provide improved mobile phone coverage to 132 towns, with populations over 500, by December 2003. The first towns have already received improved mobile phone services.

3. Mobile phone coverage for other areas (known as the 'Regional Mobile Phone program')  
Also in response to the concerns in the TSI report on mobile phone coverage, the Government announced another three-year program to provide mobile coverage in other areas currently without terrestrial services—including providing terrestrial or satellite services. Contributions were to be sought from carriers and communities and equal funding was sought from States and Territories.

### ***Implementation status***

Under this program \$2.1 million has been allocated to a satellite phone subsidy program to ensure that mobile services are available to all Australians. Funding has also been provided to improve mobile phone coverage in 55 towns with populations under 500 and spot coverage along 34 major highways. Telstra has been awarded the contracts for both these projects with the first new coverage expected to be available in December 2002.

The Commonwealth is also providing \$7.0 million towards the WirelessWest project to improve mobile phone services in the south-west land division of Western Australia, and this program is already providing increased mobile coverage to this area. A program to address a mobile blackspot in the Australian Capital Territory will also be implemented.

#### 4. Internet Assistance Program (IAP)

In response to concerns raised in the TSI about Internet speeds, the Government announced it would establish, in collaboration with Telstra, the IAP which will operate for three years. The aim of the IAP is to help users maximise Internet speeds and achieve equivalent speeds of at least 19.2 kilobits per second (kbps) over Telstra's fixed network for web and email applications. The program consists of an Online Help Service to provide advice to users, and a Technical Support Service to help users whose problems cannot be resolved by online advice.

##### ***Implementation status***

The IAP has been operating in all regional areas since 3 September 2001 and in metropolitan areas since 4 March 2002. Telstra reports that to date the IAP has dealt with more than 74 000 inquiries, with the majority coming from regional areas.

An independent advisory panel has been established by the Government to ensure the IAP is competitively neutral and, where relevant, help consumers with other issues such as dispute resolution.

The Commonwealth signed a Deed of Agreement with Telstra on 29 September 2001, which sets out funding contributions and other responsibilities of the parties.

#### 5. Other Internet initiatives

In response to TSI Recommendation 7 relating to NTN programs and the TSI's concerns on Internet access, the Government announced it would:

- adjust the Building Additional Rural Networks (BARN) initiative to support the development of high speed regional networks; and
- direct the ACA to request an industry code of practice setting out Internet service provider responsibilities for providing information and optimising data speeds including equipment requirements.

##### ***Implementation status***

- This initiative has been put in place. Funding guidelines for the BARN program have been adjusted to support high speed regional networks.
- The ACA has investigated and reported to the Government on the need for an Internet industry code of practice. Government has agreed to the ACA recommendation for a voluntary code or 'guidelines', which have now been issued.

#### 6. National Communications Fund (NCF)

In response to TSI Recommendation 8, the Government announced it would establish a competitive grants program, with program funds available in 2002–03 for three years—to support significant regional telecommunications projects in the education and health sectors. The aim of the NCF is to improve service delivery in those sectors,

with priority given to projects that also improve telecommunications services more generally in regional communities. Contributions were to be sought from applicants including equal funding from State and Territory agencies.

### ***Implementation status***

Applications for funding under the NCF closed on 28 February 2002 and 59 applications were received. The Prime Minister announced the successful applicants on 18 July 2002. The eight projects funded under the NCF are:

- Network Western Australia—\$8 million;
- The Grampians Rural Health Alliance Network (Victoria)—\$8 million;
- Health and Education Information Access for Rural and Regional NSW—\$8 million;
- Northwest and New England Broadband Telecommunications Network—\$5.5 million;
- NSW and Northern Territory Interactive eLearning—\$8 million;
- Outbacknet@qld—\$8 million;
- Regional Network Delivering Education Services (SA)—\$6 million; and
- Broadband for Regional Tasmania Project—\$3 million.

### 7. Community information campaign

In response to concerns raised in the TSI report about low levels of awareness in regional, rural and remote Australia, the Government announced it would conduct a community information campaign. The aim of the campaign was to increase awareness of:

- the benefits and opportunities available through existing Government communications funding programs;
- the availability of commercial communications services; and
- consumer safeguards and rights.

The campaign includes funding to provide ongoing online information resources on regional communications issues.

### ***Implementation status***

The community information campaign (TV, radio and print) commenced in early September 2001, and was substantially complete when it was ended, due to the announcement of the Federal election in October 2001.

The *New Connections* website was launched in September 2001. The website includes information contributed by regional service providers about their services, information about major funding programs, and information on Government regulations. The website also includes an online mapping facility.

8. Funding for consumer representation

In response to TSI Recommendation 14, the Government announced a four-year program, starting from 1 July 2002, to fund consumer representation and research in telecommunications. This included greater priority to representation for people with disabilities and in regional areas.

***Implementation status***

The Government announced the increase in funding for disability groups in consumer representation grants in July 2001. The successful applicants for funding in 2002–03 have now been announced.

9. Enhanced payphone services for remote Indigenous communities

In response to TSI Recommendation 17, the Government announced it would enhance the availability of payphone services for remote Indigenous communities under the USO. The initiative, which required close consultation with Telstra and Indigenous communities, was the first step in improving service levels pending development and implementation of a comprehensive long-term strategy (Initiative 10).

***Implementation status***

Following extensive consultation, more accurate data has now been gathered and priorities identified, and a work plan and a reporting process is now in place. Further development of this initiative has been integrated into the Telecommunications Action Plan for Remote Indigenous Communities (TAPRIC)—the wider Government response to remote Indigenous telecommunications needs (see Initiative 10).

10. Telecommunications needs of remote Indigenous communities

In response to TSI Recommendation 17, the Government announced it would conduct a major study of the telecommunications requirements of remote Indigenous communities.

***Implementation status***

The study has been completed following extensive consultation with remote Indigenous communities, their representatives, and other key stakeholders. The Government has now announced a Telecommunications Action Plan for Remote Indigenous Communities (TAPRIC), which is supported by a funding package of \$8.3 million over three years for five separate program areas.

11. Training in use of teletypewriter (TTY) equipment

In response to TSI Recommendation 16, the Government announced that:

- DCITA would assess the extent of unmet needs for TTY training, in consultation with the ACA and other relevant organisations. Additionally, DCITA would negotiate, as required, with the National Relay Service (NRS) provider to have training incorporated into the NRS; and

- longer term options for meeting telecommunications equipment needs of people with speech and/or hearing impairments and people with other disabilities would be assessed.

**Implementation status**

- A new framework for additional TTY training has been agreed by DCITA, the ACA and NRS provider—Australian Communications Exchange (ACE).
- An assessment of longer term options for meeting needs of the speech and hearing disabled has been provided to the Minister.

12. Information for consumers on availability of certain services

In response to TSI Recommendation 15, the Government announced that the ACA would be directed to review the adequacy of information made available by telecommunications companies on emergency and health-related priority services. The ACA would be required to develop appropriate measures to address any deficiencies.

**Implementation status**

The ACA reported to the Government on the adequacy of information following a public review, concluding that levels of information were not adequate. The ACA is implementing measures to improve information dissemination, such as amendments to the *Telecommunications (Standard Forms of Agreement Information) Determination 1999*.

Following the death of Sam Boulding in February 2002 and the ACA's investigation into the supply of the telephone service to the Boulding family, the Government imposed strict priority assistance requirements on Telstra through a licence condition. Telstra must now provide eligible priority customers with connections, fault repairs or interim services within 24 hours, or 48 hours in remote areas.

13. Reviews of USO contestability

In response to TSI Recommendations 3 and 4, the Government announced it would continue to monitor the effectiveness of USO contestability and review it after 12, 24 and 36 months of operation. This would allow regulatory arrangements to be fine-tuned and help to determine whether USO contestability should be extended to additional areas. The review of USO contestability pilots in 2002 includes an examination of the TSI Recommendation, that up-front incentives should be offered to potential alternative universal service providers in return for their commitment to supply substantial improvements above the legislated minimum.

**Implementation status**

The USO contestability pilots commenced on 1 July 2001. DCITA commenced the first of three annual reviews in July 2002.

14. Review of telecommunication specific competition regulation

In response to TSI Recommendations 1, 2 and 6, the Government announced it would direct the Productivity Commission to consider in its review the implications of developing telecommunications competition across the country, particularly in regional Australia, and to consider the current Pay TV programming arrangements.

The Government also announced ongoing reviews of telecommunications-specific regulation would be required to consider the regulatory impact on competition development in regional, rural and remote areas.

***Implementation status***

The Productivity Commission submitted its final report to the Government on 21 September 2001. The Government responded to the report on 24 April 2002. The Telecommunications Competition Bill 2002 was introduced into the Parliament on 26 September 2002, giving effect to the decisions announced on 24 April.

15. Appointment of a new 'regional' member to the ACA

In response to TSI Recommendation 10, Mr Allan Horsley was appointed to the ACA in December 2000 and began duties in March 2001.

16. Reliability standards and improved quality of service reporting

In response to TSI Recommendations 9, 11 and 12, the Government announced that it would:

- implement reliability standards, and monitoring and enforcement arrangements for services provided under the USO;
- improve the quality of service reporting for major service providers to allow consumers to make more informed decisions on price and quality; and
- direct the ACA to adequately monitor faults and investigate extreme cases of failure to meet CSG standards.

***Implementation status***

The Minister has accepted the ACA's reports on these matters. A key outcome of the reports has been the establishment of the Network Reliability Framework, which will see the ACA monitor and review Telstra's CSG services at three levels. These include at the exchange service area and individual service levels, with the objective of upgrading poorly performing exchanges and services to a much higher level of reliability.

17. Review of the CSG

In response to TSI Recommendations 5 and 13, the Government announced it would direct the ACA to conduct a review of existing CSG arrangements. The review would assess the need for changes to reflect the increasingly competitive telecommunications market where services are delivered through an increasingly diverse range of technologies.

***Implementation status***

The Minister has accepted the ACA's report and has announced that the CSG will continue to apply to all providers of fixed telephone services. An investigation is underway to assess how the CSG arrangements can be streamlined to minimise any undue impacts on service providers.



The background is a solid blue color with a pattern of thin, white, slightly curved lines and small white dots scattered across it, resembling a stylized network or a starry sky.

## *PART TWO*

### ASSESSMENT

## PART 2: ASSESSMENT

### SCOPE OF THE ASSESSMENT

The Terms of Reference provided to the Regional Telecommunications Inquiry (the Inquiry) set out a general requirement for the Inquiry to assess ‘whether telecommunications services to regional, rural and remote areas are adequate.’

Term of Reference 1 clarifies the Government’s expectation in this regard by identifying the three key concerns raised by the Telecommunications Service Inquiry (TSI) as the particular service areas that require examination and assessment. These concerns were felt by those who live and work in rural and remote Australia, and related to:

- the timely installation, repair and reliability of basic telephone services;
- adequate mobile phone coverage at affordable prices; and
- reliable access to the Internet.

Accordingly, the Inquiry’s assessment focuses mainly on these three service areas, and examines whether developments—including the Government’s response to the TSI, other Government programs and commercial developments—have adequately addressed consumer concerns in these areas, and put in place adequate services.

The TSI also raised issues and made recommendations in relation to other service areas, and the Government’s responses and other developments in these areas are also examined and assessed. These include:

- service levels in remote Indigenous communities;
- providing access to higher bandwidth services for education and health sectors in regional, rural and remote Australia;
- training and public access services; and
- addressing the generally low levels of awareness among regional, rural and remote communities of telecommunications service options and consumer safeguards.

## HOW IS ADEQUACY DEFINED?

The Inquiry believes that inherent in the concept of adequacy is the notion of 'fit for purpose', that is, that the service is at a level that enables users to access it readily and use it effectively for the purposes for which it is provided.

The Inquiry's approach therefore seeks to establish, in the telecommunications service areas under consideration, whether services that are accessible and 'fit for purpose' are being made available to regional, rural and remote Australians. That is:

- they are provided in a timely way;
- are of good quality and function well;
- are generally reliable; and
- are priced in a way that enables broad access and take-up by regional, rural and remote consumers.

## HOW IS ADEQUACY ASSESSED?

The Inquiry has concluded that there is no simple way of assessing service adequacy in regional, rural and remote Australia. Instead it has adopted an approach which assesses adequacy against a number of measures, and is sufficiently flexible to take into account the complexities of services being offered in the marketplace, and the impact of other factors that may inevitably limit the capacity to deliver the same level of service to all Australians.

The TSI report in 2000 concluded that, while there were some identified concerns in rural and remote Australia, consumers in metropolitan areas and large regional centres were generally satisfied with their service levels, and that services in these areas were considered adequate.<sup>4</sup> Therefore, a comparison between services in these areas and those applying in rural and remote areas is considered one important way of assessing whether the service concerns identified by the TSI have been adequately addressed, with gaps bridged as much as reasonably possible, assessed on a case by case basis.

Another key component of the Inquiry's assessment of adequacy in regional, rural and remote areas, relates to those areas of deficiency identified in the TSI report. The Inquiry has closely analysed improvements in those service areas since the TSI report in 2000—improvements arising from the Government's specific response to the report, other Government programs, commercial service developments, and improved commercial service performance that have happened since that time.

---

4 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.5

In some cases, a comparison with appropriate overseas experience has also proved useful in assessing how well regional, rural and remote users in Australia are faring. Finally, the views of regional stakeholders submitting to the Inquiry have been seen as an important gauge of whether consumer concerns in rural and remote Australia have been addressed, and whether individual problems identified in submissions are symptomatic of wider systemic service deficiencies within Telstra or other service providers.

The assessment process has therefore taken into account the above comparisons and views, in deciding whether services have met the overall 'fit for purpose' adequacy test discussed above, while also taking into account the reasonable limits of technical or financial feasibility.

The Inquiry has also considered whether service improvements that are underway, but not yet fully implemented, should be considered in the overall assessment of adequacy. An example is the three major contracts that the Government has in place with Telstra to provide improved mobile coverage in population centres and along regional highways, which are due to be completed over the next two years.

While these service improvements are not yet fully rolled out, and the benefits not yet fully available to consumers, the Inquiry has found that there is a high degree of certainty both that these service improvements will be realised, and that the benefits can be clearly identified. The Inquiry considers it sensible to include such 'locked in' service improvements in its overall assessment of adequacy.

The Inquiry therefore considered that service improvements that are under way should be considered as part of the assessment of adequacy, but only if the following could be demonstrated:

- there is a high degree of certainty that the improvements will be delivered, as a result of contractual agreement, formal undertaking or regulatory requirement;
- the improvements are clearly identifiable and quantifiable, either as defined new service infrastructure and service outcomes, or as service standards defined under regulatory instrument; and
- the improvements will be realised within specific and acceptable time frames, and in general as soon as logistically possible.

## WHY NOT DEFINE PRESCRIBED BENCHMARKS?

Some submissions have suggested that objective and tightly defined service benchmarks need to be established against which regional services should be judged. The Inquiry notes that that Government already sets service standards of a similar nature, through regulatory mechanisms such as the Customer Service Guarantee (CSG) and most recently the Network Reliability Framework. However, the Inquiry believes that it is not feasible to adopt this approach in defining service adequacy benchmarks for the full range of telecommunications services and service elements.

Issues identified in setting prescribed benchmarks across all services and service elements include:

- the extreme difficulty of setting benchmarks across all areas that reflect complexities and variations in technologies and market offerings;
- the likely arbitrary nature of points at which benchmarks would be set, and consequent inevitable dispute about them; and
- the difficulty of such an approach adequately taking into account variation in consumer service needs. For example, a frequent criticism of the CSG service standards is that they prevent service providers offering consumers service choice and price or quality trade-offs.

## SHOULD SERVICES BE EQUAL WITH METROPOLITAN LEVELS?

Another proposition put forward in a number of submissions is that regional and rural services should be measured against metropolitan service levels, and that they should not be considered adequate until they are equal with metropolitan services, presumably against all service parameters—including price, service reach, quality and reliability.

While the Inquiry agrees that comparing rural with metropolitan service levels is an important part of the assessment of adequacy, it does not agree with the assertion that rural services cannot be considered adequate until they are absolutely equal, in all respects, with metropolitan services. There are very few, if any, essential services, in Australia or overseas, where the provision of service is absolutely equal across the entire country.

The reality is that in telecommunications factors such as geographic isolation, the high cost of delivery in some areas, limitations of particular technologies (including where they are affected by climate or topography), and lack of commercial viability in some areas, mean that not all consumers across the country can expect access to exactly the same

suite of services, at exactly the same price, and in exactly the same time frames. In the Inquiry's view, the essential issue is whether all consumers across the country have access to a level of service, and a price of service, across the key service areas that allows broad take-up, effective use of services and comparable consumer benefits.

## SUMMARY OF ASSESSMENT METHODOLOGY

The methodology adopted by the Inquiry in examining the three key service areas of fixed telephones, mobile telephones and Internet services can be summarised as follows:

- examine and assess the key service elements of each of the three key service areas, including competition and coverage, pricing, connecting the service, service quality and reliability, repairing the service, and customer service generally;
- assess other service areas identified as important by the TSI report, and in submissions to the Inquiry;
- for those service elements where the need for improvement was identified by the TSI report, assess to what extent improvements have been made over the past two years, as a result of the Government's response to the TSI report (including 'locked in' improvements that are currently underway), other Government actions and commercial developments;
- as a result of developments since the TSI report, assess how rural and remote services now compare with those in metropolitan and large regional centres, taking into account reasonable differences that may result from technology limitations, logistical difficulties or other impediments resulting from geographic isolation;
- where appropriate, make comparison with relevant overseas experience;
- consider the information and views put forward in submissions to the Inquiry, and in bilateral meetings with key stakeholders; and
- reach an overall conclusion in each of the service areas as to whether the levels of service now in place in regional, rural and remote Australia can be considered adequate, measured against the general 'fit for purpose' objective identified above.

# CHAPTER 2

## FIXED TELEPHONE AND PAYPHONE SERVICES

### INTRODUCTION

This chapter relates to the general Term of Reference 1 and, more specifically, Term of Reference 2:

*The performance of Telstra, as the primary Universal Service Provider, in meeting Customer Service Guarantee (CSG) standards on the timely installation, repair and reliability of basic telephone services in regional, rural and remote Australia, compared with its performance in metropolitan markets and with overseas carriers in reasonably equivalent markets.*

In examining fixed telephone services the Regional Telecommunications Inquiry (the Inquiry) has focussed on the key dimensions of the consumer experience with these services—availability, connections, pricing, reliability, repairs and customer service. This approach is replicated in the chapters on mobile phone services and Internet services.

Given Term of Reference 2 refers specifically to the performance of Telstra, and that Telstra is the predominant provider of fixed telephone services, the Inquiry's assessment focuses primarily on Telstra. The performance of other carriage service providers is discussed as appropriate.

Chapter 2 has strong linkages with Chapter 7, dealing with legislated safeguards, because fixed telephone services is an area in which there is a wide range of legislated consumer protection. While fixed telephone services are the predominant means by which Australians currently access the Internet—through dial-up connection to their chosen Internet Service Provider (ISP)—dial-up Internet access issues are dealt with separately in Chapter 4.

## TELECOMMUNICATIONS SERVICE INQUIRY (TSI) FINDINGS

The TSI placed considerable emphasis on the provision of fixed telephone services to regional, rural and remote areas, finding that:

*...the highest priority for residential customers remains the basic fixed telephone service... Almost all businesses need fixed telephone services including a fax capability;<sup>5</sup> and*

*...access to a fixed home telephone is the single most important telecommunications service to Australian residents, especially those people who are isolated due to geographical or physical constraints.<sup>6</sup>*

The continuing importance of fixed telephone services is confirmed by the Australian Communications Authority's (ACA) 2002 Consumer Satisfaction Survey. It found that fixed telephones are still the most important service for Australian residences and small businesses.<sup>7</sup>

The TSI report found high levels of access to fixed telephones in places of residence and business across Australia. It noted that Telstra's performance, as the universal service provider and main provider of fixed telephone services in Australia, had shown continued improvement against the Government's CSG and Telstra was generally meeting public expectations. The TSI report did note, however, that there were gaps in this performance, which was falling short of the expectations of some groups. Market research conducted for the TSI report found that Australians were generally satisfied with their level of service, but there were some areas of dissatisfaction. In relation to fixed telephones, the areas of concern identified by the TSI report were timely connection of new services without infrastructure in urban and major rural areas, the length of some CSG timeframes, service reliability, the repair of faults, and the provision of fixed telephone and payphone services generally in remote Indigenous communities.<sup>8</sup>

It is evident that the Government has responded to the key issues with a range of projects and programs, while Telstra has also announced a number of initiatives to target concerns identified in the TSI report. These developments are discussed below.

---

5 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.2, p.49

6 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.40

7 ACA, *Telecommunications Consumer Satisfaction Survey 2002*, unpublished report, pp.24-5

8 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.58, p.61, p.71, p.78, p.83, p.181

# SERVICE AVAILABILITY

The availability of fixed telephone services was not a concern in the TSI report. Under the Universal Service Obligation (USO) the universal service provider, currently Telstra, must ensure basic telephone services—in the form of the standard telephone service and payphones—are reasonably accessible to all Australians regardless of where they live or do business. Discussion of the USO can also be found in Chapter 7.

# NUMBERS OF CONNECTIONS

The TSI report found that the USO was being met, with services universally available to all Australians. The Inquiry makes the same conclusion—that, as a matter of law, fixed telephone services are available upon request.

The number of Telstra fixed telephone services in operation is given in Table 2.1. This data is used as a reference point throughout the report.

**Table 2.1: Telstra fixed telephone services in operation (millions)**

Year	Metropolitan	Country	Not Classified	Total
1997	6.039	3.377	-	9.416
1998	6.242	3.523	-	9.765
1999	6.329	3.449	0.170	9.778
2000	6.491	3.576	0.176	10.242
2001	6.254	2.504	1.488	10.247
2002	6.719	2.563	1.454	10.698

Notes: Telstra advises that the categorisation of metropolitan and country changed in 2001, limiting the comparability of those figures with previous years. The metropolitan figures for 1997–99 were categorised as ‘urban’ and may not be comparable to other years. The ‘Not Classified’ category is understood to include internal Telstra services and wholesale services.

Source: ACA, *Telecommunications Performance Report 2000–01*, November 2001, p.55; Telstra, Inquiry communication.

Optus advises it has around 500 000 customers directly connected to the Optus network in Brisbane, Melbourne and Sydney. Optus also has around 440 000 Optus resale customers nationally. AAPT and Primus are understood to have around 530 000 and 390 000 respectively.<sup>9</sup>

9 Optus, submission, p.36; P Budde, *Telco Company profiles 2002–2003*, p.3 and p.167

The data available to the Inquiry indicates that 97 per cent of Australian households have a telephone service connected while 11 per cent have second or subsequent services.<sup>10</sup> This compares favourably with connection rates in other countries as Table 2.2 shows.

**Table 2.2: Telephone connection rates in selected countries, April 2002**

Country	Percentage of households with telephone connected	Percentage of households with more than one telephone connected
Norway	100	20
Sweden	100	6
Hong Kong	99	13
South Korea	99	1
Singapore	98	14
Taiwan	98	25
AUSTRALIA	97	11
Germany	97	9
United Kingdom	94	7
United States	94	29
Italy	93	1
New Zealand	93	8
France	90	5
Ireland	84	8

Source: National Office of the Information Economy (NOIE), *State of Play, April 2002*, [www.noie.gov.au](http://www.noie.gov.au), viewed 23 October 2002

The TSI report did find that while the letter of the USO was being observed—that services were available upon request—the unique barriers to access in remote Indigenous communities meant that the USO was proving ineffective in meeting their needs. The Government has responded to this finding with a range of initiatives under the Telecommunications Action Plan for Remote Indigenous Communities (TAPRIC). Given the importance and particular features of telecommunications needs in these communities, TAPRIC is assessed separately in Chapter 5 of this report.

<sup>10</sup> National Office of the Information Economy, [www.noie.gov.au](http://www.noie.gov.au), viewed 20 October 2002

## AVAILABILITY OF ENHANCED SERVICE FEATURES

The TSI report found that enhanced call features such as call waiting, call return and caller identification were useful additions to fixed telephone services, but they were not yet used, or in demand, at levels that indicated they were vital. The TSI report also noted that there were a number of Australians without access to some or all of these features.<sup>11</sup>

A number of submissions expressed continuing concern about lack of access to some or all enhanced service features, and identified these services as important. For example:

*The 3-way call and forward message facilities vital to businesses, and enjoyed by those in city and regional centres cannot be accessed through DRCS services.*<sup>12</sup>

While these features are not required to be provided by Telstra as part of the USO, it is nevertheless clear to the Inquiry that Telstra has invested considerable resources in providing these services widely.

Telstra now provides enhanced calling features, such as call waiting and call return, for most standard telephone services around Australia. Subsequent to the TSI report, in 2000–2001 Telstra completed a \$26 million upgrade of 1250 Integrated Remote Integrated Multiplexers (IRIMs) which affected approximately 150 000 customer lines. This upgrade made these facilities capable of supporting enhanced calling features.

The particular enhanced calling features that are not available depend on the mix of technological constraints. According to Telstra, as at 30 June 2002, 11 000 services across Australia, chiefly in rural and remote areas, were unable to access the standard set of enhanced calling features. A further 241 500 services, predominantly in urban areas, were unable to access calling number display. Another 2500 services, predominantly in rural and remote areas were unable to access Telstra's Message Bank Home<sup>®</sup>. Another 72 000, predominantly in urban and rural areas, were unable to access Faxstream Duet<sup>®</sup>.<sup>13</sup>

Telstra has advised it currently has no plans to specifically upgrade or replace equipment to provide enhanced calling features where they are not currently available, due to the high costs and low returns involved.<sup>14</sup> Telstra notes that take-up of some of the more advanced enhanced calling features is low. Telstra has indicated, however, that enhanced calling features may become more available where it is necessary for it to upgrade or

---

11 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.40, pp.77-8, p.83.

12 Patricia Steele, submission, p.1

13 Telstra, Inquiry communication; (Message Bank Home and Faxstream Duet are registered trade marks of Telstra Corporation Limited ABN 33 051 775 556)

14 Telstra, Inquiry communication

replace existing equipment. For example, upgrades to Analogue Radio Concentrator Systems (ARCSs) and DRCSs discussed below, will improve access to enhanced calling features for these customers.<sup>15</sup>

The Inquiry notes that while the lack of enhanced calling features is significant in rural and remote areas, it is also an issue affecting urban Australia. Generally, Telstra has invested significant resources to make these features available to all but a small proportion of the customer base, and given the low take-up of some of these features, it is not reasonable to require the significant further expenditure needed to provide 100 per cent coverage.

### FINDING 2.1

Basic telephone services are readily available to Australians and there is a high rate of connections. Telstra has undertaken further substantial improvements to the availability of enhanced telephone features over its network, and the number of customers without access to these services, as a proportion of the total customer base, is small. While desirable, the Inquiry does not consider these services essential to be provided universally.

## ACCESS TO CUSTOMER PREMISE EQUIPMENT FOR PEOPLE WITH A DISABILITY

People with disabilities comprise more than 19 per cent of the Australian population.<sup>16</sup> Under the USO Telstra must offer customers the option of a telephone handset with their service. Specialised customer equipment, for example teletypewriters (TTYs), is provided where it is required by people with disabilities to give them access to a standard telephone service or its equivalent. The equipment is specified in the Telecommunications (Equipment for the Disabled) Regulations 1998. In its USO Standard Marketing Plan Telstra commits to dispatching disability equipment to a customer within 20 working days of receipt of an application for the service.<sup>17</sup>

In its submission, Telecommunications and Disability Consumer Representation (TEDICORE) expressed concern that the range of equipment specified in the regulations was not keeping pace with commercial developments. It also expressed concern that only Telstra, as the USO provider, was obliged to provide customer equipment, potentially limiting choice of service providers for people with disabilities. TEDICORE has proposed

---

<sup>15</sup> Telstra, submission, p.19

<sup>16</sup> TEDICORE, submission, p.3

<sup>17</sup> Telstra, *Universal Service Obligation Standard Marketing Plan*, September 2002, p.25

alternative equipment supply arrangements. It also suggested service providers provide people with disabilities with better product information.<sup>18</sup> Other issues raised by TEDICORE are discussed in Chapters 5 and 7.

The Australian Association of the Deaf (AAD) noted several other concerns. These included the length of time taken to gain approval, the delivery of the equipment and training for people who require a TTY, the ability to report faults, and the lack of replacement equipment when equipment needs to be repaired.

*By analogy, the delivery of the TTY within a metropolitan area can take up to 2 weeks. Our research indicates that this time frame is increased significantly for people in rural and remote areas of Australia. Another important finding that is unique to the DEP [Telstra's Disability Equipment Program] is that when a TTY needs repairing, there was concern over how long Telstra took to repair the TTY and whether a replacement TTY would or could be delivered. Several participants raised the issue of how can a Deaf person contact the Faults and Maintenance line 132203 when they have a broken TTY and are unable to make the call to report that the TTY is broken. As back in the old days, Deaf people are expected to rely on a hearing person to make this call. In circumstances such as this, the issue raised is one of equity for Deaf people.*<sup>19</sup>

Based on sample data for June 2002, Telstra has advised the Inquiry that 98 per cent of non-Telstra badged disability equipment (e.g. TTYs and modems) was dispatched within 20 working days of the application being received.<sup>20</sup>

Telstra has indicated it places a high priority on assisting people with disabilities. General arrangements include its Disability Inquiry Hotline, a catalogue of products for people with disabilities, special arrangements for the delivery and return of disability equipment, assistance with disability equipment installation, special format billing, a directory assistance helpline, and a call connection fee exemption for people with severe or multiple disabilities.<sup>21</sup> These and other Telstra services are commended in submissions from disability groups. Telstra has also indicated it is conscious of additional issues facing people with disabilities in regional Australia and is confident that it can work with representative organisations to resolve them.<sup>22</sup>

---

18 TEDICORE, submission, p.12

19 AAD, submission, p.4

20 Telstra, Inquiry communication

21 Telstra, submission, pp.30-31

22 Telstra, Inquiry communication.

Many of the disability issues raised in these submissions are national in nature and largely beyond the scope of the Inquiry. The Inquiry nevertheless considers them important and believes they should be considered more closely by the Government through its general policy development processes.

In the Inquiry's view the arrangements for people with disabilities that Telstra has in place are generally adequate. Nevertheless there is scope for further improvement and effective ongoing consultation with disability groups is important.

## FINDING 2.2

The arrangements Telstra has in place to provide customer premise equipment to people with disabilities in regional areas are generally adequate. Telstra has made a strong effort to meet the needs of people with disabilities. There are some policy and operational issues which the Government and/or Telstra need to examine. Meaningful consultation with people with disabilities is important to this process.

## RECOMMENDATION 2.1

Telstra should continue to work with representatives of people with disabilities to resolve any service concerns, and consider their practical suggestions for service improvements. The Government should consider any national policy issues raised with the Inquiry, relating to access to telecommunications for people with disabilities.

## CUSTOMER ACCESS NETWORK (CAN) COMPETITION IN REGIONAL AUSTRALIA

Throughout Australia, and particularly in regional, rural and remote areas, Telstra continues to be the main infrastructure provider, particularly of the CAN by which fixed telephone services are provided. As such it is almost solely responsible for the technical quality of fixed telephone services in regional, rural and remote areas. Facilities-based competition in the provision of the CAN is limited. In some metropolitan and urban areas Optus and TransACT have CANs and Neighbourhood Cable operates them in some regional centres.

Consistent with its focus on competition to deliver sustainable outcomes, the TSI report placed considerable emphasis on the development of facilities-based competition in regional Australia.<sup>23</sup> The TSI report also recognised, however, that competition was relatively immature in regional, rural and remote areas, and there were inherent difficulties in the development of facilities-based competition, including the thinness of regional markets, lack of consumer awareness, Telstra's incumbency, and access to capital. In its submission Optus points to these issues continuing to frustrate the development of competition in regional Australia.<sup>24</sup> In this context, the TSI report recommended:

*...that the Government offer up-front incentives to potential alternative universal service providers in return for their commitment to supply, as a standard service, substantial improvements above the legislated minimum.*<sup>25</sup>

Optus argues that a more interventionist approach is required by Government, involving funding that encourages scale in roll-out and is contestable, and recognises the advantages of Telstra. Optus suggests specifically excluding Telstra from such funding.<sup>26</sup>

While the Inquiry shares the TSI report's support for competition as the best means of delivering long term, sustainable outcomes, two years on it is a little less optimistic about the feasibility of facilities-based competition developing in regional, rural and remote markets in the short term. The exception may be satellite and other wireless technologies, where competition in the supply of fixed services to more remote markets may be achievable, particularly if these services are bundled with other value-adding services like data and mobile.

---

23 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.134-8, pp.155-8, p.167

24 Optus, submission, p.12

25 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.176

26 Optus, submission, pp.18-19

## USO CONTESTABILITY

The TSI report also noted the potential of Government initiatives to introduce competition into the provision of the USO. However, it recommended that:

*...if the contestability pilots do not have the effect of materially improving service levels in regional, rural and remote areas, the Government should reassess policy measures, including the USO, with a view to ensuring the contemporary telecommunications needs of all Australians are met.<sup>27</sup>*

Following the TSI report, the Government implemented two initiatives to promote facilities-based competition in the supply of fixed telephone service in fulfilment of the USO. Each initiative involved a different approach to USO competition. They were:

- the Extended Zones tender—which involved a single provider franchise model; and
- the USO contestability pilots—which involved a multi-provider model.

The Extended Zones tender applied to Telstra's Extended Zones, which cover the remotest 80 per cent of Australia. The two USO contestability pilot areas are located on the New South Wales (NSW)–Queensland and Victoria–South Australia borders. The areas are depicted in Figure 2.1.

---

<sup>27</sup> TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.5

Figure 2.1: The Extended Zones and USO contestability pilots



Note: Boundaries are indicative only.

Source: TSI, *Connecting Australia Report of the Telecommunications Service Inquiry*, September 2000, p.156

In a complementary initiative, the Government also made funds under the Building Additional Rural Networks (BARN) program available to competing universal service providers under the USO contestability pilots.<sup>28</sup>

## The Extended Zones tender

The Extended Zones tender involved a tender for \$150 million to provide untimed local calls in remote Australia, with the successful tenderer becoming the Universal Service Provider, exclusively for three years. The tender was won by Telstra. The Inquiry is advised that the tender generated significant competitive pressure, and has produced significant benefits for Australians living in remote areas. The results are discussed in detail below in the context of pricing. However, this tender model was a 'winner take all' approach, in recognition of the nature of the remote market. As such the outcome of the tender may have acted to reduce ongoing competition in the provision of services in that market.

<sup>28</sup> Minister for Communications, Information Technology and the Arts, *High speed regional networks on the fast track* (media release), 12 September 2001

Indeed, according to Optus, it has had wider anti-competitive impacts in relation to the provision of broadband services by satellite.<sup>29</sup>

## USO contestability pilots

In the two USO contestability pilots Telstra is required to operate as the Primary Universal Service Provider but other carriage service providers can obtain ACA approval to compete for per-service subsidies—based on subsidies available to Telstra—for the supply of standard or alternative telephone services in fulfilment of the USO. These pilots commenced on 1 July 2001. Despite early interest from some carriers in becoming USO providers, to date no competing USO provider has entered the pilot markets, and there appears little prospect of this occurring in the immediate future.

The Department of Communications, Information Technology and the Arts (DCITA) has advised it is currently undertaking an evaluation of the pilots after their first year of operation, including an examination of the reasons for the lack of new entrants.

Telstra, Optus, Vodafone, the Communications, Electrical and Plumbing Union (CEPU) and others dealt with the contestability pilots in their submissions. While each makes different points, a strong theme is the difficulty in developing competition in these markets. Suggested explanations include the cost of entry versus the likely return from these markets, the need for economies of scale, and the significant competitive advantage to Telstra from its incumbency in those regions. Optus noted:

*The Government's recent attempts to create USO contestability pilots have not been successful. Customers have to make an active decision to change provider – which means that the force of inertia leads to most customers remaining with Telstra. (By contrast, when long distance competition was introduced into Australia in the early nineties, there was a ballot, and customers had to make an active choice: stay with Telstra or transfer to Optus.) In addition, Telstra retains valuable customer information, allowing it to cherry-pick the most profitable customers. The scheme does not provide the necessary scale of business to justify investment in the provision of USO services.<sup>30</sup>*

---

<sup>29</sup> Optus, submission, pp.15-17

<sup>30</sup> Optus, submission, p.26

## Inquiry's assessment of USO contestability

The Inquiry shares the TSI's view about the benefits that can accrue from the development of sustainable competition, and sees the in-principle merit of the USO contestability framework. The value in testing the claims of other carriers that they can provide the USO more efficiently than the incumbent Universal Service Provider is also acknowledged. However, after 16 months of operation and with little apparent prospect of attracting competitors, the Inquiry believes that the Government should not invest significant resources in providing further incentives to attract competing Universal Service Providers. Some 'tweaking' of current arrangements may be useful to test variants to the model being trialed, and further discussion should continue with industry, perhaps in line with consideration of the future of USO arrangements as a whole.

Overall, the Inquiry believes that the Government should continue to support USO contestability, but it may need to recognise its limitations and rethink what role it is to play and how this can best be done. The Inquiry considers DCITA's review of the pilots is an important step.

### FINDING 2.3

The Universal Service Obligation (USO) contestability pilots have not yet delivered competitive outcomes, suggesting any further Government action in this area should be carefully considered and any additional resources well justified. As a matter of principle, USO contestability is supported, but further work is needed to validate its practical utility.

## OPERATION OF THE USO GENERALLY

Key carriers expressed considerable dissatisfaction about existing USO arrangements, and their effect on competition in regional, rural and remote Australia.

*In Optus' view, the current USO funding arrangements have a detrimental effect on the provision of competitive services in rural and regional Australia. This is a consequence of a regime that requires competitive carriers to fund the provision of Telstra's service in rural and regional Australia.<sup>31</sup>*

---

<sup>31</sup> Optus, submission, p.25

*Vodafone believes it is inappropriate for the Government to impose a specific up-front tax on industry in the form of USO payments—to fund Telstra—to deliver a social policy outcome. In the instance whereby the Government considers that the market is unable to deliver specified social policy outcomes, then the most appropriate approach would be to contract with the industry to provide the service, and fund the identified social policy outcome through consolidated revenue.*<sup>32</sup>

The Inquiry considers the USO, as a legislated safeguard of access to telephone services, is indispensable, although, as discussed in Chapters 7 and 9, it is not considered the best model for providing enhanced services into the future. It is clear that it is the operation of the USO, rather than the principle itself, which the industry has concerns about. All carriers contribute to the USO, which has historically been funded by industry cross-subsidisation. The Inquiry considers the arguments put forward in industry submissions are persuasive and warrant close examination.

## RECOMMENDATION 2.2

The Government should review arrangements for the costing and funding of the Universal Service Obligation. This should also include whether current arrangements are impeding the development of competition in regional, rural and remote Australia.

## SERVICE-BASED FIXED TELEPHONE SERVICE COMPETITION IN REGIONAL AUSTRALIA

While there may be limitations to the scope for facilities-based competition in regional, rural and remote areas, there is competition at the services level, based, in part at least, on the resale of services provided over facilities owned by Telstra and others.

Service-based competition currently takes two main forms.

- Providers may provide a complete fixed telephone service, that is the access line and calls—local, long distance, international and fixed-to-mobile. In this case line rental and local calls are generally resold Telstra products, while the long distance call components may be resold or sourced from their own networks. Apart from price competition, consumers benefit from this by having a single bill.

---

<sup>32</sup> Vodafone, submission, p.13

- Providers may only provide long distance, international and fixed-to-mobile services to customers who 'preselect' them or dial override codes. In this instance, the providers source origination and termination (starting and ending calls) from the infrastructure provider—primarily Telstra.

While service-based competition generally uses the CAN facilities owned and operated by Telstra, significant consumer benefits can accrue through the aggregation by service providers of customers' traffic, the complementary use of their own or associates' long-distance facilities, or strong competition in the long distance market. For example, a provider could source all or some of the long distance carriage from competing backbone infrastructure providers such as Telstra, Optus, AAPT and Powertel.

Throughout Australia there is strong service-based competition. Optus, AAPT and Primus offer local access and competing call services nationally. Indeed, it is a requirement of Optus' carrier licence that it:

*...must have offered and be able to supply domestic and international long distance services to everyone in Australia who is supplied with a standard telephone service by the licensee [Optus] or the Universal Service Provider.<sup>33</sup>*

There are also several regional providers such as Kooee (northern NSW), Agile (South Australia), Neighbourhood Cable (Victoria) and TransACT (ACT and NSW).

Data provided to the Inquiry by Telstra indicates that just over one million 'churns', or customer transfers, occurred to and from Telstra nationally in 2001–02, in relation to both local access and long distance services.<sup>34</sup> The number of churns in Telstra Country Wide<sup>®35</sup> (TCW) areas was a large proportion of the national figure. This degree of churn suggests a healthy degree of competition in this market. (Table 2.1 may, however, indicate a slight decrease in Telstra wholesale services being resold in 2001–02.)

The benefits that can accrue to consumers through such competition are illustrated in Table 2.3, which shows the indicative prices of different service providers for a long distance and international call.

---

33 Carrier Licence Conditions (Optus Networks Pty Ltd) Declaration 1997, p.3

34 Telstra, Inquiry communications

35 ® Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556.

**Table 2.3: Indicative long distance and international call prices**

Call	Component	Telstra	Optus	AAPT	Primus	Kooee
National	Flagfall	\$0.30	\$0.30	\$0.30	\$0.30	\$0.25
(or over 165 km)	Call per minute	\$0.23	\$0.24	\$0.18	\$0.253	\$0.253
Australia	Flagfall	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
to USA	Call per minute	\$0.31	\$0.21	\$0.18	\$0.363	\$0.363

Notes: Standard residential peak weekday rates: Telstra HomeLine™<sup>36</sup> Complete; Optus FreeTime.

Sources: Telstra, [www.telstra.com.au](http://www.telstra.com.au), viewed 17 October 2002; Optus, [www.optus.com.au](http://www.optus.com.au), viewed 17 October 2002; AAPT, [www.smartchat.com.au](http://www.smartchat.com.au), viewed 17 October 2002; Primus, [www.primustel.com.au](http://www.primustel.com.au), viewed 17 October 2002; Kooee, [www.kooee.com.au](http://www.kooee.com.au), viewed 17 October 2002.

Historically, international benchmarking research has shown that, in terms of prices paid for residential public switched telephone network (PSTN) services, Australia's performance has placed it in the middle group of developed countries.<sup>37</sup> Unfortunately, there is a lack of recent, reliable information on price comparisons between Australian and international residential PSTN services. However, given the continuing price decreases that have occurred in Australia over the past few years, there is no reason to conclude that this situation has deteriorated.

## SERVICE CONNECTIONS

Because Telstra is the dominant service provider in Australia and the vast majority of its local access competitors make use of its infrastructure, the discussion below about service connection and repair times focuses on Telstra. Given that Telstra provides most underlying access services, it is reasonable to assume its resellers' performance levels will closely reflect its own.

The TSI report found that Telstra's performance in connecting new in-place services and new services with and without infrastructure in minor rural and remote areas was meeting public expectations. However its performance in connecting new services without infrastructure in urban and major rural areas, while improving, had not yet met sustained levels which would meet public expectations.<sup>38</sup> The TSI report also found a limited

<sup>36</sup> ™ Trade mark of the Telstra Corporation Limited ABN 33 051 775 556

<sup>37</sup> Productivity Commission, *International Benchmarking of Telecommunications Prices and Price Changes*, December 1999, pp.17-33 and OECD, *OECD Communications Outlook*, 2001, pp.178-207

<sup>38</sup> TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.71

number of customers, the 'CSG tail', were experiencing particularly poor performance. The TSI report recommended action be taken to reduce the CSG tail (Recommendation 12) and reduce some connection timeframes (Recommendation 13).<sup>39</sup>

In response to these recommendations, the Government:

- reduced the timeframe for the connection of services in remote areas without infrastructure from 12 months to six months (i.e. 130 working days);
- required Telstra to provide an interim service within 30 working days where it cannot provide a permanent service within 30 working days; and
- approved new ACA arrangements for monitoring and investigating cases of extreme non-compliance with the CSG timeframes.

New priority assistance arrangements are also relevant to the issues raised in the TSI report.

## LEGISLATED REQUIREMENTS FOR FIXED TELEPHONE CONNECTIONS

All providers offering standard telephone services are required to meet the timeframes for connection of services set out in the legislated CSG. The CSG is intended to provide an incentive for service providers to lift their performance by requiring the payment of damages to customers where timeframes are not met. From the customer's perspective, the damages provide a degree of compensation. The CSG was established in law in 1997 and commenced operation on 1 January 1998. Telstra, as the Universal Service Provider, is also required to meet identical timeframes for the connection of first services under the USO.

### Background to timeframes

Historically USO and CSG connection times have varied according to the availability of infrastructure and geographic location.

Where premises have a pre-existing connection, it is categorised as an in-place connection that can be activated in the exchange. The next category is where infrastructure is readily available, but a line must be provided to the premises. The third category is where there is no readily available infrastructure. This can have two main dimensions, there may be infrastructure present but it may have no more capacity or there may be no infrastructure available at all, for example, where a new home is built in a rural area.

---

39 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.180-181

Connection times have also varied according to community type, with the categories being:

- urban (exchange areas containing locations with 10 000 or more people);
- major rural (exchange areas containing locations with 2500 to 9999 people);
- minor rural (exchange areas containing locations with 200 to 2499 people); and
- remote (exchange areas containing locations with less than 200 people).

In the case of Telstra, the community category that a service is assigned is determined by the population of the largest urban centre or locality (UC/L)<sup>40</sup> in the exchange service area (ESA) to which the service belongs. This means that if a small village of 150 people is part of the same ESA as a large town of 5000 people it would be classified on the basis of the larger town's population rather than its own. In this case the village on its own would be 'remote' but based on the larger town's population is classified as major rural for CSG and USO purposes. Given that timeframes are always tighter in more built-up areas, this arrangement tends to favour those services which, while perhaps in a rural situation, are within the same ESA as a larger population centre.

These geographical variations have been relatively long-standing, going back at least as far as the Australian Telecommunications Authority's (AUSTEL) View of the USO in the early 1990s. While no definitive explanation has been located on how the different categories or timeframes were originally developed, it is understood they reflect factors such as availability of construction staff, travel requirements and the distances over which new infrastructure may need to be provided. Similar considerations apply to repair timeframes discussed below. These differences in timeframes are an ever-present consideration in assessing relative compliance in urban, rural and remote areas.

Table 2.4 below shows the number of services in each CSG category. It is a useful reference point in considering the practical implications of the CSG. (The number of CSG services differs from the total number of services as the CSG only applies to customers with one to five services.)

---

40 Australian Bureau of Statistics (ABS), Statistical Geography: Volume 3—Australian Standard Geographical Classification (ASGC) Urban Centres/Localities, September 2002

**Table 2.4: Number of Telstra services in operation covered by CSG as at 30 June 2002**

	National	NSW/ACT	VIC	QLD	SA	WA	TAS	NT
Urban	6 168 025	2 267 649	1 481 747	1 078 325	513 145	662 129	119 411	45 619
Major Rural	754 979	236 360	231 645	137 017	46 583	51 273	41 793	10 308
Minor Rural	908 489	276 093	218 166	205 086	88 374	80 835	37 914	2021
Remote	26 306	2588	57	13 487	1564	4017	0	4593
Total	7 857 799	2 782 690	1 931 615	1 433 915	649 666	798 254	199 118	62 541

Source: Telstra, Inquiry communication

## Changes in CSG timeframes

Since 1998 there has been a progressive reduction in connections time under the CSG (and USO). These changes are highlighted in Table 2.5.

**Table 2.5: Changes in permanent service connection timeframes under the CSG, 1998–2001**

Connection Situation	Community	Timeframes at 1 January 1998	Timeframes at 7 July 2000	Timeframes at 27 September 2001
In-place connection	All	3 working days	2 working days	2 working days
No in-place connection	Urban	5 working days	5 working days	5 working days
	Major Rural	10 working days	10 working days	10 working days
<i>Close to cabling or other infrastructure</i>	Minor Rural	40 working days	30 working days	15 working days
	Remote	40 working days	30 working days	15 working days
No in-place connection	Urban	1 month	1 month	1 month
	Major Rural	6 months	1 months	1 month
<i>Not close to cabling or other infrastructure</i>	Minor Rural	6 months	6 months	6 months
	Remote	12 months	12 months	6 months

Notes: If the customer's phone company makes a commitment to connect in less time than outlined in the table above, then this becomes the connection time.

Source: ACA, CSG Factsheets, [www.aca.gov.au](http://www.aca.gov.au), viewed 2 October 2002

## Interim services

In 1999 the Government introduced requirements on Telstra as the USO provider to offer and supply upon request interim services where a permanent service could not be provided in a minor rural or remote area without readily available infrastructure within six months.<sup>41</sup>

Following TSI concerns about the length of permanent connection timeframes, the Government imposed additional interim or alternative service requirements on Telstra as the USO provider. An interim service is generally a mobile or satellite service, while an alternative service may be a diversion to a pre-existing service.

Specifically, if Telstra cannot install a new standard telephone service within 30 working days of receiving the customer's request, Telstra must offer the customer an interim or alternative telephone service, to be provided on the same terms and conditions as the permanent telephone service. If the customer accepts Telstra's offer within one working day of it being made, Telstra will install the interim service within 30 working days of the customer's original request for the service. If the customer takes longer than one working day to accept Telstra's offer, Telstra will install the interim service within 30 working days of the customer's original request for a permanent service, plus an extra working day for each working day taken by the customer to accept Telstra's interim service offer.<sup>42</sup>

Other providers make a commercial decision as to whether they offer interim or alternative services.

While these arrangements strictly apply to Telstra as the USO provider and technically only in relation to the first telephone service, the Inquiry understands Telstra is generally applying the requirement to services to which the CSG applies, that is, subsequent services for residential, charity and small business customers.

The post-TSI interim service arrangements came into operation on 15 October 2001. There is therefore only a limited period over which to consider their operation.

The Inquiry considers the new interim service arrangements are a significant and welcome development in that they ensure people can have access to a basic telephone service within a maximum of 30 working days. While a shorter period is always better, this is a reasonable maximum period, it applies nationally, and it offers most benefit to those in remote areas who clearly have the most need to have connection timeframes shortened. This arrangement is important in considering calls for further reductions in permanent timeframes.

However, there is a concern that where a second service is requested for Internet access, and an interim service such as a mobile service is supplied, it may not be able to provide

---

41 Acting Minister for Communications, Information Technology and the Arts, *Government delivers on 'Interim Telephone Service' for remote customers* (media release), 6 July 1999

42 Telstra, *Universal Service Obligation Standard Marketing Plan*, September 2002, p.16

the desired data speed. The Inquiry understands TCW is aware of this issue and is investigating and implementing alternative solutions, one of which is to recommend the pre-existing service be used for data while the interim be used for voice.

### Auto-payment

Another important development since the TSI report in relation to the CSG was the introduction of auto-payment of CSG damages. As noted above, the intention of the CSG is to provide an incentive for providers to improve service levels by requiring the payment of damages. The TSI report expressed concern that this may have been failing because of the need for customers to claim their damages, and noted the Government was introducing the automatic payment of CSG damages. Auto-payment commenced on 2 August 2000. A recent ACA report to the Government found that the process is working effectively.<sup>43</sup>

### Current connection timeframes

Current timeframes for connections under the CSG (and USO) are shown in Table 2.6.

**Table 2.6: Permanent connection timeframes under the CSG (and USO)**

Connection situation	Community Type	Community Size (population)	Connection Time (after customer's application)
<b>In-place connection</b>	All	All	Within 2 working days
<b>No in-place connection</b> <i>Close to cabling or other infrastructure</i>	Urban	More than 10 000	Within 5 working days
	Major rural	Between 2500 and 10 000	Within 10 working days
	Minor rural and Remote	Up to 2500	Within 15 working days
<b>No in-place connection</b> <i>Not close to cabling or other infrastructure</i>	Urban	More than 10 000	Within 1 month
	Major rural	Between 2500 and 10 000	Within 1 month
	Minor rural and Remote	Up to 2500	Within 6 months

Notes: If the customer's phone company makes a commitment to connect in less time than outlined in the table above, then this becomes the connection time.

Source: ACA, Inquiry communication

43 ACA, Inquiry communication

## Mass service disruptions

Where there are circumstances outside the control of Telstra which disrupt services and affect Telstra's ability to connect or repair services, Telstra is able to claim a mass service disruption (MSD). These circumstances include natural disasters, third party damage, and restrictions imposed by local public authorities.<sup>44</sup> For example, a number of submissions drew attention to a service outage in Mildura, caused by a cut cable.<sup>45</sup>

MSDs effectively place on hold CSG and USO obligations until the period of the MSD is over. The validity of MSDs is therefore important. CSG compliance data take MSDs into account; that is, where an MSD has been claimed for a period, any delays in relation to the services covered by the MSD are excluded. MSDs must be publicly notified. During 2001–02 Telstra issued 44 MSDs.<sup>46</sup>

Following the ACA's investigation into the supply of telephone services to the Boulding family, the Government imposed a licence condition on Telstra requiring it to more clearly identify the areas covered by its MSDs and ensure they are only issued for areas affected by the cause of an outage or affected by the need to move staff or equipment from another associated area to attend the outage. The Government also requested the ACA to more closely monitor and scrutinise MSD claims. The Inquiry considers these to be beneficial developments.

## Extreme cases of CSG failure

The TSI report found some cases of extreme delays by Telstra in connecting and repairing services. Data provided to the TSI by Telstra suggested that two per cent of all connection requests subject to the CSG were met more than ten working days after the initial CSG timeframe.<sup>47</sup> While the absolute numbers of customers were small, the TSI report noted that such delays could be a significant inconvenience for individuals. Many submissions also noted concerns about such delays impacting on safety, particularly in remote areas.

Tighter requirements in relation to interim services are one way this issue has been addressed.

Further, in response to TSI Recommendation 12, at the direction of the Government, the ACA has developed a three-tier framework for monitoring and investigating cases of extreme CSG non-compliance. Under the framework, the ACA will monitor:

---

44 Telstra, *www.telstra.com*, viewed 18 October 2002

45 J. Jones, submission, p.1

46 Telstra, Inquiry communication

47 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.69

- the frequency distribution of times taken to connect and repair services at the national aggregate level—this will give an overall view of performance, provide a common basis for comparison between service providers and a base for provision of consumer information;
- the frequency distribution of the same data at the operational business unit level—the field service area (FSA) for Telstra—to enable identification of inordinate delays even where failures may not be common; and
- exception reports on any operational business units where the percentage of cases exceeding CSG standards plus five working days is greater than one per cent—the reports will include an explanation of reasons and proposed actions to lift performance to ensure the ‘tails’ of performance reflect no more than one per cent of CSG activity.<sup>48</sup>

The ACA advises these arrangements will commence at the end of 2002 with the first full data report being for the March 2003 quarter.<sup>49</sup>

The Inquiry considers this is an important development that should enable systemic non-compliance with the CSG to be identified and acted upon by the ACA. However the arrangements are aimed at identifying systemic problems, are retrospective and as such appear to provide little scope to assist individual cases of extreme non-compliance. Interim services should significantly reduce such extreme cases. Where extreme cases (e.g. more than five working days late) do arise, they should receive direct priority attention by the service provider, and should be notified to the ACA and/or the Telecommunications Industry Ombudsman (TIO) as technical breaches of the CSG. Further gains may be made by raising awareness amongst consumers of their legislated rights in relation to such CSG delays.

### RECOMMENDATION 2.3

Where extreme cases of Customer Service Guarantee (CSG) non-compliance arise (i.e. more than five working days late), they should receive direct priority attention by the service provider, and should be notified to the Australian Communications Authority and/or Telecommunications Industry Ombudsman as technical breaches of the CSG.

48 ACA, *Appropriate Procedures for Identifying and Responding to Extreme Cases of Failure by Service Providers to meet Customer Service Guarantee Standards*, December 2001, p.4

49 ACA, Inquiry communication

## PERFORMANCE IN CONNECTING PERMANENT SERVICES

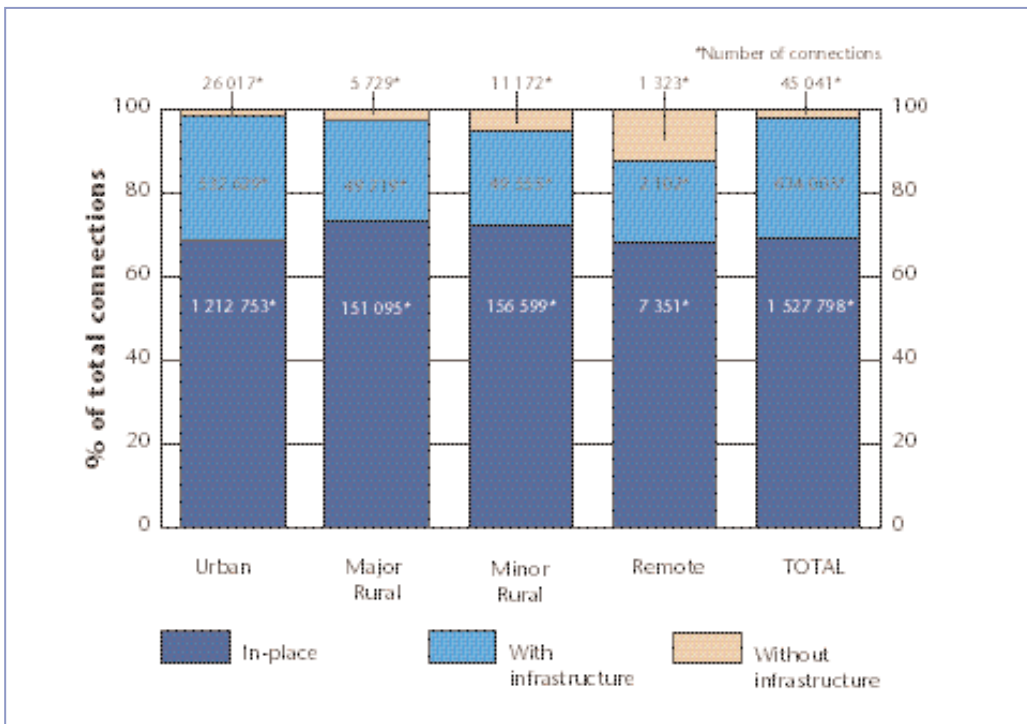
Telstra and industry compliance with connection requirements has been generally high and has demonstrated strong improvement since June 1999. In considering compliance levels, differences in timeframes between urban, rural and remote areas need to be kept in mind.

As noted above, a key performance issue is the 'tail', that is the number of connections completed after the CSG timeframe, and the length of delays. Of interest is whether the tail contains many or few overdue connections—whether the tail is 'fat' or 'thin'—and whether delays are short or long.

### In-place connections

In-place connections are important because they represent by far the greatest proportion of connections in the industry. The proportion of in-place connections to new service connections for Telstra is shown in Figure 2.2. The figure also provides data on absolute connection numbers, which is useful in assessing Telstra's performance.

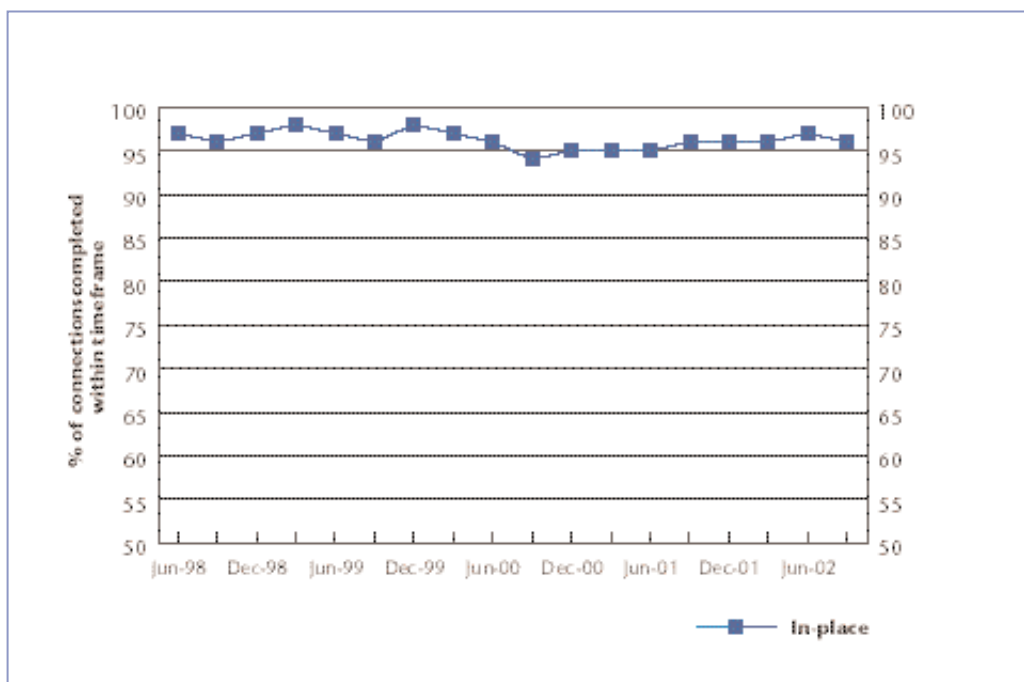
**Figure 2.2: Telstra's in-place and new service connections, by percentage, 2001–02**



Source: ACA, Inquiry communication

Figure 2.3 shows Telstra's performance, on a quarterly basis, in providing in-place connections within CSG timeframes nationally from the June quarter 1998 to the September quarter 2002.

**Figure 2.3: Telstra's CSG compliance—In-place connections**



Note: September 2002 data provided by Telstra—subject to ACA verification.

Source: ACA, *Telecommunications Performance Monitoring Bulletin*, June 1998–June 2002;

Telstra, Inquiry communication.

As Figure 2.3 indicates, Telstra's compliance in providing in-place service connections has been uniformly high at around, or more than, 95 per cent since June 1998 (18 quarters).<sup>50</sup> (Appendix B shows the annualised data for in-place service connections.) As Figure 2.2 shows, in-place connections constitute the largest category of connections by far.

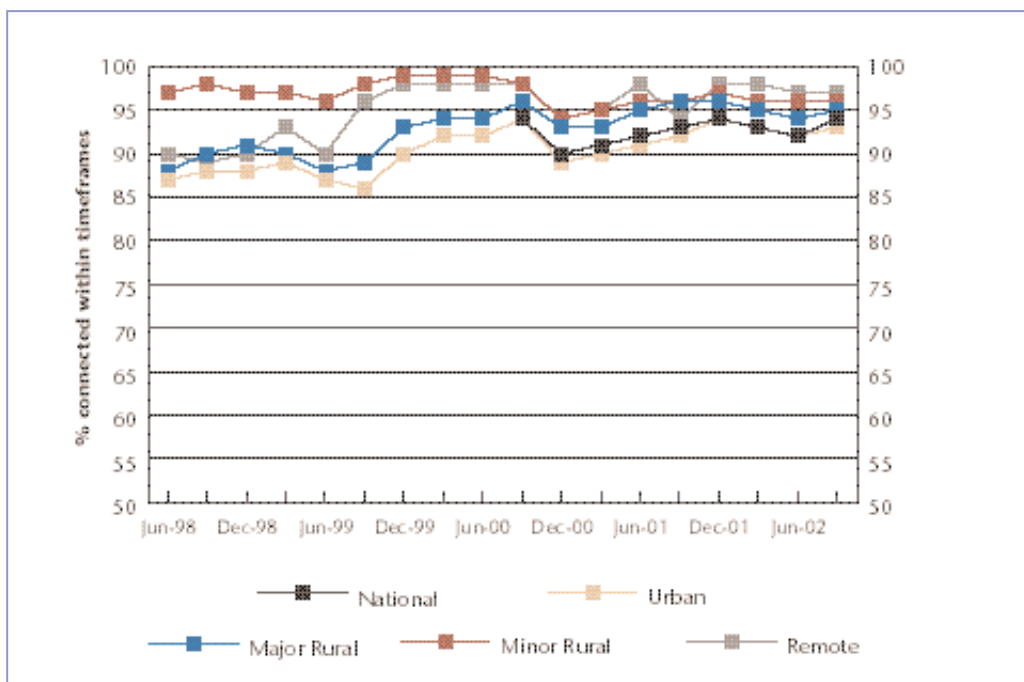
Information on the 'CSG tail' for in-place connections was not available to the Inquiry. Given Telstra's overall performance in this area, the 'tail' is considered unlikely to be an issue.

50 ACA, *Telecommunications Performance Monitoring Bulletin*, June 2002, p.17

## New service connections with readily available infrastructure

Figure 2.4 shows Telstra's compliance, on a quarterly basis, in providing new connections where infrastructure is readily available, nationally and in urban, rural and remote areas from the June quarter 1998 to the September quarter 2002. This is the second largest category of new connections after in-place connections. (See Figure 2.2.)

**Figure 2.4: Telstra's CSG compliance—New connections with readily available infrastructure**



Notes: National figures have only been collected since September 2000. September 2002 data provided by Telstra—subject to ACA verification.

Source: ACA, *Telecommunications Performance Monitoring Bulletin*, June 1998–June 2002; Telstra, Inquiry communication.

As Figure 2.4 indicates, Telstra's compliance in providing new connections where infrastructure is readily available has been consistently high since the June quarter 1998. Performance has been around, or more than, 90 per cent nationally and in all categories since the December quarter 1999 (12 quarters). Performance in rural and remote areas has consistently been above the urban compliance rate. (Appendix B shows the annualised data for new connections with infrastructure.)

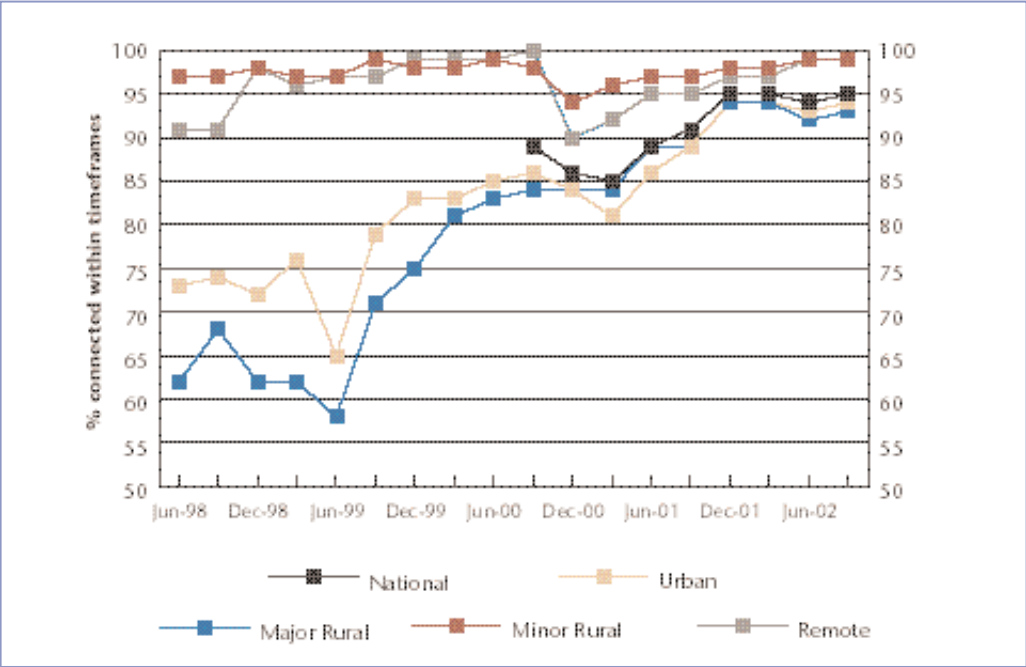
Comprehensive information on the ‘CSG tail’ for new connections with infrastructure was not available. Sample information provided for minor rural and remote areas was positive.<sup>51</sup> It is understood that this type of data will be provided to the ACA under the new arrangements for monitoring extreme cases of CSG failure. Given the level of compliance, however, the Inquiry is satisfied the tail would be relatively thin.

**New service connections without readily available infrastructure**

Figure 2.5 shows Telstra’s performance, on a quarterly basis, in providing new connections where infrastructure is not readily available, nationally and in urban, rural and remote areas, since the June quarter 1998. This is the smallest category of new connections. (See Figure 2.2.)

The provision of new services where infrastructure is not available has been a trouble spot in the past. Compliance levels in urban and major rural areas have been low historically, with performance in the June 1999 quarter sparking an ACA investigation.

**Figure 2.5: Telstra’s CSG compliance—New connections without readily available infrastructure**



Note: National figures have only been collected since September 2000. September 2002 data provided by Telstra—subject to ACA verification.

Source: ACA, *Telecommunications Performance Monitoring Bulletin*, June 1998–June 2002; Telstra, Inquiry communication.

51 Telstra, Inquiry communication

As Figure 2.5 indicates, Telstra's compliance in providing new connections in urban and major rural areas where infrastructure is not readily available has improved markedly since its low point in the June quarter 1999. Compliance has been uniformly high—around or more than 90 per cent—nationally and in all categories since September 2001 (five quarters). Performance in minor rural and remote areas has been consistently higher than 90 per cent since June 1998. (Appendix B shows the annualised data for new connections without infrastructure.)

Again, information on the 'CSG tail' for new connections without infrastructure was not available. Given the level of compliance, however, the Inquiry is satisfied the tail would be relatively thin.

The TIO reported a very significant reduction in 2001–02 in complaints related to the provision of fixed line services, with only 2775 issues, down from 7823 the previous year. While noting various factors being involved, the TIO highlighted the tightening of the CSG timeframes, Telstra's marked improvement in offering interim services and closer monitoring by the ACA.<sup>52</sup>

### Interim service performance

Enhanced arrangements for the provision of interim services commenced on 15 October 2001, as part of the Government's response to the TSI report. Since this time 25 599 interim services have been provided because permanent new connections have not been able to be provided within the required timeframe of 30 working days. This represents about 3.8 per cent of total requests for new connections in 2001–02.

#### FINDING 2.4

Telstra's performance under the Customer Service Guarantee in providing connections in regional, rural and remote areas is high and has been steadily improving. Performance in rural and remote areas has been comparable to, or exceeded performance in urban areas. This performance needs to be viewed in the context of the length of the connection timeframes for minor rural and remote areas, which are still very long.

---

52 TIO, Annual Report 2002, October 2002, p.44

## ADEQUACY OF EXISTING CSG CONNECTION TIMEFRAMES

As indicated above, Telstra performance with the existing CSG timeframes is high—above 90 per cent—in relation to all types of connections and nationally and in urban, rural and remote areas. Compliance with the CSG timeframes has shown consistent improvement. In many cases, connections are provided well before the legislated timeframes<sup>53</sup>, though documented evidence is limited.

In saying this the Inquiry notes, as did the TSI report, that there are significant differences between legislated connection timeframes in urban, rural and remote areas, particularly where infrastructure is not readily available. Only the in-place timeframe is the same nationally. To many, these differences in timeframes invalidate the uniformly high level of Telstra compliance. Critics like the National Farmers' Federation (NFF) and AgForce argue that high and improving compliance has little meaning because of the differences in the timeframes themselves.

This view may be supported by the ACA's 2002 Telecommunications Consumer Satisfaction Survey which found the length of time to connect phones was the main reason for dissatisfaction in relation to service connections.<sup>54</sup>

The NFF has expressed the view that the CSG connection times for minor rural and remote areas without infrastructure and the current system of classifying communities for the CSG, based on population size, are inappropriate. The NFF is arguing, as a matter of principle, that service levels, including timeframes for connection, should be identical across Australia, or at least established on a basis more effectively linked to remoteness factors. The NFF has suggested any reductions in timeframes might be offered commercially by Telstra under non-regulatory consumer service level agreements.<sup>55</sup>

As an alternative to the current framework, the NFF has suggested a set of timeframes could perhaps be developed based on the relative remoteness of communities, determined using the Accessibility/Remoteness Index of Australia (ARIA).

ARIA was designed by the Department of Health and Aged Care to be an unambiguous geographical approach to defining remoteness. That is socio-economic, urban/rural and population size factors are not considered for incorporation into the measure. ARIA calculates remoteness as accessibility to some 201 service centres based on road distance. ARIA values are grouped into five categories—Highly Accessible, Accessible, Moderately Accessible, Remote and Very Remote.<sup>56</sup>

---

53 Telstra, Inquiry communication

54 ACA, *Telecommunications Consumer Satisfaction Survey 2002*, unpublished consultant's report, p.37

55 NFF, submission, p.5

56 Department of Health and Aged Care, *Measuring Remoteness: Accessibility/ Remoteness Index of Australia (ARIA) Occasional Paper 14*, October 2001, p.3

While the two approaches (absolute uniformity and tiered remoteness) proposed by the NFF appear to be contradictory, the Inquiry nevertheless has sympathy with the NFF view that timeframes in the minor rural and remote categories are still too long, and notes that this view is reflected in a number of other submissions.

As indicated elsewhere in this report, the Inquiry does not consider it reasonable or realistic to expect all aspects of service, as a matter of course, to be uniform across Australia. While service levels should be as uniform as possible, this objective should be subject to consideration of the costs relative to benefits, to ensure that requirements do not impose unreasonable costs on the community as a whole.

The timeframes, including geographical variation, for in-place connections and new connections with readily accessible infrastructure, are reasonable. They should, however, be kept under continued scrutiny, with further reductions if possible being made over time.

In relation to minor rural and remote areas, the Inquiry does not consider the timeframes for new connections where infrastructure is not readily available are reasonable. The interim service arrangements do provide some relief in that they provide access to an interim service within 30 working days. Nevertheless, these categories apply to a large part of the Australian landmass, covering the vast majority of the pastoral and agricultural areas of Australia, and a large number of consumers—estimated at around 930 000 (see Table 2.4 above). Attention needs to be given to reducing the timeframes for connection in these areas to the greatest extent reasonably possible.

In response to the NFF's concerns Telstra is undertaking a trial, involving modifications to its general working arrangements, which may enable it to reduce the actual time required to provide permanent services in minor rural and remote areas where infrastructure is not readily available. The trial is also exploring ways to reduce the practical implications of the longer timeframes, for example, by offering Integrated Services Digital Network (ISDN) services as an alternative to two analogue lines, and assigning first services for data use and interim services for voice use.

The trial is a significant development which, together with the new interim service arrangements, has real potential to address the concerns of the NFF and others. To this end the outcomes of the trial should be monitored closely.

## RECOMMENDATION 2.4

Telstra should report publicly on the outcome of its trial with the National Farmers' Federation to reduce connection times in minor rural and remote areas where infrastructure is not readily available, and identify what follow-up commitments it will make. Should the Telstra trial not lead to a significant and ongoing improvement in service outcomes in this area, the Government should review regulatory arrangements, including Customer Service Guarantee timeframes and interim service arrangements, to assess whether further changes to timeframes are appropriate.

## COORDINATION OF SERVICE CONNECTIONS

From information provided to the Inquiry it appears that one cause of unnecessary delay in the provision of new service connections is a lack of coordination and effective follow through on the part of Telstra. Similar concerns were recorded in the TSI report.<sup>57</sup> Several cases reported to the Inquiry show customers requesting new connections, often well in advance, with a view to having them provided when required, only to have them still provided late, apparently due to communications breakdowns within the 'supply chain'. There appears to be some confusion for the public and sometimes even for Telstra employees and contractors. For example:

*In Western Queensland requests have been made to provide fixed phone services to new subdivisions between three and six months in advance. However, services are frequently not available in sufficient time due to confusion, between Telstra and its contractors, as to the nature of the service to be provided and the infrastructure that is available at that site.*<sup>58</sup>

Part of the problem exemplified by such complaints appears to be the lack of an effective focus of responsibility for ensuring that jobs are followed through. Too often there is no one person that the customer can be referred to who 'owns' that customer's service request, and who can ensure that the needs of the customer are effectively addressed though the various 'supply chain' elements.

---

57 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.78-79

58 Longreach Shire Council, Inquiry communication

Telstra has confirmed that it is aware of this coordination issue and it has completed a six month project, overseen by senior management, to improve customer outcomes in this area. The project outcomes include improved consumer information, process improvements, increased monitoring of connection orders, improved lines of responsibility, a dedicated follow-up team and greater TCW support.<sup>59</sup>

The resolution of such coordination problems is seen as important, and as a legitimate expectation for an effective local presence structure (discussed in Chapter 8). In other words, TCW should be taking the lead in solving this problem and ensuring that effective solutions are spread throughout the regional, rural and remote operations.

## RECOMMENDATION 2.5

Telstra should report to the Government on the outcome of its project to improve the coordination of new service connections. The impact of any changes should be monitored with a view to determining the need for any further follow-up action.

## SERVICE PRICING

The Inquiry notes that consumer pricing by Telstra, and other service providers, is essentially standard across Australia. In other words standard tariffs generally apply to all Australians, no matter where they live. Equally the Government's price caps on Telstra are imposed at the national level.

Given the Inquiry's specifically regional focus, it does not consider it appropriate to explore in any detail the effectiveness of national approaches to pricing by the Government, or to assess in detail the overall level of prices in Australia. Rather, while there is some summary analysis of price levels nationally, the major focus is on particular pricing issues faced by regional, rural and remote consumers. This is similar to the position taken in the TSI report, which did not focus extensively on pricing issues, its main comments relating to access to untimed local calls in the Extended Zones, untimed local call access to ISPs and 'local' calling areas.<sup>60</sup>

---

59 Telstra, Inquiry communication

60 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.155-157, 109-112, 79-80, 86-87

## SUMMARY OF NATIONAL ARRANGEMENTS AND TRENDS

Fixed telephone charges fall into three main categories—connection, line rental and usage charges—with the latter generally subdivided into local calls, national long distance, fixed-to-mobile and international calls. Other charges may be applied for enhanced calling features and premium call services.

Retail telecommunications pricing in Australia is subject to considerable regulation. Except for consumers in the Extended Zones, access to untimed local calls is guaranteed in Part 4 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (the Act). Part 4 (s.107) also requires comparable benefits to be available to customers who do not have untimed local calls. In the case of the Extended Zones, untimed local calls have now been ensured through the Government's \$150 million Extended Zones Agreement with Telstra, the details of which have been locked in through a licence condition on Telstra.

Part 23 of the *Telecommunications Act 1997* allows carriage service providers to have standard forms of agreement (SFOAs) setting out their standard terms and conditions, including price. This saves them having individual contracts with their customers. Service providers must comply with their SFOAs.

Price controls are provided for under Parts 2 and 9 of the *Telecommunications (Consumer Protection and Service Standards) Act*. The details of retail price controls are set out in subordinate legislation. The current price control instrument is the *Telstra Carrier Charges—Price Control Arrangements, Notification and Disallowance Determination No.1 of 2002*.<sup>61</sup>

The latest price controls, effective 1 July 2002 to 30 June 2005, include:

- a price cap of CPI-4.5 per cent on a basket of local, trunk and international calls;<sup>62</sup>
- a price cap of CPI+4.0 per cent on a basket of business and residential line rentals; and
- a price cap of CPI on a basket of connection services.

There is a cap of 22 cents on the standard untimed local call price, however Telstra is allowed to offer a higher local call charge as an option in combination with a corresponding lower than standard line rental charge.

There is a cap of 40 cents on the price of an untimed local call from a public payphone.

---

61 At the time of writing the *Telstra Carrier Charges—Price Control Arrangements, Notification and Disallowance Determination No.1 of 2002* is subject to a motion of disallowance in the Senate, expected to be dealt with on 13 November 2002.

62 CPI is the increase in Consumer Price Index in the previous year. A price cap of CPI minus 4.5 per cent means that Telstra must reduce the weighted average price of services in this basket by at least 4.5 per cent in real terms, each year. A cap of CPI plus 4.0 per cent means that Telstra cannot increase the average price of services by more than 4.0 per cent, in real terms, per year.

The local call pricing parity scheme requires average untimed local call prices in non-metropolitan areas to be broadly comparable to those in metropolitan areas.

Telstra must obtain the consent of the Australian Competition and Consumer Commission (ACCC) to a proposed line rental increase affecting low-income consumers, with consent being contingent on compliance with the licence conditions described below.

Telstra must also notify the Minister of a proposed increase in directory assistance charges, with consent being subject to an assessment of whether the increase is in the public interest.

Under associated conditions on Telstra's carrier licence, Telstra is required to:

- have a low-income package in place which has been endorsed by low-income consumer advocacy groups and specified in writing to the ACA;
- maintain and resource a Low-income Measures Assessment Committee (LIMAC), comprising representatives of welfare organisations agreed by the Minister for Communications, Information Technology and the Arts, which is responsible for reporting annually to the Minister on the effectiveness of the low-income package and its marketing by Telstra; and assessing proposed changes to the package or Telstra's Marketing Plan for the package;
- have a Marketing Plan in place for the package, approved by the LIMAC; and
- seek and consider the LIMAC's views on any significant change to the package.

As far as the Inquiry can determine, Telstra and other service provider charges to consumers are generally uniform across Australia in all these areas. Similarly, in its July 2001 study *International Benchmarking of Remote, Regional and Urban Telecommunications Services*, the Productivity Commission concluded there was no difference in PSTN prices for rural and urban subscribers in Australia.<sup>63</sup> There may be instances, however, where standard prices do not apply in regional areas (e.g. inter-capital charges will not be applicable) or where special discounts may not be available.

In the area of business services, special deals and discounts are commonplace, with organisational size undoubtedly a key factor in generating higher levels of pricing benefit. However small, often isolated regional businesses, such as farming enterprises, are able to compensate for their lack of size through the aggregated buying strength of their representative organisations. For example, the NFF has been able to negotiate discounts for its members in this way.<sup>64</sup> Such proactive, innovative approaches are to be commended, and demonstrate that initiative can drive real commercial benefits.

---

<sup>63</sup> Productivity Commission, *International Benchmarking of Remote, Regional and Urban Telecommunications Services*, July 2001, p.64.

<sup>64</sup> NFF, Inquiry communication

Some submissions have expressed concerns about possible increases in regional prices in the future. While it is true that uniform national pricing is not fully guaranteed by statute, a high degree of protection for regional, rural and remote subscribers is provided through the combined effect of the legal requirements for untimed local call provision and the overall operation of the price caps, including the local call pricing parity requirement.

Data available to the Inquiry indicates that connection and rental charges have increased in real terms while usage charges have generally decreased in real terms since the introduction of open competition in 1997. Some of the greatest reductions have been in relation to national long distance prices.

The March 2002 report by the ACCC, *ACCC Telecommunications Report 2000–01 (Report 2)*, is the most authoritative guide to recent price changes. The report states that the real price of a full basket of telecommunications has consistently and significantly decreased between 1997–98 and 2000–01. The price decrease was 8.9 per cent over the 2000–01 financial year. Table 2.7 shows real price movements over the past four financial years.

**Table 2.7: Year on year real movements in telecommunications prices**

Year	All services	Mobiles	Basic Access	Local calls	National Long Distance	International	PSTN outside of capital cities
1997–98	-4.4%	-3.4%	+0.3	-0.3%	-9.7%	-14.1%	-2.5%
1998–99	-5.0%	-3.9%	-1.0	-0.7%	-6.2%	-23.9%	-10.9%
1999–00	-9.2%	-12.7%	+8.5%	-9.6%	-9.6%	-28.1%	-10.7%
2000–01	-8.9%	-10.4%	+8.1%	-18.6	-8.1%	-17.5%	n.a. <sup>65</sup>

Note: Shows the percentage of change in real prices of a basket of telecommunications services.

Source: ACCC, *ACCC Telecommunications Report 2000–01*, pp.125-143

The incremental benefit to consumers of telecommunications services in 2000–01 from changes in price and other factors was assessed as ranging between \$5.5 billion and \$12 billion.<sup>66</sup>

Price reductions over the past year have been more limited than in previous years as markets have consolidated.<sup>67</sup> This may help explain a decline between 2001 and 2002 in household and small business consumer satisfaction with competition in fixed line services.<sup>68</sup>

65 Due to anomalies included in the sample due to a disproportionate number of non-typical customers in this sample (e.g. Telstra staff, pensioners), data for regional PSTN call prices in 2000–01 was not available.

66 ACA, *Telecommunications Performance Report 2000–01*, November 2001, p.48

67 Communications Research Unit, Inquiry communications.

68 ACA, *Telecommunications Customer Satisfaction Survey 2002*, unpublished consultant's report, p.20

## NETWORK EXTENSION CHARGES AND TRENCHING COSTS

The Inquiry is concerned that access to telephone services under the USO may be inhibited in a limited number of cases by Telstra's charges for network extension—up to a \$1540.40 cap—and Telstra's requirement that customers provide their own on-property trenching for new service connections.

*At this point we had a disagreement with the Remote Customer Support Group about trenching in hard top-rock for a cable from the mast to our camp which has not been resolved to this moment—16 months later.*

*In June 2001 when any form of consensus between Remote Customer Support Group and ourselves failed I contacted the TIO who referred me to Telstra's Customer Referral Centre where our complaint was listened to by several people. It then went into limbo and re-emerged in May 2002 when two Telstra employees rang and demanded we dig a trench pronto or we would have our interim satellite service removed. This they attempted to do by sending a technician from Longreach to collect the equipment. The technician refused to leave Longreach when I told him he would have to fight me (a 56 year old woman) for it. We are totally isolated out there and both of us have health problems. The phone is our sole life-line.<sup>69</sup>*

These costs appear to have been a particular issue in relation to some remote Indigenous communities. Government funds have been allocated under Networking the Nation (NTN) to Outback Digital Network Balkanu and the Pitjantjatjara Yankunytjatjara Media projects in this context. TAPRIC funds may also be applied to addressing this issue. The number of network extension charges billed each year is understood to be small. DCITA has indicated it has recorded around 30 complaints about trenching costs in the past two years.

The Inquiry understands that network extension charges seek to recoup part of the additional costs that Telstra incurs in connecting particular customers, or groups of customers to its network, and that the charge is low relative to actual costs. But the Inquiry has a number of concerns with the rationale for, and practice of, network extension charges:

---

69 JG and JE Vinnicombe, submission, p.2

- it is not clear when, and on what basis, the charge is being applied;
- its continuing application appears to conflict with other Telstra developments to incorporate such costs into Telstra's network investment budget (e.g. ISDN extenders); and
- it appears to provide a significant degree of disadvantage to those customers to which it is applied, and which does not appear to be justified by the amount of cost recovery accruing from this charge.

On the face of it, this charge could perhaps more appropriately be borne by Telstra as a network investment cost, and recovered over the whole of the customer base. It is not clear to what extent Telstra already recovers such costs through the USO mechanism. The Inquiry has difficulty reconciling the current approach with the notion of reasonable access to a standard telephone service under the USO.

Telstra requirements for particular customers to bear the full costs of trenching from the property boundary to the customer premises also raises some equity issues. The Inquiry accepts Telstra's position that it has no special capability in digging trenches, and it is a service that can be self-provided or provided by a range of commercial contractors. Notwithstanding this, the Inquiry considers it is likely there will be circumstances where the cost of trenching may be significant, and may discourage take-up of the standard telephone service. Again this has been raised as a particular issue for remote Indigenous communities, which are financially disadvantaged, and which may face some significant trenching costs.

## RECOMMENDATION 2.6

The Government should examine the issue of network extension and trenching costs, to consider whether such costs should be removed from subscribers, and either borne by Telstra as part of its Universal Service Obligation provision, or supported by the Government through subsidies.

## UNIFORM CHARGES AND SERVICE LEVELS

A concern expressed in some submissions is that regional consumers are being charged the same connection charges as people in metropolitan Australia but have to wait longer for their connections and repairs. That is, they see themselves as paying the same money for a lower level of service. For example:

*Speaking as a customer, I fail to see why the time allowed for repairs and new connections should be so much longer than if I lived in the city. After all, the Australian Government does not allow me a similar increase in time to respond to their requirements such as submission of Business Activity Statements. Nor does Telstra allow a similar increase in the time to pay their bills!*<sup>70</sup>

This argument extends to rental charges where the concern is that regional consumers pay the same rental charge but often receive slower repairs and, often, it was claimed, poorer quality voice and data functionality. For example:

*Our concern with the level of service provided by Telstra is based on the fact that despite being close to large towns our phone lines are inadequate for the service we are paying the same as everyone else for but not getting.*<sup>71</sup>

While it is understandable that this perception can arise, such concerns are difficult to justify. From another perspective, for example, it could be argued that service connection and service supply costs in rural and remote areas are generally more expensive than in urban areas, even when different connection and repair timeframes are taken into account. Yet rural customers pay the same price for the services they receive. From this perspective rural and remote customers are actually receiving more expensive services at the same price. For social equity reasons, such a benefit for rural and remote customers is highly desirable. However, as previously stated in this report, absolute equality of service, in terms of equal connection and repair timeframes, cannot always be justified.

## LINE RENTAL

While a number of submissions criticised recent increases in line rentals, such increases have taken place nationally within the context of the Government's overall price cap framework. This includes Telstra putting in place arrangements for low-income earners, approved by the ACCC and Telstra's LIMAC.

---

<sup>70</sup> J and J Denham, submission, p.6

<sup>71</sup> David and Beverley Waring, submission, p.1

The Inquiry also understands increases in access charges need to be balanced by reductions in call charges. Ultimately, however, the issue of line rental charges nationally is not within the Inquiry's core assessment focus, given that it affects all telecommunications users. As such it is not pertinent to a comparison of prices paid by regional, rural and remote consumers compared with those paid by metropolitan consumers.

## ISSUES RELATING TO CALL CHARGES

An important issue for many regional, rural and remote Australians is the point at which untimed local calls end and timed calls begin. While they appear accepting of timed charging for long distance and international calls, many are concerned when they have to pay timed charges for calls which they consider to be within their 'local' area or region. An extension of this is their inability to call their service centre which may be hundreds of kilometres away on an untimed basis.

A number of recent initiatives have improved the situation for consumers in regional, rural and remote areas.

### Pricing benefits in the Extended Zones

Significant pricing benefits for remote consumers have resulted from the Extended Zones Agreement.

Prior to the introduction of the Government's Extended Zone Agreement, about 28 000 consumers who live in the Extended Zones had no access to untimed local calls, and only limited concessional calls. The TSI report found that the Extended Zones tender was 'likely to lead to a substantial improvement in services to consumers in these zones'.<sup>72</sup>

As a result of the Extended Zones Agreement with Telstra, from 31 July 2001, residents and businesses in the Extended Zones have had access to:

- untimed calls at the local call rate (22 cents) within Extended Zones and to adjacent Extended Zones;
- preferential rate calls at 27.5 cents per 12 minutes between Extended Zones and their designated Community Service Town<sup>73</sup>, and between Extended Zones and the Community Service Towns of adjacent Extended Zones; and
- dial-up access to the Internet at the untimed local call rate to at least one Internet Service Provider.

---

<sup>72</sup> TSI, *Connecting Australia Report of the Telecommunications Service Inquiry*, September 2000, pp.155–157

<sup>73</sup> Community Service Towns are designated because they provide a certain level of basic services such as emergency services, schooling, medical, dental, shopping, banking, vehicle fuelling and community services.

From 31 July 2002, the preferential rate calls were replaced by untimed calls at the local rate of 22 cents. The replacement of preferential rate calls was possible because of infrastructure and service upgrades undertaken by Telstra. To illustrate the benefits of the changes, Telstra has cited the case of Mrs Liz Bird from Indiana Station, a cattle property 320 kilometres east of Alice Springs:

*'It'll make a big difference for people out here who need to call Alice Springs and other extended zones for the services people in the cities take for granted,' Mrs Bird said. As Northern Territory President of the Isolated Children's and Parents' Association, the change will also ease the burden of regular calls to members hundreds of kilometres away.*<sup>74</sup>

To improve service, and support increased traffic as a result of these changes to pricing, Telstra is undertaking a significant upgrade of the customer access network in remote Australia, in particular upgrading existing DRCS to more modern High Capacity Radio Concentrator (HCRC) systems as well as CDMA Wireless Local Loop (WLL) systems, and moving some services to satellite. Full completion is scheduled for December 2003. As a result of these upgrades, remote Australians will also have a higher minimum dial-up data speed of 14.4 kilobits per second (kbps) over the voice network. (Their access to higher data speeds is discussed in Chapters 4 and 6.)

As part of the Extended Zones Agreement, special satellite high speed Internet packages were also offered. These are discussed in Chapter 6.

Other specialised services—online customer services and support (such as online billing and fault reporting), content services (interactive distance learning packages and specialised information services), and videoconferencing—have become available during the progress of the upgrade to infrastructure and services in the Extended Zones.

The ACA, as contract manager, has had primary responsibility for ongoing monitoring of the Agreement. It released its first progress report in October 2002.<sup>75</sup> At 8 August 2002, Telstra was ahead of schedule, with approximately 15 per cent of services upgraded.<sup>76</sup> While noting some implementation issues, overall the report was positive about the progress made.

---

74 Telstra 'Community Service Towns now a 'local call' away', Melbourne, 31 July 2002

75 This report is available from the ACA's website, [www.aca.gov.au](http://www.aca.gov.au)

76 ACA, *Report on the Program to Upgrade the Telecommunications Services in the Remote 'Extended Zones' of Australia*, October 2002, p.6

## Local calling zones and community service town issues

A long-standing issue in regional Australia has been the distance over which untimed local or concessional rate calls can be made, particularly the ability to call community service towns on an untimed or concessional basis. This was an issue examined by the TSI,<sup>77</sup> which noted Telstra was reviewing its local call zoning arrangements.

The results of Telstra's zoning review were announced in June 2001. As a result Telstra introduced two new calling options Wide Area and Regional Calls, effective from 1 August 2001, that reduced the cost of shorter distance calls that had previously been charged at long distance rates. Telstra also expanded the range of Community Service Towns that could be called for a reduced rate

The 'Wide Area Call' option enables consumers to make preferential calls, long distance and long distance community calls, up to 50 kilometres, for 25 cents per call untimed. Telstra charges 26 cents per minute on weekdays and 13 cents per minute on weekends plus call connection fees, for long distance calls over 50 kilometres. Telstra advises that with this option, all local calls, not including neighbourhood calls, are charged at the standard plan price.<sup>78</sup> This option is particularly designed for outer metropolitan customers. Telstra announced that 170 000 of its customers would be able to benefit from this change.<sup>79</sup>

The 'Regional Calls' option is particularly designed for regional customers. It allows customers to call areas up to 85 kilometres away for a maximum charge of 99 cents for three hours, with calls continuing past three hours reverting to normal long distance charges.<sup>80</sup> Calls are charged at a flat 12 cents per minute until the call reaches 99 cents. This option is available to all Telstra's HomeLine™<sup>81</sup> Plus and BusinessLine™<sup>82</sup> Plus customers.<sup>83</sup> At least 310 000 Telstra customers are able to benefit from this change.<sup>84</sup>

Telstra also reviewed and increased the number of Community Service Towns, thus increasing the availability of community calls. These towns are nominated by Telstra and Telstra has indicated that this means that all regional customers have the choice, with the Wide Area Call option, of untimed local calls to their Community Service Town.<sup>85</sup>

---

77 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000 p. 79-80

78 Telstra, submission, p.24

79 Telstra, 'Telstra zoning review brings call savings for outer metropolitan customers', Melbourne, 17 June 2001

80 Telstra, *Final Report Telstra's Zoning Review Project*, June 2001, p.12

81 ™ Trade mark of Telstra Corporation Limited ABN 33 051 775 556

82 ™ Trade mark of Telstra Corporation Limited ABN 33 051 775 556

83 Telstra, submission, p.24

84 Telstra 'Telstra zoning review brings call savings for outer metropolitan customers' and 'Telstra zoning review brings savings for country customers', Melbourne, 17 June 2001

85 Telstra, *Final Report Telstra's Zoning Review Project*, June 2001, p.13

While some submissions expressed ongoing concern about the places they can call at an untimed or concessional rate,<sup>86</sup> the Inquiry finds these changes are a significant improvement on the pricing options available to consumers at the time of the TSI report. The Inquiry is concerned, however, that the new calling packages appear quite complicated, somewhat conditional and not well promoted. This is a view supported by the NFF.

In relation to zoning matters generally, there is always likely to be pressure for changes, and commercial responses to those pressures. For example TransACT offers free local calls amongst TransACT users in Canberra, and Neighbourhood Cable in Victoria is also looking to provide cheap calls to its subscribers. Bundling services together and offering discounts is one of the commercial developments that have seen prices fall. AAPT, for example, offers discounts of up to ten per cent for any customer who combines long distance calls, mobile services and Internet connections through AAPT.<sup>87</sup> In this context, given the reasonable arrangements already in place, the Inquiry concurs with the TSI's view<sup>88</sup> that responses are best left to the interaction of the marketplace, rather than regulatory intervention.

## FINDING 2.5

New Telstra pricing packages, such as Wide Area Call and Regional Call, have improved consumers' options, but are not well promoted by Telstra or widely understood by regional consumers.

---

86 For example, Gerard Stow, District Council of Orroroo/Carrieton, Guyra Shire Council, Shire of Toodyay, MD McKenzie, and E and V Orme

87 AAPT, [www.aapt.com.au](http://www.aapt.com.au), viewed 2 October 2002

88 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.86

## CALL SERVICE QUALITY

For the purposes of this part of the assessment, call service quality refers to the technical quality of a working voice service. Poor performance in this area includes such parameters as the inability to establish calls, call drop-outs, noise on the line or low volume. While not necessarily making a service unusable, these problems may detract significantly from the utility of the service. In practice, however, it is often difficult to separate such issues from full failure of the service (a service fault). Many such problems would be picked up in the fault data discussed in the next section.

Technical service quality parameters are set in Telstra's USO Plan relating to long distance and international call origination and termination, signal power (affecting volume) and random noise.<sup>89</sup> Telstra has advised there is no differentiation between regional and urban areas in relation to the application of these parameters.

The Australian Communications Industry Forum (ACIF) End-to-End Network Performance Code aims to ensure that each network involved in the carriage of circuit-switched telephone calls contributes appropriately to overall performance targets for transmission quality and connectivity. At 30 June 2002 Primus, AAPT, MCI WorldCom, RSL Com and Macquarie Corporate Telecommunications were signatories. Hutchison and Vodafone stated that their networks were compliant with the connectivity and transmission performance parameters of the code. Telstra and TransACT reported that they conform to the connectivity network performance parameters outlined in the code. The ACA is understood to have concerns, however, about compliance reporting.<sup>90</sup>

The ACA monitors network performance quarterly in terms of a service provider's performance in connecting local, national long distance and direct dial international calls. Network loss is measured in terms of the ratio of call attempts that fail to connect due to a shortage or malfunction of the provider's switching, signalling or transmission facilities. Reporting is by exception, where network loss is more than one per cent. In the June quarter 2002, only Primus reported a network loss of more than one per cent, in relation to international calls. Historically network loss has been below one per cent for service providers.

Notwithstanding the technical statistical performance level of Telstra services, poor quality is a matter of practical concern raised by a number of submissions, particularly connected to DRCS service and long copper runs. For example Mr and Mrs L'Estrange stated in their

---

89 Telstra, Universal Service Obligations Standard Marketing Plan, October 2001, pp.6-8

90 ACA, Inquiry communication

submission that ‘when it rains there is constant noise on the line, sometimes so loud you just have to hang up’.<sup>91</sup> Janelle Lilliebridge submitted that ‘when I state “noisy phone lines”, they were so noisy to the point of not able to hold a conversation’.<sup>92</sup>

## QUALITY OF SERVICE IN THE EXTENDED ZONES

Concerns have also been expressed about the quality of satellite telephone services, primarily as a result of increased deployment of these services under the Extended Zones Agreement. Some similar issues have arisen in relation to new HCRC services also being provided under the Agreement.

In this context the Consumers Telecommunications Network (CTN) expressed concerns about satellite telephones being outside the End-to-End Network Performance Code, and recommended that the ACA implement a technical standard for the quality of satellite voice telephone services provided under the USO, and support research into improved engineering for satellite voice transmission.<sup>93</sup>

The ACA as contract manager for the Agreement has raised these matters with Telstra which has instituted a range of remedial actions. There is strong view in the ACA, Telstra and DCITA these will lead to significant quality improvements. The ACA is monitoring the outcomes of these initiatives closely.<sup>94</sup> The Inquiry considers these actions are reasonable and immediate responses to the issues identified.

## PAIR GAIN SYSTEMS AND FIXED TELEPHONE SERVICES

A matter of concern to the Inquiry is that a limited number of services may have difficulty obtaining dial-tone where 6/16 pair gain systems are used to provide the services, because they will only support a limited number of simultaneous telephone calls. Apart from potential customer inconvenience, there may be potential safety issues. The use of pair gain systems also has implications for dial-up access to the Internet. This matter is discussed in Chapter 4.

On 6/16 systems, up to 16 subscribers share six lines. If lines are busy and calls cannot be made, a busy signal is heard instead. The Inquiry understands such occurrences may be on the rise as use of dial-up Internet service increases call-holding times.

---

91 H and S L'Estrange, submission, p.1

92 Janelle Lilliebridge, submission, p.1

93 CTN, submission, pp.6-7

94 ACA, Report on the Program to Upgrade Telecommunications Services in the Remote 'Extended Zones' of Australia, October 2002, pp.25-6

The Inquiry is advised that there are 4600 6/16 systems supporting some 54 000 services. A variant of the 6/16 systems supports a further, 4500 services. A similar 6/15 system supports around 17 800 services. This gives a total of around 76 300 or 0.7 per cent of Telstra fixed services in operation. The Inquiry understands the majority, if not all of these services, are located in regional, rural and remote Australia.<sup>95</sup>

Advice received from Telstra shows the average number of customers on these systems is around nine or ten rather than 16, thus reducing the risk of congestion. Their use is also subject to standard call congestion parameters, set out in the USO Plan, of 99 per cent service availability over time. Telstra monitors loading on these systems closely and individually, with a view to pre-empting any congestion problems.

It is apparent that modern pair gain systems are of exceptionally high quality, are equipped with remote diagnosis capability, and do not restrict data speeds to any significant degree. They have enabled Telstra to respond much more quickly and effectively to the needs of customers than would otherwise have been the case. The problem is some older systems are increasingly less suitable for their task and need to be managed closely and perhaps phased out.

## RECOMMENDATION 2.7

Telstra should promptly confirm to the Government that it has an effective strategy for improving as soon as possible the quality of telephone services affected by the use of 6/16 and similar pair gain systems. Telstra should give a formal undertaking to the Government including providing timeframes in relation to any actions required to implement such a strategy. Progress in meeting this strategy should be monitored by the Australian Communications Authority and reported on publicly.

## ARCS AND DRCS REPLACEMENT PROGRAM

Another area of concern has been the ongoing use of ARCSs and DRCSs predominantly in sparsely populated pastoral areas. The key service quality issues with such systems are low data speeds, lack of enhanced calling features, potential congestion and poor reliability.

Telstra is currently undertaking a program to replace outdated ARCSs and DRCSs. Some DRCS users in standard zones are being included in the upgrade resulting from the Extended Zones Agreement, as Telstra replaces systems straddling Extended

---

<sup>95</sup> *Senate Environment, Communications, Information Technology and the Arts Legislation Committee, Answers to Estimates Questions on Notice, Questions on Notice 58, 59, 64, 68, 27-29 May 2002, pp. 90-110; Hansard, Senate Environment, Communication, Information Technology and the Arts Legislation Committee, 27 May 2002, pp.103-104*

and Standard Zones. Over the past six years almost 13 000 services have been upgraded under the Remote Australia Telecommunications Enhancement (RATE) program at a cost of \$265 million.<sup>96</sup>

The remaining DRCs and ARCs in Standard Zones are being replaced under RATE at a cost of \$11.8 million to June 2003. Telstra has advised that it plans to upgrade these services primarily using CDMA WLL. This will have the added advantage of extending mobile coverage to these areas. Where this is not technically feasible, Telstra plans to use Subscriber Wireless Integrated Network Gateway (SWING). SWING will provide access to features previously unavailable to these customers.

This planned upgrade is an important final step in achieving quality telephone service delivery for remote Australians.

## RECOMMENDATION 2.8

Telstra should provide a formal undertaking to the Government to complete its upgrade of digital radio systems (ARCs and DRCs) under its Remote Australia Telecommunications Enhancement (RATE) program, and according to a publicly available timetable.

## CDMA WLL AND TTYS

In relation to the deployment of CDMA WLL the AAD and TEDICORE have expressed concern that the inability of TTYS to interoperate with CDMA WLL will disadvantage deaf people—preventing them using TTYS when visiting such areas, and potentially discouraging them taking up residence in such areas. TEDICORE has noted concerns about effective access to the TTY emergency number, ‘106’.

The need for CDMA WLL to accommodate the needs of deaf people is well understood, and arrangements are being put in place to provide alternative services where this problem arises. As TEDICORE notes, a holistic and forward-looking solution would appear desirable. However, part of the problem appears to lie in the TTY technology itself, which was designed to operate in an analogue environment. The better solution may be to replace TTYS with a technology more suitable to the digital environment. The Inquiry understands Telstra, DCITA and the ACA are working on possible options in this regard. This is documented in the ACA’s recent *Report on the Program to Upgrade Telecommunications Services in the Remote ‘Extended Zones’ of Australia*. People with disabilities need to be consulted in this process.

---

<sup>96</sup> Telstra, submission, p.19

## RELIABILITY AND FAULT REPAIR

The reliability of fixed telephone services was a key issue in the TSI report. The TSI was particularly concerned about the high levels of faults within localised areas and the extent of recurrent faults on individual services. The Inquiry shares the TSI's view that phone services in regional areas should be reliable and of high quality. This importance is reflected in submissions to the Inquiry, which clearly identified reliability as the most important fixed telephone priority for regional, rural and remote consumers.

### TSI FINDINGS

The TSI report noted concerns with ageing and degrading cable being subject to recurrent faults, 'temporary' cabling solutions in place for prolonged periods, and inaccurate plant maps giving rise to cable damage.<sup>97</sup> Telstra acknowledged a large variation in CAN fault performance. Forty per cent of Telstra's 71 000 distribution areas were experiencing fault rates in excess of 20 per 100 services in operation per year, compared to ten per cent for metropolitan distribution areas.<sup>98</sup> The TSI report found that the evidence available to it suggested localised telephone reliability problems existed within Telstra's network.<sup>99</sup> Some submissions to the TSI considered these problems were made worse by remote call centre staff unable to or unwilling to help and technical field staff, while generally positive and helpful, often lacking the necessary skills.<sup>100</sup>

Telstra noted to the TSI that half its network was over 20 years old and 30 per cent more than 30 years old.<sup>101</sup> Productivity Commission data indicates that five per cent of the CAN is over 50 years old.<sup>102</sup> The TSI report identified Telstra's Access Renewal program and other initiatives like its 'Tomorrow Plan', 1-800-R-Radio, an audit of cable pairs, changes to the operation of call centres and the establishment of TCW, as all being relevant to tackling the issue of faults. The TSI found that:

*...upgrades to aspects of Telstra's existing infrastructure are needed to address new connection and fault rate issues. Telstra's Access Renewal program has to date delivered some quantifiable improvements in performance.*<sup>103</sup>

---

97 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.76

98 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.78

99 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.78

100 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.78.

101 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.77

102 Productivity Commission, *International Benchmarking of Remote, Rural and Urban Telecommunications Services*, July 2001, p.98.

103 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.83

The TSI also found that there appeared to be no ‘established processes to measure reliability at an appropriately disaggregated level to identify recurrent, localised network performance issues’.<sup>104</sup> It also found that the ACA has the powers, but it is in the ‘administration of those powers that inadequate focus appears to have been placed on monitoring, identifying and investigating performance issues associated with the reliability of telephone services.’<sup>105</sup>

A further network issue identified by the TSI was poor information about the location of cabling and the effectiveness of the cable location service, ‘Dial Before You Dig’. This caused a number of problems such as delays in connecting services, increased faults due to inadvertent cable cuts, costs for third parties to restore cables, and delays and inconvenience to others like utilities and farmers undertaking digging work. A number of proposed initiatives by Telstra were noted.

## THE E71 DATABASE

Following the TSI report, Senator Sue Mackay also raised with Telstra its ‘E71’ database, expressing concern about the level of ‘faults’ recorded in it. Telstra now refers to the E71 database as the Customer Network Improvement (CNI) database.

Telstra has provided information about the CNI database to the Senate Environment, Communications, Information Technology and the Arts Legislation Committee. Telstra has advised that entries in the CNI database are maintenance tasks, largely routine. It advises that CNI entries are not service faults directly affecting customers.<sup>106</sup> At February 2002, the CNI database held 104 500 orders. The current level is similar. The total of CNI entries is continuously changing as new CNI entries are added and others removed. In 2001, 104 239 CNI entries were completed.<sup>107</sup> Telstra advised that about 80 per cent of CNI entries were deemed ‘non-urgent’, that is non-time critical.<sup>108</sup> Telstra advises that none of the work, while of varying importance, puts customers’ services at risk.

Telstra provided a breakdown of entries in the CNI database, by type, currency, seriousness, action taken to resolve and action pending to resolve, so the Inquiry could form its own judgements about the CNI entries. Telstra also advised it is reviewing the current database to eliminate tasks that have actually been completed—estimated to be in

---

104 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.88-89

105 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.88-89

106 *Senate Environment, Communications, Information Technology and the Arts Legislation Committee*, Answers to Estimates Questions on Notice, Questions on Notice 76, 27-29, May 2002

107 *Senate Environment, Communications, Information Technology and the Arts Legislation Committee*, Answers to Estimates Questions on Notice, Questions on Notice 219, 18 February 2002

108 *Senate Environment, Communications, Information Technology and the Arts Legislation Committee*, Answers to Estimates Questions on Notice, Questions on Notice 82, 27-29 May 2002

the thousands—and to ensure proper prioritisation. Many CNIs are subsumed by other projects currently underway or planned. Work processes relating to CNIs are also being reviewed.

From the information provided by Telstra, the Inquiry is satisfied that the CNI entries are not customer-affecting faults, and that Telstra is addressing them individually and systemically. The Inquiry also notes that if any of these entries were customer-affecting faults, they should then fall within the operation of both the CSG and the Government's Network Reliability Framework (NRF).

## TELSTRA ACTIONS ON RELIABILITY SINCE THE TSI

Since the TSI report Telstra has commenced and/or completed a number of initiatives aimed at reducing fault levels.

Telstra advises that in 2000–01 and 2001–02 it invested \$971 million and \$871 million respectively on upgrading its CAN. In 2001–02, around \$47.8 million was spent on rural proactive network rehabilitation and \$33.4 million on reactive rural rehabilitation.<sup>109</sup>

In relation to concerns about cable location, Telstra has advised it is now reviewing its policy in relation to all aspects of cable location,<sup>110</sup> including charging for on-site inspection services, and reviewing its procedures for investigating cable cuts and the recoupment of restoration costs.<sup>111</sup>

In response to concerns about pockets of particularly unreliable services, Telstra recently announced it will invest a further \$187 million in 2002–03 in network remediation in regional Australia.<sup>112</sup> This project is known as the Rural Networks Taskforce (RNT). This is a major development. Telstra has informed the Inquiry that it will spend \$70 million on repairing or replacing the worst performing access plants, \$56 million on inter-exchange network upgrades, \$35 million on reducing and alleviating the inappropriate use of pair gains systems, \$18 million to boost access network rehabilitation and \$8 million on land and building lifecycle management.<sup>113</sup> Rather than adopting the 'broad brush' approach of past Telstra rehabilitation strategies like Access Renewal, it will target known problems areas. The revised approach includes the use of highly disaggregated level data to identify areas, and then drawing on the knowledge of local staff to target the problems.

---

109 Telstra, Inquiry communication

110 Telstra, Inquiry communication

111 Telstra, submission, p.23

112 Telstra, submission, p.21

113 Telstra, Inquiry communication

Amongst other thing the \$187 million will target approximately 3000 very poorly performing services identified to the Senate.<sup>114</sup>

Telstra has advised that by September 2002 the RNT had identified some 1390 projects, completed 332 field inspections, had 114 projects under construction and 37 projects completed.<sup>115</sup> Projects recently announced include upgrades in:

- Mudgegonga, Victoria (\$22 000);
- Tyringham and Korora, NSW (\$100 000);
- mid north South Australia (\$1.9 million);
- south-west Queensland (\$1.13 million);
- Bonnie Doon and Pries, Victoria (\$65 000);
- Rushworth, Victoria (\$13 000);
- Balgowan, South Australia (\$460 000);
- Molyullah, Victoria (\$33 165);
- Flagstone Creek and Helidon, Queensland (\$29 000);
- Clare, Queensland (\$225 000); and
- Dean and Wallace, Victoria (\$25 000).<sup>116</sup>

Other Telstra initiatives reported to the Inquiry that should impact positively on the incidence of faults include:

- the RATE program discussed above;
- the Extended Zones Agreement discussed above;
- the introduction of the Rehabilitation and Analysis of Rural Exchanges (RARE) system, which uses historical information to conduct analyses to a fine level of detail;
- the use of local knowledge through the operation of TCW;
- the use of Total Productive Maintenance to improve work practices and reduce faults;
- an increase in Pro-active Tickets of Work;

---

114 *Senate Environment, Communications, Information Technology and the Arts Legislation Committee, Answers to Estimates Questions on Notice, Questions on Notice 43, 72, 27-29 May 2002*

115 Telstra, Inquiry communication

116 Telstra, [www.telstra.com](http://www.telstra.com), viewed 22 October 2002

- work to reduce ineffective fault clearances; and
- proactive oversight of pair gain systems by the CAN Electronics Management Centre.<sup>117</sup>

## GOVERNMENT'S RESPONSE TO THE TSI REPORT: THE NRF

In response to TSI Recommendation 11, that the ACA be required to monitor faults rates in any Universal Service Provider's network at a highly disaggregated level to identify reliability problems, the Government, through the ACA, has developed the NRF. The NRF is scheduled to commence operation in January 2003.

The NRF involves monitoring Telstra fault levels at three tiers to encourage pre-emptive action by Telstra to prevent fault thresholds being breached and, where they are breached, requiring effective remedial action.

At the highest tier, Level 1, Telstra will report monthly to the ACA on:

- the percentage of services with no faults; and
- the average percentage availability of services, on a per service basis;

in each of its FSAs. This level of reporting will provide a high level indicator of Telstra's fault performance. These reports will be public.

Preliminary Level 1 data provided by Telstra indicates that the national percentage of services with no faults over the seven months to, and including, August 2002 averaged 99.16 per cent, with FSA performance ranging from 98.45 per cent to 99.51 per cent for the seven months. For the same period the national percentage of service availability averaged 99.94 per cent, with FSA performance ranging between 99.84 per cent and 100 per cent for the seven months.<sup>118</sup>

At the intermediate tier, Level 2, Telstra will report monthly on all ESAs in which two, three, four or five services—depending on the size of the ESA—have had at least one fault per month for two consecutive months. These thresholds will identify poorly performing ESAs. This data will be used by the ACA to identify the 50 to 100 worst performing ESAs, which will be further investigated for the purpose of identifying problem areas for remediation. Where required, Telstra remediation plans must be provided to the ACA. Where remedial action has been undertaken, ongoing reporting will be required on a quarterly basis for the following two years, to ensure the success of the remedial action.

---

<sup>117</sup> Telstra, submission, p.21; Telstra, Inquiry communication

<sup>118</sup> Telstra, Inquiry communication

At the lowest tier, Level 3, individual telephone services supplied by Telstra, and to which the CSG applies, will be subject to requirements that they experience:

- no more than three faults in any rolling 60 day period; and
- no more than four faults in any rolling 365 day period.

Where Telstra is at risk of breaching the Level 3 requirements, it will be required to take pro-active steps to prevent a breach occurring. Any breaches will need to be reported to the ACA on a monthly basis. Where a breach does occur Telstra will be required not only to rectify the service but to investigate the underlying cause of the recurrent faults, report to the ACA on any proposed remediation work, and undertake any remediation work that is required. Remediation is intended to raise the service to a higher level of reliability, with performance being monitored for 24 months. The ACA will have the power to enforce remediation work by Telstra and, if necessary, the fault thresholds themselves if reasonable action is not being taken to meet them.

## TELSTRA'S RELIABILITY PERFORMANCE

Telstra CSG faults for 1999–2000 to 2001–02 are set out in Table 2.8. It should be noted that CSG faults are only a subset of total faults dealt with by Telstra.

**Table 2.8: Telstra's CSG-related faults, 1999–2000 to 2001–02**

Year	Urban	Rural	Remote	National
1999–2000	na	na	na	740 179
*2000–01	556 479	275 859	5891	838 299
**2001–02	518 054	280 643	5300	803 997

Notes: na=Not available. \*The way Telstra counted faults for CSG purposes changed between 1999-00 and 2000-01, accounting in large part for the increase in total faults in 2000–01. As such it is not appropriate to make comparisons between the 2000–01 and fault levels reported for previous years. Telstra has indicated that when counted on the same basis there was a 1.7 per cent decrease in total CSG faults.<sup>119</sup> \*\* Data for 2001–02 is subject to ACA verification.

Sources: ACA, Telecommunications Performance Reports, 1999–2000 (p.27), 2000–01 (p.35); Telstra, Inquiry communication

The Inquiry notes total CSG faults decreased between 2000–01 and 2001–02, but increased slightly (1.7 per cent) in rural areas. Absolute fault numbers, however, do not take into account the number of services in operation (SIOs).

<sup>119</sup> Senate Environment, Communications, Information Technology and the Arts Legislation Committee, Answers to Estimates Questions on Notice, Question on Notice 169, 18 February 2002

Another important indicator of reliability is the number of faults per 100 SIOs. This does take into account changes in the underlying service numbers. Data on CAN faults for the past five years is given in Table 2.9. This data is comparable with data reported in the TSI report. CAN faults cover a wider range of faults than CSG faults. CAN faults include, for example, faults experienced by customers with more than five services (to whom the CSG does not apply) and faults due to circumstances beyond Telstra's control (e.g. bushfires, cyclones).

Telstra has noted the impact of a number of natural disasters and extreme weather conditions in 2000–01 and 2001–02 need to be taken into account in assessing this data.<sup>120</sup>

**Table 2.9: CAN-faults per 100 services in operation (SIOs), 1997–98 to 2001–02**

Region	97–98	98–99	99–00	00–01	01–02	% change since 97–98	% change since 99–00
Sydney North	12.90	13.40	15.00	11.56	12.67	-1.78	-15.53
Sydney South	11.20	11.30	11.10	11.56	12.67	13.13	14.14
NSW Country North	16.60	18.30	18.70	18.02	18.94	14.10	1.28
NSW Country South	12.50	16.60	16.00	18.02	18.94	51.52	18.38
Melbourne	9.80	10.20	9.70	10.26	10.39	6.02	7.11
Vic Country/Tas	11.50	12.40	11.60	12.65	13.06	13.57	12.59
Brisbane	12.10	11.80	9.90	10.02	10.85	-10.33	9.60
Qld Country	14.10	16.40	14.40	12.28	13.92	-1.28	-3.33
WA	9.90	10.30	11.00	10.66	11.85	19.70	7.73
SA/NT	12.10	11.90	13.00	18.68	14.49	19.75	11.46
<b>National</b>	<b>11.90</b>	<b>12.70</b>	<b>12.60</b>	<b>12.65</b>	<b>13.04</b>	<b>9.58</b>	<b>3.49</b>

Notes: Sydney North and South and NSW North and South combined from 2000–01

Sources: TSI, Figure D.5, p.230; Telstra communication, 11 October 2002

120 Telstra, Inquiry communication

Table 2.9 indicates a slight upward trend in the number of CAN faults per 100 SIOs. Year on year increases have been generally small in most areas, southern New South Wales (NSW) in 1998–99 and South Australia/Northern Territory (SA/NT) in 2000–01 being the notable exceptions. (The SA/NT appears to be a possible aberration.) By area, the fault rates have remained broadly consistent over the period, usually being no more than two faults per 100 SIOs better or worse. The apparent exception to this is southern NSW, where the fault rates may have increased by 50 per cent or six faults per 100 SIOs, but this is unclear because of the change to Telstra's methodology. With the exception of country NSW and, to a much lesser extent, SA/NT, all areas are below or close to the national average.

Of some concern is the relatively high CAN fault rate in country NSW, which is 45 per cent above the national average. Higher fault rates in country NSW could explain the large number of submissions about reliability received from these areas, particularly the NSW Tablelands.

Information that emerged during the Boulding investigation also suggests there could be areas with reliability performance well below regional and national averages in terms of CAN fault rates.

The TSI report also examined the number of distribution areas with various fault rates across country and metropolitan Australia in 1998–99. The Inquiry sought comparable data from Telstra. Telstra could not provide this because of changes to the classification of distribution areas as country and metropolitan. The new data appears to show some improvements, but because of the change the Inquiry considers the data of limited value in the assessment of possible improvements in regional areas. The TSI data and new data are set out in Appendix C.

## Submissions relating to reliability

Both the NFF and CEPU expressed concerns that while CSG compliance may be high and improving, this was counterbalanced by an apparent increase in faults, at least in some areas.<sup>121</sup>

A number of submissions complained about fault-prone infrastructure, recurrent faults and poor repairs. For example:

*Minimising the number of recurring service faults is also of great importance to rural and regional consumers. Farmers are concerned that short-term fixes and repetitive return visits to complete service restoration are inefficient for the customer and the service provider.*<sup>122</sup>

---

121 NFF, submission, p.7; CEPU, submission, p.6

122 NFF, submission, p.5

*(Personally, this pair-gain facility has led to ongoing outage problems over the years & created time consuming maintenance & repairs for Telstra – not to mention the inconvenience and cost born by us, as consumers.)*<sup>123</sup>

*Cables to our home phone are exposed due to rain wash outs two wet seasons ago.*<sup>124</sup>

*He then proceeded to lay the line across the top of the ground over our lawn and into the house, he then left and said somebody would return to trench the line in underground. Since this day we have had to hook the line up so it was not a danger to my children who use the lawn...Kangaroos continually hook the line and when it rains its washed down the creek, every time it rains we have no phone service and as it dries the line comes good again. I have rang Telstra on several occasions and about 12 months ago somebody came and left a note in my door to say that I was in the system.*<sup>125</sup>

*...when there is major storm activity in the area we frequently lose even telephone contact. I understand that the underground cables become flooded and in-operable. This is not good in the case of emergencies!*<sup>126</sup>

*I reported to Telstra 4 Years ago that we had exposed cable in the front of our property and no inspection has ever been made ... nothing done.*<sup>127</sup>

In the course of the Inquiry there were also media reports that the reliability of Telstra's customer access network was being affected by corrosion caused by a gel previously used to seal cable joints.<sup>128</sup> The issue was raised by CEPU in its submission, together with other issues affecting network reliability.<sup>129</sup> Advice from Telstra is that in almost all joints where it has been used, the gel continues to be an effective sealant. In a small percentage, the Inquiry understands there are some issues that are being addressed by Telstra.

---

123 AHM and DK Begbie, submission, p.1

124 AR and I Matheson, submission, p.1

125 Catherine Battersby, submission, p.1

126 Tony Collins, submission, p.1

127 E and E Williams, submission, p.1

128 *The Australian*, 'Telstra's \$1bn cable seal bungle', 12 October 2002; *The Canberra Times*, 'Telstra denies cable chaos', 13 October 2002; *The Age*, 'Telstra cable denial', 13 October 2002

129 CEPU, submission, p.32

## ASSESSMENT OF FAULT RATES AND RELIABILITY

Data provided indicates that fault rates have been broadly consistent with historical levels, although there has been some gradual increase in CAN fault rates since the TSI report. Overall fault rates are reasonable, but there still appears to be considerable variation between ESAs, particularly in regional areas, indicating continuing localised problems.

While this might be viewed as somewhat disappointing given the emphasis of the TSI report on reliability issues, the Inquiry is not surprised by this evidence. Turning around the state of the Telstra network, and the processes within Telstra that enable identification and rehabilitation of particular problem areas, is a major task and cannot be achieved overnight. Even with a renewed focus by Telstra, and an effective Government regulatory regime in place, it is expected that the full benefits would take some time to flow through in terms of dramatically improved outcomes.

The Inquiry is confident that the critically important objective of improved network performance in regional, rural and remote areas will be achieved through the initiatives the Government has put in place. In particular the NRF, properly enforced and further refined, will force effective Telstra focus on, and investment in, its national network, and will deliver real benefits to regional, rural and remote consumers.

The real strength of the NRF lies in improving individual service reliability at Level 3, and in particular its emphasis on giving Telstra a strong incentive not to breach the required standards for individual services. However it will be important that the ACA maintains close monitoring at this level into the future, to ensure that Telstra has a strong incentive to comply.

The Inquiry considers the NRF fully addresses the TSI Recommendation for highly disaggregated monitoring and empowerment of the ACA to take effective enforcement action. As Level 3 of the NRF covers 7.7 million services rather than 71 000 distribution areas, the level of disaggregation under this framework is, in fact, much better than the TSI had envisaged. The Inquiry also considers the setting of requirements in relation to individual services, and the ability to take direct action in relation to individual problems, is positive.

The Inquiry does, however, have a number of comments about the NRF and suggestions for 'fine-tuning' it into the future. Firstly, in an overall sense, the NRF is focussing on recurrent faults. This is appropriate because recurrent faults are clearly the key problem for consumers, and addressing them should rightly be the first priority of the Government and Telstra. However there is currently no high level capacity within the framework to inform the public of the frequency of faults and where they occur. A requirement for such public reporting by Telstra would be useful—perhaps expressed as faults per 100 SIOs and would most appropriately occur at Level 1, the FSA level.

However the ACA should also have access to such information at Level 2, as required, to assist it to analyse the reliability of ESAs, and to identify problem areas for remediation.

In relation to Level 2 processes, the Inquiry believes that the ACA should develop clear processes and guidelines for improving reliability at the ESA level. For example, it should develop clarity as to what it considers to be the 'trigger points' for remediation of ESAs. This would not only give greater certainty to the public about what level of reliability they can expect in their local area, but also would assist Telstra in planning its network rehabilitation programs to fit the NRF requirements.

Level 2 reporting under the NRF—at the ESA level—will be critical for identifying and remedying poorly performing pockets of services in rural ESAs. In the normal course of events, it would be expected that 'bedding down' of the NRF, and identification and remediation of such exchanges under the NRF might take some time to take place. However there is a clear priority to quickly identify the worst performing ESAs in regional, rural and remote areas, and initiate action to get them upgraded. This would provide a rapid and important boost to network reliability.

There needs to be greater clarity at Level 3, in relation to such matters as what exactly consumers can expect when their service is 'remediated' to a higher level of reliability, and what action the ACA would take if 'remediated' services continued to experience faults. Again these are matters for 'fine-tuning' of the framework, once the ACA has some experience of how the NRF is operating. The first priority is clearly to get it up and running, and working in the best interests of consumers.

The Inquiry is encouraged by Telstra's announcement of the RNT and the allocation of a further \$187 million for network remediation in regional Australia. The Inquiry considers this expenditure will make a significant difference, because it is effectively focussed on particular problem areas rather than adopting the 'broad brush' approach of past Telstra rehabilitation strategies.

## FINDING 2.6

In most regions faults per 100 services in operation in Telstra's Customer Access Network have increased slightly, but overall fault levels remain broadly consistent with historical levels, and are reasonable. The evidence suggests there continue to be localised pockets of particularly fault-prone services, requiring specific attention from Telstra. The Government's Network Reliability Framework, Telstra's Rural Networks Taskforce and other Telstra initiatives are expected to reduce fault levels with the full benefits flowing through over time.

## RECOMMENDATION 2.9

To immediately target the worst performing Exchange Service Areas (ESAs) in regional, rural and remote Australia, the Government should require the Australian Communications Authority (ACA) to identify these ESAs as soon as possible after the Network Reliability Framework commences in January 2003. Telstra should then be required to provide a formal undertaking to the Government on its strategy for raising the performance of these ESAs. Telstra's strategy should include specific timeframes and commitments of funding, and its implementation should be monitored and publicly reported by the ACA.

## RECOMMENDATION 2.10

The Government should adjust and refine the Network Reliability Framework (NRF) as necessary over time to improve its operation. These refinements should include expanding the range of fault information provided under the NRF, and providing greater clarity for Telstra and regional, rural and remote consumers about strategies to improve reliability under the Framework.

# FAULT REPAIR

Where faults occur, timeframes apply under the CSG (and USO) for their repair. These timeframes are shown in Table 2.10.

**Table 2.10: Timeframes for the supply of repair of faults under the CSG (and USO)**

Location	Fault type	Time for repair (after report of the fault)
All	Administrative error by phone company, or phone company can correct fault without attending customer premises or undertaking external plant work	End of next working day
Urban	All other faults	End of next working day
Rural	All other faults	End of second working day
Remote	All other faults	End of third working day

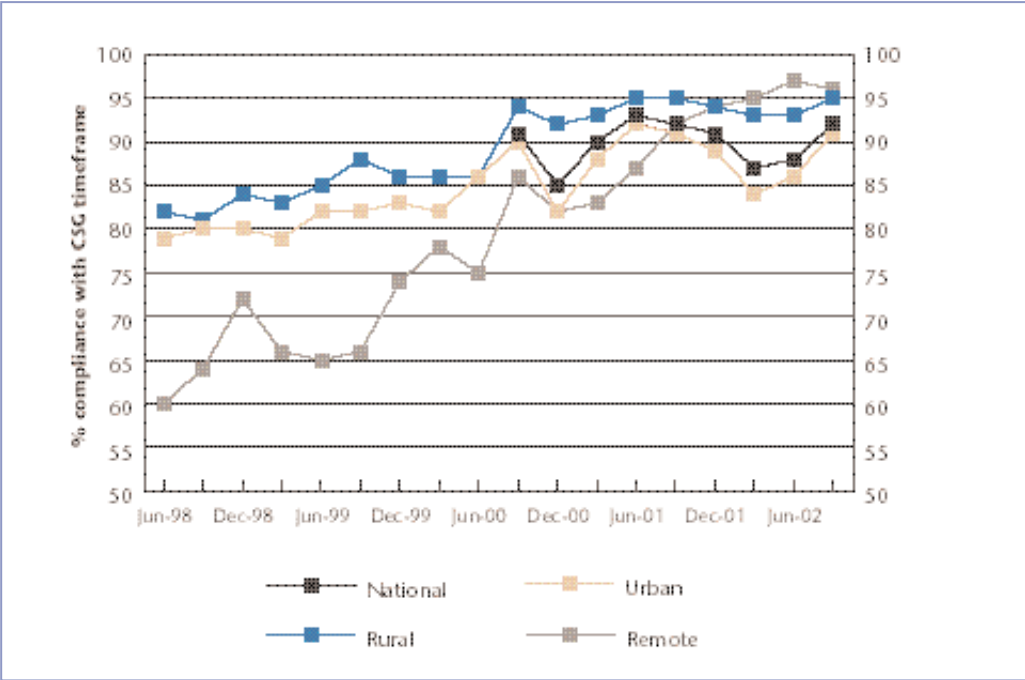
Notes: Urban— > 10 000 population; rural—200–9999 population; remote—less than 200  
Source: ACA, CSG Frequently Asked Questions<sup>130</sup>

These have been the maximum repair timeframes since the CSG was established. As with connections times, there are variations in timeframes based on geography and demographics. The Inquiry would expect that faults are actually being restored in most instances in shorter times.

130 ACA, [www.aca.gov.au](http://www.aca.gov.au), viewed 20 September

Figure 2.6 shows Telstra’s performance, on a quarterly basis, in repairing faults, nationally, and in urban, rural and remote areas, since June 1998.

**Figure 2.6: Telstra’s CSG compliance—Fault rectification**



Notes: National figures have only been collected since September 2000. September 2002 data provided by Telstra—subject to ACA verification.

Source: ACA, *Telecommunications Performance Monitoring Bulletin*, June 1998–June 2002; Telstra, Inquiry communication

As Figure 2.6 indicates, Telstra’s performance in repairing faults against CSG timeframes is high, with all categories being above 80 per cent since the September quarter 2000 and generally above 90 per cent. Rural fault repair has been consistently above 90 per cent since the September quarter 2000. Remote fault repair performance has improved steadily from a low base and has been above 90 per cent since the September quarter 2001. Annualised (Appendix B) data shows a similarly strong performance.

## Extreme cases of non-compliance with the CSG repair timeframes.

Submissions suggest long delays in having faults fixed are still occurring. For example:

*In Nov 2001 lightning caused some 45 houses to lose PSTN service for 9 days (average). A further outage, caused by water (from a major rainstorm) getting into a pit dug up to assist repair of the Nov 2001 fault caused another 5 day outage. The fault has yet to be finally cleared, since a temporary cable, slung between two fruit trees over 2 driveways, is only being addressed by the laying of new in ground cable works that started today (9 Oct 2002).<sup>131</sup>*

As with connection times, the TSI report expressed concern about extreme cases of non-compliance with the CSG repair timeframes. The monitoring and reporting arrangements discussed above will also apply to repair timeframes.

## Interim services

As part of its response to the TSI report, the Government required Telstra to offer, and if accepted by the consumer, provide an interim or alternative service where it is unable to restore a service within five working days of the fault being reported. Where an interim service is accepted, Telstra must provide it within six, seven or eight working days of the original fault report. These arrangements came into force on 15 October 2001. Telstra has advised that it provided 1315 interim services under this requirement in 2001–02.<sup>132</sup> Data on compliance with delivery timeframes is not currently available.

The Inquiry considers that this arrangement is a significant improvement in reducing the inconvenience to customers whose services are not repaired within the specified timeframes. The provision of interim services in these situations is a significant resource imposition on Telstra, and in the Inquiry's view, provides a strong incentive for improvement in repair times, and minimisation of these additional costs.

## Nationally uniform repair timeframes

As with connection times under the CSG, a number of submissions expressed concern about the difference in repair timeframes between urban, rural and remote areas. The views generally were that other timeframes should be uniform or customers should not pay uniform charges. The issues raised by these claims have been discussed above in relation to connection times. While timeframes should be as uniform as possible, logistical and cost issues must also be considered.

---

<sup>131</sup> Graham Letcher, submission, p.1

<sup>132</sup> Telstra, Inquiry communication

## Working days versus calendar days

A number of submissions expressed concern that fault repairs were further delayed because the CSG was based on working days, not calendar days. As a result the fault repair time might be extended by two or even three days where a weekend and public holiday followed the reporting of a fault. For example:

*Phones went out on Wed 24-4-02, the 2 business day guarantee saw that our service was guaranteed to be fixed by Mon 29-4-02 at 3pm. How is this you ask? Thursday was the 25-4-02, the ANZAC Day public holiday and therefore doesn't count as a business day. Friday 26-4-02 is the first business day. Then the weekend comes along, and neither day counts as a business day. So Monday 29-4-02 is the second business day. This means Telstra is under NO obligation as per the USO to have our phone service repaired until 5 days later because of the current status of the USO.*<sup>133</sup>

Given the remote repair timeframe is the third working day after a report, this could mean that any fault reported on a Wednesday, Thursday or Friday might not be repaired until the following week, a potential wait of up to five calendar days.

In its investigations into the supply of services to the Boulding family, the ACA recommended that the replacement of working days by calendar days in the CSG standard should be considered.<sup>134</sup>

The Inquiry considers there would be obvious benefits in CSG repair timeframes being counted in calendar rather than working days. At the same time the Inquiry recognises that there are significant work process issues for Telstra and other service providers in moving to such arrangements.

Telstra already provides for the repair of priority services on non-working days under new priority assistance arrangements. Under these arrangements those with life-threatening medical conditions can have their services restored in 24 hours—or 48 hours in remote areas—including on non-working days. Telstra has also advised that it is making changes to its work scheduling practices to give priority on Mondays to repair services reported faulty before the weekend.<sup>135</sup> A longer-term solution would appear to require significant changes to staffing and rostering practices, which in turn involves industrial relations issues for Telstra.

---

<sup>133</sup> Mathew and Suzy Lefevre, submission, p.3

<sup>134</sup> ACA, *Investigation into the provision and maintenance of telephone services to the Boulding family in Kergunyah, north-eastern Victoria*, May 2002, p.8

<sup>135</sup> Telstra, Inquiry communication

## Telstra's work management systems

Another common theme noted by the TSI report was delays in fault repairs attributed to Telstra's work allocation systems:

*...jobs did not appear to be allocated logically and technicians often lacked information about service history.<sup>136</sup>*

This is also the theme in a number of submissions to the Inquiry. For example:

*One improvement would be to have technicians located locally to spend more time on service, instead of spending more travel time than time spent on the job to be performed.<sup>137</sup>*

*When I recently had difficulties with my telephone line the technician came from Proserpine which is about 3-4 hours drive from here. Apparently the technicians from Sarina (1 hour) and Mackay (2 hours) were all busy. I found this very worrying because there was not a major flood or other disaster, which often occur in our area during the wet season. If the local crew were not able to cope during relatively quiet time then I cannot see how they could cope during floods or cyclones.<sup>138</sup>*

There are many similarities between this issue and that of coordination in the connection of services discussed above.

Telstra has recognised that its workforce management databases, Service\*Plus and Director, have contributed to some of the problems discussed in the TSI report. To that end Telstra has advised that it is developing a new computerised work management system, FuturEDGE, that will be able to better map skills to jobs and calculate work times. FuturEDGE will also contribute to Telstra meeting requirements under the new priority assistance arrangements. Pilot implementation of FuturEDGE commences in December 2002, with deployment throughout 2003.

Telstra has also advised of a number of other improvements to its work practices that are likely to improve service restoration times. These include:

- changing the way fieldwork calendars are managed to improve fault rectification times;
- using a national fault management display system to manage fault restoration targets for special services;

---

<sup>136</sup> TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.78-79

<sup>137</sup> Mrs Ann Waterford, submission, p.1

<sup>138</sup> Jean Kahler, submission, p.1

- providing more information to field staff by use of CDMA mobile phones that can interact with FuturEDGE and other Telstra platforms;
- introducing quality plans for all regions and the implementation of strategies to improve performance;
- introducing Total Productive Maintenance to improve CAN performance;
- developing a solution to current failures of auto-activated services;
- reducing the number of unproductive service trips that are made by Telstra staff;
- increasing the number of potential reactive faults reported by staff and repairing before customers are impacted; and
- investigating ways to reduce ineffective fault clearances.<sup>139</sup>

## FINDING 2.7

Compliance with the Customer Service Guarantee timeframes for fault repair is high, with rural and remote performance exceeding urban performance. The provision of interim services where repair is delayed provides regional, rural and remote consumers with additional reassurance. Ongoing effort needs to be put into improving processes to expedite the repair of faults.

## APPOINTMENT KEEPING

As with connections and fault repairs, appointment keeping is subject to CSG requirements and auto-payments. If a phone company gives a customer an appointment for connecting or repairing a service, then the appointment period must be no longer than five hours. The phone company must keep this appointment unless it gives the customer reasonable notice. The company has a 15 minute grace period if the appointment period is four hours or less. An extra 45 minutes grace period is allowed where the technician must travel long distances for an appointment at a premises in a community of under 2500 people.

---

<sup>139</sup> Telstra, Inquiry communication

Appointment keeping was not raised as a significant concern in the TSI report, but a small number of individual submissions to the Inquiry did express concerns. For example:

*All up there were five missed appointments, two appointments when technicians attended but failed to fix the problem, and the final appointment. This meant I was required to stay home on eight separate weekdays, each time for a period of five hours. The amount of time I spent waiting translates into hundreds of dollars in lost earning capacity.*

*Telstra awarded me compensation under the CSG for four missed appointments a total of \$48.<sup>140</sup>*

Table 2.11 shows Telstra’s performance in meeting the CSG appointment keeping requirements nationally and by region.

**Table 2.11: Percentage of Telstra appointments kept, 2001–02**

National	Urban	Rural	Remote
93%	93%	94%	71%

Source: Telstra, Inquiry communication

Regional differences in appointments are reasonable taking into account logistical considerations. National, urban and rural performance is high, but Telstra’s performance at keeping appointments drops dramatically when its staff travel to remote areas.

Telstra could also look at ways of reducing the impact of delays. For example, it is understood that Telstra seeks to make contact with persons waiting for appointments by mobile phone or alternative service where this is possible.

## PRIORITY ASSISTANCE

While access to reliable fixed telephone services is a high priority for Australians generally, it is particularly important for individuals who may be suffering a life-threatening medical condition, and who may require urgent medical attention.

The TSI report noted that priority assistance was available in certain circumstances but found inadequate levels of awareness existed regarding such services. It recommended that carriers improve the level of information available to the public about these services, including the process and eligibility criteria for gaining priority status.<sup>141</sup>

140 Anonymous by request, submission, p.3

141 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.181

As a part of its response to the TSI report, the Government required Telstra to provide interim services as soon as practicable to customers who require access for emergency-related reasons. The ACA started work with the industry on eligibility criteria and the provision of customer information.

Following the death of Sam Boulding in February 2002 and the ACA's investigation into the supply of the telephone service to the Boulding family, the Government imposed strict priority assistance requirements on Telstra. Telstra must now provide eligible priority customers with connections, fault repairs or interim services within 24 hours, or 48 hours in remote areas. Where priority customers experience two or more reported faults in a three-month period, the service must be investigated and remediated if necessary. Priority customers who default on payment are subject to specialised credit management processes, to ensure they always retain access to emergency service calls. Telstra must provide comprehensive public information to ensure eligible customers and doctors are informed of priority services. Changes are also being made to Telstra's customer management and other systems to support priority service delivery.

The Government has asked the ACA to oversee the development of an industry-wide approach to providing priority services, and this matter is being considered in the ACIF. All eligible consumers already have access to priority assistance services via Telstra.

Telstra implemented temporary priority assistance arrangements in March 2002, pending final arrangements which came into effect in September 2002.

Telstra has reported that, between 1 May and 28 June 2002, 99.9 per cent of priority activations and restorations met the 24 and 48 hour response timeframes. From 4 April to 28 June 2002, of the approximately 21 000 tagged priority assistance services, 8082 services received priority assistance restoration and 1920 services received priority assistance activation.

TEDICORE has expressed concern about the suitability of interim services for some people with disabilities.<sup>142</sup>

## FINDING 2.8

Priority assistance services now available to consumers with pre-diagnosed life-threatening medical conditions exceed those available when the TSI reported. The arrangements put in place by the Government and Telstra are comprehensive and sensible, and will reassure those in regional, rural and remote communities who face a possible emergency medical situation.

---

142 TEDICORE, submission, p.6

## CUSTOMER SERVICE, COMPLAINTS AND COMPLAINT HANDLING

Customer service, complaints and complaint handling relate to all aspects of a provider's business. The discussion here relates specifically to fixed phone services. Chapter 7 includes a more general discussion of the issues.

The TSI identified a number of issues in relation to customer service, in particular the need for greater engagement with customers, greater customer control of their interactions, greater understanding from front-line staff, and greater responsibility in helping customers get the most from their services. In relation to regional customers, the TSI saw many of these issues being addressed through the creation of TCW. The effectiveness of TCW in this regard is discussed in Chapter 8. Reforms to the operation of Telstra call centres are also important.

Concerns similar to those recorded in the TSI report have been expressed in submissions to the Inquiry. These include front-of-house staff unable or unwilling to help, no records of previous calls being kept, providing inappropriate solutions, or rudeness and unhelpful responses. For example:

*A third area of concern is the misinformation given by Telstra staff in response to various enquiries... Another example involves a telephone fault at our local nursing post. The services officer in this case advised the Nursing Post staff to use her mobile phone. When the customer explained that mobile phones don't work in Yalgoo, the customer service officer assured her that CDMA phones worked in Yalgoo.*<sup>143</sup>

Poor customer service is generally manifested in complaint levels, which in turn raises questions about complaint handling. Telecommunications consumers are generally encouraged to resolve their complaints directly with their service providers. In this respect TCW has become another generally welcome mechanism for raising concerns and complaints with Telstra. If they are unable to obtain satisfaction from their provider, consumers have access to the TIO, or ultimately general consumer protection through the courts. Complaints and enforcement are discussed in more detail in Chapter 7.

Information on complaints to Telstra is set out in Table 2.12. This shows the number of complaints per 10 000 transactions of that type. This complaint information is not disaggregated on a regional basis.

---

143 Shire of Yalgoo, submission, p.2

**Table 2.12: Telstra complaints per 10 000, 2000–01 and 2001–02**

	2000-01				2001-02			
	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
<b>Provision of service</b>	9.0	9.0	4.0	1.9	2.1	2.0	2.0	1.9
<b>Fault repair</b>	75.0	75.0	79.0	80.0	98.0	111.8	150.0	130.0
<b>Customer transfers</b>	10.0	10.0	19.0	17.0	6.0	7.0	6.0	4.0
<b>Credit control</b>	2.0	1.9	1.4	0.7	1.0	1.2	1.0	1.0
<b>Billing</b>	7.9	3.7	4.0	3.6	3.6	3.4	3.7	3.6

Notes: All numbers are complaints per 10 000. Data only collected since September 2000.

Source: ACA Performance Bulletins

In four of the five categories, complaint ratios have decreased over the past eight quarters and stabilised at a low level. Complaints about fault repair have been historically high and have increased, particularly in 2001–02. Telstra has advised that complaints about faults, not surprisingly, reflect increases in the incidence of faults and the use of MSDs. For example, in the March quarter 2002, faults increased and repairs were delayed in NSW due to bushfires and heavy rains.

Table 2.13 shows complaints to the TIO about fixed services for all fixed service providers, not just Telstra. Such complaints generally reflect a failure by the customer to resolve his or her concerns with the service provider. Again, the information is not available on a regional basis.

**Table 2.13: Fixed telephone issues handled by the TIO, key categories, 1997–98 to 2001–02**

Type of complaint	1997–98	1998–99	1999–2000	2000–01	2001–02
Billing	12 842	16 199	11 408	15 996	15 046
Customer service	708	1207	3882	11 486	6703
Provision of services	4522	7823	9183	7900	2775
Faults	3494	5560	5510	4060	3508
Customer transfer	3357	5169	8258	11234	4819
Credit control	3258	4679	5792	7556	2374
Other	2794	3580	3295	2140	5078
<b>Totals</b>	<b>30 975</b>	<b>44 217</b>	<b>47 328</b>	<b>60 372</b>	<b>40 303</b>

Notes: TIO billing complaints data includes complaints relating to mobiles which have been excluded from figures above

Source: TIO, 2000, 2001 and 2002 Annual Reports and [www.tio.com.au](http://www.tio.com.au), viewed 24 October 2002

As a result of a spike in the number of complaints to the TIO in the December 2001 quarter regarding carrier complaint handling, the ACA conducted an inquiry into compliance by eight service providers with the ACIF Complaint Handling Code. The ACA identified a number of improvements that could be made to the code and to providers' complaint handling practices. These have been raised with ACIF and specific providers.

The lack of regional data prevents any definitive conclusions being drawn about complaint levels in regional Australia and the handling of these complaints. To the extent that national level data can be considered indicative, the total complaint level has been fairly consistent since 1997–98 except for the spike in 2000–01, which may be attributable to One.Tel and local call competition. While total issues decreased in 2001–02, total issues for both Telstra and Optus did increase in the same period. Of Telstra's 25 077 complaints (fixed service, mobile and Internet), it is worth noting that 92 per cent were resolved at the lowest level, Level 1, which does not involve an investigation process.<sup>144</sup>

Complaints are a perennial issue in service industries. Increases in complaints may have many causes, including increased consumer awareness of their rights. The Inquiry considers there is a strong industry commitment to address complaints, as illustrated by its Complaint Handling Code and the TIO. Given TIO charges for handling complaints, providers have a strong incentive to minimise complaints. Both the TIO and ACA are undertaking detailed monitoring. Consumer organisations are also acting as watchdogs. The Inquiry is satisfied that adequate arrangements are in place to deal with complaints. Telstra initiatives such as TCW, improvements in coordination, FuturEDGE and changes to the operation of call centres should further improve consumer satisfaction.

## SPECIAL NEEDS

### PEOPLE WITH DISABILITIES

The TSI's finding and recommendations in relation to people with disabilities were generic in nature, rather than specific to regional Australia.

The TSI found that 'many people with disabilities lack the awareness or training to make use of equipment or services available to meet their needs'.<sup>145</sup> Amongst other things, TSI Recommendation 14 provided that additional resources be made available to assist people with disabilities participate in industry processes and conduct public awareness raising activities. Such funding has been provided by the Government. TSI Recommendation 16 was that a training program for users of TTYs be incorporated into the NRS.

---

144 TIO, *Annual Report 2002*, October 2002, p.3, p.11, p.65

145 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.96

Following a review by DCITA, a grant was made to the Australian Communication Exchange to conduct a TTY training program as part of the NRS.

A range of other matters was raised by representatives of people with disabilities in their submissions. Again, these are generally national rather than regional issues and go beyond the scope of this Inquiry. Where they are regional in nature, such as equipment delivery, repair arrangements and the use of WLL, they are dealt with in the report in the most appropriate context. The broader issues raised in these submissions should be referred to the Minister for consideration as part of existing processes.

## REMOTE INDIGENOUS COMMUNITIES

Poor access to telephone services either by way of residential phone services or payphones for Indigenous communities was a key finding of the TSI report. The TSI questioned whether the USO was meeting the particular needs of remote Indigenous communities.<sup>146</sup> The TSI recommended consideration be given to establishing a specific scheme to source basic and advanced communications services for remote Indigenous communities.<sup>147</sup>

In response to the TSI report the Government undertook to improve access to payphones. It also conducted a strategic study into improving telecommunications service levels generally in remote Indigenous communities. The study resulted in the TAPRIC. These two initiatives are discussed in detail in Chapter 5.

## 000 EMERGENCY SERVICES

Given past concerns in regional Australia about the adequacy of arrangements for handling 000 calls, the Inquiry has also examined this matter. In the past there have been community concerns where calls intended for a particular locality in Australia have been directed to emergency services in another locality with the same name. A number of incidents were reported in 1998–99, for example, involving towns named Windermere and Longford in both Tasmania and Victoria.<sup>148</sup>

Telstra advises that the emergency call service does not differentiate between rural and urban locations. All 000 calls nationally are sent on protected routes that are dedicated to 000 calls only. For example, both rural and urban callers who dial 000 will be connected to a Telstra emergency call operator in Melbourne or Sydney. When a call is received, location information is available to the operator. For calls that are made using a fixed phone, the operator identifies the emergency service organisation (ESO) that is closest to

---

<sup>146</sup> TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.91

<sup>147</sup> TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.182-3

<sup>148</sup> ACA, *Telecommunications Performance Report 1998-99*, p.62

the caller on the basis of postcode. For calls that are made using a mobile phone, the emergency call person receives mobile origin location information (MOLI) that identifies the standardised mobile service area that the caller is in. The caller is asked which ESO is required. The operator then connects the call as per the caller's request. Call data is sent via a data gateway to the particular ESO nominated. Once voice contact is made with the ESO, the 000 operator disconnects from the call.

## INTERNATIONAL COMPARISONS

The Inquiry has attempted to compare Telstra's performance as the Primary Universal Service Provider with that of carriers in reasonably equivalent markets overseas. However there is only a limited amount of data available on this issue. The most recent Organisation for Economic Cooperation and Development (OECD) Communications Outlook makes the relevant comment that, 'Quality of service (QoS) indicators continue to be important in evaluating market performance in the telecommunications service sector. However, in many cases, indicators of QoS are not internationally comparable'.<sup>149</sup> Further, Telstra's submission states that:

*...given the different QoS regimes operating in countries around the world, and different local conditions prevailing in each of the countries, Telstra found that meaningful comparisons of performance are not possible.*<sup>150</sup>

The Inquiry tends to agree with these statements.

The Inquiry considers that regional Australians are more interested in the relative performance of regional and metropolitan Australia, rather than regional Australia's performance relative to regional areas in other countries.

The most recent comprehensive set of QoS measures can be found in the OECD *Communications Outlook 2001*. Unfortunately, the most recent data are from 1999. This shows that Australia's telecommunications performance is comparable or better than most member countries of the OECD. The available evidence from Australia suggests further improvements since 1999, so the Inquiry considers Australia's overall performance continues to be comparable to most countries in the OECD.

---

<sup>149</sup> OECD *Communications Outlook 2001*, p.209

<sup>150</sup> Telstra, submission p.67

# PAYPHONES

## INTRODUCTION

With high rates of connection for fixed telephone services in Australian residences and businesses and the rapid take-up of mobile telephone services, payphones might appear to have a lesser role to play in Australian communications than in the past. Nevertheless, the Inquiry believes they are still an essential part of telecommunications in Australia, particularly for low-income earners, itinerant workers and Indigenous Australians. Around 272 million calls originated from Telstra-operated payphones alone during 2001–02. This included more than 700 000 ‘000’ emergency calls.<sup>151</sup> According to the ACA, remote Australians were more frequent users of payphones than urban and rural Australians.<sup>152</sup>

The TSI identified three main areas of concern in relation to payphones—payphone availability, reliability and access for people with disabilities. However, the TSI did not make any general recommendations on these issues. The TSI also highlighted payphones as being particularly important in Indigenous communities and that many Indigenous communities lacked this basic form of telecommunications.<sup>153</sup> The TSI’s Recommendation 17 on Indigenous telecommunications was directly relevant to this matter.

The Inquiry has received few submissions on payphone issues.<sup>154</sup> Again, the key issues raised have been availability, including siting and reliability. Concerns have also been expressed about payphones not giving change and, from the industry perspective, competition issues.

## AVAILABILITY AND SITING OF PAYPHONES

### PAYPHONE SUPPLY

As with other telecommunications activities, the provision of payphones is fully open to competition. Around half Australia’s payphones are ‘customer-operated payphones’, operated by persons other than Telstra. The other half are operated by Telstra, which, under the USO, is required to make payphones reasonably accessible to all Australians wherever they live or do business. Telstra takes into account the availability of customer-operated payphones in fulfilling its USO requirements.

Optus has been providing payphone services as part of the Northern Territory Government’s Electronic Outback Program. Tritel has been rolling out payphones through metropolitan areas and regional centres, especially in shopping centres. Other businesses

---

151 Telstra, Inquiry communication

152 ACA, *Consumer Satisfaction Survey Summary Report 2002*, to be published

153 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.90-91

154 CTN, ATSC, Kalar Holland, Johnno Lawrowicz and Payphone Industry Association

and organisations (e.g. clubs and hotels) sometimes provide one or two payphones, usually blue or gold phones, as a service to their clients.

Customer-operated payphones are an important part of payphone service provision. The Payphone Industry Association (PIA) commented on difficulties facing this sector of the industry:

*To maintain a viable payphone service in Australia the privately operated payphones must continue and be encouraged. After all, they do represent over 50% of the installed payphone base. If they are not encouraged, Australia will end up with a third world payphone service. Under the current pricing and competitive regime, service levels will deteriorate. It will also mean that the barriers to entry will remain and the public will be denied a vital service.*<sup>155</sup>

The PIA expressed particular concern about margins being squeezed by the 40 cent cap on local Telstra payphone calls, and the loss of revenue due to the use of calling cards and free-to-caller calls.

## PAYPHONE NUMBERS

Table 2.14 shows payphone numbers since 1996–97.

**Table 2.14: Number of payphones in operation**

	1996–97	1997–98	1998–99	1999–2000	2000–01	2001–02
Telstra-operated payphones	37 362	36 760	36 421	36 333	35 151	33 778
Teletypewriter payphones	70	71	88	145	161	171
Customer-operated payphones	44 335	42 019	42 432	41 659	39 757	36 875
Other	-	-	-	-	-	886
Total	81 697	78 850	78 853	78 140	75 069	71 710

Notes: ‘Customer-operated payphones’ numbers are based on payphone access lines (PALs) provided by Telstra Wholesale. The ‘other’ category comprises 886 payphones operated by Optus and members of the PIA who operate multiple phones. Some of these PIA payphones may use PALs and there appears to be an overlap of around 74 payphones with the ‘customer-operated payphones’ category.

Sources: ACA, *Telecommunications Performance Report 2000–01*, November 2001, p.56; Telstra, Inquiry communication; ACA, Inquiry communication; and PIA, submission p.1.

155 PIA, submission, p.9

Telstra-operated payphones use cards and coins (94 per cent), cards only (less than three per cent) and coins only (less than three per cent). Telstra payphones utilising cards, known as Smart Payphones, have a higher degree of functionality.

As Table 2.14 shows, the number of payphones, both customer-operated and Telstra-operated, has been declining over the past five years. There are currently 71 710 payphones in operation in Australia, compared to the 78 140 in 1999–2000, as reported by the TSI in 2000. This is a decrease of 6430 payphones or eight per cent across Australia in two years. The growth in mobile phones and increased mobile phone coverage are two of the reasons given by Telstra for this decline. Telstra also claims that the decline in its payphone numbers can be attributed to the increase in competition from alternative payphone providers and a rationalisation of Telstra's older payphones.<sup>156</sup>

That the rate of decline in customer-operated payphones has exceeded the rate of decline in Telstra-operated payphones tends to suggest a decline in payphone demand and profitability. The PIA notes that many customer-operated payphones have reached the end of their technical lives, and are not being replaced.<sup>157</sup>

## INTERNATIONAL COMPARISON

Telstra has further claimed the decline in the number of payphones in Australia reflects a trend in some other developed nations. For example, Telstra advises that the number of payphones in the USA decreased by nearly 30 per cent since 1996, from 2.6 million to 1.9 million. Telstra also claims that in late January 2002 British Telecom announced plans to cease installing new payphones due to falling usage.<sup>158</sup>

Table 2.15 compares payphones per 1000 inhabitants in seven countries including Australia. Australia's per capita ratio of payphones appears to fall somewhere in the middle of the range. Table 2.15 also shows that while payphones per 1000 people have decreased in Australia the decrease has been greater in Switzerland, the USA and Canada.

---

<sup>156</sup> Telstra, Inquiry communication

<sup>157</sup> PIA, submission, p.4

<sup>158</sup> Telstra, Inquiry communication

**Table 2.15: Payphones per 1000 inhabitants, 1999–2000**

	NZ	UK	Australia	Canada	Singapore	USA	Switzerland
1999	1.32	2.55	4.16	5.86	5.65	6.61	7.33
2000	-*	2.54	4.07	5.59	-*	6.25	6.25

Notes: \* 2000 payphone data not available for NZ and Singapore

Source: ACA, Telecommunications Performance Report 2000–01, p.56 and ACA, Inquiry communication

## DISTRIBUTION OF PAYPHONES

Table 2.16 shows the distribution of payphones across urban, rural and remote Australia and the net change in numbers.

**Table 2.16: Net movement in Telstra-operated payphones by region, 2001–02**

	Telstra-operated			Customer-operated			Total
	Number at 30/06/01	Number at 30/06/02	Net Movement	Number at 30/06/01	Number at 30/06/02	Net Movement	
Urban	24 891	23 482	-1409	30 982	28 625	- 2357	-3766
Major Rural	3690	3643	-47	3920	3692	- 228	-275
Minor Rural	5386	5421	35	4218	3967	- 251	-216
Remote	1184	1232	48	637	591	- 46	2
Total	35 151	33 778	-1373	39 757	36 875	-2882	-4255

Source: Telstra, Inquiry communication

This table shows the majority of payphones withdrawn from operation in 2001–02 were taken from urban areas, 1409 by Telstra (5.6 per cent of its previous year's urban total) and 2357 by individuals or businesses (7.6 per cent of their previous year's urban total). There was actually a net increase in Telstra-operated payphones across minor rural and remote categories. At the same time, customer-operated phones declined in these areas.

The Country Women's Association of Victoria noted that the removal of public phone boxes from some needy areas of small towns was seen to be creating a further hardship.<sup>159</sup>

159 The Country Women's Association of Victoria Inc, submission, p.1

The decline in the number of payphones should also be considered in terms of payphone sites. Second or subsequent payphones may be removed from multi-phone sites while still leaving a payphone service there. For example, Telstra estimates the actual decline in Telstra sites in 2001–02 was around 600, compared to the decrease in Telstra-operated payphones of 1373.<sup>160</sup> Telstra has not provided a geographical distribution in relation to sites.

## SUBMISSIONS

The CTN noted that payphones continue to be important for many people, as well as being useful for the rest of the population, even though mobile use has increased dramatically. CTN does:

*...not accept the proposition that there is less need for payphones due to the increasing prevalence of mobile phones.*<sup>161</sup>

The Aboriginal and Torres Strait Islander Commission (ATSIC) reiterated the view put to the TSI that payphones are particularly important in remote Indigenous communities because of low levels of residential telephone ownership.<sup>162</sup>

The ACA's 2002 *Telecommunications Customer Satisfaction Survey* provides an interesting perspective on payphone use. When survey participants were asked why they had made their last call from a payphone:

- 33 per cent said they used a payphone because they were 'on the road' and either did not have their mobile with them or did not own one;
- 24 per cent said it was because their mobile had a flat battery;
- 14 per cent said they were on holidays or away from home; and
- seven per cent used a payphone because they were out of mobile service area.<sup>163</sup>

CTN noted in its submission that Telstra does not provide readily accessible information on how communities can apply for a Telstra-operated payphone to be installed, or on the criteria Telstra uses to judge whether a payphone, under the USO, should be installed at a particular location.<sup>164</sup>

---

160 Telstra, Inquiry communication

161 CTN, submission, p.17

162 ATSIC, submission, p.9

163 *Consultant's unpublished report to the ACA on telecommunications Customer Satisfaction Survey 2002*

164 CTN, submission, p.17

The criteria for the installation of payphones are broadly stated in Telstra's USO Standard Marketing Plan.<sup>165</sup> It is considered that these criteria are not sufficiently clear and detailed to enable communities to really understand their rights in this area. The Inquiry is also concerned that the criteria themselves may not be fully appropriate, placing too much weight on the profitability of payphones. One reason that payphones are included in the USO is that they are recognised as a universally required service that may often be loss-making. Telstra needs to provide better information on its payphone policy, including how to apply for a payphone and the criteria it uses to assess applications, to both consumers and its own call centre staff. Telstra's processes and decisions in relation to providing payphones need to be more transparent.

According to Telstra, it approved 788 out of 1091 applications (72 per cent) for a payphone in 2001–02.<sup>166</sup>

### RECOMMENDATION 2.11

Telstra should be required to better inform the public about its policies for providing payphones, including ensuring that criteria for providing payphones are clearly and simply stated. Telstra's criteria and processes for payphone installation decisions should be reviewed by the Government. The Government should establish a clear policy on future payphone availability.

The CTN also expressed some concern that the location of Telstra payphones in communities is not well promoted, and that more could be done to inform communities of the whereabouts of these important facilities. This is a valid concern and could be addressed by Telstra quite readily by better information provision, perhaps online or through local telephone directories.

### RECOMMENDATION 2.12

The sites of Telstra-operated payphones, together with the numbers of payphones at each site, should be made publicly and readily available. Consideration should be given to including payphone locations at least in local telephone directories in regional areas.

---

165 Telstra, *Universal Service Obligation Standard Marketing Plan*, September 2002, pp.39-41

166 Telstra, Inquiry communication

## PERFORMANCE IN INSTALLING PAYPHONES

Like other USO services, payphones are subject to installation timeframes that Telstra, as the Universal Service Provider, must meet. These timeframes are longer than those applying to fixed telephony services because of additional planning and logistical considerations (e.g. local government approvals and provision of power). As with fixed telephony connection timeframes, there are geographical variations in connections times, again reflecting logistical considerations. Table 2.17 shows the timeframes and Telstra's performance in meeting them.

**Table 2.17: Telstra's payphones installed within timeframes 2001–02**

Within 4 months	Within 6 months	Within 12 months
92%	98%	99%

Notes: Four months is the timeframe for installations nationally where there is readily available infrastructure, and in urban and major rural areas where there is no readily available infrastructure. Six months is the timeframe for installations in minor rural areas where no infrastructure is readily available. Twelve months is the timeframe for installations in remote areas where no infrastructure is readily available.

Source: Telstra, Inquiry communication

The Inquiry understands Telstra has committed to reducing the installation timeframes for installing Telstra-operated payphones in:

- areas with readily available infrastructure from four months to three months;
- urban and major rural areas without readily available infrastructure from four months to three months; and
- remote areas without readily available infrastructure from 12 months to nine months.<sup>167</sup>

## PAYPHONE CHARGES

Payphones, like fixed telephony services, are subject to price control. The price controls impose a maximum price of 40 cents for local calls from payphones.

There has been no increase in the price of a local payphone call since 1994. The PIA notes that this is putting pressure on payphone providers.<sup>168</sup> The Inquiry is advised that the ACCC has been asked to examine access arrangements relating to the payphone industry.

<sup>167</sup> ACA, The Universal Service Obligation—Payphones Special Report no. 9, unpublished report, pp.4-5

<sup>168</sup> PIA, submission, p.4

The Inquiry recognises there may be a tension between the need for payphone providers to have an adequate financial incentive if they are to provide services, and the need to keep prices affordable for low income earners.

Long-distance calls from Telstra-operated payphones are priced uniformly on a national basis.

One submitter complained that Telstra payphones do not give change. This is an issue previously identified by the ACA and raised with the TIO. This minor issue can be addressed through consumer education, as the ACA is doing.

## PAYPHONE RELIABILITY AND FAULT REPAIR

The reliability and repair of Telstra payphones are reported on quarterly in the ACA's Performance Monitoring Bulletin. The ACA does not report on customer-operated payphones or payphones provided by alternative payphone providers. Disaggregation on a metropolitan and regional basis is limited.

Table 2.18 provides key quarterly data on payphone reliability and repair for 1999–2000 to 2001–02.

**Table 2.18: Telstra payphone reliability and fault repair, 1999–2000 to 2001–02**

Financial year	1999–2000				2000–01				2001–02			
Qtr ending	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
<b>Payphone availability (%)</b>												
National	98	98	98	98	98	98	97	98	98	98	98	99
<b>Trouble reports per unit per month</b>												
National	1.2	1.4	1.6	1.4	1.2	1.1	1.0	0.9	0.8	0.8	0.9	0.8
<b>Average hours Telstra takes to clear a fault</b>												
National	34	20	29	29	24	28	33	31	28	32	28	28

Source: ACA, *Telecommunications Performance Monitoring Bulletins*, September 1999 – June 2002

As indicated, the reliability of Telstra-operated payphones and Telstra's performance in repairing faults has been reasonably consistent over the past three years, with the trend being one of gradual improvement.

Since June 2001, the average number of trouble reports for each Telstra-operated payphone nationally has been less than one per month. On average, each payphone in an urban area has 0.97 trouble reports, while the figure for rural payphones is 0.37 and that for remote payphones is 0.28 trouble reports.<sup>169</sup> Given payphones are public facilities, it is recognised that there are special considerations, like susceptibility to vandalism, that affect their reliable operation.

Nationally, average fault repair time has been fairly stable. Some notable improvements have been made in Western Australia and South Australia, with average repair times falling from peaks of 44 hours and 41 hours in March 2001 to 31 and 35 hours respectively in June 2002.<sup>170</sup>

When a payphone does experience a fault, once notified, Telstra is required under the USO to use reasonable endeavours to fix the fault within specified timeframes. Table 2.19 shows Telstra's performance in this regard.

**Table 2.19: Percentage of Telstra payphone faults repaired within standard marketing plan specified timeframes 2001–02**

Geographic Area	Urban	Rural	Remote
Timeframe	One day	Two days	Three days
Performance	67.6	69.5	51.8

Source: Telstra, Inquiry communication

While Telstra's overall average times for repairing payphones are improving, it is clear that its performance in complying with USO timeframes, is not good, especially in remote areas. The Inquiry accepts that there are logistical difficulties in getting to many remote payphones, and that vandalism may make timely repairs difficult in some circumstances. Nevertheless it considers that Telstra needs to improve its performance in this area.

### RECOMMENDATION 2.13

Telstra should report as soon as possible to the Government on the causes of low levels of performance in meeting payphone repair timeframes, and put forward a strategy for raising performance to an acceptable level.

<sup>169</sup> Telstra, Inquiry communication

<sup>170</sup> ACA Performance Monitoring Bulletin, June 2002, p.23

## CUSTOMER SATISFACTION AND COMPLAINTS

According to the ACA's Telecommunications Customer Satisfaction Survey, net household satisfaction with payphone usage was around two-thirds, and this represented a decline of 12 per cent on the previous year. However, remote households, who use payphones more frequently, were more likely to be satisfied.<sup>171</sup>

In 2001–02 Telstra received 876 complaints relating to payphones, 412 of which related to faults.<sup>172</sup>

**Table 2.20: Number of complaints made about payphones to Telstra**

Complaints	Total
Faults	412
Policy (Privacy and Refunds)	101
Product Quality	72
Damage	71
Sales/After Support/Service Order Provisioning	63
Billing	56
Personnel	35
Access to Telstra	24
Pricing	22
Changes Made/Not requested	16
Customer Churn	4
Appointment Total	0
Credit Management	0
Marketing	0
<b>Total</b>	<b>876</b>

Source: Telstra, Inquiry communication

The TIO reports that complaints relating to payphones are declining, largely as a result of the increase in mobile phone usage.<sup>173</sup> The TIO dealt with only 37 complaint issues relating to payphones in 2001–02, representing just 0.1 per cent of all telephone service issues. The majority related to faulty payphones and failure to redeem unused coins.<sup>174</sup> This is consistent with payphone complaints to the TIO in 2000–01.

171 Consultant's unpublished report to the ACA on Telecommunications Customer Satisfaction Survey 2002

172 Telstra, Inquiry communication

173 TIO, 2001 Annual Report, p.39

174 TIO, 2002 Annual Report, p.42

## PEOPLE WITH DISABILITIES

Telstra must also take the needs of people with disabilities into account in providing payphones. This includes, for example, providing public TTY payphones as well as ones accessible to people in wheelchairs. Concerns noted by the TSI in this area were largely generic, rather than regional in nature.

TEDICORE noted a number of persistent concerns for people with disabilities in relation to payphones, including height problems for people with limited upper mobility, the use of cut-away phone booths for white cane users, the lack of TTY payphones, and limited volume controls. TEDICORE also expressed concern about the lack of consultation in this area.<sup>175</sup>

Telstra advises that TTY payphones are located, following consultation with representative groups such as the AAD, inside private or government owned sites. Shopping centres and similar publicly accessible buildings such as hospitals, transport centres, libraries and airports often host a TTY payphone.<sup>176</sup> The number of TTY payphones is small but has been steadily increasing.

**Table 2.21: Number of TTY payphones in operation, 1996–97 to 2001–02**

1996–97	1997–98	1998–99	1999–2000	2000–01	2001–02
70	71	88	145	161	171

Source: ACA, *Telecommunications Performance Report 2000-01*, November 2001, p.56 and Telstra, Inquiry communication

Telstra has advised that as at October 2002 it had 178 TTY payphones in operation.

Consistent with demand, the majority of TTY payphones are in metropolitan areas. Around 20 per cent of the 178 TTY payphones are located in regional areas and usually in large regional centres such as Tamworth, New South Wales (2), Bendigo, Victoria (1) and Townsville, Queensland (3). All Telstra Smart Payphones can have TTY hardware fitted, but site selection is based on a range of factors, including need and security.<sup>177</sup>

<sup>175</sup> TEDICORE, submission, p.11

<sup>176</sup> Telstra, Inquiry communication

<sup>177</sup> ACA, *The Universal Service Obligation—Payphones Special Report No. 9*, unpublished report, p 4

Telstra has advised that, 'competition at some commercial shopping centre locations from private payphone operators has meant that some TTY payphones in those sites have been removed or relocated to other areas.'<sup>178</sup> This was also raised by TEDICORE:

*The roll-out [of TTY payphones] is slow and compromised by private companies installing payphones in shopping centres at lower cost. This means that Telstra removes its own payphones including those with TTYs.*<sup>179</sup>

In its submission the PIA stated that:

*...[a]ll Tritel payphones are mounted at wheelchair accessible height and all have a long handset cord with hearing aid coupler.*<sup>180</sup>

Telstra advised that it aims to ensure that all its payphones are mounted at a height which is generally accessible to children and adults sitting or standing. It also advised that complaints about cut-away phone booths are investigated on a case-by-case basis, and are generally the result of changes to the payphones surrounds.<sup>181</sup>

The Inquiry is concerned by the possibility that competition in the supply of payphones may be reducing access to TTY payphones. It is also concerned that there may be persistent difficulties being experienced by people with disabilities with other payphone issues.

## RECOMMENDATION 2.14

The Government should review the provision of payphone services to people with disabilities. In particular it should take steps to ensure that competition in the supply of payphones does not impact adversely on access to teletypewriter (TTY) payphones.

---

178 Telstra, Inquiry communication

179 TEDICORE, submission, p.11

180 PIA, submission, covering letter, p.2

181 Telstra, Inquiry communication

## REMOTE INDIGENOUS COMMUNITIES

The TSI recognised that payphones play an important role in remote Indigenous communities. In response to the TSI report, the Government undertook to work with Telstra to improve payphone availability under the USO. This program is discussed in Chapter 5.

## INQUIRY'S ASSESSMENT

Given the high rates of household and business connections for fixed telephone services and the growth in mobile phone usage, the need for payphones in some areas may be lessening, and some reduction in the number of payphones is reasonable and to be expected. This appears consistent with trends in other comparable countries.

Nevertheless, there is an important ongoing role for payphones across Australia. This is particularly so where mobile coverage does not exist and for communities where fixed telephony connections are low (e.g. Indigenous communities). This view is reinforced by the large number of calls still made from payphones, including '000' emergency calls.

From data provided to the Inquiry it appears rural and remote areas are faring better than urban areas retaining their number of Telstra-operated payphones.

On the basis of national data, Telstra's performance in repairing payphones has been steady. However, the Inquiry is concerned that Telstra's compliance against USO repair timeframes needs improvement, particularly in remote areas.

The Inquiry also notes that lack of data about the location of payphones has prevented a fully effective assessment of the overall adequacy of payphone provision. The need for payphones in communities is affected by factors such as the level of fixed telephone connections and the availability of mobile services. There needs to be a better focus on such issues in any revised criteria for providing payphones.

### FINDING 2.9

Despite the decline in the number of payphones, Telstra operated payphones under the Universal Service Obligation still play a very important role in enabling equitable access to telephone services. Telstra has maintained the number of payphones in regional, rural and remote areas in recent years. However there are a number of areas of payphone provision and maintenance where improvements need to be made.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 2.1

Basic telephone services are readily available to Australians and there is a high rate of connections. Telstra has undertaken further substantial improvements to the availability of enhanced telephone features over its network, and the number of customers without access to these services, as a proportion of the total customer base, is small. While desirable, the Inquiry does not consider these services essential to be provided universally.

### FINDING 2.2

The arrangements Telstra has in place to provide customer premise equipment to people with disabilities in regional areas are generally adequate. Telstra has made a strong effort to meet the needs of people with disabilities. There are some policy and operational issues which the Government and/or Telstra need to examine. Meaningful consultation with people with disabilities is important to this process.

### FINDING 2.3

The Universal Service Obligation (USO) contestability pilots have not yet delivered competitive outcomes, suggesting any further Government action in this area should be carefully considered and any additional resources well justified. As a matter of principle, USO contestability is supported, but further work is needed to validate its practical utility.

### FINDING 2.4

Telstra's performance under the Customer Service Guarantee in providing connections in regional, rural and remote areas is high and has been steadily improving. Performance in rural and remote areas has been comparable to, or exceeded performance in urban areas. This performance needs to be viewed in the context of the length of the connection timeframes for minor rural and remote areas, which are still very long.

### FINDING 2.5

New Telstra pricing packages, such as Wide Area Call and Regional Call, have improved consumers' options, but are not well promoted by Telstra or widely understood by regional consumers.

## FINDING 2.6

In most regions faults per 100 services in operation in Telstra's Customer Access Network have increased slightly, but overall fault levels remain broadly consistent with historical levels, and are reasonable. The evidence suggests there continue to be localised pockets of particularly fault-prone services, requiring specific attention from Telstra. The Government's Network Reliability Framework, Telstra's Rural Networks Taskforce and other Telstra initiatives are expected to reduce fault levels with the full benefits flowing through over time.

## FINDING 2.7

Compliance with the Customer Service Guarantee timeframes for fault repair is high, with rural and remote performance exceeding urban performance. The provision of interim services where repair is delayed provides regional, rural and remote consumers with additional reassurance. Ongoing effort needs to be put into improving processes to expedite the repair of faults.

## FINDING 2.8

Priority assistance services now available to consumers with pre-diagnosed life-threatening medical conditions exceed those available when the TSI reported. The arrangements put in place by the Government and Telstra are comprehensive and sensible, and will reassure those in regional, rural and remote communities who face a possible emergency medical situation.

## FINDING 2.9

Despite the decline in the number of payphones, Telstra operated payphones under the Universal Service Obligation still play a very important role in enabling equitable access to telephone services. Telstra has maintained the number of payphones in regional, rural and remote areas in recent years. However there are a number of areas of payphone provision and maintenance where improvements need to be made.

## RECOMMENDATION 2.1

Telstra should continue to work with representatives of people with disabilities to resolve any service concerns, and consider their practical suggestions for service improvements. The Government should consider any national policy issues raised with the Inquiry, relating to access to telecommunications for people with disabilities.

## RECOMMENDATION 2.2

The Government should review arrangements for the costing and funding of the Universal Service Obligation. This should also include whether current arrangements are impeding the development of competition in regional, rural and remote Australia.

## RECOMMENDATION 2.3

Where extreme cases of Customer Service Guarantee (CSG) non-compliance arise (i.e. more than five working days late), they should receive direct priority attention by the service provider, and should be notified to the Australian Communications Authority and/or Telecommunications Industry Ombudsman as technical breaches of the CSG.

## RECOMMENDATION 2.4

Telstra should report publicly on the outcome of its trial with the National Farmers' Federation to reduce connection times in minor rural and remote areas where infrastructure is not readily available, and identify what follow-up commitments it will make. Should the Telstra trial not lead to a significant and ongoing improvement in service outcomes in this area, the Government should review regulatory arrangements, including Customer Service Guarantee timeframes and interim service arrangements, to assess whether further changes to timeframes are appropriate.

## RECOMMENDATION 2.5

Telstra should report to the Government on the outcome of its project to improve the coordination of new service connections. The impact of any changes should be monitored with a view to determining the need for any further follow-up action.

## RECOMMENDATION 2.6

The Government should examine the issue of network extension and trenching costs, to consider whether such costs should be removed from subscribers, and either borne by Telstra as part of its Universal Service Obligation provision, or supported by the Government through subsidies.

## RECOMMENDATION 2.7

Telstra should promptly confirm to the Government that it has an effective strategy for improving as soon as possible the quality of telephone services affected by the use of 6/16 and similar pair gain systems. Telstra should give a formal undertaking to the Government including providing timeframes in relation to any actions required to implement such a strategy. Progress in meeting this strategy should be monitored by the Australian Communications Authority and reported on publicly.

## RECOMMENDATION 2.8

Telstra should provide a formal undertaking to the Government to complete its upgrade of digital radio systems (ARCSs and DRCs) under its Remote Australia Telecommunications Enhancement (RATE) program, and according to a publicly available timetable.

## RECOMMENDATION 2.9

To immediately target the worst performing Exchange Service Areas (ESAs) in regional, rural and remote Australia, the Government should require the Australian Communications Authority (ACA) to identify these ESAs as soon as possible after the Network Reliability Framework commences in January 2003. Telstra should then be required to provide a formal undertaking to the Government on its strategy for raising the performance of these ESAs. Telstra's strategy should include specific timeframes and commitments of funding, and its implementation should be monitored and publicly reported by the ACA.

## RECOMMENDATION 2.10

The Government should adjust and refine the Network Reliability Framework (NRF) as necessary over time to improve its operation. These refinements should include expanding the range of fault information provided under the NRF, and providing greater clarity for Telstra and regional, rural and remote consumers about strategies to improve reliability under the Framework.

### RECOMMENDATION 2.11

Telstra should be required to better inform the public about its policies for providing payphones, including ensuring that criteria for providing payphones are clearly and simply stated. Telstra's criteria and processes for payphone installation decisions should be reviewed by the Government. The Government should establish a clear policy on future payphone availability.

### RECOMMENDATION 2.12

The sites of Telstra-operated payphones, together with the numbers of payphones at each site, should be made publicly and readily available. Consideration should be given to including payphone locations at least in local telephone directories in regional areas.

### RECOMMENDATION 2.13

Telstra should report as soon as possible to the Government on the causes of low levels of performance in meeting payphone repair timeframes, and put forward a strategy for raising performance to an acceptable level.

### RECOMMENDATION 2.14

The Government should review the provision of payphone services to people with disabilities. In particular it should take steps to ensure that competition in the supply of payphones does not impact adversely on access to teletypewriter (TTY) payphones.



# CHAPTER 3

## MOBILE PHONE SERVICES

Term of Reference 1 requires the Regional Telecommunications Inquiry (the Inquiry) to advise the Minister on:

*The extent to which the Government's response to the Telecommunications Service Inquiry (TSI), other Government initiatives and further commercial developments have so far addressed the community concerns identified in the TSI report, particularly with regard to:*

- *the timely installation, repair and reliability of basic telephone services;*
- *adequate mobile phone coverage at affordable prices; and*
- *reliable access to the Internet,*

*and whether ongoing delivery of the Government's response will meet the TSI concerns within a reasonable timeframe.*

## BACKGROUND

Mobile phone services are the major growth area in the Australian telecommunications market. As at 30 June 2002, there were more than 12 million users of mobile phones in Australia, with 11.74 million using GSM mobile phones and 836 000 using CDMA phones.

Mobile phone service in regional, rural and remote Australia was a key issue for the TSI report. Two years on it remains a key issue, with 50 per cent of submissions raising mobile phone issues, broadly focused on the need to maximise coverage of land-based (terrestrial) mobile phone systems. Submissions reveal that regional, rural and remote Australians have a high level of need for these services, and a high expectation that these services should be made as widely available as possible, including through Government support if necessary.

## COVERAGE AND COMPETITION

### THE TSI FINDINGS

The TSI found that mobile phone coverage was a major concern for many Australians in rural and remote areas. There was far less emphasis in the submissions provided to that report on price and quality of service issues.

The TSI expressed the view that the commercial roll-out of terrestrial mobile services was unlikely to extend much further than existing boundaries. The TSI also observed that there seemed to be a lack of awareness on the part of many people of alternative forms of communication, for example HF radio, that could be used for safety purposes when travelling or working in isolated areas.

### GOVERNMENT'S RESPONSE TO THE TSI

In its response to the findings and recommendations of the TSI, the Government recognised that terrestrial mobile coverage will not achieve 100 per cent coverage of Australia's population or geography, given the vast expanses of this country that are sparsely populated.

The Government therefore sought a balance between extending terrestrial mobile coverage as far as possible, and encouraging and supporting the take-up of satellite services. Consistent with Government policy, funding of projects was based on capital costs only, and did not include funding of recurrent costs.

#### TSI mobile phone initiatives

There were two mobile phone initiatives in the Government's response to the TSI findings and recommendations.

The first was a competitive tender to ensure that all towns in Australia with populations of 500 or more received handheld mobile phone coverage. Following the tender process, 132 towns with a population of 500 or more were identified to receive improved mobile phone coverage through Telstra's CDMA mobile network. Forty of these towns will also receive enhanced GSM coverage. The first of these towns has already received increased coverage, and all services will be switched on by December 2003.

The second initiative, the Regional Mobile Phone program, was primarily aimed at addressing the needs of smaller centres and to provide spot coverage on nominated highways. The program includes the following elements:

- \$20.4 million for improved mobile phone coverage to 55 towns with a population of less than 500. Telstra will provide service to all these towns by June 2004;

- \$20.4 million through a tender to provide mobile phone coverage to 62 sites on 34 regional highways. Telstra will provide these services by June 2004;
- \$2.1 million for a satellite phone subsidy program—providing a subsidy of up to \$1100 towards the purchase of a handset. This program is available to those who live or work in an area with no terrestrial mobile phone coverage (a separate program already operates in Western Australia); and
- \$7.0 million towards the WirelessWest project to improve mobile phone services in the south-west land division of Western Australia, with all sites due to be completed by May 2003.

## OTHER GOVERNMENT SUPPORT FOR MOBILES

Prior to the TSI report the Government had already provided considerable funding to address the mobile telecommunications needs of regional, rural and remote Australia. This was done principally through the Networking the Nation (NTN) program.

### NTN

NTN has allocated \$40.5 million, through competitive processes, to fund 222 mobile base stations and 55 repeaters across regional, rural and remote Australia.

### Social Bonus

The Social Bonus package, funded from the second partial sale of Telstra, included the Mobile Phones on Highways (MPOH) initiative. This provided \$25 million to enable near continuous mobile phone service along 16 national highways.

It will provide new and improved mobile phone coverage along 9936 kilometres of Australia's highways, covering areas within New South Wales, Tasmania, Victoria, the Australian Capital Territory and Queensland.

Following a competitive tender, Vodafone was announced as the successful tenderer for the project on 23 April 2001, and is extending its GSM network to provide the improved coverage. Vodafone expects to complete the implementation of its network along the majority of designated highways by the end of 2002. As part of the tender conditions Vodafone is required to offer roaming across all Government-funded sites.

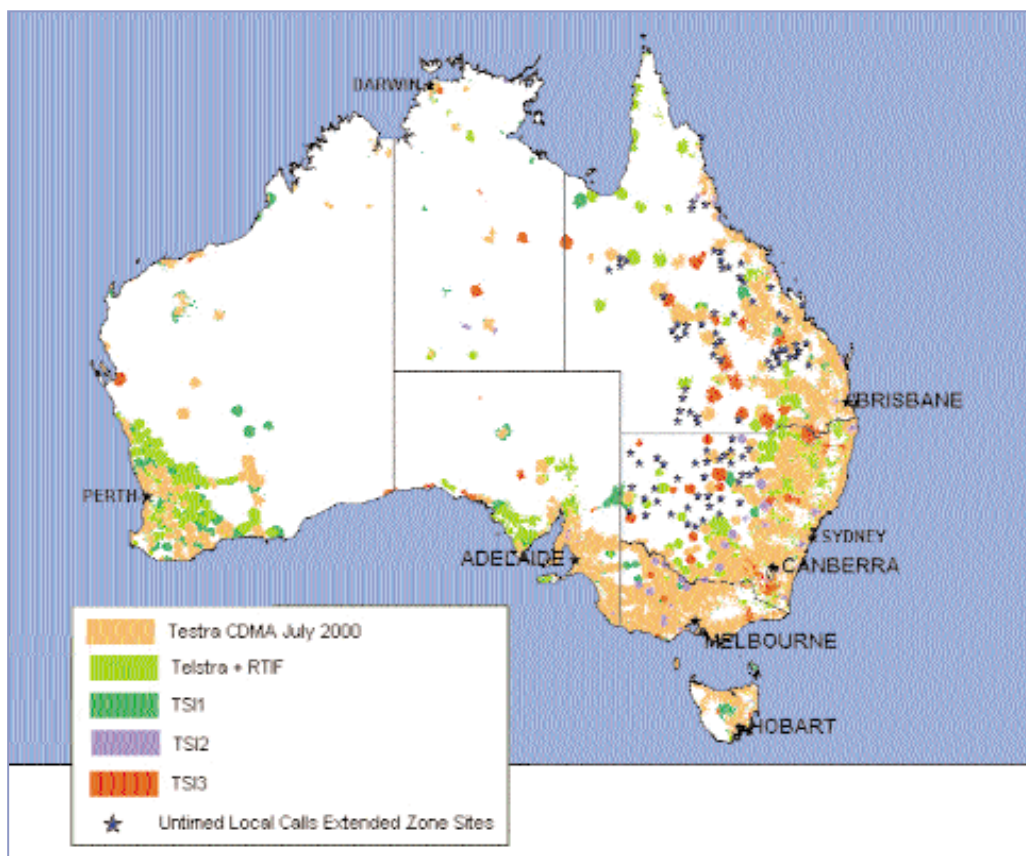
Another of the Social Bonus programs was a \$150 million tender to upgrade telephone and data networks in Telstra's Extended Zones, and to provide untimed local calls within these areas. Telstra, the successful tenderer, is planning to upgrade part of its network in these areas with CDMA Wireless Local Loop (WLL) technology, which will provide the additional benefit of mobile phone coverage to these isolated areas.

## COMMERCIAL DEVELOPMENTS

While there has been some continuing roll-out of base stations independent of Government support programs, it is clear that any significant commercial expansion of mobile coverage into rural areas not currently served by mobile phone services, is extremely unlikely in the near future, under current industry cost and revenue structures. Telstra has already invested more than \$700 million in the CDMA network, now the world's second largest CDMA network.

One significant exception to this prediction is Telstra's planned implementation of WLL services based on CDMA technology. Under its Remote Australia Telecommunications Enhancement (RATE) program, Telstra is planning to replace existing Digital Radio Concentrator Systems (DRCS) systems in the standard zones with CDMA fixed telephone systems. Again, this will provide the added advantage of mobile telephone coverage to consumers in these areas.

**Figure 3.1: Wireless Local Loop (WLL) coverage areas**



Source: Telstra, Inquiry communication

Another promising commercial development that is likely to benefit users in areas not currently served by mobile phone coverage is the introduction by Telstra of a cordless telephone (based on Digital Enhanced Cordless Telecommunications (DECT) technology) that has the capacity to provide handset operation up to ten kilometres from the base, on a 'line of sight' basis. Although not able to operate in a mobile situation, this product would seem to provide significant opportunity for use in a number of situations, such as on-farm, offering the additional benefits of cheaper fixed line rates, and free connectivity to other handsets operating on that particular service.

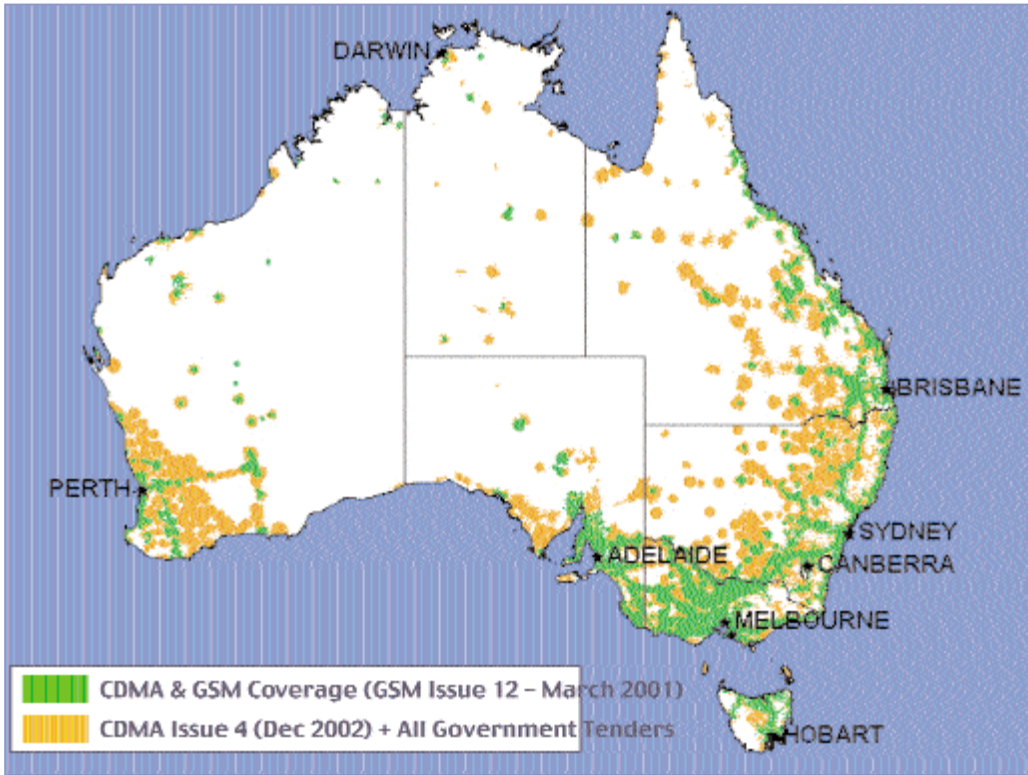
## CURRENT TERRESTRIAL COVERAGE AND OPPORTUNITIES TO EXPAND FURTHER

Once all the Government's TSI initiatives are rolled out, terrestrial mobile coverage of the CDMA network will have grown from 13.7 per cent geographic coverage of the landmass to almost 18 per cent, and from 96 per cent to 98 per cent of the population (approximately 98.28 per cent taking into account users to be served by CDMA WLL by 2004<sup>182</sup>). This is a significantly greater number than was served under the AMPS analogue network, and represents a major contribution of resources by both the Government and the CDMA network operator, Telstra.

---

182 Telstra, submission, p.92

Figure 3.2: CDMA vs GSM coverage



Source: Telstra, Inquiry communication

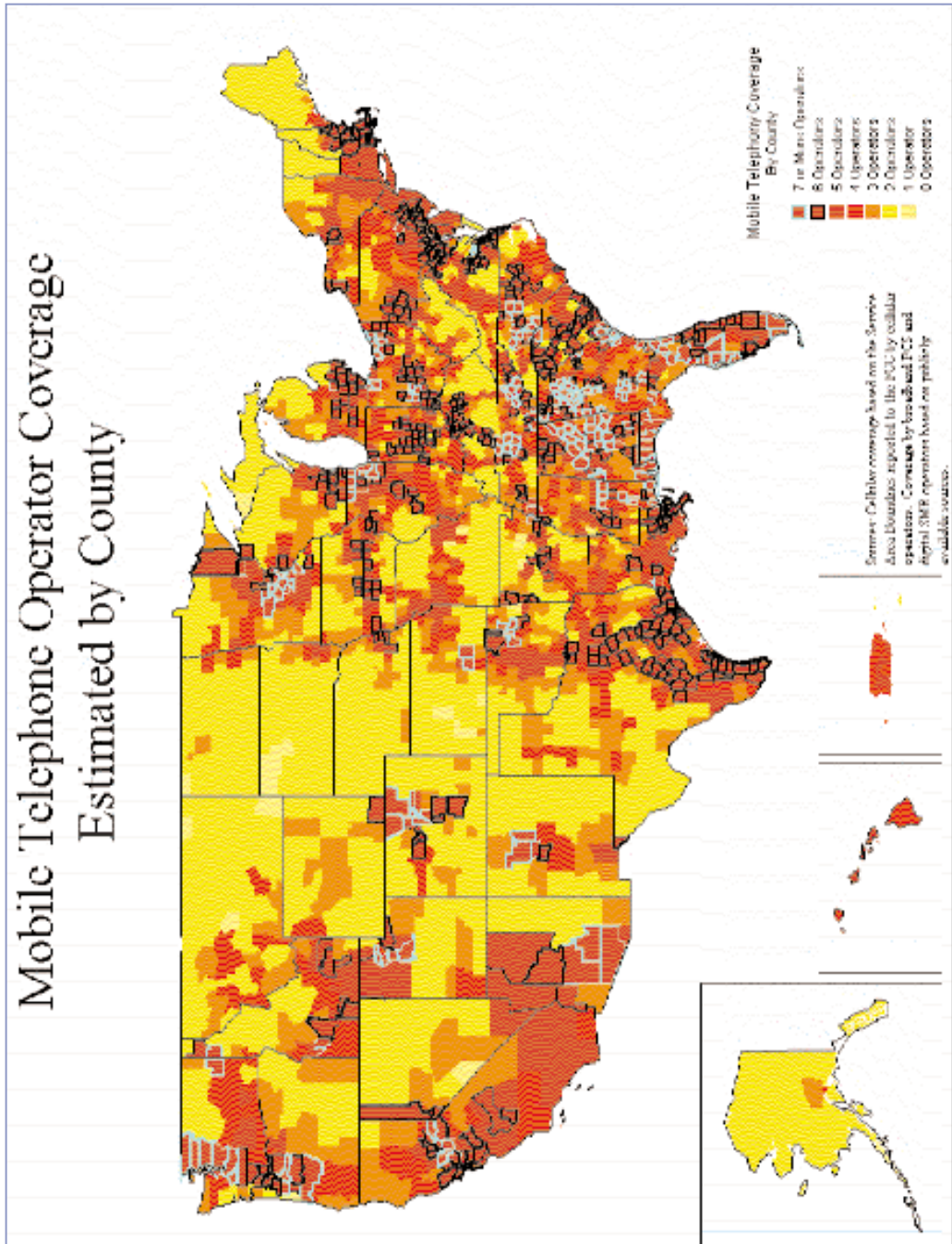
Australia's mobile coverage capacity now compares very favourably with other countries with similar geographies.

In the United States of America (USA), the two largest CDMA network operators are Verizon Wireless and Sprint PCS. The three biggest GSM networks are AT&T Wireless, VoiceStream and Cingular Wireless. The Federal Communications Commission (FCC) has estimated, based upon county divisions rather than actual area covered, that the USA population coverage is approximately 90 per cent.<sup>183</sup>

---

183 Productivity Commission, *International Benchmarking of Remote, Rural and Urban Telecommunications Services*, July 2001, p.70

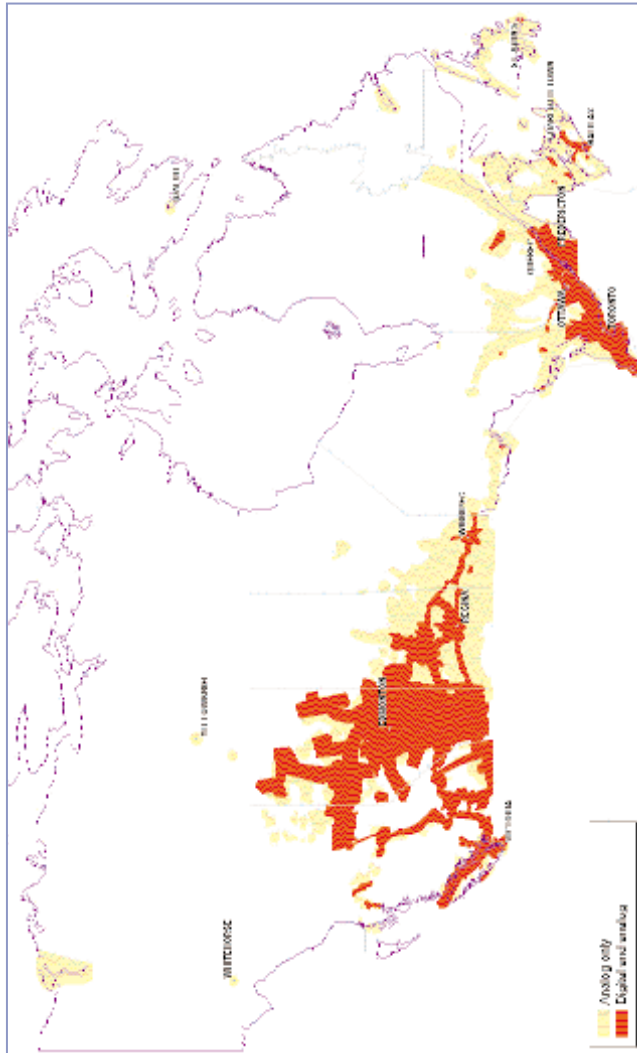
Figure 3.3: United States mobile operator coverage



Source: Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, SEVENTH REPORT, FCC, Adopted: June 13, 2002 Released: July 3, 2002. [http://www.fcc.gov/pub/Daily\\_Releases/Daily\\_Business/2002/db0705/FCC-02-179A2.pdf](http://www.fcc.gov/pub/Daily_Releases/Daily_Business/2002/db0705/FCC-02-179A2.pdf), viewed 25 October 2002

Canada is served by four main carriers—Bell Alliance, Rogers AT&T, TELUS and Microcell—providing over 94 per cent coverage of the Canadian population.<sup>184</sup>

**Figure 3.4: Canadian analogue and digital mobile coverage**



Source: Report to the Governor in Council: Status of Competition in Canadian Telecommunications Markets Deployment/Accessibility of Advanced Telecommunications Infrastructure and Services, September 2001, [http://www.crtc.gc.ca/ENG/publications/reports/PolicyMonitoring/2001/gic2001-09.htm#\\_Toc525923519](http://www.crtc.gc.ca/ENG/publications/reports/PolicyMonitoring/2001/gic2001-09.htm#_Toc525923519), viewed 25 Oct 2002

184 Canadian Radio Television and Telecommunications Commission, Report to the Governor in Council: Status of Competition in Canadian Telecommunications Markets Deployment, Accessibility of Advanced Telecommunications Infrastructure and Services, September 2001, [http://www.crtc.gc.ca/ENG/publications/reports/PolicyMonitoring/2001/gic2001-09.htm#\\_Toc525923519](http://www.crtc.gc.ca/ENG/publications/reports/PolicyMonitoring/2001/gic2001-09.htm#_Toc525923519), viewed 25 October 2002

Australia's mobile coverage by population is very similar to that of small, densely populated countries, such as England, where the network coverage is just over 99 per cent.

Despite these recent improvements, terrestrial mobile phone coverage remains a major telecommunications concern for regional, rural and remote Australians. As reflected in the 303 submissions received on mobile phone issues (representing 50 per cent of all submissions received), the key concerns are:

- many small population centres are still not covered by the CDMA network;
- coverage along some major highways passing through remote areas is inadequate;
- on-farm coverage is patchy or non-existent;
- coverage in some areas is patchy with frequent drop-outs; and
- CDMA network coverage is not as good as the former AMPS analogue network.

There has been some suggestion that the Universal Service Obligation (USO) should be modified to cover mobiles, but the Inquiry regards this as an inappropriate mechanism to deliver access. This issue is further discussed in Chapter 7.

### Opportunities to extend terrestrial coverage

Government funding, through NTN and more recently the TSI programs, has focused on extending coverage both in population centres and along important highways. The TSI programs in particular have taken a systematic national approach in identifying population centres down to a certain size, and highways of significant importance, and seeking to extend coverage to them to the greatest extent possible.

Support has been for capital equipment and installation, and experience from these latest tenders suggests that it would not be possible to provide significant further support for smaller population centres or more extensive highway coverage without the Commonwealth providing subsidies for recurrent costs. In other words, we have reached the point—under current industry cost and revenue structures—where it is not profitable for carriers to install and operate new base stations, even when the Government is subsidising 100 per cent of the costs of installing the base stations.

There may be some exceptions and the Government should certainly seek to identify and respond to those circumstances where extension of terrestrial mobile service is possible through Government capital support only. However, based on the evidence provided it is unlikely further support would lead to significantly greater coverage for the two per cent of Australians who will remain unserved, or for the approximately 80 per cent of the Australian landmass that will remain without terrestrial mobile coverage. For these people the best form of wireless mobile communication in the immediate future is likely to be by satellite, which delivers 100 per cent coverage of population and landmass.

Limits to the extension of terrestrial mobile coverage will change over time. In line with the overwhelming trend of telecommunications costs to reduce as technology develops, it is highly likely that the business case for extending into currently unserved areas will improve. The business case is likely to be further improved as more value-added services are provided over cellular networks, generating additional revenue opportunities for carriers. The Government should continue to monitor such developments into the future, to assess further opportunities for support.

### **Should the Government subsidise the recurrent costs of new base stations?**

Submissions have indicated that mobile services and mobile coverage are very important to rural and remote consumers. The Inquiry has therefore considered a key question facing the Government. Should the Government fund further extension of terrestrial mobile coverage by subsidising both the capital and recurrent costs of new base stations?

After consideration of the issues, the Inquiry finds that the degree of support provided by the Government for extending terrestrial mobile coverage into rural areas has been substantial, and it is difficult to justify extending this support beyond a 'capital only' basis. The reasons for this finding are:

### **Costs and benefits**

Over the past five years the Government has contributed approximately \$150 million to extend mobile coverage from 96 per cent to 98 per cent of the population through a range of programs. This has meant an average per capita subsidy for additional persons covered of approximately \$400. The size of this per capita subsidy has grown significantly as programs have increasingly targeted smaller communities and more isolated areas. It is apparent that to support some smaller communities the Government subsidy has approached \$2000 per capita. If the Government extends support to even smaller communities—even those that attract tourists and itinerant workers—and also supports recurrent costs, it is likely that the per capita subsidy could be significantly greater than this amount. The Inquiry believes that such an impost on the Australian taxpayer is difficult to justify when weighed up against the resulting benefits, particularly given that alternative satellite mobile services are available to all Australians.

## EFFECTS ON COMPETITION

Submissions from some mobile carriers, notably Vodafone and Optus, have complained about the unfair advantages to Telstra in being the only carrier in a position to benefit from Government programs to extend terrestrial mobile coverage into areas currently not served by mobile services. Vodafone has put forward the additional complaint that such programs also erode the market for its Globalstar satellite mobile service. While the Inquiry believes that the Government's approach to date can be justified on the basis of the significant consumer benefits achieved, such a justification would be difficult to sustain if the Government were to extend its support for mobile network roll-out through recurrent subsidies. Such an approach would extend and magnify the effect of Government intervention on commercial operators to an unreasonable degree.

### Problems with patchy coverage

Terrestrial mobile technology by its nature is a localised service, providing coverage to an area defined as a 'cell'—hence the term cellular mobile phone coverage. This technology therefore lends itself to definable locations such as towns or suburbs. However, even within towns or suburbs it is not always possible to provide full coverage. Topography, whether ridgelines in the countryside or high-rise buildings in a city, mean the designers of base stations must make allowance for the effects of these features. As a result the design of any terrestrial mobile phone system will always include compromises, and services can always be restricted and affected by topography, weather conditions usage patterns, and local government requirements.

When designing a base station's service coverage, engineers are guided by what is called the Northern American Bell 90/90 rule. This is defined as the ability to make and hold, or receive and hold, a call at a specified service quality at 90 per cent of locations for 90 per cent of the time. In practice this means that at every location calls are able to be made and held, and received and held, for at least 90 per cent of the time, and that at any given time, calls shall be able to be made and held, and received and held, in more than 90 per cent of the service area. This does not mean that there is a fixed ten per cent of the area with no coverage, although there may indeed be 'blackspots' within a service area that have reception problems because of the impact of surrounding topography.

In metropolitan areas such as Sydney, for instance, coverage is variable. Factors such as the buildings, limitations on the placement of base stations, traffic flows, and the effect of the topography of the harbour lead to both temporary and permanent blackspots and resultant drop-outs. No mobile service provider can guarantee to provide 100 per cent coverage for 100 per cent of the time.

## COMPARISONS BETWEEN CDMA AND THE FORMER ANALOGUE AMPS NETWORK

A number of submissions have claimed deficiencies in the CDMA system in comparison to the former analogue AMPS system, phased out two years ago. Most concern has centred on a perceived lack of coverage with CDMA, or at least CDMA not covering particular areas that were served by analogue. Comments received in the submissions were along the lines of the following:

*Mobile phone coverage is patchy and less reliable than the analogue service...*<sup>185</sup>

or

*Our local town Taralga was well served with Analogue mobile telephone coverage, and now there is no coverage what so-ever—either CDMA or GSM.*<sup>186</sup>

However, there were also submissions that the CDMA system was well received. For example:

*I believe that service is improving and is in fact better with CDMA but still lacks the coverage available under the old analogue system ...*<sup>187</sup>

and

*The introduction of the CDMA phone has been extremely good in our area. Generally we can say that it is much better than the displaced analogue phone or the standard digital phone.*<sup>188</sup>

As part of the implementation of the CDMA network the Government required Telstra, by licence condition, to provide reasonably equivalent coverage to that provided by the AMPS network. This requirement was monitored by the Australian Communications Authority (ACA), which confirmed in October 2000 that the new network was reasonably equivalent in its coverage, although there were some instances where fortuitous coverage from the AMPS system did not carry over into the CDMA network.

In fact, the CDMA network now provides significantly greater coverage than did the AMPS network, both in terms of population coverage and geographic coverage. CDMA coverage stands at 13.7 per cent coverage of the landmass compared to the previous AMPS coverage of seven per cent.

---

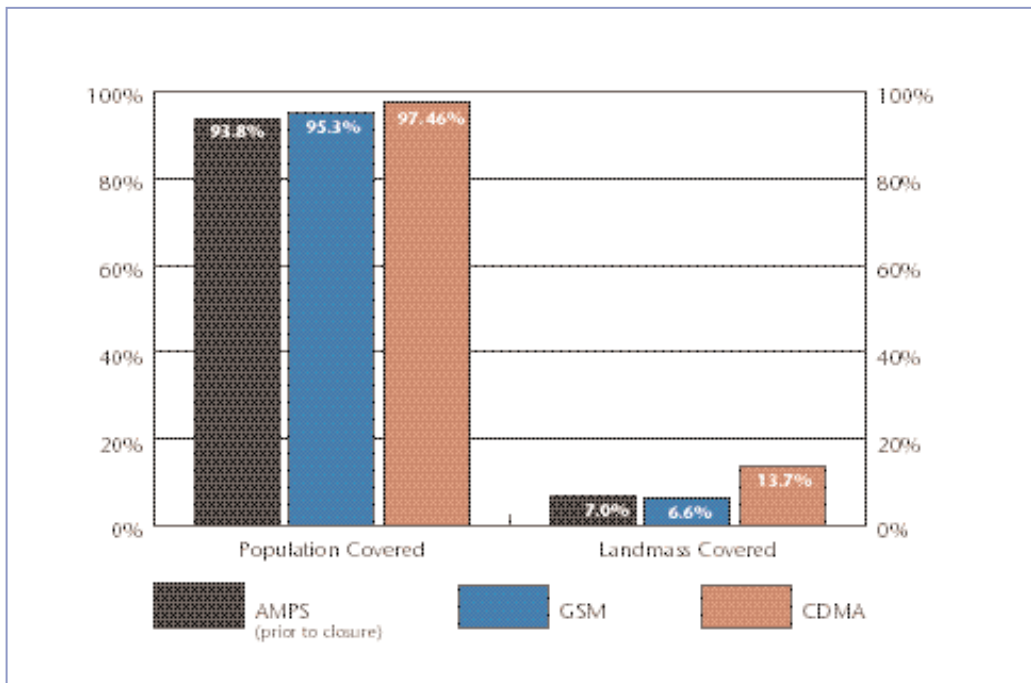
185 Brenda Gerrie, submission, p.1

186 Daniel Purser, submission, p.1

187 Ian Dawson, submission, p.1

188 Austen and Helen Knight, submission, p.2

Figure 3.5: Australian mobile phone coverage



Sources:

AMPS—Productivity Commission Report *International Benchmarking of Remote, Rural and Urban Telecommunications Services*, p.68

GSM—ACA, *Telecommunications Performance Monitoring Bulletin*, June 2002, p.13

CDMA—ACA, *Telecommunications Performance Monitoring Bulletin*, June 2002, p.13

The introduction of digital CDMA and GSM technology has provided significant other benefits for consumers, compared with analogue technology, most notably the provision of advanced services, such as Short Message Service (SMS) and Internet services, and the capacity to improve fixed telephone service delivery through CDMA wireless local loop services.

## SATELLITE MOBILE PHONE SERVICES

Satellite mobile phones have become increasingly accessible to rural consumers, particularly now the dual mode handset in a user-friendly size is becoming more readily available. These hybrid phones may combine both a terrestrial and a satellite mobile functionality. For instance, Vodafone offers the Globalstar and GSM combination. The phones default to the cheaper terrestrial service, but where the handset cannot detect a mobile tower it then switches to satellite mode.

In addition, Telstra offers a mobile satellite phone package that accesses the Iridium system using handsets similar in size to those used for the former analogue system.

In recognition that for some residents in remote areas of Australia terrestrial mobile coverage is not feasible, the Government has offered financial support for consumers to improve access to satellite mobile phone services. Support has been targeted at reducing the cost of satellite handsets, and is therefore dealt with in more detail in the discussion of prices below.

## COMPETITIVE ENVIRONMENT

There are four carriers with their own mobile phone networks, Hutchison, Optus, Telstra and Vodafone—operating three GSM and two CDMA networks.

In its submission Telstra advises that its two networks—GSM and CDMA—provide mobile phone network coverage to 95 per cent and 97 per cent of the population respectively. Coverage is planned to increase to 98.28 per cent in 2004. Telstra also offers satellite coverage to the whole country.

Vodafone is a specialist mobile network provider covering up to 92 per cent of Australia's population with its GSM network. This is expanding with the roll-out of the program extending mobile phone coverage on national highways.<sup>189</sup>

Hutchison offers CDMA services under its Orange brand through its own network in the greater regions of both Sydney and Melbourne, including Geelong, Newcastle, Gosford and Wollongong. Orange offers a local call zone service called TalkZone that allows timed local calls—including some free calls depending on the individual plan—from a nominated location, either work or home. This is achieved by telemetry in the CDMA network that determines whether or not a call is being made within the nominated zone.<sup>190</sup>

Optus advises that, over the past three years (January 1999 to June 2002) it has constructed an average of one new mobile base station every day to have a network consisting of over 3200 GSM base stations. This means the network provides coverage to 94 per cent of the Australian population.<sup>191</sup> Optus has advised in its submission that it has plans to compete more aggressively in mobiles in non-urban areas. Optus is rolling out 518 new base stations over the next two years. Of these, 224 or 43 per cent will be in non-urban areas.<sup>192</sup> Optus already has significant numbers of non-metropolitan subscribers—27 per cent of its GSM subscribers and 45.2 per cent of its CDMA subscribers.

---

189 Vodafone, *Mobiles and Prices*, <http://www.vodafone.com.au/>, viewed 9 October 2002

190 Orange, *Mobile Services*, <http://203.18.188.227/index.htm>, viewed 18 October 2002

191 Optus, *Mobile Services*, <http://www.optus.com.au>, viewed 9 October 2002

192 Optus, submission, p.42

In addition, further competitive pressure has been generated through resellers and what are called Mobile Virtual Network Operators (MVNO). MVNOs are a value adding entity that uses an existing mobile network to sell a service, which is usually linked into other branded services. For instance, Virgin Group has entered a joint venture arrangement with Optus Mobile. Virgin Mobile then combines the coverage of the Optus network with elements of its own infrastructure to offer specialised branded packages through its stores, by the post, online and through affiliated retailers.<sup>193</sup>

There appears to be a reasonable degree of industry satisfaction with commercial wholesale access arrangements negotiated in the marketplace. The arrangements are, in general terms, assisting affordability for service providers and this in turn is being passed on to the consumer with a variety of services at cheaper prices. Vodafone, when appearing before the Inquiry, indicated that the commercially negotiated arrangements for origination and termination with Telstra were satisfactory and it would not want an inflexible price set to access Telstra's network.<sup>194</sup>

## Competition between GSM and CDMA technologies

Telstra deployed CDMA to replace its phased-out AMPS system because it has similar coverage reach. Although CDMA has proved an effective technology for this purpose, there is only the one main CDMA network provider, Telstra, with Hutchison setting up limited networks around major metropolitan centres. According to the Communications Research Unit in the Department of Communications, Information Technology and the Arts (DCITA) as at 30 June 2002 there were 836 000 CDMA subscribers using either Telstra's network or the smaller Hutchison Orange network based around urban areas in New South Wales and Victoria. Take up of CDMA is increasing faster than the overall rate of subscriber expansion, with a 16.9 per cent increase in subscriber numbers in the previous six months.

GSM has more infrastructure and service provider competition between the three major players—Optus, Telstra and Vodafone. It seems likely that this competition will continue as enhanced data services are introduced. Overall the number of GSM subscribers is 11.74 million.

There has been some concern expressed that Telstra's focus on expanding its CDMA network into rural areas, and the Government's support for CDMA through various tender processes, has disadvantaged GSM users in regional Australia, and restricted competition in these areas.

---

193 Virgin Mobile, *Coverage Maps*, <http://www.virginmobile.com.au/>, viewed 9 October 2002

194 Vodafone, Inquiry communication

The Inquiry finds that competition, which is likely to be vigorous only in metropolitan areas, nevertheless benefits all Australians, including CDMA users, because of the standard national pricing and features offered by all the major mobile providers. The Inquiry also notes that Telstra has negotiated resale arrangements on its CDMA network with a number of providers, including: Optus, Southern Cross, Primus, Hutchison Orange, Austar and Cellular 1. In addition to reselling the CDMA network, Hutchison Orange also provide roaming onto the Telstra CDMA network. This is delivering service competition and choice for consumers, across the entire CDMA network area.

### Mobile number portability a benefit to competition

Mobile Number Portability (MNP) allows users to maintain their mobile number when switching service providers, and has been a useful spur to competition by overcoming the cost and convenience barriers of switching numbers. The direct benefits are in the more competitive metropolitan markets at this stage, but again competition between providers to keep more 'portable' customers benefits all customers through the standardised pricing and service regime.

## ROAMING

The TSI noted that there was an issue about roaming—the process of being able to connect to mobile networks other than the one a consumer subscribes to. There has been concern, raised again in submissions to the Inquiry, that lack of roaming between GSM networks in particular is a major detriment to consumers. For example:

*A major omission in Federally funded projects for extending mobile coverage is the lack of a mandatory requirement for national inter-carrier roaming.*<sup>195</sup>

The TSI noted that until recently there were no roaming agreements between the GSM carriers, but that GSM networks substantially overlap and there is not much general benefit to be gained by roaming.

Two years on, this observation regarding overlap of networks remains valid. Given the substantial growth in the size of Telstra's CDMA network in that time, the real benefit would be if GSM users could roam onto the CDMA network to allow more coverage in rural areas, but this is not currently technically possible.

For its part the Government has sought to encourage roaming through its initiatives to support coverage extensions. For example, under the MPOH program, the successful tenderer, Vodafone, has been required to offer roaming over the Government-funded

---

195 Joint Community Tele-Services Australia Inc and Communications Experts Group Pty Ltd, submission, p.3

parts of its GSM network. Vodafone have reported its national roaming agreement with Hutchison Orange means that Hutchison Orange customers will benefit from the MPOH infrastructure and coverage, while Telstra and Optus are currently in negotiations with Vodafone for limited use of the MPOH infrastructure.

There is also now a commercially negotiated roaming arrangement between Telstra and Vodafone to provide Vodafone customers with improved mobile phone coverage in areas of Victoria and Tasmania, demonstrating the viability of targeted roaming and the ability of the marketplace to supply a solution.<sup>196</sup>

For CDMA coverage outside its own network areas Hutchison has a roaming arrangement with Telstra which attracts a surcharge of ten cents per block of 30 seconds.<sup>197</sup>

In 1998 the Australian Competition and Consumer Commission (ACCC) investigated whether roaming should be compulsory, but decided against declaring roaming on the grounds of cost, the potential disincentive roaming may provide to expanding the network, and that it would be dealt with more efficiently by commercial negotiations.

The ACCC has advised the Inquiry that it is planning a review of the regulation of the mobile phone industry in 2003, and it is certain that this issue will again be examined.

## SHARING OF BASE STATIONS

In its submission to the Inquiry, Optus urged consideration of Government strategies to encourage greater sharing of infrastructure in less viable rural markets.<sup>198</sup> It argued that this would reduce costs and encourage competition in these more marginal markets.

While measures to encourage competition are welcome, it is by no means certain that such a strategy would allow more than one carrier to establish a viable business case in such markets. In any case both the legislative framework and actions of the regulator support mobile network infrastructure sharing. For example, in 1999 the ACCC issued a Facilities Access Code to smooth the progress of new players being able to access facilities that were already in place. The Code makes it compulsory for existing facilities owners to allow access based upon commercial negotiation. The Australian Communications Industry Forum (ACIF), in conjunction with the mobile carriers, is developing a Code that reinforces this process.

Site sharing has been boosted with carriers such as Vodafone and Optus outsourcing their infrastructure to Crown Castle. In 2001, 773 of Optus' mobile infrastructure locations were colocated, in most cases with those of Vodafone.

---

196 Vodafone, <http://www.vodafone.com.au>, viewed 1 November 2002

197 Hutchison Orange, <http://203.18.188.227/index.htm>, viewed 25 October 2002

198 Optus, submission, p.20

### FINDING 3.1

By the time all current Government-supported contracts are fully implemented in 2004, more than 98 per cent of Australians will have access to terrestrial mobile phone coverage. The Government has funded the capital costs of a large number of new base stations, and Telstra has extended its CDMA network well beyond what was required to replace its analogue (AMPS) network.

Under existing industry cost and revenue structures, it would be difficult to extend terrestrial mobile coverage significantly further even with Government support for capital costs.

After the implementation of the TSI initiatives, there may be a small number of areas without mobile phone services where the further provision of terrestrial mobile phone coverage would be economically viable with Government support for capital costs. These areas include population centres that have not received past Government support because they have fallen outside eligibility guidelines, as well as some key State and Territory highways.

### RECOMMENDATION 3.1

The Government, in conjunction with the carriers, should identify areas where extending terrestrial mobile phone service is still feasible through Government support for capital costs. The Government should consider providing funding support to such areas, which might include small population centres and key highways in regional areas.

## PRICE

### TERRESTRIAL MOBILE SERVICES

As the TSI found, there is no price discrimination between rural and urban areas. Lower rural population densities make the costs of providing telecommunications services to rural areas higher. However, as mobile services are priced on a standard national basis and these prices are commercially determined by the competitive metropolitan markets, rural consumers are sharing fully in those competitive benefits.

Both pre-paid and contracts are available to all users at uniform prices. Since an open telecommunications regime came into effect in 1997 there has been an estimated decrease in the cost of mobile phone services of 27.4 per cent. Two years ago the TSI found that Australian mobile prices were on a par with those overseas.

There were some submissions expressing concern about prices for terrestrial mobile services, but these concerns were generally about comparisons with fixed phone costs, such as:

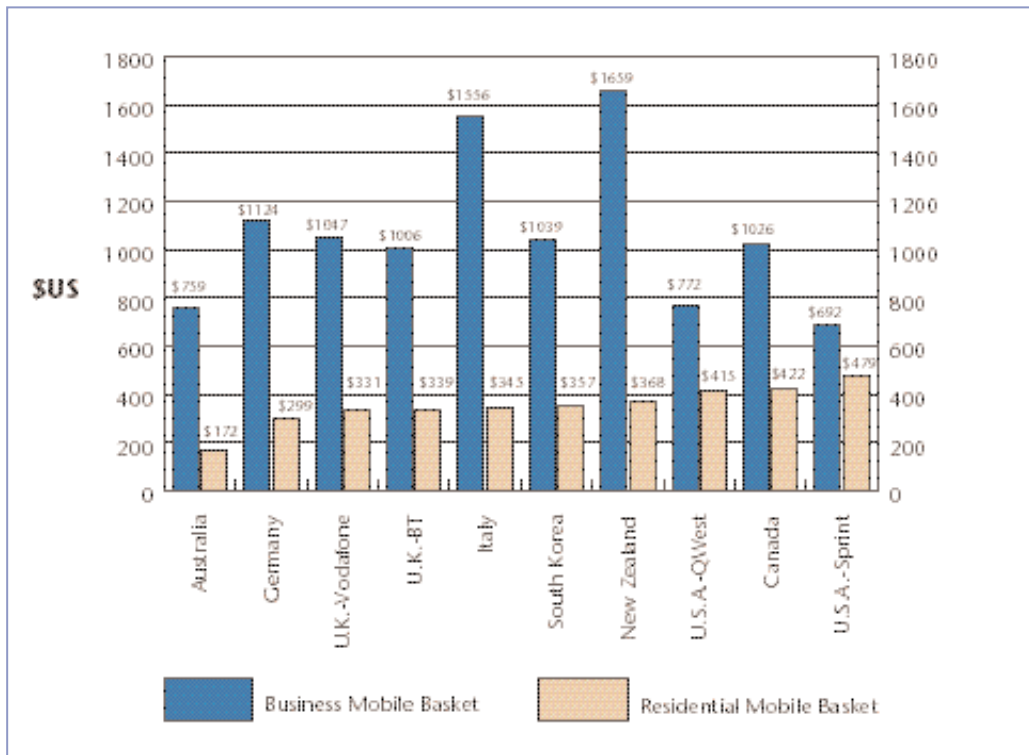
*Why should these [mobile] calls cost more than local land line calls when it is a radio signal with no land line maintenance to be paid for?*<sup>199</sup>

Current comparison of prices internationally indicates that prices in Australia are very competitive.

---

199 Bruce Styles, submission, p.2

Figure 3.6: International comparisons of mobile pricing



Sources: The mobile baskets are from Teligen T-Basket – Mobile (GSM/PCS) Basket, Teligen Limited, Feb. 2002; the Revenue Per Minute estimates are from Adam Quinton et al, Wireless Matrix – 3Q01, Global Equity Research, Merrill Lynch, Jan. 2002, at 3. Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Seventh Report, FCC, Adopted: June 13, 2002 Released: July 3, 2002. [http://www.fcc.gov/pub/Daily\\_Releases/Daily\\_Business/2002/db0705/FCC-02-179A2.pdf](http://www.fcc.gov/pub/Daily_Releases/Daily_Business/2002/db0705/FCC-02-179A2.pdf), pC-16, viewed 25 October 2002

There are some concerns about the complexity of pricing packages, but the Inquiry notes that this is being addressed by commercial responses. For instance, Vodafone has recently made available a product called ‘no plans™’ that does not lock a customer into a contract, does not charge monthly access fees, requires no minimum monthly expenditure and has no peak rates. Calls are charged at a simple rate of one cent per second, on standard calls, anytime. There are also brokerage services available to help people choose the most appropriate mobile phone deal. For example, there is Phone Choice<sup>200</sup> (currently restructuring its operations) and OptimiseMe<sup>201</sup>. The OptimiseMe site offers comparisons of 16 mobile providers as well as offering a billing assessment service to determine the best package for a user.

200 InfoChoice, <http://www.infochoice.com.au/>, viewed 18 October 2002

201 OptimiseMe, <http://www.optimiseme.com/>, viewed 18 October 2002

Aggregation of demand has also allowed groups to bargain with carriers to gain mobile discounts for their members. For example, benefits of membership of the Pastoralists and Graziers Association of Western Australia are telephone call and Mobile Net discounts with Telstra. Similarly, AgForce's members receive a ten per cent saving on all Telstra services. From this it can be seen that there are opportunities for aggregation of demand, and significant consumer benefits, across disparate regions, and not necessarily limited to a specific geographic area.

Price caps on Telstra previously covered mobiles. Under this arrangement mobiles were included in the basket of services, which were required to fall annually by 5.5 per cent. Mobiles are no longer covered, because the Government has deemed it unnecessary in the highly competitive mobiles environment. The Inquiry agrees that the mobiles market is highly competitive, and that significant consumer benefits have resulted, including in areas where only a single network operates.

## SATELLITE MOBILE PHONES

Full coverage of Australia is provided through satellite mobile phone systems. Prices for handsets and call charges for these satellite services are higher than for terrestrial mobile services, but are declining. Satellite handsets are now available from approximately \$1000 compared with more than \$5000 in 1997. Call costs have also decreased, with prices now available at below \$1 per minute under some pricing packages.

**Table 3.1: Mobile satellite price comparison**

	Telstra Mobile Satellite	Vodafone Globalstar	Optus Mobilesat
Handset Cost	\$995–\$1995	\$399–\$1974*	\$1188–\$3289*
Call Rate (\$/min)	\$0.86–\$1.98	\$1.74–\$2.84	\$1.62–\$1.98
Monthly Access	\$28–\$88	\$30–\$190	\$49.50–\$218.90
Fixed to mobile	\$1.20 (from Telstra fixed or mobile)	Standard across GSM or satellite	\$1.98 (from Optus BNS customers)
Cost to receive calls	0	\$1.74–2.84	0
24 mth cost			
Light user**	\$1809	\$3466	\$4477
24 mth cost			
Heavy user***	\$5171	\$5367	\$7429

\* Handset price lower for higher access plans or longer contract

\*\* Minimum monthly plan, 5 mins/mth in calls

\*\*\* Best call rate plan, 100 mins/mth calls

All cost information based on provider website prices 27 August 2002

Source: Telstra, presentation to the Inquiry, 2 September 2002, p.21

Telstra Mobile Satellite call charges start at \$0.99 per 30 seconds for the casual user plan decreasing to \$0.43 for the high end user<sup>202</sup> for most calls in the designated Australian Domestic Zone.<sup>203</sup> Customers can choose from three access plans on a 12-month contract commitment. The smaller and lighter handsets, similar in size to early model cell phones, are cheaper than previous Iridium-compatible models. This compares with per minute charges of up to \$1.03 cents for some low use terrestrial mobile phone service packages.<sup>204</sup> Handset prices for terrestrial services currently range from \$400 to \$2000 depending upon the package purchased.

It is expected that with further take-up of satellite services—supported through Government subsidy—prices should continue to decrease.

Competition between the two satellite mobile services could lead to further downward pressure on call charge prices, or at least additional innovative contract plans similar to terrestrial mobile services.

### Government support for satellite mobile services

The Government implemented the Satellite Phone Subsidy Scheme (SPSS) as part of its response to the TSI report. It is targeted at people living or working in the more remote parts of Australia, beyond CDMA or GSM terrestrial mobile coverage.

The subsidy is for the purchase of a satellite phone through a registered dealer. The amount of the subsidy is up to 50 per cent of the retail price, with a maximum subsidy of \$1100 (including GST). The subsidy is paid to the registered dealer prior to the consumer purchasing a phone from the registered dealer for the retail price less the amount of the subsidy.

A similar scheme, funded through NTN, operates in Western Australia. Therefore, if a person lives or works in Western Australia they are not eligible for the Commonwealth scheme. However, if they live outside Western Australia and work within it, or live in Western Australia and work outside it, they may apply.

As at 22 October 2002, DCITA had processed 478 applications under the SPSS, approving 430 and rejecting 48 that did not meet the program criteria.

Given the apparent popularity of these schemes, it is likely that funds currently allocated will be used up quickly. The Government should review resourcing and guidelines to assess the feasibility of extending the scheme and ensuring that all Australians who have appropriate need for such support can access it.

---

202 Telstra, *Telstra Mobile satellite Brochure*, \$28 monthly plan and \$88 monthly plans, sourced 12 October 2002. A four cent flag fall applies to each call.

203 Prices are the same across the Australian landmass, including the Australian Economic Zone 200 nautical miles out to sea and extend to all external Australian territories, except Antarctica.

204 Optus, *Your Call Mobile Plans*, GSM 'Your Call 33' package, sourced 12 October 2002. Does not include flagfall.

## Possible satellite rental schemes

One area of need for satellite mobile services could well be people visiting or travelling through remote areas on a casual basis—tourists are the obvious example. While it may not be appropriate to subsidise such casual users for the cost of a satellite mobile handset, access to a satellite mobile service for such users may still be very valuable, particularly for safety purposes.

A handset rental scheme might be very useful for these purposes, enabling ‘short-term’ casual users to have 100 per cent mobile coverage across Australia. The Inquiry notes that satellite handsets can already be rented, for instance, Tetracom Pty Ltd offers a GSM/satellite service on a lease or rental basis.<sup>205</sup> There may be further opportunities for commercial operators or organisations such as tourist authorities to implement such a scheme.

## Other service alternatives

Commercial products, such as HF radio systems and long range cordless phones, that can act as alternatives to mobile services are also commercially available, and the recurrent cost of these systems are significantly cheaper than satellite services.

### FINDING 3.2

Prices for terrestrial mobile services are standard across Australia, with strong competition resulting in prices for all Australians that rank well in international terms.

For the two per cent of Australians for whom terrestrial services are not available, satellite mobile services are supported through significant Government subsidies for handsets. These subsidies have reduced the cost of satellite handsets to levels comparable to terrestrial handsets. Call charges for satellite mobile services are still significantly higher than for terrestrial services but are trending down.

### RECOMMENDATION 3.2

The Government should consider extending the scope of its satellite phone subsidy scheme to cover all users with an appropriate need for a satellite service, and provide sufficient funds to meet full demand for the scheme.

---

205 Tetracom, Rental, <http://www.tetracom.com.au/rental.html>, viewed 17 October 2002

## CONNECTION AND REPAIR

### CONNECTION

Carriers have suggested connecting to the mobile network is usually a very quick process.<sup>206</sup> Assuming a customer is in an area of coverage and has a credit card, a connection to a mobile network is relatively straightforward. A subscriber is given a software identity and a handset can be mailed/couriered to them. Consumers can now also buy pre-paid phone kits from supermarkets, petrol stations and other retail outlets.

However it should be noted that some conditions may apply. One submitter outlined how he bought a CDMA phone on mail order, but found out later that the delivery area was restricted to areas with bitumen roads. The submitter was obliged to travel to the nearest centre that had tarmac roads to pick up the phone.<sup>207</sup>

An area of some confusion when arranging purchase and connection is choosing the most appropriate technology, whether CDMA or GSM, and deciding whether a car kit or special house antenna will be needed to provide extended coverage.

These concerns arise from the lack of clear information available to consumers, in particular to first time purchasers. To address this concern the ACA has published a Mobile [phone] Tool Kit<sup>208</sup>, also available on its website. The Tool Kit helps people identify the most appropriate phone service for them. Since 20 May 2002 more than 9500 copies of the Tool Kit have been sent out and there have been approximately 30 000 hits on the Tool Kit website. The Tool Kit brochure is also available at all dealerships of both Telstra and Optus mobile phones.

### REPAIR

The issue of mobile phone repairs was not widely raised in the submissions and does not seem to be a major problem for regional, rural and remote consumers.

There is a lower availability of Telstra shops, which provide repair services, in rural and remote areas. There are plans to roll out 25 more Telstra shops by 30 June 2003. Telstra is also making efforts to increase the number of agents who sell Telstra products and services. Currently there are more than 230 agents servicing rural and remote towns.

Other carriers such as Optus have arrangements for repairs both in and out of warranty. Optus has a system of customers returning a handset to one of its shops. In the case of an

---

<sup>206</sup> Optus, submission, p.41

<sup>207</sup> John Denham, submission, p.1

<sup>208</sup> ACA, ACA Mobile [phone] Tool Kit, <http://toolkit.aca.gov.au/>, viewed 16 October 2002

out of warranty phone an assessment is made and in the event of the cost of repairs exceeding \$65 the customer is given a verbal quote and asked whether he/she wishes to proceed with the repair.<sup>209</sup>

Telstra offers a troubleshooting help page on its website. This allows a customer to do some quick checks of the handset prior to submitting a customer enquiry form, which is then dealt with by a Telstra consultant.<sup>210</sup>

Where actual repair of the handset is required, repair facilities may be a problem in some rural areas, and handsets may need to be physically sent to a centralised depot specialising in repairs. However there appear to be repair facilities at least in some of the larger rural centres. For instance, in New South Wales there are repairers in centres such as Goulburn and Tamworth.<sup>211</sup>

There is a tendency, as with many modern electronic devices with frequently upgraded models, to replace the handset when it breaks down, regardless of where consumers reside.

## QUALITY OF SERVICE AND RELIABILITY

The TSI found that quality of service was a major issue in the submissions it received.

The ACA reports on quality of service (QOS) on a quarterly basis through its Telecommunications Performance Monitoring Bulletins. QOS is indicated by call drop-out and call congestion rates across a network.

Call drop-out is defined as the unintended disconnection of a call by the network, during the communication phase of a call, due to a fall in the strength of the radio signal. Call drop-out rates measure the connectivity performance of a mobile network.

Call congestion is defined as the failure by the mobile network to accept a bid to establish a call. Call congestion rates measure the performance of the networks in enabling users to gain access to the network.

The ACA reported quarterly on the performance of the three GSM and two CDMA networks until December 2001. These reports showed call drop-out rates of below 1.5 per cent and call congestion rates below 0.7 per cent.

---

209 Optus, Mobile Services, <http://www.optus.com.au>, viewed 9 October 2002

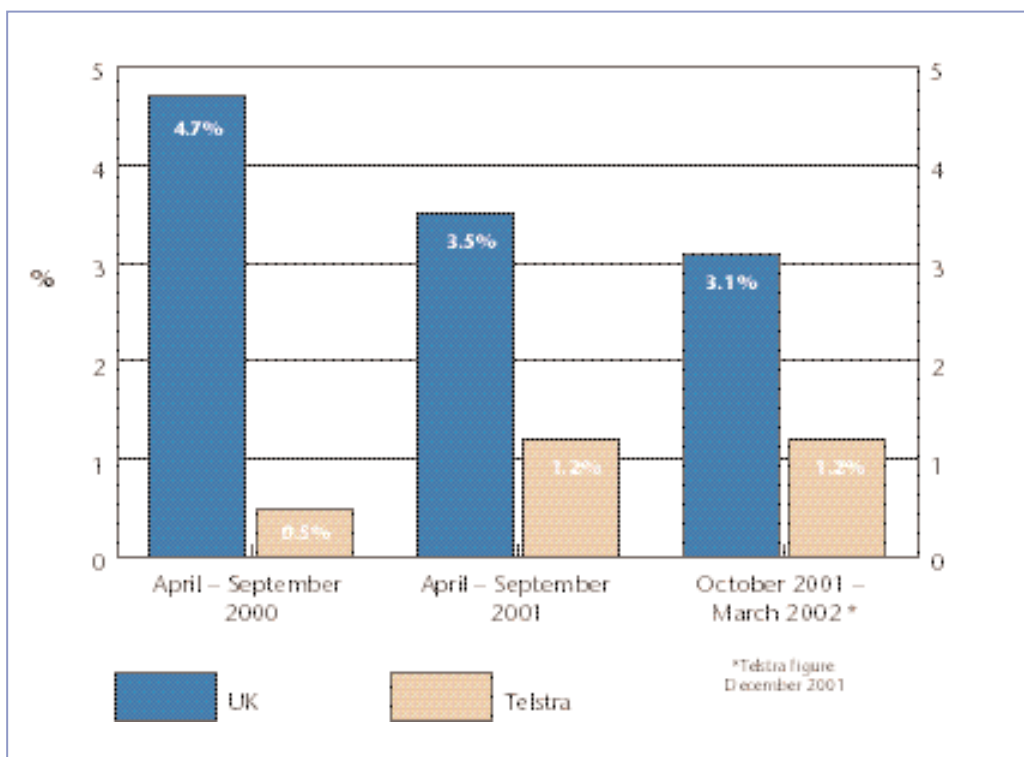
210 Telstra, Telstra Mobile Assistance, <http://www.telstra.com.au/mobilenetassist/index.cfm>, viewed 11 October 2002

211 Yellow Pages® OnLine, *Mobile Telephones--Repairs & Service*, <http://www.yellowpages.com.au/>, viewed 14 October 2002 (® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556)

The Productivity Commission report *International Benchmarking of Remote, Rural and Urban Telecommunications Services* p.79, found Australian call congestion measures of below one per cent compare favourably with equivalent measures for carriers in the United Kingdom, New Zealand, and Canada. With call drop-out rates of between one and two per cent, Australia also compares favourably with carriers in the United Kingdom, New Zealand and Canada.

Telstra compares favourably with United Kingdom carriers in terms of dropped calls.

**Figure 3.7: Call drop-out comparison between Telstra and the UK**



Sources: ACA Performance Monitoring Bulletins and Ofcom Call Success Rate Surveys

\* Telstra figure Dec 2001

The ACA has suspended GSM mobile performance reporting pending the development of new call congestion and call drop-out measures. However, the ACA has advised the Inquiry that the GSM networks and the Hutchison CDMA network continue to achieve high levels of performance.

The ACA has advised it will continue to monitor call drop-out and call congestion rates for the GSM networks using the old measures. When the new measures are developed and

reporting is resumed, it will be required annually rather than quarterly 'in recognition of the high levels of performance achieved on the GSM networks'.<sup>212</sup> The new approach will ensure all carriers are measuring performance in a consistent manner.

The issues of mobile phone coverage and perceived call drop-out levels were often linked in the submissions received by the Inquiry. A common situation recounted in the submissions is where calls drop-out when the caller moves out of the coverage in a township. However, some submissions, while noting drop-out problems, also noted the improvements that have and are being made to mobile networks.

*Mobile phone coverage in local vicinity, recently rectified by new tower works in Merbein area. Coverage had tended to 'drop out' in past—all seems OK at the moment.*<sup>213</sup>

However, there were also instances where people experience drop-outs when in and around their homes.

*Over the past 12 months the service has improved marginally to my digital phone but is at best 'unreliable' with frequent drop outs and an extremely directional nature. (Don't turn your head or you lose the signal!!)*<sup>214</sup>

The ACA is currently developing a monitoring and reporting framework for the CDMA network. The ACA is proposing that initially reporting on call drop-out and call congestion will be required on a quarterly basis. The revised reporting requirements are expected to be implemented for the March 2003 quarter.

While reporting on the quality of mobile networks occurs on a national level, it is not possible to compare network performance between regional and metropolitan Australia. The Inquiry notes that the nature of cellular systems is that they operate on line of sight basis. A topographic hindrance can occur in either rural or urban areas. If the subscriber goes out of sight of a tower, whether in town or the country, the call will drop-out, although in the city the call is more likely to be picked up by another tower.

Congestion is less likely to be a problem in lightly used rural cells, except where there are major gatherings such as agricultural shows.

When the ACA was publishing GSM performance data, it showed Telstra rapidly improving its performance in terms of call congestion as set out in Figure 3.8 below.

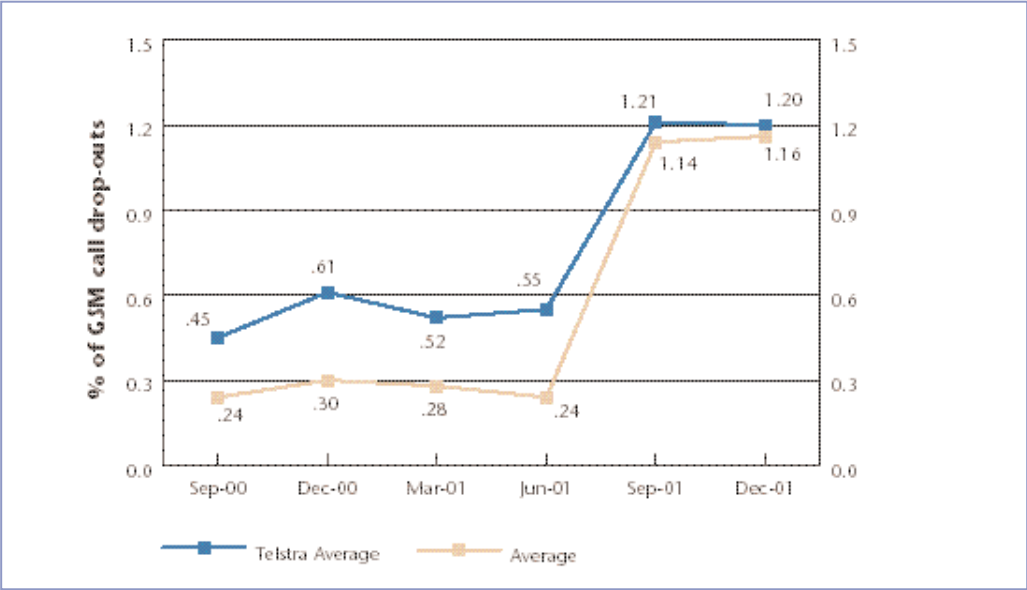
---

212 ACA, Inquiry communication

213 Sunraysia Area Consultative Committee Inc, submission, p.4

214 Ian Dawson, submission, p.1

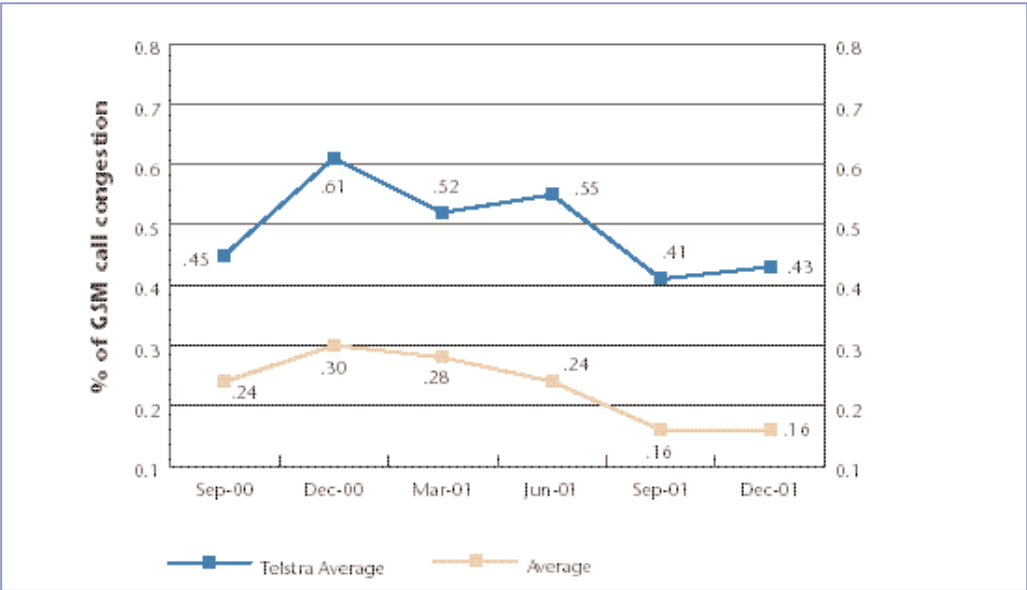
Figure 3.8: GSM call drop out (%)



Source: ACA Performance Monitoring Bulletins

Similarly, in the area of congestion Telstra was improving its performance.

Figure 3.9: GSM call congestion (%)



Source: ACA Performance Monitoring Bulletins

## SERVICE FEATURES

There has been a tendency to view mobile and fixed phone services as quite separate. However the differences between the two services are beginning to blur as the range of functions offered for each technology expands. For example, Telstra is very close to deploying its CDMA technology to provide fixed WLL services, in quite remote areas. On the other hand, through connecting a long range DECT cordless handset to the fixed line, its fixed network can now be used to provide near-mobile functionality up to ten kilometres from the handset base.

SMS is universally available via all carriers and networks. It allows mobile-to-mobile, PC-to-mobile, and mobile-to-PC messaging. A full range of other value-added services, including message bank and call forward is also available on both technologies.

The range of services and features now available through mobile phone technology is increasing as the technologies evolve, including:

- voice features: message bank—answering machine, calling number display, connection service (similar to a directory assistance service), call waiting, conference call, and call back service; and
- non-voice features: memo and group memo—pager service, variable ring tones, SMS, packet news and digital fax and data.

As can be seen from the table below, both the GSM and CDMA mobile systems offer similar levels of service.

**Table 3.2: Comparison of CDMA and GSM features**

Telstra Mobile Services	Digital GSM	Digital CDMA
MessageBank	✓	✓
Fax & Data	✓	✓
Short Message Service (SMS)	✓	✓
Memo	✓	✓
PocketNews	✓	✓
WAP	✓	✓
Easycall Call Waiting	✓	✓
Easycall Call Enquiry	✓	x
Easycall Conference Call	✓	✓
Easycall Calling Number Display	✓	✓
Call Connect (12456)	✓	✓
International Roaming	✓	x

Source: Telstra, <http://www.telstra.com.au/mobilenet/network/maps.cfm>, viewed 4 October 2002

Services such as GPRS, an 'always on' packet data service, is offered by the GSM carriers with coverage being slightly less than is available for voice. Telstra expects that by the end of the first quarter of 2003, GPRS will have the same coverage as GSM.<sup>215</sup> In rural areas where Telstra has used CDMA to provide coverage, a similar service is likely to be offered through the CDMA-based 1xRTT service, although a rural roll-out may be some time into the future. Telstra claims that, given the right circumstances, 1xRTT offers higher data rates of around 70–80kbps for the download link and up to 40 to 50kbps for the upload link. This compares to 20–25kbps for GPRS. Again coverage is approximately the same area covered by the current CDMA network.<sup>216</sup>

## DISABILITY ACCESS

An issue identified in some of the submissions was the incompatibility of CDMA and CDMA WLL with current generation teletypewriter (TTY) devices. TTY devices are used by the speech and hearing impaired to communicate across the network. This issue is primarily related to fixed telephone services, and is discussed further in Chapter 2.

Optus has made special arrangements for customers who need Braille and electronic billing. It also produces a brochure, *Mobile Phones and the Hearing Impaired or Deaf*, to provide information on service options for the hearing impaired. Selected Optus World stores also maintain CDMA trial handsets and Nokia loopsets for hearing aid users to assess levels of interference with their hearing aids.<sup>217</sup>

### FINDING 3.3

Call drop-out and congestion rates for Australian mobile networks are satisfactory, and compare well with overseas experience. Call congestion is less likely on more lightly used rural base stations. User concerns about call drop-outs in rural areas are more likely to be caused by coverage limitations than quality of service performance.

The range of value-added services provided through mobile phone technology is extensive, with users across all networks having access to these features.

---

215 Telstra, submission, p.96

216 Telstra, submission, p.97

217 Optus, submission, p.42

## CONSUMER AWARENESS

Two years on from the TSI, the Inquiry considers that mobile phone users still face some complex and confusing purchasing decisions, particularly in regard to pricing packages. While a multitude of pricing packages means a wide choice for consumers, it is often difficult to weigh up and evaluate the various components of packages on offer

Publications such as *Choice* magazine regularly publish best value surveys that receive press coverage. Various consumer guides, such as the ACA's Mobile [phone] Tool Kit, have been developed to assist people to assess their needs.

The Tool Kit is an interactive set of documents linking together information from the ACA and other sources to educate and inform consumers. To ensure that all consumers have access to the Tool Kit, it is available in the following three formats:

- online at <http://toolkit.aca.gov.au>;
- interactive CD ROM for those consumers that do not have Internet access but do have the use of a computer with CD ROM drive; and
- printed form for those consumers without access to a computer.

The central feature of the Tool Kit is an interactive set of questions which creates a personal summary of a consumer's requirements. Once a consumer has answered this short set of questions, the Tool Kit provides them with a unique summary, including useful information, tips and important questions to ask telephone companies before selecting a product or service.

Service providers often use a standard form of agreement (SFOA) which must be provided in writing by the telecommunications provider on request from the customer or potential customer. The telecommunications provider is also obliged to inform the customer of the availability of the SFOA.

One area of potential difficulty to consumers is in appreciating and dealing with contract issues. For example, a verbal agreement is equally as binding as a written one. The onus is on the customer to get a written confirmation of any such agreement.

Not all mobile phone carriers use SFOAs. Some use other forms of standard contracts. Providers usually only have an individually agreed contract with large or medium-sized business customers, not with individual customers.

Mobile number portability (MNP) is a bonus for consumers, but the opportunity needs to be better communicated to them. MNP empowers consumers and provides choice and flexibility. It allows a consumer to change carriers and keep the same phone number.

Australia has a flexible porting process and one that is affordable, efficient and easy for consumers to use.

The porting process occurs within hours, and customers do not have to contact the service provider they want to change from. An existing contract does not prevent a customer from porting. However, in such circumstances consumers are still required to pay a contract termination fee or balance of the contract.

Consumers are becoming more aware of the MNP opportunity. The ACA noted that its most recent consumer survey proved that awareness of MNP had risen sharply, increasing from 41.3 per cent of regular mobile phone users in June 2001 to 76.5 per cent in May 2002.

### RECOMMENDATION 3.3

The Government and industry should inform consumers about mobile phone services, including technology and coverage limitations, fees and charges, mobile number portability and contract issues. The Australian Communications Authority's Mobile [phone] Tool Kit has provided a valuable resource in this respect.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 3.1

By the time all current Government-supported contracts are fully implemented in 2004, more than 98 per cent of Australians will have access to terrestrial mobile phone coverage. The Government has funded the capital costs of a large number of new base stations, and Telstra has extended its CDMA network well beyond what was required to replace its analogue (AMPS) network.

Under existing industry cost and revenue structures, it would be difficult to extend terrestrial mobile coverage significantly further even with Government support for capital costs.

### FINDING 3.2

Prices for terrestrial mobile services are standard across Australia, with strong competition resulting in prices for all Australians that rank well in international terms.

For the two per cent of Australians for whom terrestrial services are not available, satellite mobile services are supported through significant Government subsidies for handsets. These subsidies have reduced the cost of satellite handsets to levels comparable to terrestrial handsets. Call charges for satellite mobile services are still significantly higher than for terrestrial services but are trending down.

### FINDING 3.3

Call drop-out and congestion rates for Australian mobile networks are satisfactory, and compare well with overseas experience. Call congestion is less likely on more lightly used rural base stations. User concerns about call drop-outs in rural areas are more likely to be caused by coverage limitations than quality of service performance.

The range of value-added services provided through mobile phone technology is extensive, with users across all networks having access to these features.

### RECOMMENDATION 3.1

The Government, in conjunction with the carriers, should identify areas where extending terrestrial mobile phone service is still feasible through Government support for capital costs. The Government should consider providing funding support to such areas, which might include small population centres and key highways in regional areas.

### RECOMMENDATION 3.2

The Government should consider extending the scope of its satellite phone subsidy scheme to cover all users with an appropriate need for a satellite service, and provide sufficient funds to meet full demand for the scheme.

### RECOMMENDATION 3.3

The Government and industry should inform consumers about mobile phone services, including technology and coverage limitations, fees and charges, mobile number portability, and contract issues. The Australian Communications Authority's Mobile [phone] Tool Kit has provided a valuable resource in this respect.

# CHAPTER 4

## INTERNET SERVICES

This chapter focuses on assessing access to Internet services via dial-up modems over the Telstra's telephone network (the PSTN), often referred to as narrowband Internet access. Consideration of the higher speed Internet market is covered in Chapter 6 (in response to Term of Reference 3).

There are approximately 4.2 million people in Australia who have access to the Internet via a dial-up service.<sup>218</sup> Of these, 3.7 million are household services, and 505 000 are business services.

In relation to dial-up Internet services the Telecommunications Service Inquiry (TSI) identified:

- the importance of the Internet to users across Australia; and
- that the key concerns of consumers with dial-up Internet services were data speeds and service reliability.

Pricing was also identified as an issue, with some rural and remote users facing a perceived disadvantage in comparison with metropolitan users because of higher call charges to access an Internet Service Provider (ISP).

## COVERAGE AND COMPETITION

### COVERAGE

All Australians with a fixed telephone line connection can access the Internet via an ISP using a modem, and have been able to since the development of the Internet as a public resource in the early 1990s. The issue identified by the TSI was that many Internet subscribers, particularly in rural and remote areas, needed to make a long distance call to connect to an ISP, thereby incurring significant additional costs compared with metropolitan users who had untimed local call access to a choice of ISPs.

---

218 Australian Bureau of Statistics, *Internet Activity - 8153.0*, March 2002, p.9

*While customers currently without local call access to an ISP face a disadvantage in accessing the Internet, the Government's initiatives regarding untimed local calls should ensure that call costs will no longer be a key factor in inhibiting access to the Internet.<sup>219</sup>*

Coverage, in the dial-up Internet context, has therefore always been about the availability of untimed local call access to an ISP, rather than the availability of access to an ISP per se.

This issue was addressed in the late 1990s by Telstra, and a number of other ISPs, offering untimed local call access across Australia, using the Telstra DialConnect<sup>®220</sup> wholesale data product. The problem with this solution was that ISPs—including Telstra's Big Pond<sup>® 221</sup> (Big Pond)—incurred significant costs to use this service to connect to their customers, and inevitably passed the costs on to their rural consumers through higher ISP charges. Therefore the overall price paid by many rural Internet subscribers remained unreasonably high.

In recognition of this ongoing problem the Government funded the establishment of many local ISP points of presence (POPs), through the Internet Access Fund (IAF) under the Networking the Nation (NTN) program. This was intended to extend untimed local call access to an ISP as widely as possible.

Since that time—and since the TSI reported—real price equity for rural and remote Internet subscribers has emerged with the development and deployment of the Telstra MegaPoP<sup>®222</sup> (MegaPoP) product, and similar offerings by providers such as Comindico. These wholesale data access products have enabled many ISPs, including Big Pond, to offer their Internet services nationally for the price of an untimed local call, and at identical ISP charges as apply to their customers in metropolitan areas. An indicative list of ISPs offering national untimed local call access of this kind, is provided at Appendix D.

ISPs are able to use this service either to provide national coverage (as identified above) or simply to extend coverage within their local region without needing to invest in additional POP infrastructure.

Telstra has advised the Inquiry that 34 of its Internet wholesale customers are currently using MegaPoP or a similar product to provide local call access to the Internet. A total of 28 of these providers service regional Australia, although they are not necessarily regionally based ISPs. Of these, 13 are focused on servicing only regional, rural and

---

219 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.100

220 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

221 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

222 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

remote consumers. Other ISPs are providing national Internet services using local call access technology in competition with Telstra's local call access products (for example, through Comindico).

## Government Initiatives to boost service availability

As indicated, prior to the development of new, national ISP products, the Government supported the development of local call Internet access through the IAF. Benefits to dial-up Internet users in remote areas have also been provided through the Government's Extended Zones agreement with Telstra.

## The Extended Zones Agreement

In the most remote parts of Australia, as defined by Telstra's Extended Zones (as outlined in Chapter 2), the Government has entered into a contract with Telstra, that guarantees residents in Extended Zones untimed local call access to an ISP.

In addition, under this agreement Telstra is also offering a subsidised satellite service (discussed further in Chapter 6), which provides access to the Internet at data speeds ranging from 33.6 kilobits per second (kbps) both ways to 400kbps download and 64kbps upload.

## COMPETITION

The TSI noted that:

*...generally Australians are well provided for in terms of choice of ISPs. There is sufficient competition among ISPs to ensure that customers can choose the ISP that best meets their needs.*<sup>223</sup>

Since the TSI, there has been a decrease in the number of ISPs as the industry has rationalised to some extent. However, there are still currently 571 ISPs operating in Australia. In the period September 2001 to March 2002, there was a decrease of 32 ISPs, most of whom were small providers servicing 100 to 1000 customers.<sup>224</sup>

The top seven ISPs—iPrimus, Telstra BigPond, OzEmail, Optus Net, AOL Australia, TPG and Austar Net—represent approximately 70 per cent of the total users served.<sup>225</sup> The majority of these ISPs provide local call access, either through a local POP or through the provision of a national local number, which can be accessed for the price of a local call.

---

223 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.109

224 Australian Bureau of Statistics, *Internet Activity - 8153.0*, March 2002, p.6

225 Internet.au magazine, *ISP Comparison*, November 2002, p.26

In addition, the number of physical POPs has remained high, with 2131 POPs available at the end of March 2002. In addition, there were nearly 500 000 access lines (i.e. connections to an ISP), with an average of 9.5 subscribers per line.<sup>226</sup>

## FINDING 4.1

All Australians can now access an Internet Service Provider (ISP) for the cost of an untimed local call, and at equitable ISP charges. A large number of ISPs now offer national dial-up access at the rate of an untimed local call.

## PRICES

The level of dial-up access charges were raised as a significant issue in the TSI report, although it made no finding on the issue of overall price.

As described above, since 2000 developments in the delivery of dial-up Internet access have led to universal access to a number of ISPs at untimed local call rates, and at metropolitan equivalent ISP charges. This competition between national providers has driven down the prices charged by ISPs located in the regions, and regional, rural and remote consumers have benefited accordingly.<sup>227</sup> Consumers can now choose from a large variety of services and pricing plans to suit their particular needs.

In its submission to the Inquiry, the Charleville School of Distance Education stated that '...families are happy with current costs of Internet services'.<sup>228</sup>

The monthly access charges of national ISPs are generally packaged with data charges, and may include a charge for exceeding a maximum monthly allowance of data download.

Until recently ISPs offerings often included per hour charging, sometimes at rates of up to five dollars per hour for casual users.<sup>229</sup> Industry trends are currently moving away from hourly ISP access charges towards monthly access with unlimited hours, but with download limits and volume charges being the variable factors.

---

226 Australian Bureau of Statistics, Internet Activity - 8153.0, March 2002, p.5

227 For example, Karratha Internet offered a three month package for \$90 in 2002. (Source – internet.au magazine, May 1999, p.62 and [www.kisser.net.au/kisser/services\\_general.htm](http://www.kisser.net.au/kisser/services_general.htm), viewed 24 October 2002)

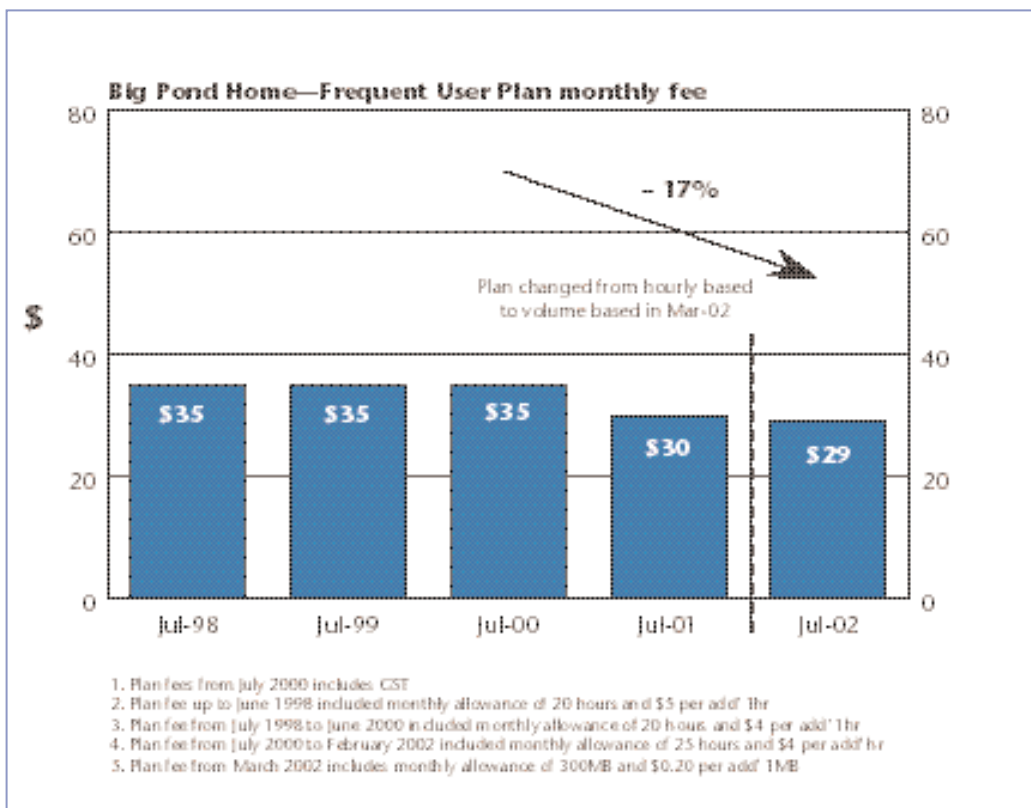
228 Charleville School of Distance Education, submission, p.1

229 iinet Discovery provides access at a rate of \$5 per month which provides four hours access, with each extra hour being charged at \$4. iinet, [www.iinet.com.au/products/dialup/discovery/index.html](http://www.iinet.com.au/products/dialup/discovery/index.html), viewed 23 October 2002.

This provides consumers with a wider choice of products to best meet their needs. To assist in identifying the most appropriate package, the Australian Communications Authority (ACA) is currently developing an Internet Tool Kit. This will provide consumers with information on the types of questions to ask providers, and assistance with identifying the most suitable package for their anticipated use.

The pricing of such packages has also been decreasing, benefiting all consumers, in both regional and urban areas. This trend is illustrated in Figure 4.1 with reference to the Big Pond Home product.

**Figure 4.1 Price of accessing Big Pond**



Source: Telstra, Inquiry communication

## FINDING 4.2

Prices for dial-up Internet services are equitable between metropolitan and regional, rural and remote subscribers, and competition has driven price levels down.

## SERVICE QUALITY, RELIABILITY AND PERFORMANCE

As noted in the TSI report, there is a range of factors that can affect the quality of service of dial-up Internet access. This includes the following factors:

- the quality and configuration of customer equipment (primarily PC and modem), and the connection by the customer into the Telstra network;
- the quality (including length) of the Telstra link from the customer to the exchange (and from there to the ISP);
- the quality and adequacy of the ISP equipment and links to the Internet; and
- the quality and adequacy of links within the Internet to the requested server (website), and the quality and adequacy of that server itself.

The main quality of service factors reported by consumers relate to data speed and call drop-out, or inability to establish or maintain a connection to an ISP. The TSI noted that:

*...data speeds of between 14.4kbps and 28.8kbps provide a reasonable service for the current usage of most residential customers.*<sup>230</sup>

## GOVERNMENT PROGRAMS ADDRESSING IMPEDIMENTS TO FIXED INTERNET SERVICE SPEEDS

The TSI report noted the complexity of the Internet supply chain, in particular that parts of this supply chain (such as the customer equipment, ISP set-up and Internet host sites) are largely outside the ability of Government's to influence. Much of the concern identified in the TSI report related to the influence of Telstra's telephone network in detrimentally affecting Internet speeds and reliability.<sup>231</sup>

### Internet Assistance Program (IAP)

In collaboration with Telstra, the Government has established the IAP, to enable dial-up subscribers to achieve satisfactory data speeds over Telstra's fixed network, in other words over the link between their equipment and their ISP.

---

230 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.100

231 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.112

The IAP is aimed at enabling users to achieve a dial-up Internet speed of 19.2kbps or equivalent over Telstra's fixed network.<sup>232</sup> It is to help users achieve a reasonable speed to allow effective email use and web-browsing. The IAP is a three-year joint venture between the Government and Telstra (formalised through a deed of agreement), which assists consumers with the following:

- testing of the data speed between their computer and an ISP through a special website;
- advice on correct configuration of their connection, PC and modem if necessary; and
- if such advice does not resolve an identified performance problem, technical support and/or upgrade of their Telstra line (including provision of an alternative service if necessary).

Where the test on the website indicates that a user does not achieve a data speed of 19.2kbps or equivalent, it is recommended that they undertake a series of steps to improve the data speed (e.g. changing location of modem or re-configuring the modem or computer). If their data speed is not improved, users are encouraged to contact the technical support personnel at the IAP. If, after following the advice of the technical support staff, a user still cannot achieve 19.2kbps, field staff will visit the users to test the line, check for faults in the exchange, check the computer and modem set-up, and then undertake any work that may be necessary on the line. If necessary, compression software is also made available to increase the throughput speed.

Up to June 2002, 53 614 users have accessed the IAP self-help website, and 11 035 people have contacted Telstra on the 1800 number in regard to the program. The program was initially targeted at regional users, but was made available to metropolitan users in March 2002. Since the program has been made available to metropolitan users, approximately 49 per cent of the users have been from metropolitan areas.

Of the 72 618 users to access the IAP (website access plus access via a 1800 number), 96.4 per cent of contacts were resolved by the online self-help services, and 2612, or 3.6 per cent, were referred to the technical support service. Of these, 1139 required assistance from service specialists. Only 1.8 per cent of those who accessed the IAP required rectification of faults in the Customer Access Network (CAN), and 131 were provided with compression software<sup>233</sup>.

---

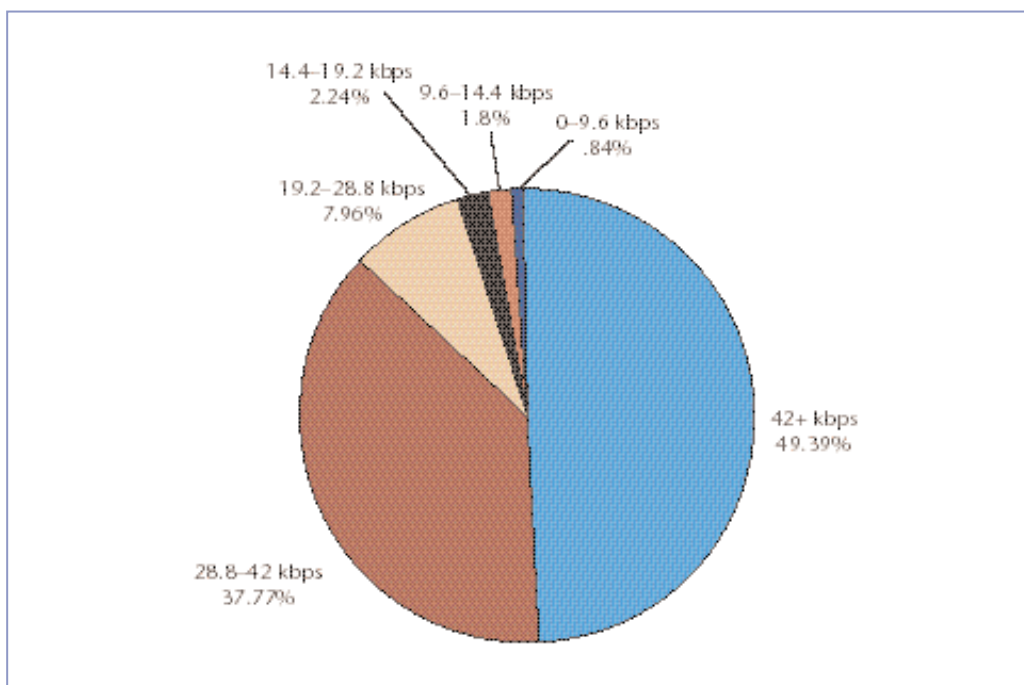
232 The TSI noted that 14.4kbps was a reasonable speed for email and web-browsing. In establishing the Internet Assistance Program, the Government, with the agreement of Telstra, determined that 19.2kbps was an appropriate data speed.

233 IAP, *4th Quarterly Report 1 April – 30 June 2002*, August 2002, p.27

These results would indicate that in the vast majority of cases, the problem is with the configuration of customer equipment rather than the Telstra line, and that technical advice on proper configuration is resolving customer concerns.

Further information from Telstra reinforces this view. A sample of the connection rates in regional Australia to Telstra's dial-up Internet server (Big Pond) in June 2002, showed that over 87 per cent of users achieved data speeds of 28.8kbps or better and over 95 per cent achieved data speeds of 19.2kbps or better (see Figure 4.2).

**Figure 4.2: Connection rates to Telstra's Big Pond Internet server, June 2002**



Source: Telstra, Inquiry communication.

These figures are 'raw'. That is, they include the influence of incorrectly configured customer equipment. The evidence from the IAP, cited above, shows that the vast majority of such data speed problems can be resolved through addressing and resolving a customer's computer and modem equipment problems. Based on this evidence it is likely that problems in the Telstra network are affecting well under one per cent of dial-up Internet users.

## Extended Zones Agreement

Specific arrangements are in place to address the special needs of those in Extended Zones. Under the Extended Zones Agreement, Telstra is required to ensure a data speed of 14.4kbps or equivalent is provided. In addition, Telstra also provided a two-way satellite offer, to provide subsidised access to higher bandwidth services (this is discussed further in Chapter 6).

## Assessment of the Internet Assistance Program

A high percentage of submissions to the Inquiry (37 per cent) noted concerns with dial-up Internet speeds and the quality of the services provided. The majority of Internet related complaints concerned problems with dial-up speeds.

While submissions demonstrated that some regional, rural and remote consumers are aware of the IAP, it is apparent that a significant percentage are still unaware of its availability. For example, a survey undertaken by the Shire of Dandaragan in Western Australia, showed that 82 per cent of respondents were not aware of the IAP.<sup>234</sup>

### FINDING 4.3

The Internet Assistance Program is achieving its objectives, but further promotion is necessary to ensure that consumers have full access to the service.

The Inquiry believes that the need for the IAP will continue beyond the current three year term of the agreement with the Government, and that it needs to be extended in both time frame and scope. The following issues need to be addressed in revised arrangements:

- once the upgrade to services in Extended Zones is complete, dial-up users in those areas need to be brought under the scope of the IAP; and
- consumers need to be reassured that they will be guaranteed a data speed of 19.2kbps (or equivalent throughput), over the Telstra fixed network, rather than provision of that level of service on a 'best endeavours' basis.

---

234 Shire of Dandaragan, submission, p.4

## RECOMMENDATION 4.1

The benefits provided by the Internet Assistance Program for users of dial-up Internet services should be guaranteed into the future. A licence condition should be placed on Telstra that would require all Australians to be guaranteed dial-up Internet speeds, or equivalent throughput, over the Telstra fixed network of at least 19.2kbps. As part of the licence condition Telstra should be required to report on its compliance with the requirement, and on the data speed performance of its regional network more generally which should be maintained at least at current levels.

## ISP Guideline

The TSI found that users of dial-up Internet services were generally satisfied with the service provided by their chosen ISP. It is not clear whether this satisfaction related just to service areas, such as connection, billing and contracts, where the ISP is clearly responsible for outcomes, or whether it also extends to other ISP service components relating to server capacity, and the capacity of the ISP's connection back into the Internet. The Inquiry suspects that the latter service issues are frequently confused with performance outcomes relating to Telstra's CAN.

Given the breadth of competition in the ISP industry, most regional, rural and remote consumers should be in a position to move away from poorly performing ISPs, or trade off quality for price. The key issue in making such choices is clear information as to what the choices are.

In order to better inform consumers of ISP service levels, the Government has required the ACA to develop an ISP Guideline to assist consumers compare and understand the services provided by an ISP. The Guideline requires an ISP to make available information in relation to price and billing, performance, help and installation, communication and security of services. This information is sought in a consistent format which enables consumers to compare not only price but also the quality of service being provided. For example, the ISP provides information on the average number of minutes per week when access to it is not available, information on support and assistance, and so on. ISPs are required to make this information available on their websites or to provide it in hard copy on request.

While the ISP Guideline is a good start in informing Internet users of ISP service quality, the Inquiry believes it could be further developed to cover additional quality of service matters, such as subscriber to modem ratios, bandwidth availability to the Internet, and the like.

#### FINDING 4.4

The ISP Guideline is a good start in better informing consumers of ISP service performance. The Guideline could be strengthened by providing additional information on ISP service performance.

### TECHNICAL DEVELOPMENTS OF RELEVANCE TO INTERNET SPEED

The TSI noted that there were several types of technologies that have been deployed to provide a fixed voice service, but which tend to limit data speeds. The key technologies of concern are services that are delivered via a Digital Radio Concentrator System (DRCS), which provides a maximum data speed of 9.6kbps, and some of the older pair gain systems.

#### DRCS Replacement

Telstra is currently replacing Radio Concentrator Systems (DRCS and ARCS) under both the Extended Zones Agreement and under the Remote Australia Telecommunications Enhancement (RATE) program in Standard Zones. There is a contractual requirement to complete the upgrade in the Extended Zones by December 2003. Telstra has advised that its DRCS and ARCS upgrade in Standard Zones is scheduled for 2003–04 but is aiming to complete the replacement roll-outs in both zones simultaneously. DRCS and ARCS systems will be replaced by CDMA wireless local loop technology, or a new High Capacity Radio Concentrator (HCRC) system branded as SWING. Both of these systems provide dial-up access of at least 28.8kbps (the DRCS replacement is discussed in detail in Chapter 2).

#### Pair Gain Systems

A pair gain system is used to provide an additional telephone service where there are insufficient copper lines available to meet the demand for services. There is a range of pair gain systems within the Telstra network, these are classified as either large pair gain systems, (providing up to 480 customer lines), medium (providing up to 16 customer lines), or small (providing up to eight customer lines).

It is estimated that 1.3 million services are provided over pair gain systems. Where properly installed, a pair gain connection meets all standard telephone service requirements. In many cases pair gain systems do not affect the dial-up Internet speed at all. In some circumstances they may in fact improve the speed achieved, particularly where a customer is some distance from an exchange.

Telstra has advised the Inquiry that approximately 120 000 services are provided via small systems, with the majority in non-metropolitan areas. The current small pair gain system technology being used by Telstra provides a data speed of 28.8kbps at locations up to 30 kilometres from an exchange. However over some smaller systems data speeds can be significantly less than this. One submission noted that:

*...despite having been informed of my need for internet access at speeds far in excess of those available via a D4 pair gain, Telstra proceeded to connect my service to the network via a D4 pair gain... I was only able to access the internet at speeds averaging of 6.4kbps with a maximum speed during brief periods over a session of 10.4kbps.*<sup>235</sup>

Telstra advised the Inquiry that service improvement initiatives with respect to pair gain systems are being put in place, including a major review of the quality of service provided by pair gain systems in all regional areas. This involves detailed field inspections to ensure that all aspects of pair gain system installations have met specification. Telstra have advised that early results show a decrease in customer complaints received from those on pair gain systems.

While these developments demonstrate that Telstra is starting to deal with the problem of poorly performing pair gain systems in a systematic way, given the degree of consumer concern about this issue, the Inquiry believes that greater assurance is required. In particular the Government should seek assurance from Telstra that all pair gain issues affecting dial-up data speeds are being addressed.

## RECOMMENDATION 4.2

Telstra should be required to demonstrate that it has an effective strategy to address any dial-up data speed issues arising from poorly performing pair gain systems. Telstra should provide a formal undertaking to the Government in relation to any actions necessary to implement such a strategy.

---

235 P Morgans, submission, pp.5-6

## THE SUITABILITY OF DIAL-UP TECHNOLOGY

The evidence presented to the Inquiry shows that there is a real discrepancy between the continuing frustration of Internet users in regional, rural and remote areas about the performance of their dial-up service, and the actual performance data provided by Telstra. Telstra's latest data would suggest that the performance of the customer access network in supporting reasonable data speeds is actually quite acceptable, but users clearly do not agree, with dissatisfaction very evident:

*Our Internet is only available at extremely slow speeds and drop-outs are frequent...*<sup>236</sup>

*Using our telephone, we cannot collect emails let alone download web pages as our telephone services is so slow and unreliable. When it drops out, you have to reconnect and then it starts downloading all over again so you also have to keep paying for reconnecting.*<sup>237</sup>

The Inquiry's view is that a key cause of this dissatisfaction is that dial-up technology is becoming inadequate to meet the service needs of users. The Inquiry believes that the Government and Telstra have initiated action that can reasonably be expected to address consumer concerns in regional, rural and remote areas in relation to dial-up speeds. Action on pair gain and the DRCS in Standard Zones should resolve the last pockets of clearly under-performing network elements. The guaranteed provision of a dial-up data service at a minimum speed of 19.2kbps, or equivalent throughput, over Telstra's fixed network would provide reasonable Internet access for dial-up customers.

However, in the Inquiry's view, dial-up modem technology, limited as it is currently to speeds below 56kbps, can no longer satisfactorily support the growing bandwidth needs of many Internet users, who increasingly need better and faster performance as they spend more and more time using the Internet for business, education, and social interaction.

This view is supported in several of the submissions.

*Internet has provided a rare sight into the I.T. of the future, but as we become more reliant on the Internet, the more frustrating we now become to its delivery and speed.*<sup>238</sup>

---

236 J Luckraft, submission, p.2

237 K and S Campbell, submission, p.1

238 R Burton, submission, p.2

*The Internet Assistance Programme sets a minimum speed of 19.2kbps. (ref: page 11) However, my experience and that of my fellows, is that this is proving inadequate for downloads such as the ATO package eTax.*<sup>239</sup>

*As more consumers switch to Broadband it is expected that the increase in page size will continue as website owners optimise their sites for Broadband. ... Given the increase in web page size it must be seriously questioned whether 19.2kbps is sufficient "for meeting common residential needs".*<sup>240</sup>

While the Inquiry expects there will continue to be a strong customer base for dial-up services well into the future, it is equally clear that many Internet users in regional, rural and remote areas have a requirement and a desire for a higher level of data service than can be provided over existing dial-up technology.

## FINDING 4.5

There is a need for Telstra and other service providers to more effectively promote and facilitate access to faster and more effective services, such as ISDN (as an immediate substitute for dial-up service) and Asymmetrical Digital Subscriber Line (ADSL) for the next generation of speed and functionality.

## CONNECTION

Customers who have the necessary computer and modem are able to connect to the Internet, after arranging access through an ISP. In most cases this involves a telephone call to an ISP and an associated membership fee transaction with the chosen ISP.

Where a second line into a house is required, the connection of this line is covered by the Customer Service Guarantee as for other fixed lines (see Chapter 2).

Computer and modem equipment is widely available and can be ordered over the telephone for local delivery at normal commercial rates. Instructions for self installation of fixed Internet equipment is widely available and technical assistance can be arranged for a fee.

---

239 S Thorneycroft, submission, p.1

240 L Staley, submission, p.7

A number of submissions have established that many consumers do not have a good understanding of their options in relation to Internet services. The Inquiry supports the development and publication of the ACA's Internet Tool Kit providing consumer information about Internet issues, including computer and modem equipment standards and options, and the location and services offered by different ISPs. The Tool Kit will also provide evaluation tools to assist consumers select a service package that best suits their needs. It is anticipated that the Tool Kit will be available in March 2003.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 4.1

All Australians can now access an Internet Service Provider (ISP) for the cost of an untimed local call, and at equitable ISP charges. A large number of ISPs now offer national dial-up access at the rate of an untimed local call.

### FINDING 4.2

Prices for dial-up Internet services are equitable between metropolitan and regional, rural and remote subscribers, and competition has driven price levels down.

### FINDING 4.3

The Internet Assistance Program is achieving its objectives, but further promotion is necessary to ensure that consumers have full access to the service.

### FINDING 4.4

The ISP Guideline is a good start in better informing consumers of ISP service performance. The Guideline could be strengthened by providing additional information on ISP service performance.

### FINDING 4.5

There is a need for Telstra and other service providers to more effectively promote and facilitate access to faster and more effective services, such as ISDN (as an immediate substitute for dial-up service) and Asymmetrical Digital Subscriber Line (ADSL) for the next generation of speed and functionality.

## RECOMMENDATION 4.1

The benefits provided by the Internet Assistance Program for users of dial-up Internet services should be guaranteed into the future. A licence condition should be placed on Telstra that would require all Australians to be guaranteed dial-up Internet speeds, or equivalent throughput, over the Telstra fixed network of at least 19.2kbps. As part of the licence condition Telstra should be required to report on its compliance with the requirement, and on the data speed performance of its regional network more generally, which should be maintained at least at current levels.

## RECOMMENDATION 4.2

Telstra should be required to demonstrate that it has an effective strategy to address any dial-up data speed issues arising from poorly performing pair gain systems. Telstra should provide a formal undertaking to the Government in relation to any actions necessary to implement such a strategy.

# CHAPTER 5

## OTHER KEY SERVICE ISSUES

### INTRODUCTION

The Regional Telecommunications Inquiry (the Inquiry) believes there are some service areas that need examination, beyond the assessments of key services undertaken in the previous three chapters. This chapter therefore examines a number of particular issues that have been identified by the Inquiry as important, namely:

- telecommunications services to remote Indigenous communities;
- the needs of the education and health sectors;
- raising community awareness, training and other support services; and
- public access facilities and telecentres.

### REMOTE INDIGENOUS COMMUNITIES

The Australian Bureau of Statistics Report *2001 Community Housing and Infrastructure Needs Survey* identified 1216 discrete (community managed) Indigenous communities in Australia, representing a population of 108 085 people. Of these discrete communities, 1139 were located in remote or very remote regions and a further 53 were located in outer regional areas, making them isolated from basic services such as education and health.

As well as being geographically isolated, these communities are often disadvantaged with lower average incomes, lower standards of education, higher levels of unemployment, poor housing conditions and higher levels of poor health.

Telecommunications has been identified as an important tool for the economic development and self-sufficiency of remote Indigenous communities, assisting them to achieve their social and business aspirations. However, these remote Indigenous communities have generally not attracted the interest of commercial service providers.

Improved telecommunications in these communities can provide benefits beyond simply improved communication capacity. Telecommunications in regional and remote Indigenous communities are closely linked to the delivery of government support services

and broadly underpin community and economic development, assisting the achievement of social and business aspirations.

*ATSIC sees telecommunications as central to the future of the Indigenous economy. It also believes that better communications will offer new solutions to old problems, contributing to capacity building and creating long term, sustainable Indigenous employment at the community level. Consequently, communications in regional and remote Indigenous communities must be treated as the essential fourth service (after housing, power and water).<sup>241</sup>*

*...the provision of modern and efficient telecommunications infrastructure and services is fundamental to the development of the region and the people that live and work there. Without the foundation that efficient, reliable telecommunications infrastructure and services can provide, the considerable social and economic potential of the Ngaanyatjarra Lands will not be met.<sup>242</sup>*

## WHAT THE TELECOMMUNICATIONS SERVICE INQUIRY (TSI) FOUND AND THE GOVERNMENT'S RESPONSE

The TSI found that:

*Given the particular telecommunications requirements of remote Indigenous communities, the Inquiry questions the extent to which the USO [Universal Service Obligation] which is based on the broader requirements of the Australian community, can address those needs.<sup>243</sup>*

In this context, the Aboriginal Torres Strait Islander Commission (ATSIC) suggested:

*...that some form of 'cashing out' of benefits for government services be examined, with a view to providing more targeted solutions for those communities.<sup>244</sup>*

In response to these recommendations, the Commonwealth Government acknowledged the deficiencies in current Universal Service Obligation (USO) arrangements in fully meeting the needs of Indigenous communities, but did not pursue the option of cashing

---

241 ATSIC, submission, p.17

242 Shire of Ngaanyatjaraku and Ngaanyatjarra Council (Aboriginal Corporation), submission, p.6

243 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.91

244 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.91

out USO benefits. It reinforced the value of the USO safety net, noting that cashing out the USO would not provide sufficient resources to meet the needs of remote Indigenous communities, and would take away from these communities a fundamental telecommunications right.

The Government announced that, as a first step in improving services in these communities, it would enhance the availability of payphone services for remote Indigenous communities under the USO.

In relation to the provision of fixed telephone and other communications services, the Government undertook a scoping study to better understand the needs of the communities, and to identify the best strategies to address those needs. As a result of that study the Government announced the Telecommunications Action Plan for Remote Indigenous Communities (TAPRIC) in May 2002. This plan puts in place a policy framework for improving telecommunications in these communities and also provides \$8.3 million over three years to supplement resources contributed through Networking the Nation (NTN), the Extended Zones Agreement and other Government initiatives.

The Inquiry recognises that there are a number of broad social issues that impact on the take-up of telecommunications services in these communities. Lack of awareness of services that are available and how to access them, services that are not affordable and are not appropriate for community needs, language barriers, lack of a reliable power supply and lack of access to technical support, are some specific impediments that reflect the unique circumstances of Indigenous communities.

### FINDING 5.1

Remote Indigenous communities remain the most disadvantaged telecommunications users in Australia and face unique difficulties in accessing adequate services. These difficulties are closely linked with broader social disadvantages faced by these communities.

TAPRIC suggests that a coordinated, holistic effort by governments and other stakeholders is needed and provides a strategic framework under which it aims to take effective, coordinated action into the future.

The Inquiry supports this holistic approach and notes that it is endorsed by key stakeholders, including ATSIC and the Northern Territory Government.

The Northern Territory Minister for Communications, the Hon Dr Peter Toyne MLA, highlighted to the Inquiry the Northern Territory Government's strategies to ensure a whole-of-government approach to supporting the development of telecommunications services in remote Indigenous communities. The Northern Territory strategies include cross-agency coordination, and direct ongoing funding support for the Outback Digital Network. The Outback Digital Network is seen as the key 'brokerage' mechanism for communities—supporting communities to access better and more appropriate services, and acting on behalf of communities in dealings with governments and service providers.

Minister Toyne also stressed the importance of supporting improved delivery of services across the spectrum, from basic voice services to advanced services capable of supporting videoconferencing. He made the point that both of these communications channels are well-suited to meeting the needs of remote Indigenous communities, rather than via the Internet where the text medium can sometimes be a communication barrier.

A number of key stakeholders have suggested that Commonwealth funding provided for TAPRIC is insufficient, given the scale of the problem facing remote Indigenous communities. For example, ATSIC's submission to the Inquiry states:

*ATSIC participates in TAPRIC process and strongly supports it. However it notes that much more substantial future funding will be required.*<sup>245</sup>

The Inquiry notes that TAPRIC funding builds on the \$35 million provided to Indigenous related projects under the NTN program, as well as support under other Government programs such as the National Communications Fund (NCF), mobile phone programs and the Untimed Local Calls (Extended Zones) Agreement, which all have the potential to provide improved services to these Indigenous communities.

The Inquiry finds that this total amount of Government support is sufficient to make a significant difference to improving telecommunications in remote Indigenous communities over the next three years. However, given the deep-seated and long-standing nature of the difficulties faced by these communities, it is likely that further future support will be needed.

---

245 ATSIC, submission, p.5

## FINDING 5.2

The Government has put in place a strategic and accepted framework to resolve the difficulties faced by remote Indigenous communities in accessing appropriate and affordable telecommunications services. The direction of the Telecommunications Action Plan for Remote Indigenous Communities is supported as providing a holistic and well-targeted way forward. Significant funds are currently being applied to meet the needs of remote Indigenous communities, but fully meeting the needs of these communities presents a long-term challenge, and further funding will be required in the future.

## PAYPHONES IN REMOTE INDIGENOUS COMMUNITIES

In responding to the TSI report the Government specifically identified the need for immediate action to improve Telstra's provision of payphones in remote Indigenous communities under its Universal Service Obligation (USO).

The Inquiry notes that a collaborative effort between the Government and Telstra (as the USO provider) to improve payphone services in these communities is now underway, despite some initial delays caused by lack of adequate data on community payphone needs.

Although this is an encouraging start, there remains a pressing need in this area. Information provided by ATSIC (based on 2001 Community Housing and Infrastructure Needs Survey (CHINS) data) indicates that there are 93 Discrete Indigenous Communities (DICs) with a usual population of 50 or more that are without access to a public telephone. Telstra data provided to DCITA suggests a similar number.<sup>246</sup>

In addition, there is a large number of smaller communities without payphones and the Inquiry suspects that many of these communities are without telecommunications of any kind.

The Inquiry considers that Telstra should place a high priority on the provision of payphones, or community phone alternatives, in those remote Indigenous communities that are without access to telecommunications services.

---

246 Telstra figures are based on communities identified for 1999 CHINS.

Where vandalism of payphones continues to be an issue in some remote Indigenous communities, Telstra needs to work with community leaders and representative organisations to develop strategies for addressing this difficult issue. For example, community ownership or adoption of local payphones, including decoration by local Indigenous artists, has been quite effective in some areas.

For many remote Indigenous communities a traditional payphone may not be the most appropriate solution, and other community-type telephone facilities may be more suitable. Nevertheless, for many communities payphones—possibly modified to suit community needs—will be required, and strategies need to be developed to ensure that such facilities are acceptable to, and supported by, communities.

The need for better payphone service is supported by a number of submissions:

*In complete contrast [to metropolitan areas] telecommunications in remote Aboriginal communities is characterised by:*

- *Low levels of penetration for the standard telephone service into residences.*
- *Shortage of payphones which in the absence of private telephone lines assumes greater importance.*
- *Waits of more than 30-60 days for payphone faults to be corrected.*<sup>247</sup>

*The Ngaanyatjarra communities have seen little evidence of the Government and Telstra improving payphone service levels in the Ngaanyatjarra communities through the installation of additional payphones or the provision of alternative telecommunications solutions. Some Ngaanyatjarra communities have had payphones installed with little or no prompting of Telstra. Other Ngaanyatjarra communities have had (or are having) long and exhaustive struggles with Telstra to have payphones supplied, connected, repaired or updated from being coin operated to card operated. Telstra's resistance to providing, repairing or upgrading payphones in those communities often seems to be based on whether payphone services have been previously subject to vandalism or are likely to be profitable to operate. Although Telstra's USO SMP [Universal Service Obligation Standard Marketing Plan] lists these factors as issues to be considered in*

---

247 West Australian Minister for Housing and Works; Local Government and Regional Development, the Kimberley, Pilbara and Gascoyne, submission, p.11

*regard to payphones, they seem to be used by Telstra to justify the non-provision of payphones even though the demand for payphone services is very high and even though most Ngaanyatjarra communities have implemented measures to prevent or reduce vandalism and damage to payphone services.*

*Telstra's USO SMP also sets out times for the supply, connection and repair of payphones in remote areas. The timeframes for payphone supply, connection and repair are extensive and the USO SMP gives Telstra a great deal of discretion in determining if and when it will supply, connect or repair a payphone service.<sup>248</sup>*

### FINDING 5.3

Telstra needs to continue progress in implementing payphone improvements in remote Indigenous communities as part of its Universal Service Obligation (USO). Telstra's activities in this area need to be well integrated with the provision of other appropriate telephone services under the USO and the Telecommunications Action Plan for Remote Indigenous Communities.

### RECOMMENDATION 5.1

Telstra should place a high priority on the provision of payphones, or alternative community phone systems, in those remote Indigenous communities currently without access to telecommunications of any kind.

## TELSTRA'S USO RESPONSIBILITY

Telstra's Universal Service Policy Statement and Standard Marketing Plan outlines Telstra's broad approach to ensure reasonable provision of fixed and payphone services. However, it is clear that take-up of these services in remote Indigenous communities remains low, and requires a commitment from Telstra to explore alternative arrangements that better suit the unique circumstances of these communities.

---

248 Shire of Ngaanyatjaraku and Ngaanyatjarra Council (Aboriginal Corporation), submission, p.30

ATSIC's submission to the Inquiry states:

*The DICs [Discrete Indigenous communities] in outer regional, remote and very remote areas are heavily disadvantaged in every facet of life.<sup>249</sup>*

The submission also states:

*...it [ATSIC] notes that Telstra's marketing approach is directed towards individual householders and that the terms offered relate to mainstream access. If services are not offered on a community basis most DICs will simply be defined out of the USO ambit.<sup>250</sup>*

Telstra's submission shows an encouraging intention to implement more appropriate telephone services in remote Indigenous communities. In particular, Telstra is promoting the use of the prepaid home phone product, *communic8*<sup>®251</sup>, as a product that enables better management of telecommunications costs within communities. However, further refinement of this product is needed to ensure it best meets the needs of these communities.

The Inquiry also believes that there are a number of other areas where significant improvements could be made without major application of resources, including the employment of specialised call centre staff who are more aware of the unique issues facing remote Indigenous communities, including language and other cultural issues. ATSIC's submission to the Inquiry states:

*A key concern is the difficulty experienced by people in the DICs in accessing or contacting Telstra. Its automated systems are a formidable hurdle for people with limited English and their frustrations are compounded when attempting to use the single payphone in a remote area.<sup>252</sup>*

The training of some call centre staff to deal with Indigenous cultural and service issues would support communities to effectively communicate with Telstra, and assist them to get better access to more tailored services. Therefore, the Inquiry considers that at least one call centre staff member with the appropriate training should be available at relevant call centres at any one time.

Another opportunity for Telstra to improve the delivery of telecommunications services to these communities would be to expand its number of Indigenous liaison officers. It is important to have a reasonable number of Telstra staff who have a detailed knowledge of

---

249 ATSIC, submission, p.16

250 ATSIC, submission, p.9

251 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

252 ATSIC, submission, p.14

conditions on the ground, and are able to develop working relationships with remote indigenous communities and individuals. This would assist in the development of more appropriate telecommunications products and services better suited to the needs of remote Indigenous communities. Liaison officers could also act as a resource for communities who are unsure what their rights are, or how to seek advice. ATSIC's submission to the Inquiry states:

*As events continually demonstrate, there is no substitute for 'hands on' and up to date knowledge of the 1216 DICs. With the best will in the world, it is simply impossible to address shortcomings in Indigenous communications services, let alone provide adequate consumer safeguards, without a detailed knowledge of conditions on the ground.*<sup>253</sup>

## RECOMMENDATION 5.2

Telstra should commit to improving the delivery of appropriate Universal Service Obligation services to remote Indigenous communities, particularly through the deployment of specialised call centre staff and Indigenous liaison officers.

## INDIGENOUS ONLINE ACCESS CENTRES

TAPRIC identified online public access centres as a solution to providing more affordable access to higher bandwidth services in remote Indigenous communities. ATSIC considers online public access centres to be very important, calling them the '...most promising means for providing communications services'.<sup>254</sup>

Typically, online public access centres provide multi-terminal access to applications such as the Internet, e-business facilities and videoconferencing. Videoconferencing in particular is well suited to addressing issues such as literacy and language barriers that are inherent in text based media. The Northern Territory Government's submission to the Regional Telecommunications Inquiry states:

---

253 ATSIC, submission, p.12

254 ATSIC, submission, p.20

*These communities are arguably some of the most disadvantaged in Australia and potentially have the most to gain from reliable broadband communications. Particularly because Indigenous societies are non literate and rely heavily on audio-visual means for communication.*<sup>255</sup>

While online access centres offer great potential benefits for these communities, the key challenge is in ensuring such centres are sustainable in the long term. The Consumers' Telecommunications Network's (CTN) submission states:

*We believe that the implementation of community access centres could be a key strategy in improving connectivity and access and we note that there are some policy recommendations in this respect contained in the TAPRIC report... However, we are not aware of any community technology centres—in any circumstances that have proved 'sustainable' without ongoing public support.*<sup>256</sup>

Under TAPRIC, a feasibility study into the longer-term sustainability of these facilities is being undertaken. As TAPRIC has noted, government support through using such facilities to coordinate service delivery is likely to be a key factor in their ongoing viability. This point was reinforced by Minister Toyne in his discussion with the Inquiry.

A more general discussion of online public access facilities, including sustainability issues, can be found later in this chapter.

## A BETTER INFORMATION BASE

TAPRIC noted the lack of accessible and reliable statistical information on telecommunications services to remote Indigenous communities. This has been apparent in the development of the payphone strategy by Telstra. Both Telstra and the Government are working to address this problem. The Australian Communications Authority (ACA) also has a role in ensuring that monitoring and reporting in this area is adequate.

### RECOMMENDATION 5.3

There should be more effective data collection and monitoring of telecommunications needs and services in remote Indigenous communities. The Australian Communications Authority should take a leading role in this area.

---

255 Northern Territory Government, submission, p.7

256 CTN, submission, p.20

# EDUCATION AND HEALTH SERVICES AND TELECOMMUNICATIONS

## ISSUES RAISED IN THE TSI REPORT

The TSI report identified telecommunications as becoming integral as a delivery mechanism in the education and health sectors.<sup>257</sup> The TSI report did not consider supply side mechanisms, such as industry-wide service obligations to be the most effective means of addressing education and health needs. It saw the education and health sectors as complex, and that prescribing universal requirement levels would be problematic. The TSI report viewed these sectors as significant purchasers of telecommunications, with the capacity to have their needs commercially met in the growing competitive market.<sup>258</sup>

The TSI report highlighted the potential for State and Territory governments to improve telecommunications service outcomes in key sectors such as education and health through their aggregated buying power.<sup>259</sup> The TSI report identified a concern in:

*...some rural and remote areas that state or nationwide service arrangements for these key sectors can substantially limit the potential to develop regionally-based demand aggregation projects.*<sup>260</sup>

It urged consideration of mechanisms to either reduce or eliminate the impact of sectoral or government-wide purchasing models on regional strategies.<sup>261</sup>

The TSI report recommended that the Government establish a national communications fund to assist significant communications projects by key users such as education and health, with a core criterion for funding such projects being the extent to which they improved communications services generally available to surrounding regional, rural and remote communities.

---

257 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.16

258 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.178

259 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.174

260 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.179

261 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.178

## GOVERNMENT'S RESPONSE TO THE TSI REPORT

### National Communications Fund (NCF)

The NCF was established in response to the TSI report Recommendation 8. The NCF supports significant communications projects in the education and health sectors in regional, rural and remote Australia, and has the following key strategic aims:

- the improvement of service delivery (education, health and telecommunications) in regional Australia;
- to promote partnerships and collaboration within and across sectors;
- to leverage additional resources from these sectors, from the telecommunications industry and from other tiers of Government; and
- to stimulate the broader provision of high bandwidth services to regional, rural and remote communities.

The NCF generated considerable interest with 59 applications being received for projects, each being required to have a minimum value of \$3 million. Applicants were also required to submit a financial plan, management strategy and project plan to demonstrate ongoing sustainability, potential community benefits and a systematic approach to project implementation.

The NCF is funding eight projects to improve education and health services in regional areas. It is expected that the projects will generate additional investment by the project partners to the value of \$60 million. Projects will provide quarterly, annual and a final report that will be used to assist in future project planning. The funded projects are:

- Network Western Australia—\$8 million. The project aims to significantly improve education and health services in regional Western Australia by upgrading telecommunications infrastructure and significantly increasing bandwidth.
- The Grampians Rural Health Alliance Network (Victoria)—\$8 million. A consortium of 12 regional health services, 48 additional primary care agencies and the regional licensed carrier OmniConnect will provide high speed and high capacity communications services to rural healthcare agencies in the Grampians area, a region with a population of about 210 000. Services will be provided into at least 40 rural and remote towns, mainly through points of presence at hospitals, and 'customer connections' to an additional 80 non-hospital sites in the region.
- Health and Education Information Access for Rural and Regional New South Wales—\$8 million. The project will build new 'last mile' infrastructure to up to 60 regional and rural education and health facilities to support the rollout of new tele-education

and telehealth services. Telecommunications infrastructure is expected to be established in 18 large regional towns across the whole state, including major population centres.

- Northwest and New England Broadband Telecommunications Network (NSW)—\$5.5 million. The project will install a broadband telecommunications network connecting 33 major health and tertiary education sites in 23 towns delivering improved telehealth and education services.
- New South Wales and Northern Territory Interactive eLearning—\$8 million. The project will establish a shared broadband Interactive Distance Learning communications infrastructure for small rural communities and isolated homesteads in areas of New South Wales and the Northern Territory. This infrastructure will deliver education services to School-of-the-Air and Distance Education students, isolated Indigenous communities, Technical and Further Education outreach students and adults seeking vocational education. Services will be delivered to about 3700 users in 547 sites-including 239 small, isolated schools.
- Outbacknet@qld—\$8 million. The project will provide education and health services to 70 rural and remote towns, including Indigenous communities in south western and western Queensland. New infrastructure will be installed, providing affordable and flexible broadband services to the targeted communities and direct competition in 'last mile' services. The project will benefit 30 hospitals and seven community health centres. The needs of 81 rural and remote schools in 66 towns, 11 TAFE campuses, and two Skill Centre campuses will also be addressed
- Regional Network Delivering Education Services (SA)—\$6 million. It is proposed that the funding be used for a broadband Internet Protocol-based network connecting 262 sites and linking up to 31 000 students and educators within the South Australian Department of Education and Children's Services and within TAFE.
- Broadband for Regional Tasmania Project—\$3 million. The project is focused on improving the provision of education and health services to regional and rural locations in Tasmania through an increase in the quantity, quality and affordability of the local telecommunications infrastructure. The project will be piloted in Queenstown and Scottsdale. On completion of the pilot, it is expected these services will be rolled-out in the education and health sectors to around 20 regional towns across Tasmania.

## Assessment of the NCF

The NCF is yet to deliver outcomes but indications are that results will be positive. The Inquiry has received positive feedback on the program from both State and Territory Governments and participating telecommunications service providers. The strategic approach taken by the Commonwealth Government under this program has been consistent with its approach generally. That is, it aims to provide capital funding to stimulate more extensive, sustainable commercial services. In this case there are also likely to be very significant direct benefits to target communities from enhanced education and health services.

The NCF is developing and testing collaborative approaches, including the bundling of demand to provide higher bandwidth services. Although yet to be fully implemented, the various NCF approaches may make supply of high bandwidth services to the general community in regional, rural and remote areas more commercially attractive. The NCF could be considered as a possible model for future Commonwealth Government action under Term of Reference 3, although it should be noted that the NCF is not a model that would necessarily provide broad equity of access across all areas in regional, rural and remote Australia.

### FINDING 5.4

The National Communications Fund has stimulated the development of services to meet the higher bandwidth needs of the education and health sectors, and has been successful in promoting collaboration and partnerships, both across the sectors and with telecommunications service providers.

## The importance of dial-up services

Dial-up access to the Internet remains critically important to the education and health sectors. The National Rural Health Alliance (NRHA) advises that many small non-government health organisations in rural Australia conduct their business via teleconferences and email, and that access to the Internet, e-discussion groups and web based course material is essential.<sup>262</sup>

Reliable access to the Internet, at all levels, is an integral part of teaching strategies. The Internet is used by teachers and lecturers as a teaching aid and a means of communicating with remote students, by students for research, for communications and to submit work.

---

262 NRHA, submission, pp.3-4

Most educational institutions presume that their students have reliable access to dial-up Internet services. A number of submissions commented on the need for reliable dial-up services:

- a submitter advises that he had to cancel plans to study online because of:

*...the absolutely disgraceful level of Internet service. It can take me as long as 20 mins to download a 10 page [document] and the machine quite often signs off because the line speed is too slow;*<sup>263</sup>

- a submitter from Blackall requires a reliable service to study with the Longreach School of the Air and to undertake tertiary study;<sup>264</sup> and
- of 171 first year students at Southern Cross University in Lismore, it is claimed only two could connect above 28.8kbps, and as a consequence the majority could not download geography papers.<sup>265</sup>

It is essential that schools and students have access to reliable dial-up Internet services. The quality of these services is discussed in Chapter 4.

## THE IMPORTANCE OF HIGHER BANDWIDTH SERVICES

Higher bandwidth services offer an opportunity to improve the provision of education and health services to regional, rural and remote Australia. Benefits resulting from higher bandwidth services include:

- virtual classrooms;
- distance learning programs by videoconferencing on the desktop;
- increased subject choice;
- delivery of a variety of health services (including telepsychiatry and teleradiology);
- providing continuing professional education, support and information;
- enabling enhanced general business administration; and
- improving access to care, including specialist care.

The potential for advanced telecommunications to stimulate major improvements in these vital service sectors has been strongly emphasised to the Inquiry.

---

263 Stuart Masters, submission, p.1

264 Susan Fletcher, submission, p.1

265 Southern Cross University student body, submission, p.1

The Western Australian Government argues that online education has the potential to help small schools in regional and remote Australia offer a range of services more akin to those offered in metropolitan Australia.<sup>266</sup> It claims this could increase literacy and retention rates, currently lower in regional than metropolitan areas.<sup>267</sup>

The Commonwealth Department of Health and Ageing sees that the importance of access to infrastructure and bandwidth is that it:

*...can assist with the better management of health records and can enable access and use of videoconferencing and image transfer technologies.*<sup>268</sup>

In a submission to the Broadband Advisory Group (BAG), the Australian Information and Communications Technology in Education Committee (AICTEC) stated that broadband services can allow students in remote Australia to obtain, through virtual classrooms and online teaching services, the advanced level maths and science teaching they need to obtain a better tertiary entrance score.<sup>269</sup>

The Commonwealth has recognised the importance of higher bandwidth services in education and health, and the need to ensure equitable access. The BAG terms of reference include consideration of:

- current impediments to, and likely drivers of, broadband take-up, particularly in key productivity sectors such as small business, education, health and community services; and
- possible policy solutions to current and emerging challenges on both the supply-side and demand-side of the broadband issue.<sup>270</sup>

## Education and health initiatives

At its July 2002 meeting, the Ministerial Council on Education, Employment, Training and Youth Affairs agreed to placing a priority on the provision of high bandwidth to schools, including the development of a national action plan.<sup>271</sup> The vocational education and training sector is also undertaking a study on the needs of the sector.

---

266 Western Australian Government, submission, p.18

267 Western Australian Government, submission, p.17

268 Department of Health and Ageing, submission, p.2

269 AICTEC, *Broadband Development in the Australian Education and Training Sector—Submission to the Broadband Advisory Group*, August 2002, p.7

270 Broadband Advisory Group, *Terms of Reference*, [www.noie.gov.au/Projects/consult/BAG](http://www.noie.gov.au/Projects/consult/BAG), viewed 11 October 2002

271 AICTEC, *Broadband Development in the Australian Education and Training Sector—Submission to the Broadband Advisory Group*, August 2002, p.6

The Minister for Education, Science and Training has commissioned a Higher Education Bandwidth Advisory Committee to:

- report on the needs of disadvantaged institutions or campuses;
- recommend initiatives to be funded under the Systemic Infrastructure Initiative in 2002–03;
- advise on bandwidth needs for undertaking high end research; and
- formulate a strategy by which the current and future needs of universities can be assisted by the Government in a structured way over the next five years.<sup>272</sup>

Through the Schools Online Curriculum Content Initiative, the Commonwealth, State and Territory governments are investing \$68.2 million to develop high quality online curriculum content.<sup>273</sup>

The National Health Information Management Advisory Council has developed *Health Online: A Health Information Plan for Australia*, the second edition of which was released in September 2001. The objective of the Plan is to work to secure affordable access to quality telecommunications for the health sector to serve consumers irrespective of where they live.<sup>274</sup>

The Inquiry notes and supports comments from the NRHA that telehealth initiatives should be seen:

*...as adjuncts to a local health workforce that is appropriate to meet everyday needs, rather than as replacements for it.*<sup>275</sup>

In other words, electronic communications should complement and supplement traditional face-to-face service, rather than replace it.

## Education and health higher bandwidth needs

The Commonwealth Department of Health and Ageing suggests that health services would benefit from having access to two-way 128kbps bandwidth to support data networks between remote clients, and that telehealth typically requires a bandwidth of up to 384kbps.<sup>276</sup>

---

272 AICTEC, *Broadband Development in the Australian Education and Training Sector - Submission to the Broadband Advisory Group*, August 2002, p.6

273 AICTEC, submission, p.10

274 National Health Information Management Advisory Council, *Health Online: A Health information Plan for Australia*, p.48, [www.health.gov.au/healthonline/welcome.htm](http://www.health.gov.au/healthonline/welcome.htm), viewed 16 October 2002

275 National Rural Health Alliance, submission, p.2

276 Department of Health and Ageing, submission, p.4

AICTEC advises that a school of 100 students is likely to require a 1.14 megabits per second (Mbps) connection and a school of 400 students a 3Mbps connection.<sup>277</sup> Larger institutions will require correspondingly higher amounts of bandwidth and smaller institutions lesser amounts of bandwidth.

As an example of what States and Territories have identified as the requirements of their systems, Western Australia is providing higher bandwidth services to all schools in the state. Regional high schools are being supplied with 2Mbps, regional primary schools with 512kbps and two-way satellite connections are being installed in 39 remote schools.<sup>278</sup>

### FINDING 5.5

The education and health sectors have a critical need for high quality Internet access in regional, rural and remote areas. Needs range from reliable low cost dial-up access for remote residences and small organisations, to higher bandwidth services for schools and larger health organisations.

## ISSUES WITH HIGHER BANDWIDTH SERVICES IN THE EDUCATION AND HEALTH SECTORS

From submissions received by the Inquiry it is clear that many education and health organisations and consumers still perceive problems in accessing higher bandwidth services in regional, rural and remote Australia.

Residential users and small organisations are increasingly seeking access to higher bandwidth services for the purpose of accessing education or health online content, for example, online curriculum. In its submission to the BAG, AICTEC expressed concern that where an education provider is not part of a state system, they may lack purchasing power and end up paying higher prices for services.<sup>279</sup> A number of submissions commented on the difficulty in obtaining access to higher bandwidth services in regional, rural and remote Australia.<sup>280</sup>

---

277 AICTEC, submission, p.8

278 NOIE, *Broadband Development in the Australian Education and Training Sector—Submission to the Broadband Advisory Group*, August 2002, p.6 and p.27

279 AICTEC, *Broadband Development in the Australian Education and Training Sector—Submission to the Broadband Advisory Group*, August 2002, p.14

280 Including submissions from: AICTEC; Charleville School of the Air; Tasmanian Farmers and Graziers Association; Towong Shire; Alice Springs School of the Air; Southern Cross University and Murdoch University

This is essentially an issue of equitable access for education and health users in regional, rural and remote areas to the standard higher bandwidth services, such as ADSL, that are readily available in metropolitan Australia. The issue is examined in detail in Chapter 6, in response to Term of Reference 3. As detailed in that Chapter, the Inquiry believes there would be real benefits to the education and health sectors if they were included in any broad Government support program to improve access to higher bandwidth services in regional, rural and remote Australia.

For schools and health organisations where services for multiple users need to be provided, significant additional costs could be incurred for managed services, such as IP addresses, firewalls, specialist software and the like. The Inquiry is advised that for schools such costs are often supported through whole-of-government arrangements, which involve such services being managed centrally. However, for independent schools and other organisations without substantial scale, such costs may be a significant impediment.

## DEMAND AGGREGATION OPPORTUNITIES

As noted earlier, the TSI report identified the potential for State and Territory Governments to aggregate demand to improve outcomes in the education and health sector. In its submission Telstra advised the Inquiry that demand aggregation opportunities are being taken up, and consequently extremely competitive prices for broadband services are obtained. Telstra advised that where aggregation has occurred education and health services in regional, rural and remote Australia pay equivalent costs to their metropolitan counterparts operating on the same basis. Discussions with State government agencies confirmed that significant discounts are indeed available to regional, rural and remote schools through whole-of-agency demand aggregation arrangements.

The Inquiry is aware of a number of examples of State governments using their buying power to secure better services and competitive prices, helping health services, schools and TAFEs to obtain high quality telecommunications.<sup>281</sup> For example:

- The Queensland Government instigated a project with Optus, the Reef Network, to establish a competitive fibre backbone along the Queensland coast. The Queensland Government is currently progressing its SmartNet project, which uses aggregated demand from the Government and the community to provide improved data services and infrastructure in Northern Queensland, as well as data services for Queensland schools.<sup>282</sup>

---

281 AICTEC, *Broadband Development in the Australian Education and training Sector - Submission to the Broadband Advisory Group*, August 2002, p.13

282 Queensland Government, *Submission to the Broadband Advisory Group*, August 2002, [www.noie.gov.au/Projects/consult/BAG/public\\_submissions.htm](http://www.noie.gov.au/Projects/consult/BAG/public_submissions.htm), viewed 16 October 2002

- The Victorian Government is aiming to increase the availability and lower the cost of access to information and communications technologies infrastructure for regional and rural Victoria. One means of achieving this is a new fibre optic network along the Regional Fast Rail corridors to Ballarat, Bendigo, Geelong and the Latrobe Valley. The network will upgrade signal and rail communications along four corridors. The network's surplus capacity will also be marketed to deliver improved and lower cost Internet services to more than 700 000 regional Victorians.<sup>283</sup>
- The Western Australian Government, through its Statewide Telecommunications Enhancement Program has achieved favourable arrangements for the provision of rural and remote services through both Telstra and Optus.<sup>284</sup> The Western Australian Government is also working with Telstra to provide 350 regional schools with high speed Internet access.

The NSW Government is taking a whole-of-government approach to the provision of higher bandwidth services in NSW. In June 2002 the NSW Government issued a Request for Quotation to meet the needs of the State education and health sectors. NSW is seeking:

- To roll-out broadband connections to schools, colleges and administrative centres throughout NSW. It will link approximately 2650 sites to the central St Leonards data centre.<sup>285</sup>
- To establish:

*...an integrated Supernet service for NSW health to support a range of health and medical applications.*<sup>286</sup>

This Request for Quotation is an interim measure while a process to provide effective solutions for the provision of broadband telecommunications services to NSW Government agencies is completed. The NSW Government is proposing a \$283 million optic fibre network scheme to provide connections for government services, including schools and hospitals with a particular emphasis on rural and regional communities.<sup>287</sup>

In the NSW education sector demand has been aggregated across the 2600 schools, TAFEs and other education sites. All schools information is directed to a central hub at St Leonards in Sydney where the Education Department controls and filters all services that are to be accessed by students. In the health sector demand has not been

---

283 Victorian Department of Infrastructure, *Improved Internet Services*, <http://www.doi.vic.gov.au/doi/internet/railprojects.nsf>, viewed 11 October 2002

284 Western Australian Government, submission, p.26

285 NSW Department of Information and Technology Management, submission, pp.3-4

286 NSW Department of Information and Technology Management, submission, p.4

287 NSW Department of Information Technology and Management, media release, 18 September 2002

aggregated as successfully because the autonomous health services have been buying individually. Where the demand has not been aggregated, health services have sometimes not been able to produce the level of demand to make the delivery of higher speed bandwidth services affordable. The NSW Government is planning to build a data centre for the health sector similar to that of the Education Department at St Leonards. This should result in demand aggregation outcomes similar to the education sector, and corresponding cost savings and improved access to service delivery.<sup>288</sup>

The TSI report expressed concern that this sector-based demand aggregation limits the ability of regions to develop regional demand aggregation strategies, because it effectively removes a large chunk of telecommunications demand from the regional demand aggregation business case.

As the need for higher bandwidth services continues to grow across these government sectors and the broader community, the potential tension between sector based aggregation and regional based aggregation models is likely to continue. In most of the cases outlined above, State Governments expressly intend to ensure that benefits are passed on to the broader community. For example, in its submission the NSW Government states it is seeking to work in partnership with industry and the other spheres of Government to provide telecommunications services, including higher bandwidth to regional NSW.<sup>289</sup>

Where government demand aggregation activity results in expanded service provision (i.e. infrastructure roll-out) broader community benefits are easily realised through public access to new services. It is more difficult to conceive of how the benefits of 'special deals' to government agencies, which result in discounted prices to government users such as schools, can be passed on readily to the broader community.

Another concern expressed in the education sector is that large scale demand aggregation strategies that 'lock up' a large part of the demand with one provider may limit competition in the longer run, and reduce the benefits flowing from competitive pressures. While the Inquiry recognises this risk, it is really a question of balancing short term benefits against these longer term issues, and the possible need for disaggregation in the future. This is really a matter for the strategic judgement of the parties involved.

---

288 NSW Department of Information Technology and Management, Inquiry communication

289 NSW Department of Information Technology and Management, submission, p.3

## FINDING 5.6

Governments across Australia are working to provide access to higher bandwidth services in the education and health sectors, often aggregating demand to obtain a better outcome. Where governments aggregate demand, there is a need to ensure that benefits obtained for education and health users in regional, rural and remote areas are made broadly available to the wider community. There is also a need to balance the benefits of demand aggregation with the longer term need to encourage and promote competition, to the maximum extent possible.

## TRAINING, AWARENESS AND SUPPORT FOR CONSUMERS

### TRAINING

Training was not referred to specifically in the Inquiry's Terms of Reference. Nonetheless a number of submissions have identified the need for adequate training, and have commented favourably on training provided under programs funded by NTN. During a bilateral meeting, members of the Online Council Regional Telecommunications Working Group asserted that training is essential for the take-up of advanced telecommunications. The Communications Law Centre argued that:

*Users and particularly new users require adequate support services that provide information, advice and assistance in relation to the use of communications services and with the problems and issues that arise out of their use.*<sup>290</sup>

In metropolitan Australia there is a significant amount of information technology training available. Universities, TAFEs and high schools all run after-hours courses on a range of information technology (IT) related subjects, varying from basic software usage, web page design through to advanced computer programming. In urban and large regional centres there are a significant number of private providers of IT training. In rural and remote Australia training opportunities are much less readily available, with more isolated users often having to travel long distances to access such courses.

---

290 Communications Law Centre, submission, p.2

The funding of online access centres and specific training programs through NTN has gone a long way to addressing the lack of training opportunities in non-metropolitan Australia. For example:

- 925 online access centres offer training courses in information technology;
- since 1998 over 25 000 Tasmanians have attended training courses conducted at Online Access Centres. The Tasmanian access centres have run more than 3600 free training courses;<sup>291</sup>
- more than 1400 families received training through the Internet to the Outback program; and
- the BridgIT project in Queensland provides IT and Internet training and support to rural women and their families at existing venues and in people's homes.

#### RECOMMENDATION 5.4

The Government should consider providing ongoing support for IT training and support services in rural and remote areas of Australia, where there are not the same opportunities as in urban areas. Further support should build on existing programs, such as Networking the Nation and State and Territory based initiatives.

### Disabilities training

The TSI recommended that a training program for users of TTY machines be incorporated into the National Relay Service (NRS). In response to the recommendation the Department of Communications, Information Technology and the Arts (DCITA), the ACA and the NRS provider—Australian Communications Exchange—have agreed to a framework for additional TTY training. Telephone services for people with disabilities are considered in more detail in Chapter 2.

---

291 Online Access Centre Association of Tasmania, submission, p.1

## AWARENESS

### TSI Findings

The TSI identified a lack of awareness among consumers regarding:

- standards for regulatory safeguards;<sup>292</sup>
- services available to meet the telecommunications needs of people requiring priority repair services or people on low incomes;<sup>293</sup>
- options other than mobile phones for ensuring personal safety;<sup>294</sup> and
- the provision of new services.<sup>295</sup>

The TSI found that an uninformed market is an impediment to competition and the telecommunications industry has a responsibility for increasing customer awareness.<sup>296</sup>

The TSI recommended that:

*Recommendation 9: That the ACA establish standard quality of service indicators to be adopted by all major service providers. Those providers should be required to publish their performance against those indicators on a regular basis.<sup>297</sup>*

## THE GOVERNMENT RESPONSE TO THE TSI REPORT

### Community Information Campaign

In response to the TSI concerns, the Government undertook a \$6.9 million community information campaign to increase awareness in regional, rural and remote areas of:

- the benefits and opportunities available through current government communications funding programs;
- the availability of commercial communications services; and
- consumer safeguards and rights.

---

292 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.62

293 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.98

294 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.125

295 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.132

296 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.179

297 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.179

The program consisted of a coordinated series of press, radio and television advertisements, a publication lift-out and editorial in regional papers. The campaign was cut short by the calling of the 2001 Federal election, although it had largely been completed by that time. The development of an online resource for regional telecommunications, the *New Connections* website and 1800 help line, was also included as part of the campaign.

## ACA activities

In response to the TSI, the Government asked the ACA how it could improve its communications and consumer information activities. The ACA has developed the concept of the Consumer Tool Kit, an interactive set of documents to educate and inform consumers. The Tool Kit is designed to help consumers choose the best value products and services to meet their unique needs. The Tool Kit is available, online, as an interactive CD-Rom and in printed form.

The first stage Tool Kit focuses on mobile services, and the second stage will focus on Internet and fixed line issues. Stage one was launched in May 2002 and stage two is scheduled for release in early 2003. The Tool Kits are aimed at assisting consumers to understand their needs, providing advice on the right questions to ask providers, and providing simple fact sheets for users.

The ACA also produces quarterly Consumer Information Bulletins, issues consumer alerts on issues such as mobile number portability, and has facilitated the development of a Guideline for Internet Service Providers (ISPs) which sets standards for the provision of information to consumers by ISPs.<sup>298</sup>

## Indigenous activities

As part of the TAPRIC, the Government will undertake an information campaign to assist the take-up of telecommunications services in remote Indigenous communities. The campaign will be aimed at raising community awareness of existing telecommunications rights and the obligations of service providers, and informing communities of existing and new relevant services and programs. It will also raise awareness about the role communities can take in the implementation of telecommunications services as part of broader community development.

The campaign will provide information about such rights and services as the USO, the Digital Data Service Obligation (DDSO), the Extended Zones agreement, Telstra priority services and TAPRIC itself. It will also provide communities with information concerning the procedures for applying for a phone service, maintaining such a service and reporting problems or faults if or when they occur.

---

298 see Chapter 4 and [www.aca.gov.au/consumer/index.htm](http://www.aca.gov.au/consumer/index.htm)

## TELECOMMUNICATIONS INDUSTRY OMBUDSMAN (TIO) ACTIVITIES

The TIO undertakes a range of activities designed to improve awareness of the TIO Scheme. These activities include:

- a quarterly newsletter, *TIO Talks*, that is distributed to all interested media, TIO members, government departments and agencies and members of the general public;
- information packs mailed to target interest groups;
- a website;
- comments and statistics for the media;
- an annual Community Service Announcement; and
- consultative forums in cities and regional centres.

The TIO's latest public awareness survey (March 2002) indicates that aided awareness of the TIO in regional areas has risen by three per cent to 48 per cent since the previous survey in 2000. Unaided awareness of the TIO in regional areas has risen six per cent to 11 per cent since 2000.<sup>299</sup>

## THE NEED FOR BETTER CONSUMER RIGHTS AND PRODUCTS INFORMATION

The Inquiry believes there is still a lack of awareness of consumer rights in non-metropolitan Australia. A number of submissions commented on consumers' lack of awareness of their rights.

The National Farmers' Federation (NFF) commented that there is:

*...a low public awareness of affordable digital data solutions that can provide a near perfect minimum throughput Internet service...*<sup>300</sup>

and that:

*...there has been very little public reporting of effectiveness of Networking the Nation projects. A greater awareness of the positive outcomes from a number of these projects could have a significant effect on services uptake.*<sup>301</sup>

---

299 TIO, Inquiry communication

300 NFF, submission, p.8

301 NFF, submission, p.8

Towong Shire Council advised:

*There would be very few members of the Towong Shire community who have heard of the USO, CSG & TIO.*<sup>302</sup>

Wooli Minnie Water Chamber of Commerce believes that:

*...people are unaware of current consumer rights.*<sup>303</sup>

The Sunraysia Area Consultative Committee advised that many people are not aware of their rights.<sup>304</sup>

Research carried out by DCITA in 2001 showed 26 per cent awareness in non-metropolitan Australia of the USO and 34 per cent of the CSG. The Department of Transport and Regional Services (DOTARS) commented that the relatively low take up rate of the free two-way satellite Internet connection in the Extended Zones is evidence of a gap in community awareness of telecommunications options.<sup>305</sup>

The Inquiry also notes comments from the Isolated Children's Parents' Association of WA and the Pastoralists and Graziers Association of Western Australia that information provided by Telstra tends to be seen as advertising or sales marketing, with strings attached, and discarded.

The Western Australian Government agrees that consumers need better information from the carriers about their products. It argues that:

*Carriers need to change their marketing focus to address the actual needs of consumers and specifically answer their questions evolving from 'What's in it for me?' 'What does it do?' 'What does it cost?' 'How do I get it?' and most importantly, 'Why can't I get it?'*<sup>306</sup>

In its submission DOTARS noted that in non-metropolitan Australia there is less knowledge of consumer rights and products. The Department suggested this could be due to the mass media being less pervasive, and a lesser likelihood of people knowing others who have tried various telecommunications services.<sup>307</sup>

---

302 Towong Shire Council, submission, p.1

303 Wooli Minnie Water Chamber of Commerce, submission, p.1

304 Sunraysia Area Consultative Committee, submission, p.1

305 DOTARS, submission, p.5

306 Western Australian Government, submission, p.31

307 DOTARS, submission, p.5

In its submission Telstra suggested that:

*...consumers would benefit from participation in a more comprehensive and directed consumer awareness education program.*

*In particular, Telstra believes that enforcement agencies could engage in further consumer oriented advertising and communications to promote consumer awareness...*

*A further suggestion would be for the enforcement agencies to be required to submit a consumer awareness and communications plan to the Minister, setting out how they will achieve increased consumer awareness in the same way that carriers are required to submit to the Minister and report against industry development plans.<sup>308</sup>*

Telstra advised that as it:

*...is of the view that consumer awareness of consumer protections is imperative, Telstra has undertaken to improve consumer awareness via the launch of the Telstra Customer Service Charter.<sup>309</sup>*

The Inquiry considers Telstra's initiative worthwhile, although it notes that the key focus of the industry should be promoting and explaining its products, and that government has a key role in informing consumers of their rights. These issues are addressed in detail in Chapter 7.

## FINDING 5.7

Awareness of consumer rights and commercial products in non-metropolitan Australia is still relatively low. Ongoing Government support for increasing awareness would be valuable.

The Inquiry recognises that a 'one size fits all' approach to raising awareness will not work, and communications need to be targeted on a regional basis with due regard to the demographics of individual regions. A range of delivery mechanisms, including local media and online access centres, are necessary to successfully promote awareness of consumer rights and products.

---

308 Telstra submission, pp.169-170

309 Telstra submission, p.170

## ONLINE PUBLIC ACCESS

Since 1997, NTN has funded more than 1600 telecentres and public Internet access terminals. This figure includes 925 centres with full or part time staff, unstaffed Internet kiosks and computers in public libraries with Internet access. The majority of the Commonwealth funded Rural Transaction Centres (RTCs) also provide online access to communities.

Both the Western Australian Government, through its telecentre program, and the Commonwealth Government through the RTC program are experimenting with mobile facilities to increase the number of communities and people who can be provided with online access.

Online public access centres are important because they:

- stimulate awareness, interest and demand for Internet and online services;
- are an important means of providing IT training in regional, rural and remote Australia;
- provide valuable access for casual users and those with limited financial means; and
- provide Government services online, and other valuable support services (e.g. RTCs and telecentres).

A number of submissions commented on the importance of online public access.

- The Cape Barren Island community has been funded through NTN for an online access centre that has been well patronised. This program has been very successful in assisting community members to access web based educational resources and the Internet in general.<sup>310</sup>
- Hay Shire Council—Council has an ISDN Internet connection heavily subsidised by NTN under the auspices of the State Library of NSW. This facilitates a reliable and reasonably efficient service that is well patronised by residents who would otherwise be denied access to higher bandwidth services.<sup>311</sup>
- Mrs Meredyth Cunningham—the Keith Community Library funded through NTN has been ‘well received in the Tatiara community and has been well patronised’.<sup>312</sup>

Most online access centres are established as a result of community need, and are either owned or managed through community-driven structures. Local government has played a significant role as a facilitator and manager of many online public access centres. Some

---

310 Cape Barren Island, submission, p.2

311 Hay Shire Council, submission, p.1

312 Meredyth Cunningham, submission, p.1

Councils host access centres in their public libraries and some provide premises rent-free to community organisations. The Local Government Association of South Australia advises that in South Australia, Councils are bearing the ongoing maintenance costs of access terminals.<sup>313</sup>

Telecommunications and Disability Consumer Representation (TEDICORE) identified online access centres as a means of providing access to the Internet for people with disabilities who may not otherwise have been able to afford assistive devices.

TEDICORE recommends:

*(a) Creation of a pool of assistive devices to facilitate access in community-based centres. This would be a national ongoing program and could be modeled on the Networking the Nation project in Tasmania entitled "Tech Assist Online". Funds would be used to purchase assistive devices to facilitate public access in centres used by people with disabilities.*<sup>314</sup>

The Inquiry considers that online access centres are ideally placed to play a strong role in supporting access to online services for people with disabilities.

## FINDING 5.8

Online access centres provide important services for regional, rural and remote communities, including online public access, training and support, and government services online. Online access centres can also play a strong role in assisting people with disabilities to access online services.

## Ongoing sustainability

Covering the recurrent costs of operation has always been a problem for online access centres. Centres by their very nature tend to be providing community services that are non-commercial, particularly in smaller rural towns. They are also often targeted at those people in the community who are least able to afford commercial prices for the services provided.

Revenue from public Internet access and training is generally insufficient to sustain online access centres. To date, NTN, state and local governments have provided support to centres.

---

313 Local Government Association of South Australia, submission, p.4

314 TEDICORE, submission, p.8

For example:

- NTN provided top up funding to centres in Victoria, Queensland, South Australia and Tasmania.
- The Western Australian Government contributes \$20 000 annually to each telecentre to employ a part time staff member. The telecentres are expected to generate sufficient income to meet day-to-day expenses.
- A range of financial and non-financial support is provided to NSW telecentres. The NSW government provides:
  - ~ \$5000 per annum per centre to subsidise free access to NSW Government online services;
  - ~ up to \$5000 per annum per centre for new hardware and software;and
  - ~ up to \$900 per annum per centre to participate in skills training relevant to the operation of the centre.<sup>315</sup>

In Tasmania:

*Thin markets and the tension between providing low-cost public access and generating income means that most centres generate between 10-20% of their operating budgets through user fees and other revenue generating activities.*<sup>316</sup>

The Tasmanian Government therefore provides additional funding to the telecentres.

The telecentres most likely to be sustainable are those that are entrepreneurial and diversify their business to expand the range of services offered, and being able to generate adequate revenues without 'treading on the toes' of commercial operators.

The delivery of government services for a fee provides centres with an important opportunity in this regard. RTCs and Western Australian telecentres are increasingly operating on this fee for service model. Many Western Australian telecentres for example, deliver services on behalf of the Australian Tax Office, the Department of Health and Aged Care's Office of Rural Health, Centrelink, Veteran's Affairs, the Health Insurance Commission, Telstra Country Wide<sup>®317</sup> and Westpac Challenge Bank.

---

315 NSW Office of Information Technology, Keeping a CTC going, [www.ctc.nsw.gov.au/get\\_involved/keeping.jhp](http://www.ctc.nsw.gov.au/get_involved/keeping.jhp) viewed 11 October 2002

316 Tasmanian communities online, [www.tco.asn.au/program.cgi](http://www.tco.asn.au/program.cgi) viewed 11 October 2002

317 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

The Community Tele-Services Australia Inc. and Communications Expert Group advise that centres have the best chance of survival if they are co-located with a library, banking or other revenue generating opportunity, provide Federal, State and Local Government services and deliver:

- Internet services;
- micro-business services; and
- training and support.<sup>318</sup>

The general philosophy of online access centres has been not to compete with commercial facilities if these are introduced as a result of growing community demand. Online access centres generally seek to 're-invent' themselves as required to ensure that they are always at the 'community service' end of the service spectrum. That is, they seek to provide public services that are not available commercially, or are not available to particular sectors of the community—for example, low income users.

It therefore appears likely that some, if not most, online access centres will need an amount of ongoing government assistance to survive. In particular, access centres serving remote Indigenous communities may struggle to survive without ongoing assistance.

Such assistance could be in the form of fee for service (e.g. payment for delivery of training and services) and/or direct ongoing financial support. The three tiers of government, Federal, State and Local, need to cooperate to achieve the best model for jointly funding centres, to ensure that they can continue to deliver services that meet community needs.

## RECOMMENDATION 5.5

All tiers of government should work together to support online access centres in regional, rural and remote Australia, and to enable these important community facilities to remain viable.

---

318 Community Tele-Services Australia and Communications Expert Group, submission, p.1

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 5.1

Remote Indigenous communities remain the most disadvantaged telecommunications users in Australia and face unique difficulties in accessing adequate services. These difficulties are closely linked with broader social disadvantages faced by these communities.

### FINDING 5.2

The Government has put in place a strategic and accepted framework to resolve the difficulties faced by remote Indigenous communities in accessing appropriate and affordable telecommunications services. The direction of the Telecommunications Action Plan for Remote Indigenous Communities is supported as providing a holistic and well-targeted way forward. Significant funds are currently being applied to meet the needs of remote Indigenous communities, but fully meeting the needs of these communities presents a long-term challenge, and further funding will be required in the future.

### FINDING 5.3

Telstra needs to continue progress in implementing payphone improvements in remote Indigenous communities as part of its Universal Service Obligation (USO). Telstra's activities in this area need to be well integrated with the provision of other appropriate telephone services under the USO and the Telecommunications Action Plan for Remote Indigenous Communities.

### FINDING 5.4

The National Communications Fund has stimulated the development of services to meet the higher bandwidth needs of the education and health sectors, and has been successful in promoting collaboration and partnerships, both across the sectors and with telecommunications service providers.

### FINDING 5.5

The education and health sectors have a critical need for high quality Internet access in regional, rural and remote areas. Needs range from reliable low cost dial-up access for remote residences and small organisations, to higher bandwidth services for schools and larger health organisations.

### FINDING 5.6

Governments across Australia are working to provide access to higher bandwidth services in the education and health sectors, often aggregating demand to obtain a better outcome. Where governments aggregate demand, there is a need to ensure that benefits obtained for education and health users in regional, rural and remote areas are made broadly available to the wider community. There is also a need to balance the benefits of demand aggregation with the longer term need to encourage and promote competition, to the maximum extent possible.

### FINDING 5.7

Awareness of consumer rights and commercial products in non-metropolitan Australia is still relatively low. Ongoing Government support for increasing awareness would be valuable.

### FINDING 5.8

Online access centres provide important services for regional, rural and remote communities, including online public access, training and support, and government services online. Online access centres can also play a strong role in assisting people with disabilities to access online services.

### RECOMMENDATION 5.1

Telstra should place a high priority on the provision of payphones, or alternative community phone systems, in those remote Indigenous communities currently without access to telecommunications of any kind.

### RECOMMENDATION 5.2

Telstra should commit to improving the delivery of appropriate Universal Service Obligation services to remote Indigenous communities, particularly through the deployment of specialised call centre staff and Indigenous liaison officers.

### RECOMMENDATION 5.3

There should be more effective data collection and monitoring of telecommunications needs and services in remote Indigenous communities. The Australian Communications Authority should take a leading role in this area.

#### RECOMMENDATION 5.4

The Government should consider providing ongoing support for IT training and support services in rural and remote areas of Australia, where there are not the same opportunities as in urban areas. Further support should build on existing programs, such as Networking the Nation and State and Territory based initiatives.

#### RECOMMENDATION 5.5

All tiers of government should work together to support online access centres in regional, rural and remote Australia, and to enable these important community facilities to remain viable.



The background is a solid blue color with a pattern of thin, white, slightly curved lines and small white dots scattered across it, creating a sense of motion or a network.

## *PART THREE*

### FUTURE ACTIONS

## PART 3: FUTURE ACTIONS

This part of the report addresses Terms of Reference 3, 4, 5 and 6, all of which require the Inquiry to consider and recommend possible future Government action that may be taken to achieve the specific objectives set out in those Terms of Reference. The four key issues associated with these Terms of Reference are summarised as:

- What additional Government action could be taken to remove impediments to the delivery of Internet services at 64 kilobits per second (kbps) or better?
- Is further action required to ensure legislated consumer safeguards are enforced into the future?
- Should the Government ensure that Telstra retains an ongoing commitment to maintaining a local presence in regional, rural and remote Australia, and if so, how should this be achieved?
- How can the Government ensure that people in regional, rural and remote Australia have ongoing equitable access to the benefits of future advances in telecommunications services?

In analysing these issues and recommending ways forward the Inquiry has been guided by some key principles. These principles, which also underpinned the approach of the Telecommunications Service Inquiry (TSI), are strongly recommended to the Government as the preferred basis on which future actions should be considered and undertaken.

- Support for competition: The Inquiry noted and supports the view expressed by telecommunications service providers and others that promoting open, fair and unfettered competitive opportunities is the best way to achieve improved levels of service, access to new technologies, consumer choice and downward pressure on prices in regional, rural and remote Australia.

At the same time there are always likely to be areas where competition is not fully effective, and where Government intervention is necessary to achieve more equitable outcomes for consumers. Such Government intervention, to the maximum extent possible, should also seek to promote vigorous competition among telecommunications service providers. Governments should avoid actions which either impose unreasonable costs on industry, result in unreasonable industry cross-subsidies, raise barriers to market entry or impose unreasonable prescription on the way industry operates.

- Overall fairness and equity: Interventions to achieve improvements in areas without access to services, impose costs that are ultimately borne by consumers, whether as taxpayers or as end-users of telecommunications services. Government interventions therefore need to strike a reasonable balance between providing support for regional, rural and remote telecommunications consumers, and ensuring that such support is fully justified by equity considerations.
- Efficiency and effective targeting: Particularly in light of the two objectives stated above, Government interventions need to be well-targeted, and facilitate the cost-effective use of Government or industry resources. In other words, Governments should seek to achieve high quality outcomes for target communities and consumers, at least possible cost to taxpayers. This objective is assisted by effective targeting, recognising that regional, rural and remote telecommunications needs are not homogenous, and there is no 'one size fits all'.

The strength and value of the telecommunications service environment is increasingly in the variety and choice it offers consumers, both in terms of services and service providers. Therefore, Government actions should recognise and endeavour to respond to different community needs, and facilitate flexibility and choice to the greatest degree possible. This is partly about supporting competition, but it is also about ensuring Government actions and programs are 'demand-driven'—that is, they are framed in response to community needs and priorities, and seek to inform, involve and empower communities, rather than impose solutions on them.

In proposing that the Government be guided by these principles in any future interventions, the Inquiry re-emphasises the finding of the TSI report that competition in the telecommunications industry has already provided considerable consumer benefits across Australia and, if appropriately supported by Government, will continue to develop and flourish. As new products and services emerge in the future through competitive processes, Governments will continue to face the challenge of ensuring that the benefits they bring are shared equitably across Australian society, including in regional areas where commercial roll-out may prove difficult and expensive.

The Inquiry believes that the Government should respond to these future challenges carefully, and in accordance with the principles outlined by this Inquiry. Failure to do so could ultimately reduce service benefits for those regional, rural and remote consumers who the Government aims to assist.



# CHAPTER 6

## HIGHER BANDWIDTH INTERNET ACCESS

Term of Reference 3 requires the Regional Telecommunications Inquiry (the Inquiry) to advise the Minister on:

*Additional Government action that may be taken to remove impediments to the delivery of Internet services at 64kbps or better and wireless-based technologies in regional, rural and remote Australia.*

### THE NEED FOR BANDWIDTH

Chapter 4 has assessed the adequacy of the Internet services that have been predominantly used by consumers in Australia, that is, narrowband dial-up connections using modems and Telstra's fixed telephone network. Although dial-up modems have allowed millions of households to access and use the Internet cheaply, this technology has long been recognised as a limited solution for Internet access. Telstra's analogue telephone network was never designed to support the transfer of data at high speeds, and dial-up modem technology itself is limited in the range of functions and performance it can provide.

For a number of years, experts have forecast the advent of the so-called 'broadband' revolution, that is, the replacement of dial-up services with high bandwidth, 'always on' digital access to the Internet that would allow for a greater range of functions and performance for users. Broadband services would allow true multi-media capacity, with high level graphics, 'streaming' video and audio, large text files able to be received by users, and high volumes of data also able to be sent.

Despite such forecasts, it has really only been in the past two years that high bandwidth Internet services have permeated into regional areas, beyond the metropolitan cable networks established by Telstra and Optus in the major capital cities. The principal technologies that have underpinned the expansion of high speed Internet have been more affordable Asymmetrical Digital Subscriber Line (ADSL), Integrated Services Digital Network (ISDN) and satellite services.

The Inquiry believes that higher bandwidth digital Internet services have a vital role to play in the future social and economic development of Australia. This conclusion is supported by many submissions expressing a similar sentiment:

*The importance of telecommunications is clearly shifting from basic voice and data services to access to information highway services in education, healthcare, community services, commerce and entertainment.*<sup>319</sup>

and

*...the advent of high-speed broadband technology creates a new window of opportunity to secure a quantum shift in the delivery of services to rural and regional Australia.*<sup>320</sup>

For the people of regional, rural and remote Australia, higher bandwidth services offer some key benefits, including:

- services such as online banking—which assists communities where other banking services have been withdrawn;
- government services and information;
- online education and health services; and
- the ability to exchange detailed information between people and organisations, quickly and relatively cheaply.

While the delivery of such services has been possible over narrowband dial-up connections, it is the Inquiry's view that dial-up technology is not able to deliver the performance and service 'richness' that consumers are increasingly seeking. The Inquiry has noted the continuing consumer frustration with dial-up services in regional, rural and remote areas, as reflected in submissions to the Inquiry. While frustrations have been attributed to bandwidth limitations of the rural network, evidence presented by Telstra shows that its network in regional, rural and remote areas is performing quite well in this respect—apart from some particular technologies that need replacing (i.e. Digital Radio Concentrator Systems (DRCS) and some older pair gain systems). Improvements resulting from the Government's Network Reliability Framework (NRF) would also be expected to result in some improvements to dial-up data speeds. In reality, as shown in Chapter 4, most consumers in regional, rural and remote areas can expect a comparable performance from their dial-up services as that provided to metropolitan users.

---

319 Paul Budde Communication Pty Ltd, submission, p.4

320 Chris Dalton and Ros Hill, submission, p.i

The Inquiry believes strongly that the real issue facing many regional, rural and remote consumers is being faced by dial-up Internet users more generally—the performance of dial-up technology is not able to meet the growing expectations of many consumers for a faster and better Internet experience. In short, Australia has reached the ‘bandwidth ceiling’ imposed by conventional dial-up technology.

In the Inquiry’s view, supported by a number of submissions, there is a pressing need to assist consumers wanting better performance to migrate to higher bandwidth digital Internet services, whether at the ISDN level (64–128kbps) or at the higher bandwidth levels that can be provided by ADSL, cable, fibre and satellite technologies.

### FINDING 6.1

Access to higher bandwidth services is becoming vital for the economic and social development of regional, rural and remote Australia.

## SCOPE OF INQUIRY’S INVESTIGATION

In examining current impediments to delivering and accessing these services, the Inquiry is required to assess the particular differences between services available in regional, rural and remote areas, and those provided in metropolitan areas. Therefore the Inquiry has only examined higher bandwidth issues of particular relevance to regional, rural and remote Australia, and identified whether, and in what ways, service delivery to these areas is lagging behind metropolitan levels.

Issues relating to higher bandwidth supply and demand in the national context are being examined by the Broadband Advisory Group (BAG), which will report to Government in the near future.

In considering Term of Reference 3, some clarification of terms is considered useful.

Wireless-based technologies are taken to be ‘last mile’ satellite and microwave solutions capable of delivering higher bandwidth data connections to customers.

Various technologies provide Internet services of 64kbps or better at a variety of service levels. The standards of service that are delivered by these technologies vary greatly—a 64kbps connection is a fundamentally different type of service to a 2Mbps connection. In considering these services, developing a broad classification system for distinguishing the various levels of service allows for better understanding of the issues about their delivery. Consequently, the Inquiry has adopted a classification system involving three broad levels of higher bandwidth services.

(1) *Basic Higher Bandwidth Service (64kbps to 128kbps)*

This basic service level is suitable for standard Internet applications such as file transfer, web browsing and email. Customers would normally be either residential users or small enterprises. This service level would typically be delivered by an ISDN link. For the less than four per cent of Australians for whom ISDN is not available, the service can be delivered via one-way or two-way satellite.

(2) *Intermediate Higher Bandwidth Service (approximately 256kbps to 600kbps)*

This intermediate service level is suitable for more bandwidth intensive applications such as streaming video and audio. It also allows for the fast download of large files. This type of connection could be suitable as a gateway for small Local Area Networks (LANs). Customers would normally vary from residential users up to small to medium enterprises including smaller schools and health centres. This service would typically be delivered through either an ISDN, an ADSL or a satellite link.

(3) *Advanced Higher Bandwidth Service (1Mbps to 2.5Mbps, or higher)*

This advanced service level is suitable for very high quality videoconferencing. It also allows for the fast download of very large files. This type of connection could be suitable as a gateway for larger LANs. The service may have 'managed' properties such as static Internet Protocol (IP) addresses, firewalls and specialist filtering software. Customers would normally be medium to large businesses, including larger schools and hospitals. This service would typically be delivered by either an ISDN service, a high grade xDSL service, an advanced satellite system or a dedicated Asynchronous Transfer Mode (ATM) or Frame Relay link.

Specific consideration has also been given to issues that might impede the delivery of wireless technologies—for example, spectrum availability.

## SUMMARY OF SERVICE IMPROVEMENTS SINCE THE TSI REPORT

In relation to higher speed Internet services, the TSI report found that:

*A range of alternative service delivery options are emerging for high speed data services, providing greater choice and competition.<sup>321</sup>*

As predicted by the TSI report, over the past two years there has been considerable progress in rolling out higher bandwidth services to regional Australia:

---

321 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.108

- ADSL is available in virtually all metropolitan Exchange Service Areas (ESAs) and in 256 ESAs in Telstra Country Wide<sup>322</sup> (TCW) areas. Around 85 per cent of the Australian population lives within these ESAs. Another 54 exchanges are expected to be able to provide ADSL by the end of the 2002–03 financial year<sup>323</sup>. Due to technical limitations, including pair gain equipment like Remote Integrated Multiplexers (RIMs), not all of these people can receive an ADSL service, but over 70 per cent of Australian premises are estimated to have access to the service.<sup>324</sup>
- The ADSL market is very competitive. Telstra, XYZed Pty Ltd (a wholly owned subsidiary of Optus) and Request have installed their own equipment—Digital Subscriber Line Access Multiplexers (DSLAMs)—into local exchanges, and are offering services. XYZed Pty Ltd and Request have generally focused their marketing of higher bandwidth services to medium and large businesses, and have concentrated on the inner metropolitan market. Telstra sell ADSL directly to consumers, and also sell a wholesale product to ADSL resellers. The reseller market is extremely competitive with dozens of resellers competing in various niche ADSL markets.
- By waiving the cost to customers of installing ISDN repeaters, Telstra has effectively extended the coverage of its ISDN network so that the service is now available at significantly greater distances from exchanges than previously; in some circumstances, up to 30 kilometres from an ISDN enabled exchange. Telstra has also reduced ISDN connection charges for basic rate services and one primary rate service (i.e. ISDN 10).
- Telstra has announced Regional Connect, a high bandwidth product that uses a one-way satellite link for downloads and an ISDN link for uploads. Currently, this new service is being trialed, but it is expected to be available to more than 96 per cent of the Australian population who can receive an ISDN service in the near future.<sup>325</sup>
- Many more competitors have entered the market for supplying one-way satellite services. Such companies include Hotkey, ihug, HoloHost, NetSpeed and WestNet.<sup>326</sup>
- A market for two-way satellite Internet services has developed. From September 2001, Telstra has offered a two-way satellite service that does not require a terrestrial back-channel. This service is available throughout Australia. Optus has also released a two-way satellite service and appears to have largely marketed its product at the business sector. Significantly, Optus supplies data services to many isolated health and education organisations, and also to Indigenous communities via its two way satellite service.

---

322 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

323 Telstra, submission, p.75

324 Telstra, Inquiry communication

325 Telstra, submission, p.78

326 There are 13 Satellite ISPs listed on the Broadband Choice Website. For the full list, see [www.broadbandchoice.com.au/isp-list.cfm](http://www.broadbandchoice.com.au/isp-list.cfm) viewed 21 October 2002

## FINDING 6.2

Since the TSI report, the commercial provision of higher bandwidth services has expanded considerably, with services delivered over a range of platforms and through a number of competing providers.

## BANDWIDTH IN THE BACKBONE

In December 1999, the National Bandwidth Inquiry (NBI) reported that there was considerable capacity in Australia's backbone (inter-exchange) network.<sup>327</sup> As predicted by the NBI, with advances in optic fibre technologies, the capacity of the backbone network has increased considerably. The Inquiry notes that in discussions with industry representatives, there appeared to be consensus that the inter-exchange network is of high quality, and has more than adequate capacity.

The NBI also noted that, regardless of the capacity in the backbone network, the delivery of higher bandwidth services to customers is subject to any limitations that might exist between the exchange and the customer, provisioning issues at the local exchange, and other market factors including price. Given that the capacity of the backbone network remains satisfactory, the Inquiry has also concentrated on examining this same broad set of issues as being potential inhibitors of higher bandwidth service delivery.<sup>328</sup>

## RECENT DEVELOPMENTS IN THE HIGH-SPEED WIRELESS MARKET

The market for various wireless data services is already quite well advanced. The satellite market is very active, with a number of existing commercial offerings, and more being proposed. The following table summarises the present state of the satellite market in Australia:

---

327 Australian Information Economy Advisory Council, *National Bandwidth Inquiry*, December 1999, pp.71-72

328 Australian Information Economy Advisory Council, *National Bandwidth Inquiry*, December 1999, p.72

**Table 6.1: Australian satellite Internet Service Providers (ISPs)**

Provider	Business		Residential	
	One-way	Two-way	One-way	Two-way
Telstra	✓	✓	✓	✓
Optus	✓	✓		
Hotkey	✓		✓	
ihug	✓		✓	
WestNet	✓		✓	
HoloHost			✓	
NetSpeed			✓	
Several other Satellite ISPs			✓	

Source: Company data

In the mobile phone market, operators are increasingly enhancing their cellular networks to offer data products at varying levels of capacity, for example:

- Telstra is considering upgrading its CDMA mobile phone towers to be 1xRTT compliant.<sup>329</sup> This technology would allow users to access mobile data services at up to 70kbps in most places that currently have CDMA coverage. It has been pointed out that CDMA 1xRTT technology is also being commercially deployed in some international markets to provide fixed wireless data services. Currently there are over 20 networks deployed and a similar number to be commissioned in the next year. At the end of August 2002 internationally there were 17 million CDMA2000 (1xRTT) users and this was growing at around two million a month.<sup>330</sup>
- Hutchison is operating under the 'Orange' brand, Hutchison is in the process of assembling a high performance Wideband CDMA network that will operate at speeds of up to 2Mbps.

In the area of data-specific terrestrial wireless networks, several companies are positioning to enter the market, through mainly urban areas:

- Unwired has purchased 3.4GHz spectrum for \$95.5 million and is rolling out a fixed wireless network to provide voice and data services. Unwired has announced plans to roll out a network that would be able to service 95 per cent of the Australian population.

329 Telstra, submission, p.96

330 Nortel, Inquiry communication

- Xone already has several metropolitan access points offering Internet and Virtual Private Network (VPN) services via the 802.11b<sup>331</sup> standard, which utilises the 2.4GHz spectrum, publicly available under a class licence.
- IDL is an ISP providing higher bandwidth microwave services in the Hunter Valley region.

## GOVERNMENT INITIATIVES

To date, the Government has largely relied on the operation of the commercial market to develop higher bandwidth data services. However, Government regulatory obligations and targeted programs have nevertheless played a role in enabling the delivery of data services at 64kbps or greater.

## DIGITAL DATA SERVICE OBLIGATION (DDSO)

Since 1999, all Australians have had guaranteed access, on request, to Internet services of at least 64kbps or equivalent under the DDSO. Telstra is the national DDSO provider, and fulfils its obligation through the provision of ISDN services to at least 96 per cent of the population. Where an ISDN connection is not available, customers can access financial assistance to have an alternative solution provided via the Special DDSO (SDDSO). Under the SDDSO, customers requiring access at 64kbps, but who cannot receive ISDN, have access to a one-way satellite service, supported by a subsidy of 50 per cent of the cost of buying and installing the satellite equipment, capped at \$765. Both Telstra and Hotkey offer one-way satellite solutions in fulfilment of the SDDSO. The Inquiry understands higher speed and two-way satellite solutions can be supplied in fulfilment of the SDDSO, if providers choose to do so.

## BROADBAND ADVISORY GROUP (BAG)

The BAG was established in March 2002 as an expert body to provide high level advice to the Government on higher bandwidth issues. The BAG's role is to assist the Government so that its higher bandwidth policy framework optimises the economic and social benefits that Australians derive from higher bandwidth services. It acts as a vehicle for encouraging communication between stakeholders on both the supply-side and demand-side of the

---

331 The 802.11b standard is often called 'Wi-Fi' (wireless fidelity). It uses 2.4GHz spectrum which is globally available for low-power operation. This is the same spectrum used by devices such as cordless telephones and TV remote control units. The technology is capable of transmitting messages at up to 11Mbps, thus creating broadband wireless LANs.

higher bandwidth market. It also works in close consultation with stakeholders in the telecommunications industry, including small businesses and major service providers, as well as representatives from key sectors such as health, education and community services.

## EXTENDED ZONES AGREEMENT

Under the Government's \$150 million agreement with Telstra to upgrade remote communications infrastructure, Telstra also undertook to offer two-way satellite Internet services to the 28 000 customers living in Australia's most remote areas—80 per cent of the landmass. This service includes the following benefits:

- free installation of two-way satellite equipment and, in partnership with IBM, a discounted computer package; and
- low ongoing usage charges for Internet services from 33kbps to 400kbps via the two-way satellite.

The ACA reports that 30 per cent of customers in Australia's Extended Zones have taken up the offer in some form.<sup>332</sup>

## OTHER GOVERNMENT INITIATIVES

Several other major Government initiatives have helped to provide access to higher bandwidth services in regional, rural and remote Australia.

- In 2002, eight projects were approved to receive funding through the \$50 million National Communications Fund (NCF). The aim of this program is to improve education and health services in regional Australia through supporting the provision of higher bandwidth services. A more detailed account of these projects can be found in Chapter 5.
- Various projects under the Networking the Nation (NTN) program have been directly aimed at increasing the availability of higher bandwidth services in regional, rural and remote Australia.
- Over three years from 2002, \$8.3 million will be provided under the Telecommunications Action Plan for Remote Indigenous Communities (TAPRIC).

---

332 ACA, *Report on the Program to Upgrade Telecommunications Services in the Remote 'Extended Zones' of Australia*, October 2002, pp.20-21

This support will improve access to telecommunications services in remote Indigenous communities , including higher bandwidth Internet services. See Chapter 5 for more information on TAPRIC.

- The Building Additional Rural Networks (BARN) fund was established to support the development of high-speed regional networks. A total of \$70 million is being provided over five years from 1999–2000 to support alternative higher bandwidth networks in regional, rural and remote Australia.

### FINDING 6.3

The Government has provided support, through a variety of policy and program initiatives, to improve access to higher bandwidth services in regional, rural and remote areas.

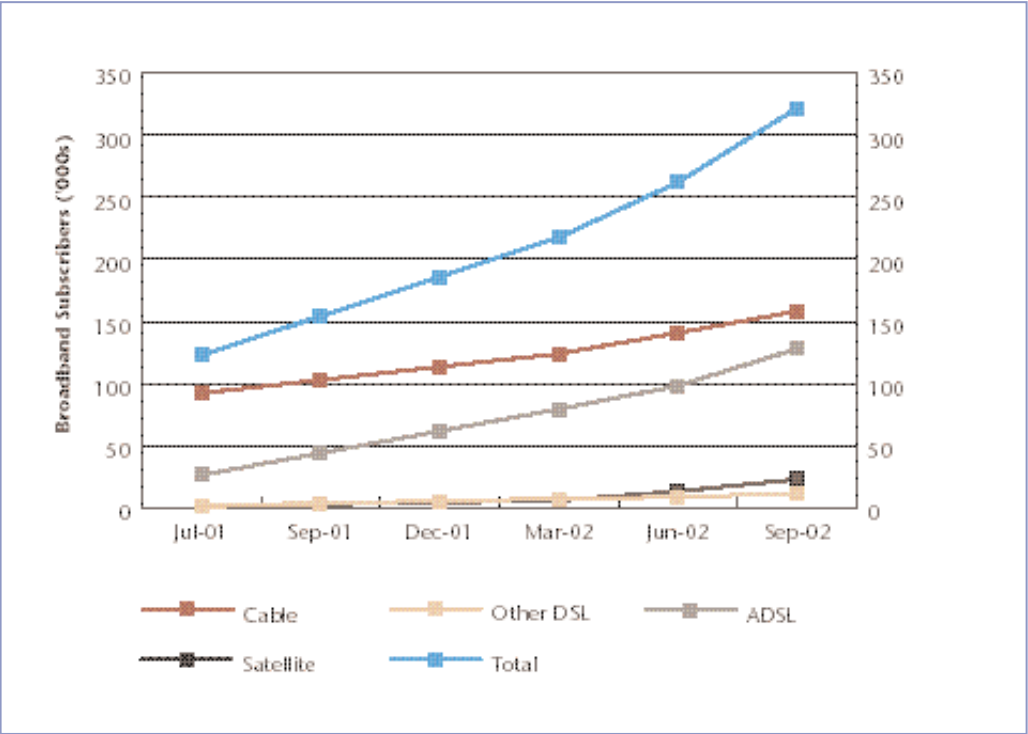
## CURRENT STATE OF PLAY

### SERVICE TAKE-UP

Over the past two years, there has been significant growth in the higher bandwidth market. It seems to have passed through the 'early adopter' phase and is now entering the 'mass market' demand phase.

The overall expansion of the recent take-up of higher bandwidth services is illustrated by the Figure 6.1 below.

Figure 6.1: Higher bandwidth take-up in Australia from July 2001 to September 2002



Source: ACCC, Snap Shot of Broadband Deployment, as at 30 September 2002

## SUMMARY OF AVAILABLE SERVICES

Tables 6.2 to 6.4 summarise the range of services and technologies now available in each of the broad bandwidth categories defined in this chapter. The tables summarise service capabilities, indicative prices and availability. Currently, Telstra is the only provider who can nationally deliver all these services to residential consumers. Given the ubiquity and predominance of Telstra products in this market, the Inquiry has used them to indicate prevailing price and service capability.

**Table 6.2: Basic higher bandwidth—64kbps to 128kbps**

Technology/ Service	Data speed (upload/ download kbps)	Current coverage as a % of the Aust. population	Installation Price	Monthly usage charge <sup>1</sup>
ISDN Home Service	128/128	96+%	\$99.00	\$42.50 plus either \$0.30 or \$1.10/hour plus ISP charge
One-way Satellite	64/<56	100%	\$653.40 <sup>2</sup>	\$70.95 (unlimited downloads) plus local phone call fee per access
Two-way Satellite	64/64	100%	\$1198.00 <sup>2</sup>	\$120.00 plus \$0.189/Mb over 300Mb

Source: Telstra, [www.telstra.com.au](http://www.telstra.com.au) (various references), viewed October 2002

Note 1: Australian ISPs normally limit the amount of data that can be downloaded on a higher bandwidth connection, and customers are charged on a per Mb basis for additional data. These limits are an integral part of the service offered. Where applicable, download caps that are commensurate with the speed of the service have been selected: 300Mb for a basic service, 1Gb for an intermediate service and 5Gb for an advanced service.

Note 2: Lower charges apply for metropolitan installation and higher charges apply for remote installations (see [www.bigpond.com/broadband/products/](http://www.bigpond.com/broadband/products/) for further installation charge details).

**Table 6.3: Intermediate higher bandwidth—256kbps to 600kbps**

Technology/ Service	Data speed (upload/ download kbps)	Current coverage as a % of the Aust. population	Installation Price	Monthly usage charge <sup>1</sup>
ADSL	512/128	Over 70% of premises	\$129.00 to \$349.00 (depending on modem and mode of installation)	\$76.95 plus \$0.149/Mb over 1Gb
One-way Satellite	400/<56	100%	\$653.40 <sup>2</sup>	\$76.50 plus \$0.264/Mb over 1Gb plus local phone call fee per access
One-way Satellite Regional Connect	400/64	96+% (possible) Currently under trial	\$700.00	\$120.00 plus \$0.264/Mb over 1Gb
Two-way Satellite	512/128	100%	\$1198.00 <sup>2</sup>	\$145.00 plus \$0.189/Mb over 300Mb (\$271.00 in total for 1Gb)
ISDN 10	640/640	96+%	\$610.00	\$295.00 plus either \$0.30/Min or \$0.15 for first 15min. plus \$0.04/min.plus ISP charge

Source: Telstra, [www.telstra.com.au](http://www.telstra.com.au) (various references), viewed October 2002

Note 1: Australian ISPs normally limit the amount of data that can be downloaded on a higher bandwidth connection, and customers are charged on a per Mb basis for additional data. These limits are an integral part of the service offered. Where applicable, download caps that are commensurate with the speed of the service have been selected: 300Mb for a basic service, 1Gb for an intermediate service and 5Gb for an advanced service.

Note 2: Lower charges apply for metropolitan installation and higher charges apply for remote installations (see [www.bigpond.com/broadband/products/](http://www.bigpond.com/broadband/products/) for further installation charge details).

**Table 6.4: Advanced higher bandwidth—1Mbps to 2.5Mbps**

Technology/ Service	Data speed (upload/ download kbps)	Current coverage as a % of the Aust. population	Installation Price	Monthly usage charge <sup>1</sup>
ADSL	1500/256	Over 70% of premises	\$129.00 to \$349.00	\$224.00 plus \$0.129/Mb over 5Gb
ISDN30	1920/1920	96+%	\$3080.00	\$855.00 plus either \$0.30/Min or \$0.15 for first 15min. plus \$0.04/min. plus ISP charge
E1 over ATM	2048/2048	96+% <sup>2</sup>	\$1925.00	From \$2739.44 to \$15005.08 depending on distance from capital city

Source: Telstra, [www.telstra.com.au](http://www.telstra.com.au) (various references), viewed October 2002

Note 1: Australian ISPs normally limit the amount of data that can be downloaded on a higher bandwidth connection, and customers are charged on a per Mb basis for additional data. These limits are an integral part of the service offered. Where applicable, download caps that are commensurate with the speed of the service have been selected: 300Mb for a basic service, 1Gb for an intermediate service and 5Gb for an advanced service.

Note 2: Presumably Telstra would be able to deliver an E1 equivalent to anywhere in Australia where ISDN is available.

## LINKS BETWEEN HIGHER BANDWIDTH AND TELEPHONE SERVICES

Customer requirements also need to be taken into account when considering prices for higher bandwidth services—as represented in Tables 6.2 to 6.4. Such requirements may affect the type of higher bandwidth service selected by many customers. For example:

- ISDN customers can simultaneously use voice and data services over the one connection.
- ADSL customers can simultaneously use voice and data services.

- One-way satellite customers (with a dial-up service as the return path) can only use either voice or data services at any one time. In order for customers to do both, they require an extra telephone line, and have to pay the appropriate access fees.
- Two-way data satellite services currently offered to residential customers in Australia do not provide telephone services.

## PRICING AND NETWORK ECONOMICS

Table 6.2 shows ISDN provides the cheapest access in the basic higher bandwidth category and Tables 6.3 and 6.4 show the ADSL packages in the intermediate and advanced bandwidth categories provide cheaper access than alternative technologies.

Prices for satellite Internet services have generally tended to be higher than for those delivered by terrestrial technologies. This extra expense is mainly associated with the high costs of providing customer premises equipment such as computer cards and Very Small Aperture Terminal (VSAT) equipment, and also the high price providers pay for access to satellite transponder capacity. This is particularly the case for two-way satellite services, which require a transmitter as part of the customer equipment.

Although ADSL provides cheaper services to customers, there are limits to how far this type of terrestrial network will be rolled out. In most cases, ADSL is available at no more than 3.5 kilometres from an enabled exchange. Further, the cost of upgrading an exchange to carry ADSL is considerable and providers require a minimum number of customers per exchange before enabling an exchange becomes a commercially viable proposition. Clearly exchange service areas with a high number of potential customers offer service providers an opportunity to more quickly recover capital costs.

At the end of September this year there were 321 900 broadband subscribers in Australia.<sup>333</sup> Enabling a single exchange is an expensive exercise, so it follows that a large number of Australia's smaller exchanges are unlikely to be able to provide ADSL services in the short term, under purely commercial conditions. Further, due to a lack of customers within 3.5 kilometres of some more remote exchanges, many smaller exchanges probably will not be enabled with ADSL technology even in the longer term. This explains the concern of many submissions from regional, rural and remote areas that ADSL is not available to their communities. In these circumstances, satellite services are the only realistic option. While such services can be readily provided to isolated customers because the required infrastructure—satellite and telephone connection—is already in place, they are more expensive than ISDN and ADSL where these are available.

---

333 ACCC, *Snapshot of Broadband Deployment, as at 30 September 2002*, unpublished. This survey defines 'broadband' as services of over 200kbps and hence, excludes lower bandwidth satellite and ISDN products. It is worth noting that 120 700 of these customers subscribed to some kind of DSL service.

## SOME POSSIBLE BARRIERS TO TAKE-UP

### CONTENT

Some submissions to the Inquiry raised the issue of the lack of compelling content to attract people in regional areas to subscribe to higher bandwidth services. For example, the National Farmers' Federation (NFF) raised the need for more Government online services.<sup>334</sup> The NFF proposes that this would provide a more compelling impetus for regional Australians to take up high quality online services.

The Inquiry agrees that this issue is important, but considers the overall issue of higher bandwidth content is a national one, and not within the primary scope of the Inquiry's investigations. In general, it needs to be noted that content development is largely driven by commercial forces, although both education and health content are important for stimulating consumer demand.

### ADSL COVERAGE

Many submissions to the Inquiry raised concerns about limited ADSL roll out. Submissions voicing these concerns generally fell into one of three broad categories.

- People from regional, rural and remote areas who are not within the 3.5 kilometre reach of an ADSL enabled exchange.
- Those who are within range of an ADSL enabled exchange but receive access via pair gain technology and consequently, cannot receive a higher bandwidth service. A large proportion of Australians who cannot receive ADSL services because of pair gain technologies live within metropolitan areas.
- Those living in exchange service areas that are not ADSL enabled.

### ISDN COVERAGE

A number of submissions stated they were unable to receive an ISDN service. Of the approximately 11.3 million telephony services currently in operation in Australia, only 384 000 or 3.4 per cent cannot receive an ISDN service.<sup>335</sup> The lines not able to be serviced by ISDN are predominantly those in the more isolated regions of Australia and can be divided into three categories.

---

334 NFF, submission, p.4

335 Telstra, submission, p.71

- Those who are in an ISDN enabled exchange service area (ESA) but are outside of the range of the ISDN service.
- The small number of customers who are located in ESAs that are compatible with the ISDN service but whose exchanges are currently not ISDN enabled.
- Those customers that cannot receive an ISDN service because their local exchange is not compatible with the ISDN technology, for example, those who receive a radio telephone service.

For each of these groups of people who cannot receive ISDN or ADSL, a satellite solution is available.

## ISDN connection timeframes

The NFF submission to the Inquiry noted that measures to ensure the timely installation and fault repair of ISDN services need to be implemented for customers receiving benefits under the DDSO:

*Timeframes relating to installation and repair of a 64-kilobit per second digital service as currently defined in the Governments Digital Data Service Obligation should be no different to those defined in a revised CSG or CSLA.*<sup>336</sup>

The Inquiry agrees that connection and repair timeframes for ISDN, under the DDSO, do appear to be substantially longer than those applying to telephone services under the Customer Service Guarantee (CSG) and Universal Service Obligation (USO). Telstra claims that there are complicating issues that prevent exact alignment of these timeframes. Nevertheless the Inquiry believes that this matter should be investigated by the Government.

### RECOMMENDATION 6.1

The Government should investigate whether the timeframes for connection and repair of ISDN services that are required under the Digital Data Service Obligation should be more closely aligned with regulated timeframes applying to telephone services.

---

336 NFF, submission, p.5

## Problems with satellite services

Some submissions raised issues about one-way satellite services. It was noted that both the high price of the service (see Tables 6.2 and 6.3), and the slowness of the dial-up modem back-channel, inhibited the take-up of this product. On the latter point, although most Internet users receive much more data than they send (and for these, one-way services are quite adequate), others require speed on the back-channel. For example, to send files or upload web pages to their ISP. The Internet Assistance Program, as outlined in Chapter 4, goes some way to addressing the issue of slow upload rates, but 19.2kbps is still considered inadequate for many customers who need to transmit large files.

*Bigpond one-way Satellite product has had little take-up, because of usage costs and its reliance on a narrowband terrestrial return path.*<sup>337</sup>

The recent introduction of a residential two-way satellite service has meant that customers anywhere in Australia can upload files to the Internet at speeds from 64kbps to 128kbps. As can be seen from Tables 6.3 and 6.4, where ADSL is not available, two-way satellite offers an alternative high quality service to Australians regardless of where they live. However, as identified in many submissions, installing and using the two-way satellite service is an expensive proposition, with a much higher per month access fee and higher excess data charges. The difficulties associated with meeting the costs of two-way satellite services are typified by the following submission:

*Investigations have been made into introducing broadband for our internet services, but there is no infrastructure available in the region. Therefore, the alternative is for us to supply our own infrastructure, (the cost of a satellite disc is over \$700) with the annual cost of operating such a service being over \$3 600, which is beyond our means. This is compared to a similar service offered in large regional areas of around \$60 per month with no layout for infrastructure.*<sup>338</sup>

While all Australians have access to higher bandwidth services, for many people the only product that can satisfactorily offer this service is considerably more expensive than the standard services available in most metropolitan areas. This price differential is the major impediment to equitable delivery of higher bandwidth services in regional, rural and remote Australia.

---

337 Government of Western Australia, submission, p.29

338 Tandara Lodge Community Care Inc, submission, p.4

Several submissions noted that although the Extended Zones Agreement assisted people in the Extended Zones to access high-speed services, many others live in isolated (and often adjacent) Standard Zones, and experience similar levels of service, but were not eligible for the service offering under that agreement. For example:

*Whilst the [Extended Zones Agreement] subsidy is most welcome to people in Extended Zones, this roll out of technology has clearly discriminated against the people in the Standard Zones...Phone services to [some] Standard Zone residents is provided by an ARCS or DRCS. The same service as for Extended Zones residents.*<sup>339</sup>

## PRICE BARRIERS TO TAKE-UP

After consideration of the many submissions on this subject, and following analysis of the range of service offerings set out in Tables 6.2 to 6.4, the Inquiry has concluded that price rather than availability is the major impediment to the take-up of higher bandwidth services in regional, rural and remote areas.

The price issue has two possible dimensions:

- the generally higher price paid by all Australians for higher bandwidth services compared with dial-up narrowband services; and
- particular price differences for higher bandwidth services faced by some consumers in regional, rural and remote areas, compared with users in metropolitan areas.

## HIGHER BANDWIDTH PRICES GENERALLY

As previously explained, higher bandwidth issues which are primarily related to national broadband policy are viewed as more appropriately dealt with by the BAG, and will not be considered in detail by the Inquiry. The Inquiry is instead focusing on impediments to delivery which particularly affect regional, rural and remote consumers.

However, given that some submissions have commented adversely on the price of higher bandwidth services overall, it is useful to touch on this issue.

Consumer perceptions of higher bandwidth prices are closely linked to issues of available and relevant content that allows users to make full use of such services. Prices for higher bandwidth services are more expensive than for narrowband dial-up services.

---

339 Bruce Robinson, submission, p.1

For consumers to be comfortable with paying these extra fees, they need to experience perceived additional value. Getting faster access to existing Internet content is no doubt valued in itself, but additional value is also gained from accessing relevant content, such as streaming audio and video which is suited to the functionality of high bandwidth services. The supply of relevant content is a key driver in encouraging users to pay extra for services with a higher degree of functionality.

Overall the prices paid by Australians for the most cost-effective higher bandwidth services such as ADSL and cable compare well internationally. The TSI found that both ADSL and ISDN prices ranked relatively well in international comparisons.<sup>340</sup> Since that time, other studies have found similar results.

## PRICE DIFFERENCES BETWEEN METROPOLITAN AND REGIONAL, RURAL AND REMOTE AUSTRALIA

The primary concern for regional, rural and remote Australians, as reflected in the submissions and Tables 6.2 to 6.4, is that where lower priced higher bandwidth services such as ISDN and ADSL are not available, users can only access comparable services at a significant price premium.

### FINDING 6.4

The major impediment to regional, rural and remote Australians having equitable access to higher bandwidth services is the higher prices that users in some areas pay for these services.

### ISDN availability and pricing issues

While the less than four per cent of Australians who cannot access ISDN are eligible for a subsidy under the SDDSO for the more expensive satellite equipment they are required to buy, this does not fully compensate them for their additional costs. Nor does the one-way satellite service under the SDDSO fully match the functionality of ISDN service, in terms of the capacity of the back-channel.

Unless an ISDN customer uses their connection to access data for very long periods—more than 95 hours per month depending on how many calls the satellite customer uses

---

340 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.111

to connect to their ISP—the satellite solution is more expensive to use. Further, because one-way satellite users require a telephone line back-channel if the customer wishes to receive phone calls while accessing data as an ISDN customer is able, then they will need to pay for the installation and monthly access to a second phone line.

Where ISDN is available, charges for using the service increase with the distance of the termination point from the user. A flat \$0.30 per hour rate can be used to access some ISPs (among them Telstra's BigPond<sup>®341</sup> service) from anywhere in Australia. These ISPs are using Telstra MegaPoP<sup>™342</sup> (MegaPoP) data service. However, a flat \$1.10 per hour charge plus a \$0.165 connection fee is incurred to access other locally based ISPs. This difference in pricing seems competitively unfair, even allowing for the claimed increased efficiency of the MegaPoP network, and is an issue that should be brought to the attention of the Australian Competition and Consumer Commission (ACCC).

## RECOMMENDATION 6.2

Some Telstra pricing arrangements for ISDN services seem discriminatory, and would appear to unduly favour Telstra over other providers. This should be brought to the attention of the Australian Competition and Consumer Commission.

## ADSL availability and pricing

Where the network is accessible, ADSL service is available from Telstra at a flat rate regardless of where the customer is located.

The functionality of a 400kbps one-way satellite connection is not comparable to a 512kbps ADSL connection. Although the monthly access prices of these products are very similar, the ADSL connection has a 128kbps upload rate whereas the satellite product relies on a less than 56kbps back-channel. Further, customers with access to ADSL can simultaneously utilise data and telephony services, whereas one-way satellite customers can utilise only one service at a time. One solution to address this will be Telstra's Regional Connect satellite/ISDN hybrid product, which is currently being trialed. With a 400kbps satellite download link and a 128kbps upload link, reasonably comparable service to the 512kbps ADSL product can be obtained.

The price of installing the satellite equipment is still significant and tends to increase for customers living in more remote areas. Even with the SDDSO subsidy, it is still considerably more expensive than ADSL. Combined with slightly higher usage charges,

---

341 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

342 ™ Trade mark of Telstra Corporation Limited ABN 33 051 775 556

the cost of making local phone calls and the possibility of paying for an extra phone line to simultaneously have access to a voice service, the cost of a one-way satellite system can be significantly higher than an ADSL service.

Access to a similar range of functions from a 512kbps ADSL connection can be gained from a 512kbps two-way satellite connection. The two-way service offers the same upload speed and its use does not interrupt the telephone service. However, as can be seen from Tables 6.2 and 6.3, two-way satellite installation and usage charges are relatively high compared to most of the other products in the same bandwidth categories. Submissions from those unable to receive a higher bandwidth service at the same price as ADSL users indicated that the cost of installing and using a higher bandwidth service is an important issue.

*Some of the internet inequality could be reduced if satellite technology was available at costs more consistent with mainstream metropolitan services.*<sup>343</sup>

The Government has implemented an important project, the Extended Zones Agreement, that is helping to reduce the cost of two-way satellite connections for people who are among the ones who most require the service—those living within Australia's Extended Zones. For these people, the cost of installing the product has been waived and usage charges have been reduced to levels lower than the prices available in metropolitan areas.

## SUMMARY OF PRICE INEQUITIES

Tables 6.2 to 6.4 illustrate the various products that offer services at the three broad levels. The most affordable product in the basic service category is the ISDN Home product. In the intermediate category, the 512kbps ADSL product is the most affordable. In the advanced category, the 1.5Mbps ADSL product is the most affordable.

In summary, the Inquiry finds that the key points of difference between pricing in metropolitan areas and in regional, rural and remote areas are:

- for service at 64–128kbps, higher prices are paid by the less than four per cent of Australians who cannot access ISDN services; and
- for services at 256kbps and greater, higher prices are paid by the approximately 30 per cent of Australian premises that cannot access ADSL services.

---

343 Great Southern Area Consultative Committee, WA, submission, p.4

# IS THERE A SOLUTION TO THESE PRICE PROBLEMS?

## WIRELESS NETWORKS

There is a perception that wireless technologies may provide a simple, effective and inexpensive solution to the pricing issues faced by some people in regional, rural and remote areas. Intuitively, a technology that does not require installing cables underground from the exchange to the customer premises seems likely to offer cost efficiencies for carriers. The reality is more complex, and while wireless operators may indeed make considerable savings in some areas, they face other costs and technical obstacles that are not faced by traditional fixed infrastructure carriers.<sup>344</sup>

Despite the interest in wireless data services, there are often technical limitations with wireless technologies that are difficult to surmount. These challenges include:

- wireless technologies are limited by distance, to a greater or lesser degree. This is a particular problem for deploying wireless solutions in sparsely populated regions. In general terms, the higher the bandwidth deployed, the less the distance of coverage. Repeater stations can be constructed to circumvent this problem, but they can be expensive to construct and can impose spectrum management difficulties;
- signal attenuation caused by environmental factors such as rain, fog and/or vegetation can degrade the quality of wireless connections. Again, services deployed at higher frequencies are generally more severely affected by such conditions;
- wireless applications may be more susceptible to security breaches than other data access technologies. This problem can be addressed through various technology developments such as spread spectrum coded transmission and Public Key Infrastructure;
- it is not always possible for carriers to gain access to the best locations to transmit and receive data (e.g. the top of hills and buildings); and
- there may be interference from other users in the same spectrum. This is a particular problem for users in the publicly available bands, such as 802.11b, especially in built-up areas.

---

344 The Nortel Networks submission to the Inquiry gives a useful summary of some of the more promising technologies and their associated advantages and disadvantages.

## Regulatory approaches to wireless data services

To encourage wireless innovation, the Government has waived the carrier licence obligations for many of the emerging wireless operators.<sup>345</sup> However, this decision will only benefit smaller ‘hot spot’ operators such as Xone rather than the providers of last mile fixed solutions such as IDL.

Apart from the spectrum publicly available under class licences, it is possible to purchase rights to various frequency bands. The cost of purchasing spectrum is an obvious barrier to market entry, especially for smaller companies. However, spectrum is a limited and valuable commodity sought after by commercial operators, particularly at frequencies suitable for emerging high bandwidth services such as third generation (3G) mobile services. The Government has sought to allocate such bandwidth according to its market value through spectrum auctions. In the Inquiry’s view this seems a fair and transparent way to allocate a sought after commercial commodity.

The Inquiry believes that there should not be any particular bias by the Government towards promoting wireless technologies. There are varying cost, technical and other business case issues to be resolved across all higher bandwidth technology platforms. The best way to get efficient, cost-effective services in place is to provide a technology neutral, transparently competitive ‘level playing field’, to allow commercial decisions to be made on the best technologies and services to meet consumer needs. If Government intervention is required to stimulate or improve consumer access to higher bandwidth services then it should be undertaken in a way that allows, as far as possible, the above approach to be pursued.

Consequently no measures specifically aimed at encouraging wireless roll-out, above and beyond the general support measures proposed later in this chapter are recommended.

## SOLUTIONS FOR THE FUTURE

### EQUITABLE ACCESS

The Inquiry considers that people in regional, rural and remote areas should now have access to higher bandwidth services comparable to that in metropolitan areas, and at comparable prices. The Inquiry is proposing measures that it believes would provide higher bandwidth services to people across regional, rural and remote Australia at prices broadly comparable to those in metropolitan Australia.

---

345 For details of this decision see [http://www.dcit.gov.au/Article/0,,0\\_1-2\\_15-4\\_111550,00.html](http://www.dcit.gov.au/Article/0,,0_1-2_15-4_111550,00.html), viewed 30 October 2002

## GUIDING PRINCIPLES FOR POLICY FORMULATION

In considering Government action to bring about equitable access to higher bandwidth services for all Australians, the Inquiry has been guided by several key principles and findings:

- higher bandwidth services are becoming critically important for the information economy. Equitable access to these services in regional, rural and remote Australia will provide an impetus for future economic growth. Consequently, reasonable Government action should be taken to remove impediments to the take-up of these services;
- Government action should seek to minimise any distortion of the market, which is highly competitive in this area. Support or any other Government action should demonstrate both technology and competitive neutrality, and should be aimed at stimulating efficient and sustainable commercial services;
- Government action should avoid burdening the telecommunications industry with excessive financial obligations. The Inquiry recognises that recent years have been challenging and difficult for telecommunications service providers, and excessive financial obligations could have a negative impact on the industry and its investment in regional Australia, to the ultimate detriment of consumers;
- the Government should carefully consider the impact of excessive financial obligations on Australian tax payers. Support for the improved delivery of higher bandwidth services needs to be justified by social and economic equity considerations;
- Government support for new higher bandwidth infrastructure should be given on the basis of fair access to supported infrastructure for competing providers; and
- Government regulation and funding support in this area has already been considerable. It would be beneficial for consumers and the industry as a whole for new policy initiatives to simplify the current structure rather than further complicating it.

The Inquiry has considered several options, ranging from relying entirely on the operation of the commercial market to imposing strict price controls. Overall equity objectives, as well as an assessment of actions since the TSI report, were taken into account. Policy initiatives that were especially relevant include the NTN program, the SDDSO, the Extended Zones Agreement and the National Communications Fund.

## RECOMMENDED POLICY RESPONSE

### RECOMMENDATION 6.3

The Government should establish an incentive scheme for the provision of higher bandwidth services to regional, rural and remote areas, to enable all Australians to have access to services at prices comparable to those prevailing in metropolitan areas. A preferred model for the scheme is provided in this report.

The most effective and appropriate Government response would be to provide a financial incentive to providers of higher bandwidth services to offer services at equitable prices in regional, rural and remote areas. Specifically, a one-off ‘per customer’ payment should be paid to providers of higher bandwidth data services in areas where a defined minimum level of service, in terms of price and functionality, is not likely to be provided commercially in the immediate future. Importantly, for providers to receive the incentive payment, higher bandwidth services would have to be made available at prices within parameters broadly comparable to the prices charged in metropolitan areas.

The overall reasons for the Inquiry’s recommendation are:

- equitable access to higher bandwidth services is becoming vital for economic and community growth in regional, rural and remote Australia;
- the higher bandwidth market is dynamic and competitive, with a large number of providers competing at different service levels, and across different technology platforms. The Government should not implement any measure that particularly favours any one technology or service provider;
- there is no point in extending the current DDSO on Telstra to require it to provide higher bandwidth digital services universally, because it already does so;
- any Government regulation to impose price caps on Telstra for higher bandwidth services would have a negative effect on this competitive marketplace, effectively driving out competitors who could not match Government-imposed price caps;
- a large Government tender or tenders to roll out technologies capable of delivering cheaper services into rural and remote Australia (as per the Government’s TSI mobile tenders) would inevitably unduly favour the dominant ADSL and ISDN network provider, Telstra<sup>346</sup>, and would also not achieve fully equitable access;<sup>347</sup>

---

346 It is worth noting that several providers, notably Optus, strongly put forward this point of view in their submissions to the Inquiry.

347 This is not to imply criticism of the Government’s approach to mobile phone extensions. The Inquiry’s view is that the high bandwidth market has significant structural differences to the mobile telephone market, and requires a different approach.

- large grant programs, such as the NCF, have proved very valuable in stimulating both the extension of higher bandwidth services and the development of relevant content and applications, but are not designed to enable equitable access to these services for all users in regional, rural and remote Australia; and
- the Inquiry believes it would be possible to structure a program in this market that would allow opportunities for multiple service providers, using a variety of technology platforms, to access supporting funds and therefore offer more equitably priced services to regional, rural and remote Australians. Such an outcome would achieve the dual objectives of enabling equitably priced service delivery across Australia, while maintaining and even enhancing service choice for consumers.

## WHERE SHOULD THE INCENTIVES APPLY?

Incentives should be targeted to those areas where services of a designated price and functionality, comparable to what is available in metropolitan areas, are not commercially available, and are not likely to be available in the immediate future.

### The RIM issue

As noted by a number of submissions, there are some parts of metropolitan (and regional) Australia where ADSL is not available because of the deployment by Telstra of Remote Integrated Multiplexors (RIMs) in the network.

This issue could be of relevance to the operation of the scheme in larger regional centres, and the Inquiry suggests that this matter needs to be examined in finalising the details of a scheme. In assessing whether RIM areas should be involved in the scheme, the Government would need to assess to what extent lack of ADSL in such areas was because of commercial non-viability, or was simply a technology restriction that should be remedied by Telstra.

## ELIGIBILITY FOR PAYMENT

The scheme should make a per customer payment to each qualified provider of a designated higher bandwidth service to eligible regional, rural and remote customers. In other words, the Government would need to identify areas not currently adequately served, and what services could be provided to meet those service needs. Any provider able to provide the defined level of service to eligible consumers should be able to qualify for support under the scheme.

Providers could apply the payment for whatever purpose needed to ensure the equitable provision of service. For example, satellite providers could use the payment to reduce the

cost of currently expensive customer equipment, or ADSL providers could use it to support the cost of rolling out the exchange equipment (DSLAMs) necessary to provide new service to previously unserved exchange areas.

For the sake of simplicity, it would be best to make the payment to retail providers of higher bandwidth services. The Inquiry notes that this may raise some issues of equity for infrastructure providers of higher bandwidth service, who are wholesaling to resellers. This could be addressed by the Government in a number of ways, including either through:

- allowing wholesale prices to reflect the impact of the retail payment in eligible areas; or
- establishing different payment levels between resellers and facilities providers.

## WHAT SERVICES SHOULD BE ELIGIBLE FOR SUPPORT AND IN WHAT CIRCUMSTANCES?

Eligible areas and customers would need to be defined at the start of the scheme (e.g. ESAs where ADSL was not viable) and/or identified by service providers during the operation of the scheme (e.g. customers within an enabled ESA but out of range of ADSL service). Identifying eligible customers is challenging, but it should not be unduly difficult. For example, substantially the same approach currently applies in the operation of the SDDSO.

The Inquiry suggests that the scheme would prove even more effective if the Government segmented designated service levels to provide payment support at a range of different levels. The following categories are suggested for initial consideration:

- 64kbps equivalent or better, for consumers wishing to migrate from dial-up analogue services;
- 400kbps equivalent or better, for consumers wishing to access a higher level of service; and
- 1Mbps equivalent or better, primarily targeting small businesses and smaller community service providers (e.g. small education and health centres).

The scheme would need to identify price levels at which each of the above service levels would be provided before the payment was awarded. There are several options for setting these benchmark prices. The following outlines one possible approach:

- the Government could set price parameters for each level of service, broadly based on metropolitan prices, but allowing a price variation (presumably upwards) within defined limits to reflect the high costs of service provision in some areas; and

- the Government could establish a pre-qualification process to register providers under the scheme, and as part of this process could approve service offerings, which would need to be offered within the established price parameters.

## LEVEL OF PAYMENT

Subsidies would need to be set at levels that provide appropriate incentives for service providers to offer an equitably priced service, but not at levels that provide significant windfalls. Subsidies should be set at levels to encourage providers to offer the most efficient service to meet the needs of consumers in particular areas.

This implies that subsidies may need to be differentiated, to recognise:

- the different levels of service being offered;
- the different costs associated with the kinds of technology necessary to deliver the service to different areas; and perhaps
- whether the provider is a reseller or is providing new infrastructure.

Again, establishing such a payment framework is challenging but in the Inquiry's view, readily achievable. It could be done either administratively by the Government—following a scoping exercise—or the Government could consider a competitive, market-testing approach to establish the appropriate payment levels. A competitive tendering process would minimise the risk of windfall profits to providers and, in accordance with the guiding principles outlined above, bring about an efficient market outcome. It is worth noting the Canadian Government has also extensively utilised competitive tendering processes in its own attempt to bring about equitable access to broadband technologies in its less densely populated regions.<sup>348</sup>

## COULD PROVIDERS BUILD A BUSINESS CASE BY AGGREGATING SUBSIDIES?

A number of submissions and meetings have highlighted the value of past Government support, primarily under NTN, for communities to aggregate their demand or buying power in order to attract a new service provider or new services into their region. The Online Council's *New Connections Toolkit* has provided valuable advice and guidance to communities in this respect. The Inquiry sees these initiatives as an important ongoing component of the Government's overall approach to supporting telecommunications growth in regional, rural and remote areas.

---

348 Broadband for Rural and Northern Development: Guidelines for Applicants, p.1

The proposed higher bandwidth incentive scheme would fit well with such strategies. For example, a regional community demand aggregation approach could perhaps attract new ADSL or ISDN infrastructure able to deliver services within a region through providing to the market a 'signed up' number of customers, who would all attract the Government payment. In this way, the business case for providers to enter regional and rural markets with new infrastructure and service offerings could be substantially improved.

The Inquiry also believes that there is a need to provide support to individual consumers and small businesses to assist effective take-up and use of higher bandwidth services, for example through providing advice on the most appropriate equipment and level of service to meet particular needs. Government support for the concept of broadband brokerage services, which could be of great value to regional, rural and remote consumers, who are remote from mainstream commercial advice, is the favoured approach.

#### RECOMMENDATION 6.4

The Government should provide further support to communities to undertake demand aggregation strategies, and other activities that would support the take-up of higher bandwidth services. Support should also be considered to assist consumers and small businesses to make effective use of higher bandwidth opportunities.

### FIT WITH EXISTING PROGRAMS

The Government would need to ensure the proposed incentive scheme was well integrated with existing support measures, particularly to ensure there was no duplication or 'double-dipping'. In particular, consideration would need to be given to the support provided under NTN programs, the Extended Zones Agreement and the SDDSO.

The simplest and most effective approach would be to remove the subsidy under the SDDSO (support would be provided under the new scheme), but continue the obligation (on Telstra at least) to provide 64kbps service under the DDSO as a regulatory safety net.

## FUNDING

Funding such a scheme is ultimately a matter for the Government, but the Inquiry considers it would be appropriate to use an ongoing Commonwealth funding stream dedicated to regional, rural and remote telecommunications, as proposed and discussed in Chapter 9.

## REVIEW AND ADJUSTMENT OF THE SCHEME

The proposed incentive scheme aims to stimulate major changes in the commercial delivery of higher bandwidth services to regional, rural and remote Australia. If the scheme was successful in bringing about increased service take-up in regional, rural and remote areas, the commercial business case for service delivery may be considerably improved after a reasonable period of operation of the scheme. In this event there could be a need to refocus the scope and scale of the program.

The Inquiry therefore suggests that there be a review of the scheme after a reasonable period of time (e.g. three years) to evaluate outcomes, and to assess whether changes need to be made. This could be linked to the review process proposed in Chapter 9. Such an assessment may, for example, identify that the scheme should continue, but with a reduced geographic and/or service focus as a result of improvements in coverage over the period of the program, and perhaps price reductions arising from commercial and technological developments. It might also identify new service needs and priorities that could be taken into account in a revised program.

It may be valuable to have more frequent reviews during the initial period of the scheme to 'fine-tune' arrangements, as a result of:

- changes in mainstream service pricing and/or functionality;
- gaps in equitable service provision becoming evident in some areas; or
- other anomalies arising that may need to be addressed.

The results of the scheme would be monitored and reported at least on an annual basis, for example, in the ACA's *Telecommunication Performance Report*.

## BENEFITS OF A PAYMENT SCHEME

In summary, the Inquiry believes that a higher bandwidth incentive scheme, along the lines of that described above, would have the following benefits:

- it would provide equitable access to a range of higher bandwidth services for all Australians. Such equitable access is vitally important to enable regional, rural and remote Australians to take full advantage of the benefits of advanced telecommunications services in the future;
- it could assist the strategies of key service sectors, such as education and health, to connect service organisations (e.g. schools) in regional, rural and remote areas. The importance of higher bandwidth services for these sectors is described in Chapter 5;
- it would promote competition, consumer choice and price reductions in a market where competitive interest and activity is high;
- it would be technology neutral and, if correctly structured, would promote efficient technology deployment by service providers; and
- it would fit well with community strategies supported under previous Government programs and projects.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 6.1

Access to higher bandwidth services is becoming vital for the economic and social development of regional, rural and remote Australia.

### FINDING 6.2

Since the TSI report, the commercial provision of higher bandwidth services has expanded considerably, with services delivered over a range of platforms and through a number of competing providers.

### FINDING 6.3

The Government has provided support, through a variety of policy and program initiatives, to improve access to higher bandwidth services in regional, rural and remote areas.

### FINDING 6.4

The major impediment to regional, rural and remote Australians having equitable access to higher bandwidth services is the higher prices that users in some areas pay for these services.

### RECOMMENDATION 6.1

The Government should investigate whether the timeframes for connection and repair of ISDN services that are required under the Digital Data Service Obligation should be more closely aligned with regulated timeframes applying to telephone services.

### RECOMMENDATION 6.2

Some Telstra pricing arrangements for ISDN services seem discriminatory, and would appear to unduly favour Telstra over other providers. This should be brought to the attention of the Australian Competition and Consumer Commission.

### RECOMMENDATION 6.3

The Government should establish an incentive scheme for the provision of higher bandwidth services to regional, rural and remote areas, to enable all Australians to have access to services at prices comparable to those prevailing in metropolitan areas. A preferred model for the scheme is provided in this report.

### RECOMMENDATION 6.4

The Government should provide further support to communities to undertake demand aggregation strategies, and other activities that would support the take-up of higher bandwidth services. Support should also be considered to assist consumers and small businesses to make effective use of higher bandwidth opportunities.

# CHAPTER 7

## EFFECTIVE LEGISLATED CONSUMER SAFEGUARDS

### INTRODUCTION

Term of Reference 4 requires the Regional Telecommunications Inquiry (the Inquiry) to advise the Minister on:

*The current provision of legislated consumer safeguards including the Universal Service Obligation (USO), the Customer Service Guarantee (CSG), untimed local calls and the Telecommunications Industry Ombudsman (TIO) and whether further action is required to ensure these safeguards are enforced into the future.*

This Term of Reference is relevant to both the assessment of the adequacy of current service levels, and consideration of arrangements to support future access to services.

In discussing legislated safeguards the Inquiry is referring to safeguards in both primary legislation (statute) and subordinate legislation, for example, licence conditions and Ministerial determinations. The terms 'regulated' and 'legislated' are generally used synonymously. However, there are practical differences between them. For example, government has greater day-to-day discretion over subordinate legislation.

In discussing the effectiveness of the legislated safeguards, it is necessary to examine the safeguards themselves, as well as monitoring and reporting, and compliance and enforcement. They are interrelated.

In addressing Term of Reference 4, the Inquiry has therefore focussed on:

- the coverage and efficacy of the current legislated consumer safeguards;
- perceived shortcomings with the current safeguards and whether there is a need to augment them;
- the effective enforcement of these safeguards; and
- measures that could be taken to enhance the efficacy of the legislated safeguards and their enforcement.

Importantly, while Chapter 7 provides a description of the range of legislated safeguards in place, its assessment focuses on the overall structure and adequacy of the framework of

legislated safeguards, rather than specific safeguards. Individual safeguards, including their adequacy and enhancement, are dealt with in the chapters relevant to each specific safeguard. For example, the CSG is examined in Chapter 2. The exception to this is extension of the USO, which is examined here in the context of calls for it to be applied to a range of services.

In examining these issues the Inquiry has sought advice from the Australian Communications Authority (ACA), Australian Competition and Consumer Commission (ACCC) and the TIO on their approaches to dealing with complaints and breaches of regulatory requirements. The Inquiry has sought to assess not only that legislated safeguards are adequate, but also that there are effective enforcement processes.

## BACKGROUND

### TELECOMMUNICATIONS SERVICE INQUIRY (TSI) REPORT FINDINGS

The TSI report made a number of findings and recommendations in relation to the role of legislated consumer safeguards.

The TSI report emphasised the superiority of commercial incentives and competition over regulation in delivering consumer outcomes. Notwithstanding its general preference for market outcomes, the TSI report recognised there would be situations where the market might fail to deliver the desired outcome and regulatory safeguards might have an appropriate role to play.<sup>349</sup>

It also observed that, where market failures occur, there are a number of policy tools other than competition and regulation, such as targeted funding, training and awareness, and Government leadership, that may be more appropriately used to achieve desired consumer outcomes. The TSI report also noted the inadequacy of 'one size fits all' solutions in regional telecommunications and the need for a marketplace responsive to the needs of consumers. It expressed concern about the potential for excessive regulation to impact on investment and profitability, inhibit competition and distort market outcomes.<sup>350</sup>

---

349 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.134-6, pp.168-9

350 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.169, p.173, p.176

The TSI report also identified low levels of awareness of consumer safeguards.<sup>351</sup>

In relation to enforcement, the TSI report found:

*The regulatory powers afforded by legislation provide a suitable framework for the ACA to address quality of service issues. It is in the administration of those powers that inadequate focus appears to have been placed on monitoring, identifying and investigating performance issues associated with the reliability of telephone services and extreme failures to meet customer service guarantee performance standards.*<sup>352</sup>

In light of these findings and recommendations, a number of initiatives were implemented by the Government. These include the new Network Reliability Framework (NRF), new monitoring and investigation arrangements in relation to extreme cases of CSG non-compliance, public awareness activities and revision of the ACA's performance monitoring and reporting arrangements. This chapter assesses the current legislative arrangements in light of these developments.

## CURRENT LEGISLATED SAFEGUARDS

Australia has one of the most comprehensive frameworks of telecommunications-specific consumer safeguards in the world. Key elements are the USO, the CSG, untimed local calls, the TIO and the NRF. The safeguards complement general consumer protection under the Commonwealth *Trade Practices Act 1974* and State and Territory fair trading laws.

The safeguards are given effect in a number of ways, but interact to provide a detailed framework for industry-specific consumer protection:

- fundamental protections for basic services, like the USO, Digital Data Service Obligation (DDSO), CSG, price caps and the untimed local call obligation, are set out in statute;
- supplementary details and less important requirements are often set out in subordinate legislation, such as licence conditions;
- these core legislative safeguards are supplemented by quasi-regulatory industry codes, approved by the ACA, which deal with operationally complex matters where a standard approach is desirable;

---

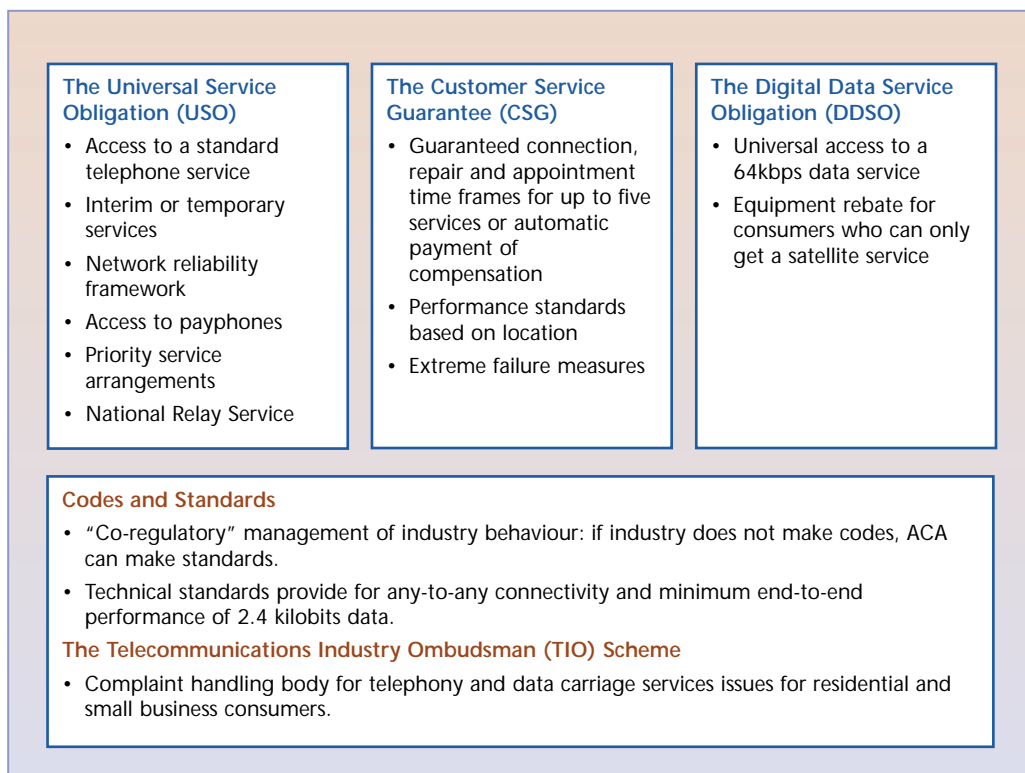
351 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.62

352 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, p.89

- the TIO provides an avenue for complaint resolution for dissatisfied customers; and
- the ACA, as independent Government regulator, provides a further layer of scrutiny and enforcement, particularly in relation to systemic problems.

One possible representation of these arrangements is provided in Figure 7.1.

**Figure 7.1: Structure of the legislated safeguards**



Source: ACA communication

## OVERVIEW OF CONSUMER SAFEGUARDS

Following is a short overview of the current legislative framework of consumer safeguards, focusing on consumer benefits. The safeguards cover almost all aspects of the consumer's experience with a telecommunications company, particularly, but not only, in relation to fixed line telephone services. While the supply of fixed telephony services has developed out of an environment of monopoly supply, mobile and Internet access services have largely emerged within increasingly competitive market structures. Different regulatory approaches have therefore been applied to each sector.

Many of these safeguards are long-standing. The USO, untimed local call obligation and provision of telephone directories have been carried over from the pre-1989 arrangements. Preselection requirements and the TIO were established in legislation in 1991. The CSG was established in 1997.

## PROMOTING COMPETITION

The primary objective of Australian telecommunications regulation is stated to be the promotion of the long-term interests of end-users. The Government advises that it seeks to achieve this through facilitating the commercial and competitive supply of services, supporting competition where necessary, and providing consumer safeguards to ensure minimum standards, particularly where competition is not fully effective. The promotion of competition is supported by general competition law, which is supplemented by telecommunications-specific competition regulation, particularly targeted at the market power of Telstra as a vertically integrated incumbent operator. This includes special regulation of anti-competitive conduct, access and information disclosure.

The need for effective competition and competition regulation in telecommunications was a strong theme in the TSI and in many submissions, including from Telstra's competitors, State and Territory Governments and representative organisations like the Australian Telecommunications Users Group (ATUG) and the National Farmers' Federation (NFF). The Inquiry concurs with this view, and notes that the Government has responded to the Productivity Commission's report examining telecommunications competition-specific regulation by introducing into Parliament a package of amendments to further enhance this area of regulation.<sup>353</sup>

Preselection enables fixed telephone service customers to preselect their preferred provider of long distance, international and fixed-to-mobile calls and to override their selection on a call-by-call basis. The Government has also introduced number portability, which enables fixed and mobile phone customers to take their telephone number with them if they change their local access provider.

## INSTITUTIONAL ARRANGEMENTS

Two independent regulators have particular responsibilities for telecommunications. The ACCC oversees telecommunications-specific competition regulation, pricing and some general consumer protection. The ACA is the specialist regulator for other telecommunications issues. It has extensive powers to gather information, conduct inquiries and investigations, and take enforcement action. Together the ACA and ACCC

---

353 Richard Alston, Minister for Communications Information Technology and the Arts, *Government Boost to Telecommunications Competition*, (media release) 24 September 2002.

monitor and report annually on competition, pricing and performance in the telecommunications industry. The TIO is an independent body for the investigation and resolution of consumer telecommunications complaints. The TIO can also give evidentiary certificates in relation to CSG breaches if required. The Australian Communications Industry Forum (ACIF) has been established by industry to manage self-regulation in telecommunications.

## CONSUMER SAFEGUARDS

In general telecommunications services are supplied on a commercial basis by companies responding to competitive pressure and consumer demand. Where supply may not be commercially attractive, the USO ensures all people, including people with disabilities, have reasonable access on an equitable basis to the standard telephone service, including telephone handset on request, and payphones. There is an industry-funded subsidy for USO services. Under the USO, specialised customer equipment is available to people with disabilities to use the standard telephone service. For people with a speech and/or hearing impairment, the National Relay Service (NRS) provides an industry-funded voice-text translation service.

The CSG provides an incentive for carriage service providers to meet specified timeframes for the connection of services, repair of faults and keeping of appointments, by requiring automatic payment of damages where the timeframes are not met. Following the TSI report, some CSG timeframes for connection of services have been tightened, and the ACA has developed processes for monitoring and investigating extreme cases of non-compliance with the CSG. In response to TSI Recommendation 13, the ACA reviewed industry-wide application of the CSG and recommended it be retained with some minor modifications beneficial to industry.<sup>354</sup> The Government accepted this advice in the interests of consumer protection.

Again as part of the Government's response to the TSI report, priority assistance arrangements have been put in place, which require Telstra to provide enhanced service connection, repair and remediation for people with diagnosed medical conditions who are at risk of suffering an emergency life-threatening incident.

Also as part of its response to the TSI report the Government has developed the NRF to target high levels of recurrent faults. The NRF requires Telstra to monitor and report on fault levels by field service areas, exchange service areas and individual services; and it requires Telstra to take action to prevent a defined level and frequency of multiple faults on individual services.

---

354 ACA, *Review of the Telecommunications Customer Service Guarantee Arrangements*, 2001, pp.4-5

Price control arrangements empower the Minister to set controls on the prices of Telstra and/or any carriage service provider designated as a universal service provider or a digital data service provider. Separately, the untimed local call obligation requires all carriage service providers who offer standard fixed telephone services to offer the option of an untimed local voice call. People living in the remotest 80 per cent of Australia's landmass obtained access to untimed local calls in 2001 as part of the Extended Zones Agreement, which has been locked-in as a Telstra licence condition.

All providers of fixed standard telephone services must offer emergency '000' access, operator assistance, directory assistance and itemised billing.<sup>355</sup> They may also have in place a standard form of agreement (SFOA), which sets out standard terms and conditions of supply in a consumer-friendly form. Telstra is required to provide an entry in a printed telephone directory and supply a telephone directory to all customers with fixed standard telephone service, unless requested not to.

Extensive arrangements protect the privacy of consumers' communications and personal information. Access to telephone sex services is regulated to protect minors and to protect against unexpected high phone bills.

ACIF has developed a range of industry consumer codes covering preselection, the handling of threatening and unwelcome calls, churning (changing providers), local number portability, call charging and billing accuracy, end-to-end network performance and mobile number portability. ACIF also develops technical standards relating to the quality of services.

## MOBILE SERVICES

Mobile services have developed free from much of the regulation applying to fixed services, reflecting in part their introduction as a premium service, as well as the early introduction of competition in the mobile market.

High levels of mobile coverage and service have been achieved without regulatory intervention. As a safety-net however, Telstra has been required to provide CDMA network coverage reasonably equivalent to that provided by its former analogue or AMPS network. The results of recent competitive Government tenders to extend mobile coverage into non-commercial areas have also been locked-in by licence conditions, ensuring coverage in these areas for at least five years, and potentially a further five, depending on the development of new technology.

Mobile number portability enables mobile phone customers to take their mobile phone number with them if they change their provider.

---

355 *Telecommunications Act 1997*, Part 12, Schedule 2

## INTERNET ACCESS SERVICES

Similar to mobile services, services to access the Internet have evolved free of much of the regulation applying to fixed services. This reflects in part their development as an extension of fixed telephony, and the early emergence of a highly competitive Internet Service Provider (ISP) market—arising mainly from very low barriers to entry.

As discussed in Chapters 4 and 6, high levels of dial-up and high-speed Internet access have been achieved commercially, although the cost of access may sometimes be a concern. Some regulatory safeguards nevertheless apply. The untimed local call obligation applies to data calls for residential and charity customers. The Digital Data Service Obligation (DDSO) provides all Australians with reasonable access upon request to a digital data service with a down-load capability of at least 64 kilobits per second (kbps). The Extended Zones Agreement, locked-in by licence condition, has offered people in remote Australia free installation of high speed two-way satellite Internet access, and concessional ongoing charges for the period of the agreement.

## GUARANTEEING COMMERCIAL OUTCOMES

In many instances legislated safeguards have been put in place, even where commercial arrangements had delivered the outcomes the safeguards guarantee. For example:

- the CSG was introduced even though Telstra had pre-existing service level agreements and has its own voluntary service guarantees in relation to mobile services and Asymmetric Digital Subscriber Line (ADSL);
- the DDSO locks in access to ISDN, although it is undertaken commercially by Telstra; and
- the Extended Zones Agreement and the mobile extension agreements have been locked in as licence conditions.

In this context the safeguards provide an added layer of assurance for consumers.

## INTERNATIONAL COMPARISON

Australian telecommunications consumers appear to be among the best protected in the world. While it is difficult, because of national variations, to make exact comparisons between countries, the information available suggests Australia's legislated consumer safeguards compare favourably with other similar countries, such as the United States of America (USA), Canada, New Zealand (NZ) and the United Kingdom (UK). Australia and these countries often have safeguards like the USO, regulations about local calls, and directory and operator services, that are the same or similar. In some instances, Australia appears to have additional safeguards that are unique like the CSG, the Network Reliability Framework and the DDSO. There appear to be few, if any safeguards, that these countries have and Australia does not.

## COMPLIANCE, ENFORCEMENT AND PENALTIES

### ROLE OF THE ACA

Carriers and carriage service providers are required to comply with applicable telecommunications laws as a matter of course. To put this beyond doubt, the telecommunications law includes a specific mechanism that carriers and carriage services providers are required by a statutory licence condition, and service provider rule, to comply with telecommunications laws.<sup>356</sup> Moreover, the law makes it a requirement to comply with licence conditions and service provider rules.

Where a carrier or carriage service provider fails to comply with the law, it is in contravention of its licence conditions or service provider rules. As such, it is liable to formal warnings from the ACA, remedial directions, or injunctive or punitive action in the Federal Court.<sup>357</sup> Penalties can be sought in the Court for up to \$10 million per contravention. These penalties are substantial and equal to those in the Trade Practices Act. In the most serious cases, a carrier may have its licence revoked.

Similar arrangements apply in relation to industry codes and standards. The ACA may give a warning about contravention of a code or direct compliance with a code. As compliance with an ACA direction and ACA standard is a statutory requirement, contravention of those requirements would provide grounds for enforcement action as described above.

---

<sup>356</sup> *Telecommunications Act 1997*, Schedule 1, clause 1, Schedule 2, clause 1

<sup>357</sup> *Telecommunications Act 1997*, sections 69, 70, 102, 103, Part 30, Part 31

As an independent regulatory authority, the ACA has discretion as to what action it takes in relation to achieving and enforcing compliance with the telecommunications law and seeking penalties. The ACA advised that it generally confines itself to the enforcement of systemic contraventions of legislated consumer safeguards and other regulatory requirements. When deciding what action to take in relation to a regulatory breach, the ACA balances a number of factors. These include the nature of the breach and its implications, particularly in terms of the detriment or harm caused, the cost of legal action and the benefit likely to be achieved from such action.

It should not be assumed that technical breaches of the law will necessarily result in penalties. For example, in 2000 the ACA commenced legal action for monetary penalties against two ISPs, Albury Local Internet and Viper Communications, in relation to their refusal to join the TIO scheme. Even though the Court recognised there were technical breaches of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*, it did not consider there was culpability on the part of the ISPs, rather a genuine but erroneous belief as to the extent of the statutory obligation, which they accepted once clarified by the Court. The Court also did not consider that penalties would have a real deterrent effect. It also noted that any damages arising from their conduct were minor or non-existent.<sup>358</sup>

In addition to direct complaints, the ACA has several processes for identifying possible regulatory contraventions. These include:

- the Consumer Protection Agencies Liaison Meeting (CPALM)—enabling the identification, consideration and actioning of issues across agencies;
- the ACA's Consumer Consultative Forum (CCF)—enabling peak consumer body representatives to raise general or particular consumer concerns;
- the quarterly collection of compliance and complaint data from AAPT, Optus, Primus and Telstra;
- analysis and discussion of quarterly and annual TIO complaint data; and
- monitoring of the media.

---

358 *ACA v Viper Communications Pty Ltd* [2001] FCA 355 (5 April 20-01)

## TELECOMMUNICATIONS INDUSTRY OMBUDSMAN (TIO)

While it is not an official regulatory body, the TIO is nevertheless established by law. Individual contraventions as they affect consumers are usually dealt with by the TIO. As an alternative dispute resolution scheme, the TIO's main focus is to resolve an individual's complaint rather than to prove that there has been a legal breach. Where appropriate, the TIO would advise the provider that it appears to be in breach of a relevant legislative requirement. If the supplier fails to rectify that breach, the TIO may direct that supplier to do so (pursuant to section 6 of the TIO's Constitution). Decisions made by the TIO under this section are binding upon members of the TIO Scheme.

The TIO cannot investigate complaints that are specifically under consideration, or have previously been investigated, by the ACA, ACCC or any other court or tribunal. In some instances, however, the TIO may deal with complaints on an individual basis, while the systemic issues are examined by the ACA. A recent example of this is when the TIO received hundreds of complaints where it appeared that several providers were not complying with the ACIF Complaint Handling Code. Although the TIO dealt with each individual complaint, the matter was referred to the ACA as a systemic problem. Similarly, the TIO has the discretion not to investigate a complaint which, in the TIO's opinion, would more appropriately be dealt with by another body, such as the ACA or ACCC.

Given their complementary roles, there is close cooperation between the TIO and the ACA, and also with the ACCC, as the general consumer protection regulator.

## MONITORING AND REPORTING

Monitoring and reporting are important in ensuring effective, legislated consumer safeguards as they provide an indication of service outcomes and compliance with, and effectiveness of, any underpinning safeguards. Monitoring and reporting can also identify the need for further policy action.

The ACA has a general responsibility under the *Australian Communications Authority Act 1997* to monitor and report on compliance with regulatory requirements and industry performance.

Under this function the ACA collects and publishes quarterly data on 13 key performance indicators, as set out in Table 7.1. This information is published quarterly, a quarter in arrears (i.e. March quarter data is published in June).

**Table 7.1: ACA Key Performance Indicators**

---

1.	Measurement of performance in meeting requests from customers for connection of in-place services within specified timeframes.
2.	Indicator of the performance in meeting specified timeframes for the connection of specified call handling features to in-place services.
3.	Indicator of the performance in meeting specified timeframes for the connection of new services.
4.	Indicator of the performance in meeting specified timeframes for the restoration of services.
5.	Indicator of the performance in meeting appointments with their customers.
6.	Indicator of performance in meeting section 117A of the <i>Telecommunications (Consumer Protection and Service Standards) Act 1999</i> (i.e. time for payment of damages).
7.	Indicator of performance in responding to calls from customers for assistance, other than directory assistance.
8.	Indicator of performance in responding to calls from customers for assistance with telephone numbers.
9.	Indicator of performance in terms of consumer dissatisfaction with particular aspects of provision of a standard telephone service as measured by complaints.
10.	Measures performance in being able to establish connections for the purpose of local calls, national long distance calls and direct dial international long distance calls.
11.	Digital GSM call drop out
12.	Digital GSM call congestion
13.	Population coverage of mobile phone services

---

Source: ACA, *Discussion Paper: Monitoring and Reporting on Quality of Service: Possible Enhancements in Light of the Government's Action Plan in Response to the Telecommunications Services Inquiry*, 18 September 2001, pp.32-47

With the development of the NRF and the ACA's monitoring of extreme cases of CSG non-compliance, further Telstra data on fault levels and connection and repair times will become available for compliance monitoring and enforcement purposes.

In response to the TSI report's Recommendation 9 relating to quality of service reporting for consumers, the ACA is also refocussing its performance monitoring and reporting arrangements to provide more useful information to consumers.<sup>359</sup> The Inquiry understands the ACA is incorporating the Government's recent decisions on continuation of the CSG, establishment of the NRF and managing extreme cases of CSG non-compliance into this framework. A number of this Inquiry's findings and recommendations are also relevant to the ACA's work in this regard.

The ACA has specific monitoring and reporting requirements under the *Telecommunications Act 1997*, especially its annual report on industry performance under section 105. This is the ACA's major report on regulatory compliance and industry performance.<sup>360</sup>

The ACA also has a range of more specific monitoring responsibilities, that have arisen as a result of Ministerial request or subordinate legislation. For example, it is monitoring closely Telstra's compliance with the Extended Zones Agreement and the new priority assistance requirements.

On the basis of its day-to-day, quarterly and annual monitoring work, the ACA is able to assess compliance and initiate enforcement action where required.

The ACCC monitors and reports separately on telecommunications competition and pricing issues.

The TIO provides quarterly and annual reports on complaints it receives. This is fed into the ACA's monitoring and reporting processes.

---

359 See for example, [www.aca.gov.au/publications/reports/performance/2000-01/report.htm](http://www.aca.gov.au/publications/reports/performance/2000-01/report.htm), viewed 22 October 2002

360 See, for example, [www.aca.gov.au/publications/reports/performance/2000-01/report.htm](http://www.aca.gov.au/publications/reports/performance/2000-01/report.htm), viewed 22 October 2002

## EFFECTIVENESS OF CURRENT LEGISLATED SAFEGUARDS

The Inquiry considers the effectiveness of the current legislated safeguards can be reasonably gauged by their coverage, consumer benefits in the areas the safeguards target, levels of complaint, the level of public awareness, the degree of industry compliance, and the level of industry acceptance. The effectiveness of monitoring, reporting and enforcement are also important, but are discussed separately.

## SUPPORT FOR SAFEGUARDS IN SUBMISSIONS

Submissions indicated strong support for the current range of safeguards, and particularly the USO, CSG, untimed local calls and the TIO Scheme. This was sometimes expressed explicitly:

*The Centre's view is that the move to a further competitive environment ... presents challenges for ensuring that adequate consumer protection mechanisms are in place. It is submitted that these challenges are able to be met largely within the existing regulatory framework.*<sup>361</sup>

*The current provision of legislated consumer safeguards ... are essential requirements of the future telecommunications area of Australia. Ensuring that future Governments and commercial operators do not diminish, change or remove these safeguards, other than keep them current with technology, is a conditional requirement of WA Farmers ....*<sup>362</sup>

*On the whole, these mechanisms have proved to be significantly more effective in protecting consumer rights than self-regulatory codes and standards.*<sup>363</sup>

*Other safe guards including the Universal Service Obligation (USO) are beneficial to rural customers, as they stipulate that all customers are entitled to and must be provided with services. We state that the USO must be retained to ensure increases in future service standards in regional areas are maintained.*<sup>364</sup>

---

361 Communications Law Centre, submission, p.6

362 WA Farmers Federation, submission, p.4

363 Consumers Telecommunications Network (CTN), submission, p.12

364 South Australian Farmers Federation, submission, p.4

As noted above, a strong theme was the need for effective regulation to support the development of competition. Competition is widely perceived as being not yet fully developed with Telstra still having significant power in various markets, particularly arising from its control of the customer access network. For example:

*Competition rather than legislated minimum service levels will drive the development of regional telecommunications.*

*However, while the incumbent provider has pricing power sufficient to stifle any initiative, competition will fail.*

***The Government must ensure that Telstra acts in the interests of sustainable competition.***<sup>365</sup>

While submissions showed varying knowledge of the current legislative safeguards and varying views on their present and future effectiveness, there was a strong consensus that appropriate and powerful safeguards are needed into the future. For example:

*In a fully privatised telecommunications environment rural and remote customers will need the protection of strong licensing and legislation documentation if they are to be comfortable with their future access to reasonable ICT [information and communications technology] service standards.*<sup>366</sup>

*[C]ountry people must have some comfort in the arrangements that the government locks into place that does not allow us to become second class customers of these vital systems.*<sup>367</sup>

*Like many others, we hold shares in Telstra and regardless of whether the full sale of the company will benefit shares or not, should such a sale go ahead, we are fearful of a diminution of standards/services, particularly in areas outside the major cities. Only powerful legislation mandating Telstra's social service role to provide a functional and efficient telecommunications standard regardless of location will be sufficient cause to rethink our position. We believe the majority of Australians outside the major cities share this view.*<sup>368</sup>

---

365 City of Greater Shepparton, submission, p.11

366 Isolated Children's Parents' Association Australia, submission, p.4

367 Gerald Martin, AgReSULTS, p.1

368 Paul and Kerry Burgoyne, submission, p.3

## COVERAGE OF CONSUMER SAFEGUARDS

The current safeguards focus mainly on fixed telephone services. This is understandable given the social and economic dependence on this service, the historical circumstances in which it has developed, and the long-standing dominance in this market of one provider, Telstra.

The TSI report was generally satisfied with the scope of the existing safeguards. Perhaps the one significant issue identified by the report was the lack of effective oversight of fault levels, particularly of recurrent faults. This is now being addressed through the NRF.

There are fewer legislated safeguards in relation to mobile coverage and Internet access. In the Inquiry's view this reasonably reflects factors related to the nature of the services, the nature of the market for these services, and the alternative strategies used by the Government to achieve consumer benefits in these service areas.

The main additions to legislated safeguards proposed in submissions relate to mobile phone coverage and Internet access speeds. These are generally described as extensions that should be made to the USO. The Inquiry agrees with the objectives of these proposals but it does not agree with them being pursued through the USO. There are better approaches than using the USO to achieve these ends. Because of its importance, the issue of USO extension is discussed in detail below. The Inquiry's proposals to improve consumer benefits in these areas are set out in Chapter 3 (mobile services), Chapter 4 (dial-up Internet access) and Chapter 6 (higher-speed Internet access).

The other key new safeguard proposed in submissions—a mechanism for ongoing review, improvement and funding of regional, rural and remote telecommunications service levels—is discussed in detail in Chapter 9.

The Inquiry notes there has been some dissatisfaction on the part of consumer representatives with the operation of industry self-regulation, in particular, concerns that their views are not being taken into account.<sup>369</sup> While this is a generic rather than a regional-specific issue, the Inquiry understands progress is being made in addressing these concerns.

## COMPLAINTS

Complaints that indicate a failure of the legislated safeguards would be dealt with by either the TIO or ACA.

---

369 Communications Law Centre, submission, p.6; Consumers' Federation of Australia, submission, p.2

Table 7.2 gives numbers of complaint issues, by key categories, to the TIO for 1997–98 to 2000–01. Unfortunately the data is not disaggregated into metropolitan and regional areas, though this was done in 1999–2000.<sup>370</sup>

**Table 7.2: Issues handled by the TIO, key categories, 1997–98 to 2001–02**

Type of Issue	1997–98	1998–99	1999–2000	2000–01	2001–02
<b>Fixed services</b>					
Billing	12 842	16 199	11 408	15 996	15 046
Customer transfer	3 357	5 169	8 258	11 234	4 819
Customer service	708	1 207	3 882	11 486	6 703
Faults	3 494	5 560	5 510	4 060	3 508
Provision	4 522	7 823	9 183	7 900	2 775
Other	6 052	8 259	9 087	9 696	7 452
<b>Total fixed services</b>	<b>30 975</b>	<b>44 217</b>	<b>47 328</b>	<b>60 372</b>	<b>40 303</b>
<b>Mobile services</b>					
Billing	2 669	3 702	3 509	5 658	7 047
Contracts	-	-	-	-	5 168
Credit control	-	-	-	-	1 597
Customer service	-	-	-	-	3 136
Faults	-	-	-	-	1 550
Porting	-	-	-	-	1 264
Other	4 251	5 340	5 667	6 715	672
<b>Total mobile services</b>	<b>6 920</b>	<b>9 042</b>	<b>9 176</b>	<b>12 373</b>	<b>20 434</b>
<b>Internet services</b>					
Billing	688	1 822	2 102	3 136	3 582
Contracts	61	242	440	719	836
Customer service	-	12	282	1 181	1 940
Faults	40	86	79	-	2 384
Other	388	854	1 389	2 929	755
<b>Total Internet services</b>	<b>1 177</b>	<b>3 016</b>	<b>4 292</b>	<b>7 965</b>	<b>9 497</b>
<b>Total complaints</b>	<b>39 072</b>	<b>56 275</b>	<b>60 796</b>	<b>80 710</b>	<b>70 234</b>

Notes: Mobile services not broken down 1997–98 to 2000–01. Mobile services billing issues have been separated from fixed services billing issues. No Internet customer service issues figure available for 1997–98; no Internet fault issues figure available for 2000–01.

Source: TIO, 2000, 2001 and 2002 Annual Reports, [www.tio.com.au](http://www.tio.com.au), viewed 24 October 2002

370 ACA, *Telecommunications Performance Report, 1999–2000*, 2000, p.125

There has been a steady but not significant increase in complaints since the introduction of open competition, with a decrease over the last financial year. Such an increase could readily be explained as a combination of more robust competition, increased consumer awareness of rights, and a steady increase in both the range of services being provided and the take-up of those services. The decline could be attributed to a more settled market, for example, with the exit of One.Tel and following the introduction of local call competition and number portability.

Also the nature of the complaints does not appear to suggest a legislative failure. Many relate to matters which safeguards can satisfactorily address, such as connections and fault repairs. The largest category is complaints relating to billing, that is, disputes over call charges. Again, there are rules in place to enable these matters to be dealt with—the SFOA, ACIF's billing code and telephone sex regulations. Billing is inevitably a vast and complex area, and mistakes can be made by both industry and customers. What is important are the processes for resolving such issues. The outcome of these processes is shown in Table 7.4 below, which sets out outcomes of complaints made to the TIO.

Matters which could be classed as significant potential breaches of legislated safeguards that have been investigated by the ACA include:

- Telstra's performance under the CSG and USO in 1999; and
- the supply of telephone services to the Boulding family in 2002.

In relation to both of these matters no breaches of legislated safeguards were found, although in the case of the latter Telstra policy deficiencies were identified and addressed by the Government.

Other complaints issues investigated by the ACA are few and relatively minor overall. Perhaps the most significant from the consumers' perspective are refusals to join the TIO and practices in relation to complaint handling.

## DELIVERY OF CONSUMER BENEFITS

In assessing the effectiveness of consumer safeguards in providing benefits to consumers, it is often difficult to distinguish between the extent to which outcomes have been delivered through commercial initiatives and competition, rather than through regulation. As previously indicated, many consumer safeguards have been put in place to ensure that commercial provision of service remains in place. Similarly safeguards defining service standards, such as the CSG, are not necessarily resulting in service levels beyond what might have been achieved commercially in any event. The Inquiry's view is that these safeguards are likely to have the most significant direct impact on improved service levels in those areas where competition is not a major factor in driving service improvements.

In an overall sense, the positive results identified in Chapters 2 and 5 would indicate the efficacy of the legislated consumer safeguards in achieving vital consumer benefits.

Some submissions did express concerns about the adequacy of the existing safeguards. There is little suggestion, however, of fundamental or even significant failure on the part of the safeguards. Indeed, there was recognition in the submissions that the existing legislated safeguards are working:

*The [Communications Law] Centre's view is that the move to a further competitive environment including a further privatisation of Telstra presents challenges for ensuring that adequate consumer protect mechanisms are in place. It is submitted that these challenges are able to be met largely within the existing regulatory framework.*<sup>371</sup>

The following details specific safeguard issues raised in submissions, and how they are addressed in this report:

- CSG connection and repair timeframes are discussed in Chapter 2;
- telephony fault levels are being covered by a new regulatory mechanism, the NRF, discussed in Chapter 2;
- mobile coverage extension and benefits have been achieved by Government funding support: these are analysed and further recommendations put forward in Chapter 3;
- dial-up Internet speeds over Telstra's network are already set by agreement between Telstra and the Government. In Chapter 4, the Inquiry has recommended that the benefits available through this agreement should be consolidated as a licence condition; and
- the Inquiry has recommended (in Chapter 6) that prices for higher bandwidth Internet services should be addressed through commercial incentives rather than regulation such as price controls.

The Inquiry is aware there is some concern amongst consumers about the effectiveness of the ACIF Code on Consumer Complaint Handling.<sup>372</sup> While each complaint is important, the overall number of these complaints is small, and concerns about compliance with the code have been investigated and acted upon by the ACA.<sup>373</sup>

---

371 Communications Law Centre, submission, p.6

372 Consumers' Federation of Australia, submission, p.3

373 ACA, *Carriage Service Providers and Complaint Handling Systems, Report of the ACA Investigation*, October 2002, pp.3-4

It appears to the Inquiry that another reasonable indicator of the effectiveness of legislative safeguards is the number of negative consumer experiences, when compared with the overall number of consumer contacts with the industry. While complaints about delays, faults and other matters reflect frustrating and disappointing experiences for individual consumers and need to be addressed, they are a small proportion of total industry services and transactions. This is illustrated using Telstra data in Table 7.3.

**Table 7.3: Telstra complaints, 2001–02**

Complaint type	Number of complaints received by Telstra	Ratio of complaints received by Telstra	Number of complaints about Telstra received by the TIO	Percentage of total TIO complaints for the category
Billing	29 369	3.6 complaints per 10 000 bills issued	9120	41.3%
Provision of service	16 230	15.9 complaints per 10 000 services in operation	2134	72.0%
Fault repair	43 489	124 complaints per 10 000 faults reported	3099	61.3%
Customer transfer	1759	6 complaints per 10 000 transfers	1042	17.1%
Credit control	8810	8.6 complaints per 10 000 services in operation	1507	38.0%

Source: ACA, *Telecommunications Performance Report 2001–02* (draft)

While there are variations, similar complaint levels are reported by other service providers in the ACA's quarterly performance bulletins.

In an industry as vast and complex as telecommunications, with more than ten million fixed services, more than 12 million mobile services and almost four million Internet services, perfect results cannot be expected. Just because services are not fault free or providers sometimes take longer than they should to repair services, does not mean the

system as a whole is not working well. When considered against the scale of the overall system, the Inquiry believes the Australian telecommunications sector performs well, both in terms of technical operation and customer interactions.

As noted above, specific processes have been put in place to address individual complaints and contraventions, with a focus on resolution of individual complaints between the customer and the service provider in the first instance. Given the millions of transactions in the industry this is essential for efficient operation of the system. It would be impossible for a regulator and the Courts to deal with each of these matters individually. Instead service providers are encouraged, through industry codes, to provide effective complaint handling mechanisms, with further redress being available through the TIO.

### Level of public awareness

For legislated safeguards to be effective, it is important that individuals are aware of the protections available to them. Notwithstanding concerted Government, ACA and industry efforts before and after the TSI report, the Inquiry remains concerned about public awareness of telecommunications safeguards.

This lack of awareness is demonstrated through the number of submissions that clearly did not know what matters safeguards currently cover, and how the safeguards work. This is not surprising given their scope and complexity. For example:

*Protection seems adequate, however, it is suspected many people are not aware of or adequately informed about their rights and the obligations/standards of service that service providers are required to meet.*<sup>374</sup>

*There would be very few members of the Towong Shire community who have heard of the Universal Service Obligation (USO), Customer Service Guarantee (CSG) and Telecommunications Industry Ombudsman (TIO).*<sup>375</sup>

The TIO has also noted that many people calling about delays in service connections are unaware about the existence of the CSG.<sup>376</sup>

---

374 Sunraysia Area Consultative Committee Inc, submission, p.7

375 Towong Shire Council, submission, p.3

376 TIO, *Annual Report 2002*, October 2002, p.44

A number of submissions queried how the provision of high-cost services in regional, rural and remote areas could be guaranteed, although this has been the purpose of the USO for more than ten years. For example:

*The Government has stated that they will legislate to make sure a totally privatised Telstra would continue to service the regions. Really. Let me put this to you. If a private firm was to report to the government of the day. That to continue to service a part of its market. Which is unprofitable. Would mean that the firm would endanger its financial position. Would or could that govt, continue to insist that the firm continue to service that portion of the market. Don't be silly, of course it could not. Imagine what shareholders would make of that.*<sup>377</sup>

A particular concern was that mandatory timed local calls could be introduced at Telstra's choosing, even though it is prevented by law. For example:

*One aspect which does not seem to be getting any comment, to my knowledge, is the likelihood that a fully privately owned Telstra would introduce TIMED LOCAL CALLS. I believe many (most?) Australians would see this as a regressive step and would not be convinced that the Government would be able to guarantee it would not happen.*<sup>378</sup>

The ACA's 2002 Consumer Awareness Survey found improving but still poor levels of consumer awareness about telecommunications issues.<sup>379</sup> A survey of 622 farmers commissioned by Telstra Country Wide<sup>®380</sup> (TCW) found that a third of farmers were not aware of the existence of the regulatory regime covering telecommunications services, and approximately one half of all farmers surveyed did not understand the mechanisms in any detail.<sup>381</sup>

---

377 James Tongue, submission, p.2

378 P Kilborn, submission, p.1

379 ACA, *Consumer Awareness Survey 2002*, October 2002, pp.11-12.

380 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556.

381 TCW, A national survey of farmers' usage of, and attitudes towards, telecommunications services in Australia, October 2002, p.10

## COMPLIANCE AND COMPLIANCE MECHANISMS

While submissions clearly indicate the system is not perfect, the Inquiry's view is the overall level of compliance with legislated safeguards is high. This view is based on the relatively low levels of complaint about non-compliance, the low level of enforcement action, and the generally high levels of compliance evident in ACA reports.

Telstra has established a company-wide Regulatory Compliance Assurance Program. The program consists of a range of initiatives to ensure Telstra complies with its regulatory obligations and that its compliance can be assessed and reported. This includes senior management commitment and accountability for compliance, staff education and training, the embedding of compliance into process and system design, and a computer-based compliance reporting system.

A practical example of this system is in the CSG area, where CSG requirements are an integral part of the Service\*Plus customer management system and detailed reporting. Similar systems requirements arise from the NRF.<sup>382</sup> Optus' submission also provided evidence of its commitment to compliance and the resources it commits to do so.<sup>383</sup>

One area of concern is the lack of clarity in some areas about what compliance actually means. For example, compliance with CSG and USO connection and repair timeframes is measured in terms of percentage compliance, with full compliance, by definition, being 100 per cent. One hundred per cent is effectively impossible to achieve, which raises the issue of the level of compliance that the Government and consumers should be seeking. The situation is complicated by the performance standards themselves, and whether they are set at an appropriate level, as discussed in Chapter 2. The Inquiry considers there may be merit in further consideration by Government of indicative performance targets in this area.

## INDUSTRY VIEW OF LEGISLATED SAFEGUARDS

In looking at industry acceptance of the current level of regulation, the Inquiry is concerned less with industry's overall level of comfort with the regime, than with their preparedness to accept and work constructively within the regime and with the regulators. The Inquiry would be worried if industry was too comfortable with its regulatory obligations, but at the same time it is important that the regime does not impose undue regulatory burdens.

---

382 Telstra, submission, pp.165-169

383 Optus, submission, pp.25-28

Submissions from Telstra, Optus and Vodafone indicated they generally understood and accepted the obligations imposed upon them, though they would prefer less regulation. Telstra noted that:

*While it has some concerns about the general efficiency of particular aspects of the regulatory framework, Telstra believes that the current regulatory regime is generally appropriate given its objective of protecting and safeguarding the interest of telecommunications consumers into the future.*<sup>384</sup>

While accepting the importance of the USO in principle, all carriers questioned the current delivery arrangements, emphasising the need to better align the mechanism with the competitive telecommunications environment.<sup>385</sup> The operation of the USO is discussed below and in Chapter 2.

Optus also argued that the CSG should be restricted to the primary universal service provider and improvements could be made to the TIO scheme. The TIO matters raised are essentially industry rather than consumer issues and are best pursued in that context. In relation to the CSG, the Inquiry understands Optus' concerns but notes that since the TSI report the matter has been examined by the ACA and the Government, with a decision being made to retain industry-wide coverage. The Inquiry understands, however, some flexibility is to be introduced into the CSG to assist service providers, and it notes resellers have the right to seek contributions towards CSG payment from upstream suppliers, where the latter are responsible for non-compliance.

## FINDING 7.1

The existing framework of legislated consumer safeguards is considered effective, and provides a strong level of protection for telecommunications consumers. However there is always scope for fine-tuning and 'continuous improvement', as market conditions change.

## FINDING 7.2

Compliance with legislated safeguards by carriers and service providers is generally high. However there is a lack of clarity in relation to the expected level of compliance with percentage based compliance measures, such as under the Customer Service Guarantee.

---

384 Telstra, submission, p.112

385 Telstra, submission, pp.169-172; Optus, submission, pp.25-28; Vodafone, submission, p.18

## EXPANSION OF THE USO

A key issue concerning legislated safeguards raised in submissions, and which warrants particular consideration, is the scope of the USO. A number of submissions from consumers argued that the current USO is not an adequate consumer safeguard because it does not guarantee access to services other than basic voice telephony and payphones. These submissions argue that the USO should be expanded, for example, to include mobile telephony and/or a data capability of a guaranteed speed, for example 19.2kbps or greater.

*No mandatory requirement for mobile services to be provided in regional Australia. It is not part of the Universal Service Obligation.*<sup>386</sup>

- *Universal Service Obligation (USO) and Customer Service Guarantees specify the minimum requirements, not what is “adequate”.*
- *There need to be strong regulatory arrangements with benchmarks beyond the USO.*
- *Revisiting and extending the Universal Service Obligation needs to take place to include mobile phone coverage and affordable Internet access.*
- *Clear benchmarks for telecommunication services need to be set by the Commonwealth Government and updated with advances in technology.*<sup>387</sup>

*There is a concern that a fully privatised Telstra will not enhance services in rural and remote areas. To ensure there is adequate growth and provision of services, it is recommended that the Universal Service Obligations be updated to 128 kbit/s (i.e. 2 x ISDN services), with a five-year review to upgrade service levels as demand changes.*<sup>388</sup>

By contrast a number of submissions from industry players argued that the current USO arrangement is unduly burdensome, inhibits competition, and should be wound back rather than expanded. Optus, for example, argued, that the USO forces it to make a significant payment to its main competitor, Telstra, a company that is four times more

---

386 Isolated Children's Parents' Association of WA, submission, p.4

387 WA Government, submission, p.6

388 Communications Experts Group (CEG) Community Teleservices Australia (CTSA), submission, p.11; see also, for example, Louise Staley, submission, p.23

profitable. Optus and others contend the cost of the current USO should be borne solely by Telstra . Alternatively Optus suggests that contributors might divert contributions to development of their own networks.

*While Optus believes that basic services for those in loss-making areas should continue to be funded through the USO, it is not tenable that other carriers should have to continue to fund Telstra to provide those services.*

*Telstra is able—and should—fund the whole of the USO itself. This is the key reform needed to stop the USO being an impediment to competition.*

*[G]iving non-Telstra carriers capacity to provide their own services on the ground, to a value equivalent to that of their former USO contributions. Such a proposal would facilitate competitive infrastructure and the provision of competitive advanced telecommunications services in rural and regional Australia by new carriers.<sup>389</sup>*

As proposed in Chapter 2, the Inquiry recommends the USO costing and funding arrangements be reviewed. Optus' proposal that service providers be required to invest in their own networks is interesting, but needs to be considered carefully. The Inquiry considers it might be difficult to implement, administer and enforce. Telstra, Optus and Vodafone all emphasised the cost and industry impacts inherent in any expansion of the USO.

Calls to expand the USO must be considered carefully. Are the upgrades suggested appropriate in terms of community need? Would the costs exceed the benefits? More fundamentally, is the USO mechanism, as it currently exists in law, the best mechanism for improving consumer services and benefits into the future?

In the Inquiry's view, the principal problem with calls to expand the USO is that they necessarily imply the use of the current USO system (the 'classic USO model' as Telstra calls it) to underpin the delivery of those services. While the current USO has been designed so it can be upgraded, the Inquiry questions the appropriateness or sustainability of such an approach.

The current USO approach was developed to underpin the supply of basic telephone services in a monopoly environment. It was premised on there being a single telephony provider who would internally cross-subsidise the cost of providing a limited range of

---

389 Optus, submission, pp.26-27

services, regardless of location. While it has been carried over into the new competitive environment, experience suggests the model is poorly suited to an increasingly competitive market place, a wide range of products and diverse consumer demand. The USO, and the basic, minimum standard of service it provides for, now seems at odds with the rapidly expanding telecommunications needs of Australians.

Importantly, as reflected in submissions received from industry players, the current USO mechanism, if used to support uniform pricing and if funded by industry, has a major negative impact on competition and consumer choice because it provides an industry cross subsidy to support the USO provider's product to the commercial detriment of other providers. Moreover, determining the appropriate subsidy to pay a provider is inherently complex and contentious. The level of subsidy is tied to price controls and access charges. In the Inquiry's view the USO should be confined to telephony services. The Inquiry strongly supports the consumer protection provided by the existing USO, but in view of industry submissions, there may be a case for the Government to re-examine the subsidy level and funding mechanism.

There is also strong industry resistance to industry funding of further Government objectives to expand equitable service provision into regional, rural and remote areas. The industry sees this as a Government social policy objective, funded most appropriately and transparently from the public purse.

The Inquiry believes that future service equity objectives in competitive markets should not be achieved through the traditional USO model. As reflected in the recommendations for higher bandwidth services (Chapter 6), the preferred approach is that of incentive schemes, transparently funded by Government, that seek to stimulate competition and choice, while also promoting equity of access.

The Inquiry does not believe that an upgrade of the current legislated USO safeguard is the appropriate means of promoting access to new services.

### FINDING 7.3

The Universal Service Obligation is not an effective mechanism for providing broad consumer access to an increased range of services into the future. There are a range of other more appropriate policy options available to the Government to achieve equity objectives in the future. These various mechanisms need to be well integrated and publicly articulated as part of the regional telecommunications plan proposed in Chapter 9.

## CONSUMER TELECOMMUNICATIONS NETWORK (CTN) CONCERN ABOUT USO MARKETING PLANS

In its submission CTN expressed concern that Telstra develops its own USO Marketing Plan, effectively letting it define its own obligation.<sup>390</sup> However, while the Plan is developed by Telstra, it must be approved by the ACA. This appears to reflect the regulatory philosophy that Telstra, as the service provider and having the best knowledge of its capabilities and operational practices, should develop the Plan.

## TELECOMMUNICATIONS AND DISABILITY CONSUMER REPRESENTATION'S (TEDICORE) CONCERN ABOUT TELSTRA'S DISABILITY SERVICES

In its submission TEDICORE noted the importance to people with disabilities of a range of services Telstra provides. These are the Directory Assistance Hotline, the Disability Inquiry Hotline, Aged and Disability Centres, the Centre for Accessibility within Telstra's Research Laboratories and Telstra's Disability Services Unit, Telstra's central disability policy unit. TEDICORE also proposes that Aged and Disability Centres be expanded into regional areas through mobile showrooms or staff visits. TEDICORE notes that Telstra currently provides these services as a 'good corporate citizen', but it considers their provision should be required by legislation.

Again, the issues raised by TEDICORE are essentially national rather than regional in nature, and properly matters for the Government rather than the Inquiry .

For its part, the Inquiry agrees with TEDICORE that the services provided by Telstra are helpful for people with disabilities. That they are provided by Telstra voluntarily illustrates the strong effort Telstra makes in this area .

It is unclear to what extent such arrangements would be required under the *Disability Discrimination Act 1992*. Such services could be included in Telstra's Disability Action Plan if they are not already. If this is not the case Telstra could give consideration to addressing TEDICORE's concerns in its next Disability Action Plan.

## COMPENSATION

One common criticism of the current CSG is that it does not provide sufficient compensation for loss of business due to a telephone or other service being out of order. The Inquiry believes this is not the purpose of the CSG. As noted above, its purpose is to provide service providers with an incentive to meet the CSG timeframes.

---

390 CTN, submission, p.12

Claims for compensation for loss of business are a matter for fair-trading and/or the common law. Telecommunications providers generally have their own separate compensation processes. Moreover claims for 'loss of business' compensation can be pursued with the TIO. There have been a number of TIO directions relating to compensation since 1997. One submitter, Tresname Pty Ltd, however, asserted that 'small business claims for loss are still being treated under outdated law, i.e. no absolute proof of loss no result' when there was a trend to proportionate settlement on the basis of probability.<sup>391</sup>

That such compensation processes exist is obviously not well known, and it is difficult to establish from information provided by service providers.

#### FINDING 7.4

The ability to seek compensation for loss of business from carriage service providers, including via the Telecommunications Industry Ombudsman, is not sufficiently well known and could be given more prominence in industry and Government publicity material.

## MAJORITY PUBLIC OWNERSHIP OF TELSTRA AS A CONSUMER SAFEGUARD

Many submissions argued that the most effective consumer safeguard is the retention of Telstra in majority Government ownership. The Inquiry considers that the question of public or private ownership of Telstra is not relevant to consideration of the Government's legislated framework to protect telecommunications consumer rights, as set out in the Inquiry's Terms of Reference.

---

391 Tresname Pty Limited, Inquiry submission, p.5

## PUBLIC AWARENESS OF LEGISLATED SAFEGUARDS

Consumer awareness of the protections available to them is key to the effectiveness of legislated safeguards. It is clear that consumer awareness in this area is growing, but is still low. Further improvement in consumer understanding would be of considerable benefit to the operation of the safeguards regime.

Lack of consumer awareness about legislated protections—as well as commercial developments—emerged as a concern in the TSI report. Several initiatives were undertaken to address it and are continuing. It is noted that significant resources have already been expended and continue to be expended on raising public awareness.

For example:

- the *New Connections* website and 1800 helpline;
- the Government's consumer information campaign in 2001; and
- the ACA's general consumer education programs.

A range of bodies is involved in raising public awareness. Key players include the Commonwealth Government, the ACA, the TIO, ACIF, industry and consumer organisations. This is discussed further in Chapter 5. Effort should be put into coordinating awareness initiatives to maximise the return on investment and ensure consistency in the information provided. This has been done by the ACA and Telstra, in relation to the Extended Zones Agreement, and Telstra's new priority assistance arrangements.

Paradoxically, it may be that low awareness is due in part to the low incidence of Australians having to resort to legislated safeguards. The vast majority of consumers appear to have a trouble free experience with their service provider, and have no real need for a detailed day-to-day knowledge of consumer safeguards. It is not until they have a problem that most people need to know their rights.

The Inquiry sees two important priorities in relation to raising awareness:

- simplifying the message; and
- getting the message out there.

## SUMMARY OF TELECOMMUNICATIONS CONSUMERS' RIGHTS

The Inquiry considers the multitude of safeguards and their complexity inhibit their ready recollection and understanding by the community.

Public awareness could be improved by presenting the legislated safeguards in a simplified manner. To this end the Government should consider the development of a Summary of Telecommunications Consumers' Rights.

This document would provide a comprehensive but concise and simple summary, perhaps suitably illustrated, of the key consumer safeguards.

Lengthy Government documents are often counterproductive in getting the message across. The Summary would provide a simple, readily comprehensible statement of the protections available to telecommunications consumers.

The document would derive from the rights of consumers set out in detail in existing legislation. The outline (s.4) to the Telecommunications (Consumer Protection and Service Standards) Act may provide a suitable model.

The Summary could be given a legislative foundation if the Government considered it appropriate, but it would not be essential to its effectiveness. The Summary, would, however, link into the wider Regional Telecommunications Plan proposed in Chapter 9, providing for example, its key objectives.

The Inquiry sees such a Summary as providing the basis of renewed efforts to build public awareness.

### Consolidating and simplifying consumer legislation

A proposal by Telstra in its submission is that the current consumer safeguards should be consolidated in a single piece of legislation and that legislation be simplified.<sup>392</sup> To some extent this was done in 1999 with the enactment of the Telecommunications (Consumer Protection and Service Standards) Act.

While the Inquiry sees theoretical benefits in this, it considers it would be a difficult and protracted task, and the practical advantages limited or non-existent. Few consumers would be particularly interested in sitting down and reading the legislation, no matter how much it is simplified.

---

392 Telstra, submission, p.9

## New approaches to public awareness raising

Existing approaches to public awareness raising should continue, particularly the initiatives following on from the TSI report.

These efforts should be coordinated with wider efforts to develop community awareness about legislated safeguards, as well as about commercial offerings of the telecommunications market, and the potential benefits arising from telecommunications and information technology generally.

This aligns with recommendations elsewhere in this report about the ongoing need for community training schemes, particularly for special needs groups.

As well as more traditional types of consumer awareness programs, new approaches should be examined. Practical, concrete, cost-effective solutions to the problem of low consumer awareness are needed. One idea the Inquiry has found attractive follows.

## Information in telephone directories

Consistent with the view that most people only want to know what their rights are when they have a problem, the Inquiry considers information is best made available to consumers when they are seeking guidance on resolving those problems.

In this context, the most obvious place for consumer rights information to be provided is in the telephone directory.

Under the law a telephone directory must be provided to each fixed phone customer. Six metropolitan and 49 regional directories are published by Sensis, Telstra's directory business. More than 11 million copies are delivered free to almost every home and business in Australia each year.<sup>393</sup> Phone books are generally retained for their full life and are difficult to lose. The TIO has advised that the telephone directory is the most common means by which callers are directed to the TIO.

Phone directories already include some information on regulatory arrangements, but it appears this information is not as comprehensive or succinct as it might be. It could be replaced by more focused information, perhaps based on the proposed Summary of Telecommunications Users' Rights.

The Inquiry envisages the information being given prominent placement in directories, possibly on or inside the cover or in the directories' early pages. At a minimum the cover could advertise the inclusion inside of important information.

Consideration could also be given to provide summary information in other formats that are unobtrusive, resource effective, but with high and repeat visibility, such as notices in bills and even fridge magnets.

---

393 Sensis, [www.sensis.com.au/Internet/products\\_services/wp/ps\\_wp.jhtml](http://www.sensis.com.au/Internet/products_services/wp/ps_wp.jhtml), viewed 27 October 2002

## RECOMMENDATION 7.1

Measures should be taken to provide telecommunications consumers with a simplified statement of their legislated rights, and to get the message to them more effectively. A one-page Summary of Telecommunications User's Rights is recommended. The Government should explore all relevant channels to ensure that information is provided to consumers where and when they most need it.

## EFFECTIVENESS OF MONITORING AND REPORTING

The ACA's monitoring and reporting activities are already detailed and are considered generally adequate.

However the Inquiry believes that, particularly with the development of the NRF, there are some areas where collection and reporting of additional kinds of data by the ACA would assist it and the Government in the task of assessing network reliability, and working with Telstra to achieve improvements.

The need for more comprehensive data collection has been raised by the NFF.<sup>394</sup> Telstra's submission, however, implicitly cautions against unnecessary and excessive collection of information.<sup>395</sup>

Improvements in monitoring may be able to be made in several areas:

- the scope of data collected (what it relates to);
- actual rather than percentage performance;
- the level of disaggregation of data;
- the coordination of data; and
- data verification.

To some extent all these issues were touched upon by the TSI report when it recommended monitoring of fault levels in distribution areas.

Improved data collection and reporting will be important to the review cycle proposed in Chapter 9.

---

<sup>394</sup> NFF, submission, p.13

<sup>395</sup> Telstra, submission, pp.194-202

## Scope of data

In relation to the scope of data, key concerns relate to fixed telephone services, and to fault levels, recurrent faults and the length of time in providing connections and repairs. With growing interest in Internet services, similar data in relation to these services is likely to become increasingly relevant.

It is recognised that there is a cost to industry in collecting, recording and providing data. This should be taken into account by the ACA, which needs to ensure that its data requests are justified and necessary for the fulfilment of its responsibilities. But equally it should be recognised that decisions by the ACA are only as good as the data they are based on. If there is a need to collect additional data to inform good decision-making the ACA should use the powers available to it to ensure the data is made available.

## Actual versus percentage data

One concern is that percentage compliance results are useful, but they do not tell the whole story. They do not, for example, tell the actual distribution of connection times or repair times. They do not tell whether compliance is being achieved comfortably or marginally within designated timeframes. They do not tell how long customers are remaining in the tail, or the absolute number of those customers. While it can be argued that percentage compliance is reasonable given the way the CSG operates, it does not give a full picture of industry performance.

In the view of some submissions (e.g. NFF and AgForce) percentage data simply obscures the full picture of performance. The full picture is provided by a range of elements including the number of incidents, percentage compliance and distribution data. From the raw data, the regulator and others can calculate their own percentages and form their own views.

The NRF and monitoring of CSG tails will provide much better data on recurrent faults, both at the exchange area and individual services levels, and CSG performance levels. As discussed in Chapter 2, consideration should also be given to the need for other actual data, for example, connection numbers, fault numbers and perhaps, actual connection and repair times, which would assist in assessment of regulatory and industry performance.

## More disaggregated data

The Inquiry considers there needs to be an assessment of the level to which data should be disaggregated and disaggregation standardised. While current monitoring often allows the collection of appropriately disaggregated data, and the NRF will extend this capacity, the Inquiry has noted that some data provided to it has been disaggregated in different ways, and has not allowed 'apples with apples' analysis. Disaggregation of complaints to the TIO, for example, would be potentially helpful and would appear to involve few additional resources.

A particular concern is that results for urban centres are not disaggregated, and therefore include diverse population centres like metropolitan Sydney (3.5 million people) and regional towns of 10 000 people. While this is justifiable because these diverse areas share common CSG timeframes, it precludes detailed analysis of compliance with those timeframes across different demographic categories.

## Coherent data collection framework

The ACA is taking steps to improve data collection with its proposed revisions to the monitoring and reporting framework in response to the TSI report. The TSI report's particular concern, however, was to make information more meaningful to consumers. The other aspect of data collection, particularly important to this Inquiry, is that there be appropriate data for the proposed three-year review process, and for regulators and policy makers generally to make informed decisions.

Data collection arrangements should receive further consideration in light of the findings and recommendations of this report. The object of this further review would be to ensure that ACA data collection is effectively linked to:

- the ACA's compliance monitoring and enforcement role;
- its role of advising the Minister for Communications, Information Technology and the Arts on industry developments;
- its proposed new role in supporting the three-yearly review cycle; and
- the added emphasis on regional-metropolitan reporting this involves.

At a minimum it would be useful for the ACA to do a stocktake of the data it collects, and put forward a data collection framework, to ensure that data is standardised adequately to allow effective comparisons to be made as required.

### RECOMMENDATION 7.2

Data on telecommunications compliance and performance should be collected at an appropriate level of disaggregation to allow ready assessment of relative performance levels. The Australian Communications Authority should put in place a data collection framework, to ensure comprehensive, disaggregated, standardised and meaningful collection of data on regional, rural and remote telecommunications services and service performance.

## Verification and explanation of data

In advice provided to the Inquiry, Telstra explained its arrangements for verifying the compliance data it provides to the ACA, including its internal development, oversight and accountability arrangements, consultation with the ACA on methodology, and the provision of follow-up information in relation to specific results.<sup>396</sup>

It would be reassuring to the public for the ACA to publish its processes in relation to the verification of industry data. There may also be interest in the publication of the methodologies used in preparing particular data reports.

The ACA should also ensure adequate explanation is available of data provided publicly, for example, in terms of what it precisely relates to, peculiarities in its collection and caveats on its reliability. For example, in its Telecommunications Industry Performance Report for 2000–01, the ACA reported a 13.2 per cent increase in rural faults. It is understood this was largely attributable to changes in the definition of faults counted as a result of changes to the CSG.

The ACA might also give consideration to whether there would be benefit in greater use of independent testing and external audits to complement the use of industry data. The Inquiry recognises the ACA does do this in some instances, for example, in relation to payphone operation.

## Reporting

Generally ACA reporting is very good and provides an appropriate level of information to the Government and the public about service availability and performance.

It is noted that monitoring and reporting are two different things. While the Inquiry is, in many ways, advocating closer monitoring, it is mindful of the TSI report's concerns that information for consumers be kept simple and meaningful. That is, not all data collected for monitoring purposes needs to be published.

On the other hand it is important that the ACA provide the public with timely and comprehensive information when it is in the public interest to do so. In this respect it is noted that the ACA's limited information disclosure powers may restrict its capacity to do this. The Government could consider whether it would be appropriate to extend those powers, more in line with the powers available to the ACCC.

---

<sup>396</sup> Telstra, Inquiry communication

## EFFECTIVENESS OF ENFORCEMENT

It is difficult to assess the effectiveness of consumer safeguard enforcement, given high levels of compliance and little past need for enforcement action. High levels of compliance are better than high levels of enforcement—no matter how effective action to address non-compliance may be, it is obviously better for problems not to arise in the first place.

As noted above, Australian telecommunications enforcement in the area of consumer safeguards has two main dimensions:

- while technically a complaint resolution rather than an enforcement body, the TIO plays a key role in redressing individual failings by service providers to meet regulatory requirements; and
- the ACA, the official enforcement agency, plays a key role in enforcing the telecommunications regime by obtaining compliance, and taking enforcement action where required.

## ENFORCEMENT BY THE TIO

In the Inquiry's assessment the TIO provides a highly effective service in dealing with consumer complaints. This is surely what consumers want, not becoming bogged down in prolonged enforcement action in the Courts.

A limited number of submissions expressed concern about the TIO's operation, including, in a few instances, its independence from industry. For example:

*The Telecommunications Industry Ombudsman is considered only a free lawyer for Telstra and protecting it from action by the customers.*<sup>397</sup>

*I have never had any dealing with the TIO but I am highly suspicious of the fact that the TIO is funded by telecommunications carriers, telephone service providers and Internet Service Providers, the major funder being Telstra. I am particularly suspicious given what Telstra has been up to elsewhere. Surely the TIO should be adequately funded by the Government to keep it independent.*<sup>398</sup>

---

397 Lachlan Shire Council, submission, p.3

398 B Alford, submission, p.3

*Matters which contain technical problems are generally poorly resolved. It would appear that the Ombudsman relies almost entirely on Telstra expertise. If this is not the case the Ombudsman requires better "experts".*<sup>399</sup>

*In our dealings with the A.C.A and T.I.O we have been treated with courtesy but I have the impression that they may be swamped with work and ultimately in a dispute they must still rely on Telstra to provide them with relevant information which would be difficult to discern if it is correct when one is in an office in Melbourne and dealing with a problem regarding terrain in Central Western Qld it may as well be a problem in the Sahara Desert.*<sup>400</sup>

There were concerns expressed that the TIO has a time limit in which it will consider investigating complaints.

*In fact, even the TIO does not have a process in place for the resolution of problems of a continuing nature that may have extended over their (somewhat short) 12 month deadline. In fact, with most of our problems, these have generally exceeded 12 months in occurrence.*<sup>401</sup>

These appear to be isolated comments, and sometimes not based on direct experience. There may also be some confusion as to the matters which fall within the TIO's responsibilities and what are purely commercial matters for industry (e.g. mobile coverage) or policy matters for Government (e.g. CSG timeframes). The overwhelming impression is the TIO is a valuable institution and is doing a good job. For example:

*The CFA [Consumers' Federation of Australia] acknowledges and applauds the efforts that the TIO Scheme has made to ensure it is accessible, fair and reliable in its treatment of consumer complainants.*<sup>402</sup>

*We are not familiar with USO or CSG but have been well served by and grateful for the support of the regional representatives of the TIO.*<sup>403</sup>

---

399 Tresname Pty Ltd, submission, p.5

400 JG and JE Vinnicombe, Inquiry submission, p.3

401 Rob Cumming, submission, p.1

402 Consumers' Federation of Australia, submission, p.2

403 Doug Balnaves, Coonawarra, submission, p.1

Table 7.4 sets out complaints received by the TIO and their outcomes for the years 1997–98 to 2001–02.

**Table 7.4: TIO complaint outcomes (by percentage)**

Year	In favour of complainant:			Unknown or not recorded
	Substantially	Partially	Not	
1997-98	48	25.2	15.7	11.3
1998-99	39.6	27.3	18.5	14.6
1999-00	28.3	19	15.1	37.6
2000-01	33.2	23.7	18.9	24.2
2001-02	39.9	17.3	19.5	3.1

Notes: Outcome results are sometimes unknown due to loss of contact with clients.

Source: TIO, 2000, 2001 and 2002 Annual Reports, [www.tio.com.au](http://www.tio.com.au), viewed 25 October 2002

These results indicate the TIO is providing solutions to consumer concerns. In addition to resolving issues, the Inquiry has been advised that since 1997, the TIO has directed or recommended compensation payments of around \$168 500 in relation to some 56 matters. This excludes land access issues.

In terms of industry conduct and compliance, it is worth noting that of the known outcomes a reasonable proportion of complaints are not resolved partially or fully in favour of the complainant. That is, industry is not always found to be in the wrong.

To further enhance its effectiveness, a number of important changes were made to the TIO in 2001–02, drawing in part on past experience. Dedicated inquiry officers have been introduced to enable the focusing of investigative resources. Staffing was also increased. These changes have led to a dramatic improvement in the TIO's call handling performance. Additional legally qualified investigation officers have been recruited and a greater focus has been placed on systemic issues. With a view to improving in-house complaint resolution by service providers, the TIO has completed the first phase of an Internal Dispute Resolution Pilot Project. New operational procedures have been introduced to resolve complaints where delay is the distinguishing factor. The TIO has also adopted the Benchmarks for Industry-based Customer Dispute Resolution Schemes promulgated by the Commonwealth.<sup>404</sup>

404 TIO, *Annual Report 2001-02*, October 2002, p.10, p.13, p.19, p.28

## FINDING 7.5

Through its complaint resolution processes the Telecommunications Industry Ombudsman scheme provides an effective and practical means of 'enforcement', and is of more practical value to individual consumers than prolonged, involved and expensive legal action.

The Inquiry considers it may be beneficial if the TIO collected location information (e.g. postcodes) in relation to complaints and if this information was provided to the ACA on a quarterly basis to better facilitate analysis, particularly from a regional perspective. This links into the previous comments on ACA data collection.

## ENFORCEMENT BY THE ACA

The ACA's enforcement role has two main dimensions:

- promoting compliance in the first instance; and
- taking enforcement action where levels of non-compliance allow and warrant it.

High levels of compliance suggest success on the ACA's part in relation to the promotion of compliance, and this has reduced the need for it to take enforcement action. Formal enforcement action by the ACA over the past five years has been rare.

This can be interpreted as an indication of the success of the ACA in engendering in the industry a culture of compliance. It may also indicate a culture of positive compliance within the industry, as demonstrated by Telstra's and others' formal compliance arrangements.

The TSI report expressed some concerns about the ACA's monitoring and enforcement activities, particularly in relation to the incidence of network faults and extreme cases of non-compliance with the CSG. In the case of the former the ACA was hampered by the lack of a clear formal mechanism in relation to fault levels. The ability of the ACA to act is dependent on what the law will allow it to do. This is now being addressed by the NRF, and the Inquiry has proposed some specific action under this Framework to ensure rapid improvement in fault levels (see Chapter 2). In the case of the latter, the ACA has now developed a framework for monitoring and acting on extreme cases of non-compliance with the CSG.

The Inquiry considers these are significant developments for the ACA, and will improve its capacity to exercise its responsibilities and take enforcement action where necessary.

CTN in particular noted the importance of an active and effective regulator, and one that is adequately resourced. It commented, for example, that the Boulding tragedy:

*...indicates that the current legislation encompasses adequate powers of intervention, in relation to a majority-publicly-owned carrier at least, and that in general reform is needed not so much in regulatory powers but in intervention policy and practice.*

CTN went on to recommend that:

*The Australian Communications Authority should be properly resourced to establish an external audit process and to conduct independent testing to ensure that legislated consumer protections are properly implemented and that codes and standards are complied with.*<sup>405</sup>

The ACA has considerable discretion as to what action it takes to enforce the telecommunications law. The Inquiry sought specific information from the ACA to understand how the ACA exercises that discretion, past circumstances where it had considered using its powers, and whether its practices were consistent with the long-term interests of end users.

For the Inquiry the key questions were:

- How has the ACA been achieving compliance with the law?
- Will this approach work into the future?
- What would it take for the ACA to exercise its formal enforcement powers?

## ACA's regulatory philosophy

As an important preface to its comments, the ACA noted that in regulating the industry it is particularly mindful of the high-level objectives of the Telecommunications Act, namely, promoting:

- a) the long-term interests of end-users of carriage services or of services provided by means of carriage services; and
- b) the efficiency and international competitiveness of the Australian telecommunications industry<sup>406</sup>;

---

405 CTN, submission, p.13

406 s.3(1), *Telecommunications Act 1997*

and the regulatory policy set out in section 4 of the Telecommunications Act, namely:

The Parliament intends that telecommunications be regulated in a manner that:

- (a) promotes the greatest practicable use of industry self-regulation; and
- (b) does not impose undue financial and administrative burdens on participants in the Australian telecommunications industry;

but does not compromise the effectiveness of regulation in achieving the objects mentioned in section 3.

These provisions create a potential tension between achieving the objects of regulation, including the advancement of consumers' interests, and fostering, not stifling, the development of the industry and competition. While noted by the ACA, this tension was criticised in several consumer submissions as undermining the ACA's effectiveness in protecting consumers. The Communications Law Centre (CLC), for example, proposed legislative amendments.<sup>407</sup>

The ACA has advised that its preferred approach is not to exercise its formal regulatory powers where there are alternative, cooperative remedies to address issues in the market, or to otherwise meet regulatory objectives. Such measures include expressions of concern to providers about their conduct, threats of formal action and the seeking of written undertakings. The ACA's experience is that such action generally achieves results, even without the threat of formal action being made. The ACA considers this is consistent with the regulatory policy set out in the Telecommunications Act. The issue for many people seems to be whether the ACA is getting the balance right and whether its preferred choice of mechanisms other than formal regulatory powers is correct.

The ACA also considers that in using alternative remedies, the fact it has formal powers provides it with valuable leverage in negotiating satisfactory outcomes with industry participants. That is, the threat of using its powers is generally sufficient to achieve compliance, the key objective of regulation. The ACA cited a number of examples in this regard, including its follow-up to its 1999 investigation of Telstra's CSG compliance and its 2002 investigation into compliance with the ACIF Complaint Handling Code. The information provided by the ACA suggests that its informal approach does achieve satisfactory results.

The threshold for a formal exercise of powers by the ACA varies depending on the nature of the alleged breach and the kind of sanction sought. In each different case, there may be a range of possible appropriate responses depending on the strategy used by the ACA to achieve compliance and the case history of the alleged breach. Directions, warnings and civil penalty proceedings are not intended to be mutually exclusive. A combination of

---

407 CLC, submission, p.6; see also, CFA, submission, p.2; CTN, submission, pp.7-8

these may be used in a particular case. The desirability of regulatory intervention through formal exercise of powers depends on the circumstances of the case.

The ACA defines a systemic issue as one which has the potential to cause widespread consumer detriment and which is indicative of failure of a system, process or practice of a carrier or carriage service provider. The ACA could nevertheless investigate and take action in other instances.

In the past the ACA has taken the view that it will usually act in the following order:

1. investigate;
2. seek to achieve compliance through cooperative measures;
3. warn;
4. direct;
5. seek a penalty.

The ACA does not, however, consider an inflexible process of escalation is appropriate, because it would fetter the discretion of the ACA in the exercise of its powers in specific cases. If a case is sufficiently serious, the option must be available to go straight to seeking a civil penalty, and possibly making directions as well.

### **Assessment of the ACA's enforcement**

The Inquiry recognises the difficult balancing act the ACA faces in enforcing the telecommunications law, given the tension between many of the statutory policy objectives and within the statutory regulatory policy. There is a need for it to exercise discretion, and this can sometimes be difficult.

The Inquiry does not consider enforcement action in itself is the measure of an effective regulator, but rather the level of compliance achieved. In this regard, industry compliance makes the ACA highly successful.

The Inquiry agrees with the ACA that fostering a culture of compliance with the industry is the best strategy for protecting consumers and is to be encouraged.

#### **FINDING 7.6**

The Australian Communications Authority has adopted a well-reasoned approach to regulatory enforcement, focusing principally on compliance and cooperation, and on enforcement to back up this approach where necessary.

## ENFORCEMENT IMPROVEMENTS

Possibilities for strengthening the ACA's enforcement role are suggested below. Improvements to data collection recommended elsewhere in the report are seen as important in supporting the ACA's enforcement role.

These changes would complement proposed new ACA functions in relation to local presence requirements discussed in Chapter 8 and future proofing discussed in Chapter 9.

### Clear regulatory obligations

For the ACA to be able to take effective enforcement action it is necessary that regulatory obligations are themselves clear and reasonably precise. For example, for the ACA to be able to take action in relation to multiple faults, it is necessary for requirements to be specified about multiple network faults. This has now been done under the NRF. The Inquiry believes NRF could be further clarified with the benefit of experience, as proposed in Chapter 2.

The Inquiry also understands concerns have been expressed about the lack of specificity in Telstra's USO Marketing Plan. Clarity and a 'consumer friendly' approach should be a key criteria in the drafting of any future requirements.

### New types of enforcement mechanisms

It has also been proposed that the ACA be given a power to impose fines or to seek penalties in lieu of prosecution in relation to a wider range of regulatory breaches. The ACA's fining powers are currently limited to relatively minor technical matters. As noted above the resource cost of legal action can be a deterrent. There are perceived advantages and disadvantages in this proposal. For example, it would provide the ACA with a further mechanism to encourage compliance and to act promptly in cases of apparent contravention, however, the ACA may still have difficulty satisfying itself grounds exist for a fine or may find it necessary to defend its decisions in Court. Ultimately this is a matter the Government needs to consider.

### Procedural matters

There are some procedural matters the ACA might like to consider, with a view to providing certainty and comfort to the community that its interests are being adequately protected.

The Inquiry found it very helpful for the ACA to articulate its regulatory philosophy and approach. Consumer representatives and the public generally might also find it helpful in understanding the ACA's mode of operation if the ACA were to document it publicly.

Given its primary emphasis on taking action in relation to systemic breaches, the ACA could clarify and make public what it considers a 'systemic breach' to be and how it goes about identifying them. As 'systemic breach' appears to be linked to the concept of 'consumer detriment', this too might be clarified.

The ACA could make more use of formal processes in dealing with cases of suspected or alleged contravention of regulatory requirements. This would provide transparency and provide a reliable and documented basis for identifying 'systemic' breaches or other conduct of concern. At a minimum it would establish a formal record of ACA action for operational purposes, rather than having to rely on corporate knowledge.

It is also important that the ACA's interventions, even if not always formal regulatory interventions, be as transparent as possible to the public. This would assure the public that matters of concern are being dealt with, even if not formally, and ensure the ACA is seen as an effective regulator.

### RECOMMENDATION 7.3

The Australian Communications Authority should examine how it can best communicate to the public and consumer representatives its regulatory philosophy and approach, and examine whether and how it should provide greater clarity and certainty about its regulatory enforcement activities.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 7.1

The existing framework of legislated consumer safeguards is considered effective, and provides a strong level of protection for telecommunications consumers. However there is always scope for fine-tuning and 'continuous improvement', as market conditions change.

### FINDING 7.2

Compliance with legislated safeguards by carriers and service providers is generally high. However there is a lack of clarity in relation to the expected level of compliance with percentage based compliance measures, such as under the Customer Service Guarantee.

### FINDING 7.3

The Universal Service Obligation is not an effective mechanism for providing broad consumer access to an increased range of services into the future. There are a range of other more appropriate policy options available to the Government to achieve equity objectives in the future. These various mechanisms need to be well integrated and publicly articulated as part of the regional telecommunications plan proposed in Chapter 9.

### FINDING 7.4

The ability to seek compensation for loss of business from carriage service providers, including via the Telecommunications Industry Ombudsman, is not sufficiently well known and could be given more prominence in industry and Government publicity material.

### FINDING 7.5

Through its complaint resolution processes the Telecommunications Industry Ombudsman scheme provides an effective and practical means of 'enforcement', and is of more practical value to individual consumers than prolonged, involved and expensive legal action.

## FINDING 7.6

The Australian Communications Authority has adopted a well-reasoned approach to regulatory enforcement, focusing principally on compliance and co-operation, and on enforcement to back up this approach where necessary.

## RECOMMENDATION 7.1

Measures should be taken to provide telecommunications consumers with a simplified statement of their legislated rights, and to get the message to them more effectively. A one-page Summary of Telecommunications User's Rights is recommended. The Government should explore all relevant channels to ensure that information is provided to consumers where and when they most need it.

## RECOMMENDATION 7.2

Data on telecommunications compliance and performance should be collected at an appropriate level of disaggregation to allow ready assessment of relative performance levels. The Australian Communications Authority should put in place a data collection framework, to ensure comprehensive, disaggregated, standardised and meaningful collection of data on regional, rural and remote telecommunications services and service performance.

## RECOMMENDATION 7.3

The Australian Communications Authority should examine how it can best communicate to the public and consumer representatives its regulatory philosophy and approach, and examine whether and how it should provide greater clarity and certainty about its regulatory enforcement activities.



# CHAPTER 8

## TELSTRA'S LOCAL PRESENCE

### INTRODUCTION

#### TERM OF REFERENCE

Term of Reference 5 requires the Regional Telecommunications Inquiry (the Inquiry) to advise the Minister on:

*the ongoing commitment of Telstra to a local presence, such as Telstra Country Wide<sup>®408</sup> (TCW), in regional, rural and remote Australia.*

The Inquiry has interpreted a local presence to include a high degree of decentralised management with a greater capacity to understand and respond to local needs, both in terms of service provision and service maintenance.

The Inquiry also considers that an important component of a local presence is the extent that such a structure can influence broader company policy and strategies to the benefit of regional customers. Therefore understanding how TCW operates within Telstra as well as what it delivers to customers is important to assessing the importance of the role it plays in regional communities.

In addressing this Term of Reference, the Inquiry has focussed on the rationale for, and benefits of maintaining a local presence, and the arguments and strategies for locking in a local presence into the future.

This Term of Reference also has relevance to other Terms of Reference including:

- the role of local knowledge and local response in achieving high levels of service (Terms of Reference 1 and 2);
- a mandated local presence requirement being an additional legislated safeguard (Term of Reference 4); and
- an ongoing local presence being part of a future-proofing mechanism (Term of Reference 6).

---

408 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

## TELECOMMUNICATIONS SERVICE INQUIRY (TSI) FINDINGS

The TSI report identified concerns in relation to Telstra's customer service interactions, particularly in regional, rural and remote Australia. These concerns related to:

- call centres with staff not aware of local conditions including time and distance considerations; and
- problems with fault repair due to poor local coordination, ineffective work allocation systems, and the withdrawal of local technical staff and/or their replacement with contracted personnel.

The TSI report indicated that these issues highlighted the need for:

- greater engagement with consumers in undertaking effective, local consultation and providing candid information about network and service plans;
- processes that allow customers to feel they have some control over their interactions with their provider;
- front-line (call centre) staff to have an understanding of the circumstances of the customer, in particular their geographic location; and
- Telstra to accept greater responsibility for assisting customers to get the most out of their service, through providing objective advice about service options and technical issues.<sup>409</sup>

TCW was established shortly before the TSI reported and the TSI viewed it as a promising development. The TSI report concluded the success of TCW would be judged on the extent to which it addressed the above issues in the short to medium term. As a result, no specific recommendations were made by the TSI report to Government in relation to Telstra's local presence.

---

409 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.78-79, and p.86

## WHAT IS TCW?

TCW is a business unit within Telstra, established as a result of a commercial decision by Telstra to gain a better understanding of the requirements of its regional customers, and to provide a better focus on the delivery of Telstra services in regional, rural and remote areas.<sup>410</sup> Inherent in the TCW concept is the devolution of a high degree of responsibility to managers in the regions for building business opportunities and servicing regional customers.

TCW covers all of Australia except for the mainland capitals and major adjoining urban areas such as Newcastle, Wollongong, Geelong and the Gold Coast. As such TCW serves approximately one third of Telstra's overall customer base—approximately three million customers whose annual expenditure is more than \$3 billion per annum. TCW's headquarters are in Albury-Wodonga on the New South Wales-Victoria border.

TCW is headed by a Group Managing Director, currently Mr Doug Campbell. To assist with its operations, TCW has an external advisory board comprised of respected regional Australians. The advisory board's role is to assist TCW in setting strategies, policies and priorities. The board provides recommendations and advice on the strategic direction and operational and financial performance of the TCW business unit. Its current members are Mr Donald McGauchie (Chair), Mr Ric Mollison, Mr Roderic O'Connor, Mr Noel Bridge, Ms Jenny Russell and Mrs Jano Faulkes-Taylor<sup>411</sup>.

Under the TCW structure, regional Australia is divided into four service regions—Queensland, New South Wales, Southern (Victoria and Tasmania) and Central Western (South Australia, Western Australia and the Northern Territory). Each region has a Regional Manager.

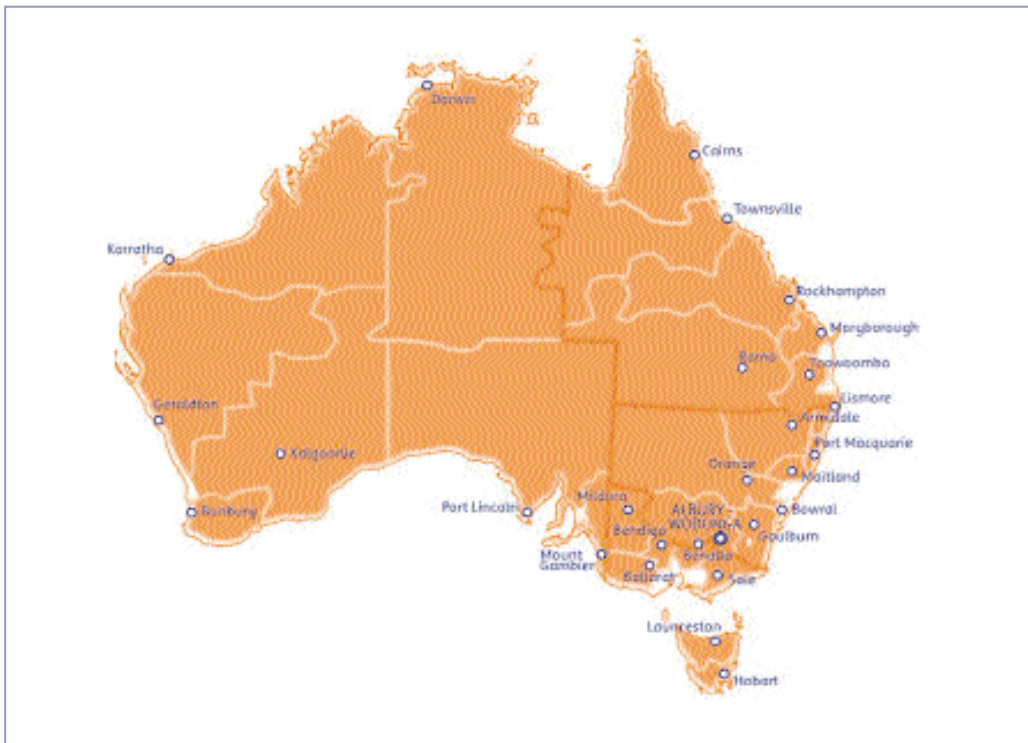
The four service regions are further subdivided into 28 areas, each with an Area General Manager (AGM). The AGMs operate out of 36 offices across regional Australia—one office in each of 21 areas; two offices in each of Central Queensland, Southern Highlands/Shoalhaven, Northern Victoria, Gippsland/Yarra Valley, South West Victoria and North West WA areas; and three offices in the Wide Bay/Gladstone area. The TCW areas are shown in Figure 8.1.

---

410 Telstra, Inquiry communication

411 TCW, Advisory Board Report 2002, p.3

Figure 8.1: TCW's service areas



Source: Telstra

The role of the AGMs and their staff is integral to TCW's operation. Telstra advises that their role includes:

- supporting the core of the TCW strategy through managing costs, identifying investment priorities, and implementing locally-based decisions;
- improving overall communications, sales and service, including achieving sales targets;
- providing a local 'Telstra face' in regional Australia, including retail outlets and regional call centres;
- working with communities to deal with local complaints and improve delivery of service;
- developing product solutions to meet the specific needs of regional, rural and remote customers—for example, the introduction of mobile satellite phones, two-way satellite Internet and a long range cordless phone;

- appointing local agents to supplement Telstra services and working with local communities to hire and train (mostly part time) local technical contractors, authorised agents and communications consultants; and
- developing relationships with key internal and external stakeholders, including community leaders, local councils and regional development councils.

As at 17 October 2002 there are 477 full time staff working directly for TCW. This is expected to reach approximately 500 by the end of 2002. Staff members are employed in a variety of roles including business management (182), sales (105), customer service (105), marketing (40) and technical support (45). A total of three per cent of TCW's workforce have Indigenous backgrounds.

TCW primarily relies on staff from other Telstra business units to deliver and maintain services. Telstra Retail provides the primary level of support for 'front-of-house' and customer contact support, such as complaints handling, fault prioritisation, product management, billing and 'back-of-house' operational support. The Mobiles business unit provides similar support for mobile communications products. The Infrastructure Services and Network and Technology Group provide support for TCW in connecting and maintaining services.

## HOW TCW OPERATES WITHIN TELSTRA

Understanding how TCW works within Telstra is important in evaluating its importance to regional, rural and remote Australia. Because TCW is not directly responsible for the actual delivery and maintenance of customer services, its influence within Telstra to bring about improvements in these service outcomes is critical to its success.

TCW's stated aim is to act as an advocate and focal point for regional, rural and remote Australia within Telstra.

Relationships between TCW and other Telstra business units are formalised through Telstra Internal Commitments (TICs). These are yearly agreements that set the level of service to be provided to TCW. TICs are signed off by the Group Managing Directors and accountable Operational Managers of each business unit within Telstra. These relationships are regularly reviewed at the senior level by each Group Managing Director and their senior management team, and there are also regular reviews at the operational level.

Telstra's capital investment process includes a 'sponsorship' element. Under this model all capital spent, including investment in new technologies and services, is 'underwritten' by business units dealing directly with the customer base, such as TCW. These business units are expected to provide a return on this capital investment.

The sponsorship model means TCW plays a key role in securing capital investment in regional telecommunications. It is extensively involved in the process of product development and technology selection and is responsible for developing and presenting supporting business cases when seeking funding.

As a sponsor of capital expenditure, TCW has a considerable degree of discretion in negotiations to focus investment to areas it sees as having the highest priority.

TCW is also extensively involved in investment in network maintenance, such as the recently announced \$187 million targeted upgrade of the rural telecommunications network. (Details of this program are provided in Chapter 2).

## MANAGING SERVICE DELIVERY

In contrast to the previous centralised arrangements, TCW's area structure in the regions better enables local knowledge to be brought to bear on service provisioning and reliability issues. In this context AGMs are supported by regular and detailed monitoring and reporting of service outcomes and issues.

Weekly performance reports for each TCW area cover service activation (services put in place), assurance (faults fixed and appointments met), complaints (open, closed and received), held orders (delays which require the provision of interim services), special services, customer network improvements, and escalated service difficulties (delays or problems which have been assigned a higher level of priority). Further detail is available by drilling down to underlying data. These reports provide a high-level capability to identify, analyse and respond to delays, problems and complaints at the regional level.

Local knowledge is being increasingly utilised to target expenditure on areas of need. For example, AGMs are playing a key role in targeting the \$187 million Telstra has allocated in 2002 for regional network improvement. As advised by Telstra, AGMs, in conjunction with their local teams, are accountable for managing this program, selecting projects, measuring customer experience and delivering results. The degree of targeting can be seen in a number of projects announced by TCW in September and October 2002 (see Chapter 2).

At another level, AGMs undertake monthly business performance reviews with internal suppliers (other Telstra business units) as part of the TICs between TCW and the other Telstra business units. Monthly performance reviews occur at a national, regional and local level and review current performance levels, highlight initiatives to improve performance, discuss customer issues, and agree on any ongoing actions.

As the 'face of Telstra' in regional areas, TCW is also an important channel for raising and achieving resolution of individual and local complaints, although most trouble reports and complaints are captured by central call centres. Problem areas are often identified through AGM meetings with communities and stakeholders, and even through radio talkback programs.

*A group of local subscribers in the Edgeroi, Bellata Spring Plain area met recently with Ian Peters, General Manager, TCW New England/North West, and we felt that this was a step in the right direction, as opposed to the old system of merely submitting a complaint to a "faceless" person.*<sup>412</sup>

*... it has been a real bonus to the bush knowing that we have a direct link to 'somebody'.*<sup>413</sup>

If TCW is unable to resolve issues directly, it operates as a go-between for its customers and the other business units within Telstra. For example, a specific complaint relating to mobile phones that cannot be answered at the first point of contact, would be referred to the Mobiles business unit, where staff would have a greater capacity to deal with more specific issues.

## TCW SURVEYS

TCW undertakes surveys, sent to local businesses, government and industry representatives, seeking ratings on the importance of specific telecommunications categories, and how TCW is performing against these. TCW publishes the results of these surveys and uses the information obtained to focus on the issues identified as important, with a view to identifying where and how services can continue to be improved.

*Service issues and customer expectations are aligned and products can be refined for the needs of the particular market. TCW has successfully addressed many customer issues and demonstrated high levels of business performance.*<sup>414</sup>

---

412 D M Nalder, submission, p.1

413 Maria Townsend, submission, p.2

414 Telstra, submission, p.176

## WHAT TCW HAS DELIVERED

TCW appears to be ‘putting the runs on the board’. The following reflect a range of developments that can be largely attributable to TCW and its influence within Telstra.

### Better targeted products and services

Important product launches include:

- BigPond<sup>®415</sup> broadband two-way satellite Internet—allowing users to download data from the Internet and upload at very high speeds, via satellite rather than phone lines;
- Telstra Mobile Satellite—providing voice and data via a handheld satellite phone nationally;
- a new long-range cordless phone providing line of sight coverage up to approximately ten kilometres from the home antenna;
- PremiumWeather<sup>™416</sup>—an online information service gives farmers a full seven day forecast service with expert commentaries supplied by professional meteorologists; and
- Broadband Regional Connect, a hybrid ISDN/satellite Internet access product, which is currently being trialed.

### Better targeting of Telstra resources to regional and rural needs

TCW is the key driver of the program to upgrade outdated radio concentrator systems (DRCS and ARCS) in remote areas, as discussed in Chapter 2.

As noted TCW is playing a key role in the \$187 million Regional Networks Taskforce.

Further studies are under way to determine how current work practices can be enhanced to focus on reducing fault re-occurrence. This will have important relevance for compliance with the Government’s Network Reliability Framework (see Chapter 2).

Also, as discussed in Chapter 2, TCW is undertaking a pilot study to assess the feasibility of reducing connection times for services in minor rural areas where infrastructure is not readily available.

In more remote areas TCW has been active in successfully trialing the communic<sup>®417</sup> prepaid home service in the Indigenous communities of Aurukun and Kunballanjnja, and the service is now being rolled out to other Indigenous communities.

---

415 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

416 ™ Trade mark of Telstra Corporation Limited ABN 33 051 775 556

417 ® Registered trade mark of Telstra Corporation Limited ABN 33 051 775 556

TCW sales-related calls are directed to one of five dedicated call centres in Grafton, Townsville, Bendigo and Perth (two). Ninety per cent of TCW customer calls are answered in these call centres, with overflow transferred to other centres. That is, to ensure customer service related inquiries are handled promptly, a call from a regional centre (e.g. Queensland) which would normally initially be directed to the state centre (i.e. Townsville) may not be answered in Townsville if it can be answered by another centre sooner.<sup>418</sup>

*Having designated call centres enables Telstra Country Wide to provide specialist training to service representatives at these sites, and better equip them for dealing with customers from regional areas. The location of these call centres was selected based on their location and to accommodate different time zones across the country. Also established are specialist call cells to handle calls from customers living in very remote areas (e.g. 1800 R Radio).<sup>419</sup>*

## Service roll-outs in cooperation with the Commonwealth

A number of initiatives are now being implemented through TCW as a result of successfully competing in tender processes undertaken by the Commonwealth Government, or through working in partnership with the Government to target key regional and rural concerns:

- the *Extended Zones Agreement* is providing untimed calls at local call rates, access to an Internet service provider at a local call rate, preferential rate calls and two-way high bandwidth satellite services to the remotest parts of Australia (Chapter 2 provides details);
- *Mobile phone programs* are being rolled out as a result of Government tenders to provide new services to small towns across Australia and on major regional highways (Chapter 3 provides details);
- the *Internet Assistance Program* is a \$50 million joint initiative with the Commonwealth to assist users to achieve speeds of 19.2kbps over Telstra's fixed network. The Program includes both online help and technical support services (Chapter 4 provides details); and
- TCW has been involved in service delivery to a number of grantees under the Networking the Nation program, including to Balkanu: Cape York Development Corporation and the Outback Digital Network.

---

418 Telstra, Inquiry communication

419 Telstra, submission, p.26

## More local sales outlets

TCW has established new retail outlets offering advice, products and services to regional and rural consumers.

Telstra Country Shops have been opened in Griffith and Moree in New South Wales, Gladstone in Queensland, and Horsham and Bairnsdale in Victoria. Shops will open in Coffs Harbour, East Maitland, Lismore, Orange and one other centre (yet to be confirmed) by the end of 2002 with a further 25 shops planned by June 2003.

In October 2002, Telstra commenced a pilot involving ten Telstra Country Kiosks, a modified version of the Country Shops, designed to serve customer needs in towns with populations between 5000 and 25 000. A further 40 kiosks are expected to be operational by June 2003.

In towns with populations less than 5000, more than 230 local businesses, such as newsagents, pharmacies and milk bars, have been appointed as local agents. These agents offer information and advice on Telstra products and services. A dedicated hotline is provided in these shops for customers to access Telstra's product, billing and fault reporting services.

## Sponsorship, marketing and community support

Telstra's local presence also extends to a range of sponsorship and marketing activities in the local community, including:

- sponsorships and support programs for the arts, sport, environment and technology;
- advertising (television, press and radio);
- billboards, direct mail, shopping centre displays, expos and field days; and
- conferences and seminars on how products and services can assist business.

## Submitters' views on the value of TCW

A number of submissions expressed doubt or scepticism about the value of TCW, some seeing it as essentially a marketing exercise. For example:

*The establishment of TCW has, on the main, only been a cosmetic, glossy corporate advertising stunt that has generally created an image of Telstra in the community, without the "on the ground" support to back it up.*<sup>420</sup>

---

420 Bogan Shire Council, submission, p.3

*There has been a lot of Public Relations and talk but if you wish to make contact with the top decision makers it is a different matter.*<sup>421</sup>

*One view has it that TCW has not improved service, but has significantly increased the amount of advertising in the region.*<sup>422</sup>

Such comments were, however, in the minority. By contrast, the clear majority of submissions that referred to TCW were positive in regard to its achievements and role.

Positive submissions were received from a wide range of organisations and individuals, and reflect a broad view that TCW has played and is continuing to play an important role in achieving better service delivery outside metropolitan areas. The accessibility of the AGMs and their staff is seen as an effective step in decentralising Telstra's management and localising decisions affecting services in regional, rural and remote areas.

*The organisation's support for Telstra Country Wide is based not only on its direct impact on services, but also as a devolution of real resources and authority away from the capital cities.*<sup>423</sup>

*The ability for the regional staff to identify with the local issues and develop better solutions has resulted in a visible improvement in service delivery in regard to telecommunication.*<sup>424</sup>

*It is very reassuring to have a local commitment to the telecommunications within the regional areas as it involves local people understanding local problems and providing community ownership and identification.*<sup>425</sup>

The local knowledge of AGMs and their staff, who live and work in the communities for which they have decision-making responsibility, is also seen as important, particularly in responding to complaints.

*The WA National Party applauds the establishment of Telstra Country Wide, it is generally well received by rural and regional residents. The value of having on the ground staff who not only know the towns and individual exchanges that people are calling about with any complaints and issues but the staff usually also have an understanding of the localised issues.*<sup>426</sup>

---

421 Ann Waterford, submission, p.2

422 University of Ballarat, submission, p.3

423 National Rural Health Alliance, submission, p.5

424 Mackay Tourism and Development, submission, p.1

425 Parkes Shire Council, submission, p.4

426 National Party of Western Australia, submission, p.4

Another key theme in submissions was the value of local field staff. For example:

*As it is, a tech can spend as much time travelling to and from his depot, as doing the job. Local knowledge regarding cables and installations is invaluable, locally based machinery (trenchers etc) is also vital to get a job done quickly.*<sup>427</sup>

*Local presence should always be maintained as local technicians understand better than most, the needs and business goals of their customers.*<sup>428</sup>

The National Farmers' Federation (NFF) noted:

*Their [TCW AGMs] ability to direct service priorities and information flows has resulted in more timely outcomes for problems and issues encountered by farmers and rural communities.*<sup>429</sup>

Telstra itself considers:

*The location of Area General Managers in distinctive regional areas has helped Telstra to better respond to local service requirements, understand local needs and more actively develop and market Telstra communication services. Telstra Country Wide has successfully addressed previous customer disenchantment and demonstrated high levels of business performance.*<sup>430</sup>

## TCW's survey results

While they need to be treated with appropriate care, TCW's own stakeholder surveys reinforce the generally positive public view of TCW reflected in the submissions.

The 2002 survey shows a substantial improvement in community leaders' satisfaction overall. The surveys show that advances are considered to have been made in several areas including representation of regional Australians inside Telstra, providing local access to Telstra management, and working constructively with the community to fix problems.<sup>431</sup> The survey does, of course, also identify areas for further improvement, including, most importantly, installing new phones promptly, remote communities' communications and mobile coverage.<sup>432</sup>

---

427 Richard Sawday, submission, p.2

428 Bathurst City Council, submission, p.2

429 NFF, submission, p.12

430 Telstra, submission, p.9

431 TCW, Telecommunications Survey Report, July 2002, p.5 and p.8

432 TCW, Telecommunications Survey Report, July 2002, p.7

## ASSESSMENT OF TCW

While TCW has been criticised in some quarters as simply a marketing exercise by Telstra, the Inquiry is satisfied that it does represent genuine structural reform by Telstra, and that it is contributing to real service benefits in regional, rural and remote Australia. In the two years of its operation TCW is considered to have delivered some significant, practical outcomes.

As noted above, the TSI report viewed TCW as having an important role in addressing its concerns in relation to engagement with consumers, improving consumer control of their dealings with their providers, improving call-centre outcomes and helping customers to get the most out of their service. Though still in its early days, TCW has made progress in all these areas, and promises more.

TCW's area structure has been deliberately established to provide for more localised engagement and interaction by AGMs and their staff with regional communities. It is clear that being present in communities means that AGMs are more accountable to those communities. It is also clear that AGMs do have direct decision making authority, and can respond to local needs accordingly.

TCW's local presence has given regional, rural and remote communities a greater say in resolving their service and product needs. This is backed-up by an increasing retail presence and the specialist call centres. While submissions suggest front-of-house performance can still be improved (see Chapters 2 and 7), significant changes in practices have occurred, with greater focus being placed on quality, customer satisfaction and resolving issues promptly.

The Inquiry is of the view that TCW is effectively addressing the concerns raised by the TSI report. It cannot be said to have fully resolved all these issues, but it is certainly on the right path, and making good progress towards that goal.

Over and above the issues identified by the TSI report, TCW is playing a significant role in identifying the broader concerns of regional consumers, raising them within Telstra and, importantly, securing the resources and commitment to address those concerns. This is reflected in its big achievements—delivering new products, winning new contracts, and targeting and addressing problem service areas.

It should be recognised that putting in place a fully effective local presence is not a simple or quick process—it involves cultural and structural change within Telstra, and requires the involvement and commitment of other Telstra business units. As the 'on the ground' interface between Telstra and its regional customer base, TCW must be at the forefront of initiatives to improve regional service delivery. It must also be supported by strong action and commitment by the Telstra executive, and by those business units responsible for actual service delivery and network maintenance.

There is also a need to extend the message about TCW more widely to regional, rural and remote customers. Greater awareness of its role and services can be expected as it continues to develop.

## Local field staff and resourcing

The local presence of appropriately qualified field staff is a key issue. Publicly reported reductions in field staff give rise to concerns that reductions in service levels must inevitably follow. Similar concerns arise in relation to reductions in capital expenditure. Such a claim was made by the Communications, Electrical and Plumbing Union (CEPU):

*Since the decision was made to float the company [Telstra], staffing levels have been determined by market expectations rather than by operational needs. Rapid labour shedding has meant a loss of skills and knowledge which has, in the CEPU's view, weakened Telstra's capabilities company-wide.*<sup>433</sup>

This is a matter that was raised directly with Telstra by the Inquiry.<sup>434</sup>

Telstra advised that since June 1998 full-time staffing has decreased by 36.2 per cent, from 66 760 at that time to 44 977 at June 2002. As of June 30 2002, there were 6963 full-time Telstra staff based in non-metropolitan locations.

As at August 2002, around 10 000 staff, or around 25 per cent of full time staff, worked in the customer field workforce. Core field service connection and fault repair work is mainly carried out by Telstra staff, with contractors responsible for one to two per cent of such work in regional areas and five to ten per cent in metropolitan areas. Greater use is made of contractors in network construction activity.

Between 2000–01 and 2001–02 Telstra's operating capital expenditure decreased by 13 per cent from \$4.1 billion to \$3.6 billion. Approximately \$800 million (22 per cent) of the \$3.6 billion was spent in regional Australia or initiatives targeted at regional Australia. This included \$47.8 million for pro-active rural network upgrades and maintenance and \$33.4 million for reactive or unexpected upgrades and maintenance. Both these amounts are down on the previous year, but are forecast to increase significantly in 2002–03, particularly as a result of the Rural Networks Taskforce project.

Telstra acknowledges that absolute levels of capital and operational expenditure and staffing levels are significant drivers of service performance. The impact of changes in these areas on service performance is an explicit consideration in making changes to expenditure and staffing. Telstra notes, however, that there are many other factors that influence service delivery outcomes. These include changes to management structures

---

433 CEPU, submission, p.37

434 Telstra, Inquiry communication

and work practices, the level and mix of the workforce's skill base, better tools to target problem areas and utilise resources, and changes in demand. In Telstra's view, its core workforce is now much better aligned to its core workload, with peaks being able to be handled through greater staff mobility and the use of contractors. In this context, reductions in staffing and expenditure need not produce lower service outcomes, and in Telstra's case, it argues, they have not.

In the context of these expenditure and staffing levels, Telstra points to its improved and strong performance against the CSG timeframes. To this could be added relatively stable fault rates. Service levels are discussed and assessed in detail in Chapter 2. In addition, there has been significant network construction, service expansion and product innovation in recent years, as discussed in other chapters.

## WHAT ARE THE BENEFITS OF A LOCAL PRESENCE?

The Inquiry firmly believes that a strong regional, rural and remote local presence, as defined and described above, is a very important component of adequate telecommunications service delivery in these parts of Australia. An effective local presence can overcome many of the disadvantages felt by rural telecommunications consumers as a result of their isolation from mainstream commercial facilities and opportunities.

These benefits are:

- improved direct contact with regional, rural and remote customers, through on the ground sales and service representatives, retail sales outlets, and skilled specialist staff in call centres;
- improved understanding of, and response to regional, rural and remote customer needs, through the development of specialist products, improved access to Government support, and better analysis of, and response to customer complaints;
- better allocation of company resources to address regional, rural and remote network issues, through improved understanding and analysis of local network issues, greater capacity to identify the impacts of network problems, and more focussed application of resources to address network issues; and
- providing a voice for regional, rural and remote issues within the company management structure, through competing for company investment dollars, and focussing management attention on regional, rural and remote business opportunities, and the particular needs of the regional customer base.

## FINDING 8.1

The establishment of Telstra Country Wide<sup>®435</sup> (TCW) has significantly improved Telstra's capacity to respond to local telecommunications needs and issues. TCW is generally accepted and valued by regional, rural and remote customers, although there is still a need to better inform customers of its benefits.

## OTHER PROVIDERS' LOCAL PRESENCE

Other telecommunications carriers and service providers have also identified the value of a strong local presence. While other national carriers do not have the level of regional and rural customer base to justify a large-scale local presence like TCW, nevertheless they are still looking for ways to establish direct contact with customers. Optus and Vodafone have a sales presence through agents in many regional centres. Several providers have deliberately adopted strategies, such as franchises or partnerships, with local Internet Service Providers (ISPs), to provide that presence. For example:

*Optus is wholesaling SatWeb (Optus satellite one and two-way data services for accessing the Internet) to a number of ISPs in rural and remote areas and a regional telecommunications company.<sup>436</sup>*

Other examples include AAPT's regional alliances in Victoria and the use of franchise arrangements by the new special digital data service provider, Hotkey. Many regional and rural ISPs and new start-up service providers like Neighbourhood Cable, Bendigo Community Telco and the Southern Telephone Company are local by definition.

---

435 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

436 Optus, submission, p.35

## PROVIDING FOR AN ONGOING LOCAL PRESENCE

Telstra has indicated, including in its submission, that TCW is a commercial initiative, and has been profitable for Telstra to establish and maintain.

*Telstra has stated publicly that it is committed to maintaining the Telstra Country Wide business model for compelling commercial reasons. These include Telstra's commitment to its customers across the whole network and the commercial incentive to service customer needs in the most efficient and effective way. Telstra has established that there are strong commercial reasons for the company to continue to maintain and upgrade its presence in regional, rural and remote Australia. The experience of Telstra Country Wide over the past two years has convinced Telstra that regional, rural and remote Australia will continue to be a positive contributor to the company's bottom line.*<sup>437</sup>

Effectively Telstra is saying that it makes good business sense to maintain a local presence through TCW, and so there is no need for the Government to impose any requirement on Telstra to ensure that TCW continues.

The NFF expressed a similar view:

*NFF accepts the current Telstra commitments to maintain a significant local presence in rural Australia and suggests a return to habits of old would be of significant commercial risk to the company, given the opportunities provided by competitive suppliers.*<sup>438</sup>

The Inquiry agrees with Telstra that maintaining a local presence makes good business sense. It is also clear that, as a profit-making venture, there is no prospect of TCW being disbanded in the foreseeable future.

However, a number of submissions have reflected a fair degree of doubt and scepticism, with suspicion that the establishment of TCW is merely a marketing ploy, and that the extent of its benefits do not match Telstra's claims.

---

437 Telstra, submission, p.9

438 NFF, submission, p.12

A local presence could have many manifestations, and the different kinds of local presence could bring very different benefits to regional and rural consumers.

Potential concerns include:

- the local presence might focus only on the most profitable parts of the region or sectors within the region, and neglect the needs of loss-making areas, and the important objective of intra-regional equity;
- the local presence management team might lose its influence within the company management structure, and, with the best will in the world, might not be able to achieve its objectives for its regional and rural customer base in the face of, for example, re-focussing of company resources; and
- possible future industry or company downturns in financial performance might conceivably lead to a decision to scale down or even abolish the local presence.

The Inquiry believes that the benefits of a local presence, as demonstrated by TCW, are sufficiently important to regional, rural and remote consumers, that there should be a high degree of certainty that it continues, and in a form that will continue to provide significant benefits to the customer base. The best way to guarantee this degree of certainty is through a Government regulatory requirement.

Such a requirement should apply to Telstra, because it has a ubiquitous presence across Australia, and that presence is linked to its regulatory obligations as the Universal Service Provider and the Digital Data Service Provider. Requiring Telstra to maintain an effective local presence is wholly consistent with Telstra's responsibility to effectively deliver service to all Australians under the Universal Service Obligation (USO) and the Digital Data Service Obligation (DDSO).

On the other hand, the Inquiry does not believe that it would be sensible to require other carriers servicing regional and rural areas to maintain a local presence, of the kind exemplified by TCW. The reasons for this finding are:

- the presence of other carriers in regional, rural and remote areas is much more sporadic and scattered than Telstra's, and any meaningful local presence would be difficult to specify, and even more difficult to justify in a business sense;
- requiring Telstra to provide a local presence would, in any event, be a positive inducement for other carriers to do the same, in order to effectively compete; and
- requiring all carriers to provide a local presence could act as a disincentive for competitive investment, to the detriment of regional, rural and remote consumers.

Requiring only Telstra to maintain a local presence, of the kind demonstrated by TCW, would not impose any commercial or competitive penalties on the company, given that the TCW bottom line is profitable, and that the TCW brand is providing considerable intangible benefits to Telstra.

Importantly though, any Government regulatory requirement should not unduly prescribe, or interfere with, the way that Telstra conducts its business through TCW. A local presence requirement on Telstra should also not be unduly burdensome, and should be broadly compatible with Telstra's commercial interests. This is in line with the regulatory policy of the telecommunications regime in Australia, articulated in the *Telecommunications Act 1997*:

*The Parliament intends that telecommunications be regulated in a manner that*

*....(b) does not impose undue financial and administrative burdens on participants in the Australian telecommunications industry...*<sup>439</sup>

## RECOMMENDATION 8.1

Telstra should be required to maintain an ongoing local presence in regional, rural and remote Australia. The requirement should only apply to Telstra consistent with its status as the Primary Universal Service Provider. The requirement should not be unduly prescriptive or burdensome, and should be broadly compatible with Telstra's commercial interests.

## OPERATION OF A LOCAL PRESENCE REQUIREMENT

A Government requirement for the maintenance of a local presence by Telstra should focus on the outcomes and benefits that are evident from that local presence. It should not seek to prescribe how Telstra should operate in order to achieve those outcomes. The kinds of benefits that the Government should seek to perpetuate include:

- a high degree of decentralised management and decision-making;
- strong representation for regional and rural interests within Telstra's executive management structure;

---

439 Section 4, *Telecommunications Act 1997*

- effective direct customer servicing and support, including call centre handling of regional customers, levels of customer satisfaction and effectiveness in addressing customer complaints;
- effective concentration and application of resources in regional, rural and remote Australia, including additional specialist staff who can address the specific needs of rural customers;
- effective coordination of effort in all service areas, and a better focus of responsibility for managing projects and service tasks;
- effective information to regional, rural and remote customers; and
- support through its activities for broader regional community development.

Any local presence requirement should provide a high degree of certainty and reassurance for:

- regional, rural and remote communities—that an effective Telstra local presence will be maintained; and
- Telstra—that it will maintain the right to manage its regional operations autonomously and in its commercial interests.

The Inquiry believes that a structure for requiring a Telstra local presence along the lines of the following would prove effective, and provide the certainty required for all stakeholders.

- The Government could impose a licence condition on Telstra to maintain an effective local presence.
- The licence condition would establish broad objectives for benefits to be achieved from a Telstra local presence (along the lines of the benefits identified above).
- The licence condition would state that the local presence obligation on Telstra should be broadly compatible with its commercial interests.
- Telstra would be required to develop a local presence plan to demonstrate how it would fulfil the objectives through its operations in regional, rural and remote Australia. The local presence plan could include components specific to the operation of TCW in particular regions.
- The plan would be lodged and approved by the Government (the Australian Communications Authority) and once approved would be made available publicly, including at the regional level, for example, on Telstra's website and at TCW retail outlets.

- Telstra would be required to report annually (with perhaps six monthly progress reports), on the implementation of its plan over the preceding period. The report (perhaps summarised as necessary) would again be made publicly available. The Inquiry believes that reporting against achievements in each of the regions would provide regional communities with valuable information about the performance of Telstra in their local area.
- The Government would assess whether Telstra's implementation of its plan met its commitments in the plan. If this was not the case Telstra could be required to comply with its plan in the specific areas of non-achievement.
- The Government would also review and assess whether Telstra's plan was effectively meeting the objectives specified by the Government. If necessary Telstra could be required to amend its plan to better address the designated objectives.
- The local presence objectives set out in the licence condition would also be reviewed regularly, for example, as part of the review cycle proposed in Chapter 9, to ensure their continuing relevance.

## RECOMMENDATION 8.2

Telstra should be required to develop and publish a local presence plan to set out the range of activities and strategies it would deploy in regional Australia to address the Government's broad objectives. Telstra would be required to regularly report on its achievements against the plan and to demonstrate to the Government, and to regional communities, that it was providing an effective and beneficial local presence.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### FINDING 8.1

The establishment of Telstra Country Wide<sup>®440</sup> (TCW) has significantly improved Telstra's capacity to respond to local telecommunications needs and issues. TCW is generally accepted and valued by regional, rural and remote customers, although there is still a need to better inform customers of its benefits.

### RECOMMENDATION 8.1

Telstra should be required to maintain an ongoing local presence in regional, rural and remote Australia. The requirement should only apply to Telstra consistent with its status as the Primary Universal Service Provider. The requirement should not be unduly prescriptive or burdensome, and should be broadly compatible with Telstra's commercial interests.

### RECOMMENDATION 8.2

Telstra should be required to develop and publish a local presence plan to set out the range of activities and strategies it would deploy in regional Australia to address the Government's broad objectives. Telstra would be required to regularly report on its achievements against the plan and to demonstrate to the Government, and to regional communities, that it was providing an effective and beneficial local presence.

---

440 ® Registered trade mark of Telstra Corporation Limited, ABN 33 051 775 556

# CHAPTER 9

## SHARING BENEFITS INTO THE FUTURE

### INTRODUCTION

Term of Reference 6 requires the Regional Telecommunications Inquiry (the Inquiry) to advise the Minister on:

*The most effective means by which the Government can ensure that people in regional, rural and remote Australia can share reasonably equitably—in terms of availability and cost—with residents in metropolitan Australia in the benefits of future advances in telecommunications services resulting from competition and new technologies.*

This Term of Reference indicates that the Government wants regional, rural and remote Australia to share in the benefits of future technological advances and competition—even though these benefits may not emerge ‘commercially’ in regional Australia, or perhaps not as quickly as in metropolitan areas. Another way to view this objective is that there should be a ‘future-proofing’ mechanism put in place to enable the sharing of telecommunications benefits across Australia into the future.

The Inquiry proposes that this mechanism be achieved through arrangements involving:

- a regular independent review mechanism, linked to a formal strategic planning framework;
- a requirement for Government to respond in a meaningful way to the review’s recommendations;
- reasonable certainty of ongoing Commonwealth funding to support service improvements in regional, rural and remote areas; and
- a consolidated focus within the Australian Communications Authority (ACA) on regional, rural and remote issues.

It is clear that achieving the objective of equitable access to future service advances will require funding support of some kind. All the past evidence suggests that higher service delivery costs and ‘thin’ markets in rural and remote areas will continue to act as an impediment to the uniform commercial roll-out of new services. Funding support has

been needed in the past—such as through the Universal Service Obligation (USO) levy and through targeted Government funding—and is expected to be needed again in the future in parts of regional, rural and remote Australia.

The Inquiry is therefore proposing an ongoing support process, through a regular independent review and Government response, to enable regional, rural and remote telecommunications service inequities to be identified and addressed in a structured, transparent and effective manner.

This Term of Reference raises some key issues that the Inquiry has considered carefully in its response.

Firstly, the concept of sharing implies equity of service outcomes between regional and metropolitan Australia, rather than setting benchmarks for the overall level of service for Australians generally. The Inquiry sees this as sharing the benefits of future technological change and competition, rather than the achievement of preconceived service objectives or benchmarks. In other words, the impetus for improved services generally should be competition and technological innovation through the private sector, rather than through Government prescription.

Another key issue in addressing this Term of Reference is the meaning of ‘reasonably equitably’. As discussed previously in this report, the Inquiry considers the concept of ‘equity’ has to do with fairness of outcomes, including access to an appropriate service in terms of range of available functions, reliability, accessibility and price. It does not necessarily mean outcomes are absolutely ‘equal’ or ‘equivalent’.

The Inquiry agrees with the view put in many submissions that effective communications are an increasingly vital part of community and economic participation for regional, rural and remote communities, both for accessing key services, such as education and health, and also for communicating across Australia and with the world. For example:

*In fact, efficient and reliable telecommunication systems are more critical in country and regional NSW than in urban areas given the vast distances, prospect of medical emergencies and accidents in isolated areas and the community's increasing reliance on the internet to participate in business, social and educational opportunities. The NSW National Party believes information technology can be a stepping-stone to genuine regional development and decentralisation on a major scale.<sup>441</sup>*

---

441 National Party of NSW, submission, p.2

It should also be noted that Term of Reference 6 links with other Terms of Reference, in that:

- proposed action to deliver equitable access to higher bandwidth Internet services, and the proposed requirement for an ongoing Telstra local presence are themselves the part of a future sharing strategy (Terms of Reference 3 and 5); and
- the future sharing mechanism itself can be seen as an important legislated safeguard (Term of Reference 4).

## NEED FOR, AND ROLE OF, A FUTURE PROOFING MECHANISM

Access to a wide range of telecommunications services continues to be important to participation in contemporary society. It is becoming even more important as the time goes by, as the capacity and benefits of advanced telecommunications services continue to develop. Just like all Australians, people in regional, rural and remote areas need access to a wide range of telecommunications services for business, information, social and recreational purposes, and for personal safety. As technologies and services develop in the future, the potential for all Australians to benefit from these advances will continue to grow.

Many submissions argued that the need for high quality telecommunications services is even greater in regional, rural and remote areas, because improved telecommunications services can help overcome isolation, and provide access to opportunities that are taken for granted in metropolitan areas.

*People in rural and remote Australia do not have the same sort of access to common services found in metropolitan and larger regional centres. Banks, Government agencies such as Medicare, Investment services, and Tertiary education are typically missing from much of rural Australia.*

*As a result, the ability of telecommunications services to materially impact on the lives of rural and remote consumers is much greater than that for urban consumers who can easily access those services.*<sup>442</sup>

---

442 Louise Staley, submission, p.15

Several submissions, such as the Isolated Children's Parents' Association (ICPA), Schools of the Air and various individual submissions, noted the importance of effective communications in delivering education in regional, rural and remote Australia, enhancing the life opportunities of young people growing up in these areas. For example:

*We [the ICPA] strive to ensure that children's educational needs and future aspirations are not hindered simply because of where they live...*

*...the linking fact to many of the above points is that children in the areas mentioned rely on communication provided to carry out facets of their education.*<sup>443</sup>

As many submissions have pointed out, adequate telecommunications capacity is also a key driver of regional community and economic development. For example:

*With the increasing trend to transact business online and access information and services online and the increased withdrawal of face-to-face services in local communities access to the Internet is a vital part of life for rural and regional communities. The trend towards online delivery is accelerating and therefore access to the Internet will not merely be more important, but essential for the survival of local communities.*<sup>444</sup>

*Now and increasingly, internet access is becoming an integral part of business for primary producers and regional businesses. Lack of access or poor access is costing these rural businesses income through inability to access instant information, up to date prices, even weather reports and river heights. Poor services, slow services and unreliable services are resulting in a loss of information transfer to regional areas.*<sup>445</sup>

Underlying all these concerns, is a deep-felt concern about the need for equity between regional and metropolitan Australians:

*The lack of communications in other than the Eastern seaboard is an absolute disgrace. So, there are less people away from the cities but they are Australians and not aliens from outerspace and as Australians they deserve to be on an equal footing with their city counterparts.*<sup>446</sup>

---

443 ICPA of WA, submission, p.2, p.5

444 Online Access Centre Association of Tasmania, submission, p.2

445 South Australian Farmers Federation, submission, p.5

446 V F Moore, submission, p.1

This view informs the National Farmers' Federations (NFF) policy objectives:

*NFF policy states that levels of service in rural and regional areas should be equivalent to those in urban Australia and that the Commonwealth must provide appropriate mechanisms to guarantee ongoing provision of equitable telecommunication services and service quality for ALL Australians.*<sup>447</sup>

Over the past five years the Australian Government has maintained a strong focus on telecommunications, in terms of both policy and program initiatives. Significant legislative protections have been put in place—such as the Customer Service Guarantee (CSG) and enhancements to the USO—and more than \$1 billion has been allocated to improve telecommunications services and support in regional, rural and remote Australia.

This strong focus has generated significant improvements for regional, rural and remote consumers. While noting the scope for further—or more appropriately, continuous—improvement, many submissions have acknowledged this.

*The response to the TSI by Government has provided a wealth of telecommunications service improvements for rural and regional Australia, but as mention[ed] farmers are outcome focused rather than program announcement oriented. NFF commends the Government on the initiatives to date but is keen to see the “in the paddock” outcomes.*<sup>448</sup>

*AgForce congratulates the Federal Government for the wide range of initiatives established over recent years to improve telecommunications in Australia. While undoubtedly standards of telephone service have risen in significant areas of Queensland, AgForce believes there is still substantial work to be done to address community concerns relating to the timely installation, repair and reliability of basic telephone services.*<sup>449</sup>

*Services have improved in rural and regional Australia, but this has been the result of massive Government intervention.*<sup>450</sup>

---

447 NFF, submission, p.3

448 NFF, submission, p.8

449 AgForce, submission, p.1

450 Australian Consumers' Association, submission, p.1

However many submissions also expressed concern about how such improvements can be maintained into the future. For example:

*We want good services in the future, not just for the next term of Government. Governments come and go but needs for telecommunications services continue and evolve in ways the Howard Government cannot even predict or envision.*<sup>451</sup>

This Term of Reference is concerned with how the improved focus on regional, rural and remote telecommunications can be maintained into the future, and how benefits from future commercial developments can be made to flow through equitably to ‘thinner’ markets in rural and remote Australia.

The Inquiry notes that the concept of an ongoing requirement for service reviews and service upgrades has been raised publicly, including by the Government. A number of submissions have expressed support for such formal arrangements. For example:

*Each of these [Government] initiatives play an important part in ensuring services—particularly in regional Australia—are maintained to a particular level. The [Riverina Regional Development] Board however, is concerned to ensure that these safeguards are ‘future-proof’ and continue to be reviewed and updated to keep abreast of new telecommunications initiatives and technology developments. To this extent, the USO and CSG should be based more around ensuring that, as new technologies are introduced that provide more efficient and effective services, they should be carried through into regional communities within a reasonable period of time.*<sup>452</sup>

*On this basis the Board believes the USO and the Customer Service Guarantee should be revised and amended at least every two years.*<sup>453</sup>

*A regular review process would be vital in order to encourage further developments and the implementation of new technologies in the region, as well as address current issues associated with existing telecommunication services.*

---

451 Madelon Lane, submission, p.1

452 Minister for Communications, Information Technology and the Arts, *Future-Proofing of Telecommunications Services In Regional Australia*, media release, 12 July 2002

453 Riverina Regional Development Board, submission, p.4

*The government needs to ensure this review process is in place. Furthermore, future reviews must be region specific and fuel policy reforms that give rise to region specific safe guards and the enhancement of minimum service provision standards.*<sup>454</sup>

*A review of equitable telecommunications services availability should be conducted on a three-year cycle with the timely implementation of programs to address any shortcomings.*<sup>455</sup>

The Inquiry agrees that governments in the future will not always focus on regional, rural and remote telecommunications as a matter of course, and that the market cannot be guaranteed to deliver important services uniformly. The Inquiry agrees that formal arrangements should be put in place to regularly review what services are important for regional, rural and remote communities, to assess whether access to them is broadly available in those areas, and if not, to recommend to government whether action should be undertaken to provide such access.

An ongoing formal review process of a similar kind is already in place in the United States of America and the European Union, where legislation provides for regular review of their universal service obligations.

To be fully effective, the Inquiry considers such a process for regular review of regional, rural and remote services should be linked with a strategic planning framework for regional telecommunications, and to ongoing arrangements that provide a high degree of certainty that government support funds will be made available on an ongoing basis.

## RECOMMENDATION 9.1

The government should put in place a process to regularly review telecommunications services in regional, rural and remote Australia, and to assess whether important new service advancements are being delivered equitably in those areas.

The review process should be linked to a strategic plan for regional telecommunications, and underpinned by ongoing arrangements that provide a high degree of certainty that Government funds will be made available to support service improvements in regional, rural and remote Australia, where they will not be delivered commercially within a reasonable timeframe.

---

454 Advance Cairns, submission, p.24

455 NFF, submission, p.11

## PRINCIPLES FOR A REGULAR REVIEW PROCESS

The Inquiry considers that the review process should be guided by the following principles:

1. Certainty for regional, rural and remote communities

The review process should provide a high degree of certainty to regional, rural and remote communities that it will result in improved, equitable access to important telecommunications services, particularly to new advanced services, across Australia.

In the Inquiry's view this means that:

- core arrangements and requirements should be ongoing and should be set out in legislation;
- governments should be required to respond in a meaningful, public way to the recommendations of reviews; and
- there should be a high degree of certainty of ongoing funds being made available to support service improvements as required.

2. Independence from the executive government

Each review should assess service issues in regional, rural and remote Australia and make its recommendations independent of the executive government of the day.

This means that:

- reviews should be undertaken by a body that has an appropriate degree of independence from government;
- the review body should have sufficient resources and expertise to support the work of the review;
- reviews should have full access to independent expert advice as required; and
- reviews should be public processes.

3. Flexibility to respond to a range of needs

Both the TSI and this Inquiry have emphasised that there are a range of policy tools available to the Government to promote specified telecommunications outcomes, and that tools should be employed appropriately.<sup>456</sup>

Future reviews should provide the opportunity for the government to select the best policy response to meet particular needs and circumstances. Government policy responses need to take into account different prevailing market conditions in different areas, and variations in community needs across regions. As noted in Chapter 7

---

456 TSI, *Connecting Australia, Report of the Telecommunications Service Inquiry*, September 2000, pp.167-174

of this report, while the USO is a critically important safety net for telephone services, simply upgrading the USO to include new services is not likely to be the best way to address future service needs, and to promote high quality service, competition and consumer choice.

#### 4. Support for competition

While future reviews will focus on those areas where competition is not fully effective in delivering important new services, it will be important that review considerations and recommendations are targeted at improving the competitive delivery of services in those areas, rather than perpetuating a non-competitive environment. In other words, review recommendations and government policy responses, should be aimed at improving the competitive, sustainable delivery of new services as far as possible across regional, rural and remote Australia.

### RECOMMENDATION 9.2

Establishing a structure for future reviews of regional, rural and remote telecommunications services should:

- provide certainty for regional, rural and remote communities;
- ensure that reviews are independent from executive government;
- allow for flexible and appropriate policy responses to meet the range of needs in regional, rural and remote Australia; and
- promote competition and commercial service delivery as the most effective and sustainable service outcome.

## CORE ELEMENTS OF A REVIEW PROCESS

The key issues in establishing an effective mechanism to review and improve services are:

- who conducts the review and how that body relates to the Government;
- what it reviews and the degree of discretion of the review body in what it reviews;
- how it operates;
- the degree of Government discretion involved in responding to review recommendations; and
- a reasonable certainty of ongoing resources to allow an effective Government response.

Having regard to the principles stated above, the Inquiry's preferred review model has the following features:

- the review body should be independent from executive government, but would not duplicate existing policy development and regulatory oversight processes;
- the review body would have a degree of discretion and flexibility about the scope of reviews, but would be required to consider a core set of issues, primarily in relation to the equitable availability of important telecommunications services to regional, rural and remote Australians. The review body would need to seek public and industry input in developing its report; and
- the Government of the day would be legally obliged to consider and respond in a meaningful way to all the review's findings and recommendations, but the Government would not be bound to accept all recommendations. It would need to give public justification of its approach if it did not.

In proposing this model the Inquiry is mindful that any ongoing government intervention to deliver particular levels of telecommunications service would likely involve a considerable allocation of national financial resources. For example, almost \$1 billion of Commonwealth funding has been provided under the Networking the Nation, Social Bonus and TSI programs.

No future government should be prevented from exercising its proper fiscal responsibilities, and considering on a case by case basis whether a service upgrade should proceed, particularly when significant public funds may be required.

At the same time it is important to establish a process for future funding that is as certain as possible. To facilitate more certain future funding for telecommunications purposes, the Inquiry proposes that the Government put in place formal arrangements for an ongoing funding allocation, specifically targeted at regional telecommunications.

While a number of models for such funding arrangements have been put to the Inquiry, and are discussed briefly in this chapter, the Inquiry has not made a recommendation on a preferred model, believing that it is ultimately a matter for the Government.

### RECOMMENDATION 9.3

The scope of regular reviews of regional, rural and remote telecommunications services should be flexible, but there should be a core focus on assessing whether important new telecommunications services are available equitably across Australia.

### RECOMMENDATION 9.4

Future governments should be legally obliged to respond publicly to the recommendations of future reviews, and to justify responses that are not in accord with review recommendations.

## A STRATEGIC PLAN FOR REGIONAL TELECOMMUNICATIONS

To underpin and support the review process, the Inquiry considers the Government should establish and maintain a strategic plan for regional telecommunications. Such a plan could set out Government objectives in relation to regional telecommunications, as well as strategies, programs and projects, regulatory arrangements, funding commitments and timeframes for achieving objectives. It would have a key focus on strategies for providing new services under future-proofing initiatives, but could also cover other key areas of policy priority, such as services in remote Indigenous communities, awareness and training, and demand aggregation strategies, to take a number of current areas of policy focus.

A plan of this kind would support the review process by:

- providing a primary reference point against which to measure progress; and
- giving guidance to the review about Government policy priorities and objectives.

In turn the recommendations and outcomes of each review process would feed into the further development of the regional plan.

More broadly, a regional telecommunications plan would also promote:

- a structured and well-planned approach (including across tiers of government) to providing telecommunications service benefits to regional, rural and remote communities; and
- a better understanding by regional, rural and remote Australians of Government objectives and strategies in this area.

In advocating a strategic plan, the Inquiry is not suggesting the Government should take a centralised or prescriptive role in driving the development of telecommunications in regional, rural and remote Australia, for example through advocating particular technologies, or setting prescriptive service targets. Rigid planning approaches are inappropriate in the rapidly developing telecommunications industry, and can lead to poor policy decisions that are not in the best interests of consumers.

The plan should help regional, rural and remote consumers understand what governments are doing to improve service provision, including in the area of new service developments, and what Government strategies aim to achieve. Similarly it could assist industry to better understand the Government's service objectives and policy strategies.

The development of such a strategic plan has been advocated in a number of submissions, including those of the West Australian and Queensland Governments.

*A National Strategic Plan is needed which maintains and enhances Australia's position regarding telecommunications use among its first world peers. This plan needs to take a holistic view of telecommunications making best advantage of all tiers of government as well as the infrastructure and content industries.*<sup>457</sup>

## FUNDING OF FUTURE SERVICE DELIVERY INITIATIVES

The Inquiry recognises that there are competing demands for Government funding, which make it difficult to commit substantial funds into the future for particular purposes. However, there would be little public confidence in any 'future-proofing' mechanism that was not backed up by a more than usual degree of certainty in relation to funding.

This view has been expressed by a number of key stakeholders. Some kind of ongoing funding arrangement therefore needs to be part of the 'future proofing' mechanism.

*The Government should provide funding, where necessary, to maintain equitable telecommunications services to a suitable minimum standards into the future.*<sup>458</sup>

---

457 Queensland Government, submission, p.3

458 National Farmers' Federation, submission, p.11

## NEED FOR COMMONWEALTH FUNDING

Most telecommunications services are provided on a fully commercial basis under Australia's competitive telecommunications regime. In regional areas, however, services are sometimes subsidised. In the case of fixed telephony, there was originally an internal cross-subsidy within Telstra and its predecessors (Telecom and the Postmaster-General). With the advent of competition this was converted to an industry cross-subsidy. With the commercial provision of, and growing demand for, a wider range of telecommunications services, new strategies for facilitating widespread service access have developed. In all instances, however, the common factor is the need to allocate funding to subsidise commercially unprofitable services.

As discussed in Chapter 7, reliance on USO-style cross-subsidies has been increasingly rejected as inappropriate in a competitive market. Instead, more transparent and better-targeted funding approaches for supporting service delivery have been developed. These have included commercial pricing of service and payment of subsidies, both to providers and to customers. There has been a general move away from industry-funded subsidies to government funded subsidies.

The Inquiry does not consider industry subsidisation of future sharing arrangements is appropriate. It considers industry funding to meet the cost of non-commercial telecommunications needs would impose a significant financial burden on the industry, and would negatively affect investment incentives, not just in regional Australia but nationally. Ultimately, it would also impact negatively on prices paid by consumers for telecommunications services. Government funding is preferred by the Inquiry.

As noted in Chapter 7, many industry submissions expressed similar views to these, along with concerns about current industry funding of the USO. These concerns have been backed up by non-industry submissions. For example:

*The current supply side [USO] arrangements have created significant impediments to the realisation of improvements in rural telecommunications services ... and in the delivery in rural areas of quality public sector services that are increasingly dependent on high-speed broadband infrastructure.*<sup>459</sup>

While USO funding is more complex because of the historical circumstances in which it has evolved, the Inquiry has some sympathy with industry's arguments, as indicated in Chapters 2 and 7. The Inquiry considers this may be an area that would benefit from further Government investigation.

---

459 C.Dalton and R.Hill, submission, p.3

In summary, the Inquiry considers funding responsibility should rest primarily with Government, rather than industry. It is appropriate for Government to directly fund its social and economic telecommunications policy objectives, as it does other policy priorities.

## GOLDEN SHARES

Another funding option which has been raised is the 'Golden Share', as it was called in the United Kingdom, or the 'Kiwi Share' as it was called in New Zealand. These are special shareholdings kept by government in privatised national carriers, giving the government special rights in relation to service delivery. This is a kind of sharing mechanism both in terms of an obligation to provide services and to fund them.

The notion of having a 'Golden Share' to provide future benefits runs counter to the Inquiry's preference for transparent government funding rather than hidden industry cross-subsidies. The Inquiry believes other government policy options, as discussed in this report, are more transparent than this mechanism.

There was no support for the 'Golden Share' concept in submissions to the Inquiry.

### RECOMMENDATION 9.5

The Government should provide funding for future service improvements in regional, rural and remote Australia, rather than imposing financial obligations on industry.

## OPTIONS FOR SPECIFIC GOVERNMENT FUNDING MODELS

Concerns have been expressed in submissions about government budget funding being an uncertain mechanism for future service upgrades in regional, rural and remote Australia. For example:

*Nevertheless the politically-driven approach of the last six years has implications for future telecommunications funding. On the one hand, it raises the question as to whether the political will to fund regional telecommunications needs from budget would long survive the full sale of Telstra, should this eventuate. On the other,*

*it creates an expectation in the industry at large that any future funding of uncommercial services will come directly from government, rather than through any increase in industry levies.*<sup>460</sup>

These concerns could be overcome through various mechanisms to enable greater certainty of future funding. One option suggested by the Western Australian National Party is a levy on telecommunications transactions:

*The means to ensure the people in rural, regional and remote Australia share reasonably equitably in delivery of telecommunications in the long term, could be in the provision of funds drawn from a small levy on every financial transaction on any Telco in Australia to produce a figure of say \$300M per year in 2002 dollars to expand and upgrade the rural and regional telecommunications infrastructure...*<sup>461</sup>

There has also been considerable speculation about using part of the proceeds from any future sale of Telstra to underpin future service upgrades and/or extensions. Most interest has centred on the establishment of a trust fund to provide an ongoing funding source. For example:

*The Australian Telecommunications Users Group (ATUG) is proposing a Rural Telecommunications Development Trust that would use some funds from the further sale of Telstra to ensure continuity of improved services in regional Australia. While the State Government does not support the further sale of Telstra, the Trust would be an appropriate funding mechanism to provide for ongoing investment in regional telecommunications infrastructure beyond a level that is achievable on a non-subsidised or non-commercial basis, ie where the return on investment falls below the cost of capital.*

*The suggestion is that the Trust could be established as an independent statutory body within the Communications portfolio, reporting to the Minister for Communications, Information Technology and the Arts. In concept, the funding mechanism would be an annuity based on funds obtained from the sale of further shares in Telstra. The actual funding mechanism need not require direct investment of sale proceeds exclusively for the benefit of the trust. Annual budget appropriation would suffice. However,*

---

460 Communications Electrical and Plumbing Union, submission, p.10

461 Western Australian National Party, submission, p.4

*to improve credibility, amendments to the Telecommunications Act creating the Trust could also set out the formula by which annual funding is determined.*

*A vehicle such as the Telecommunications Development Trust should be considered as an ongoing mechanism for responding to benchmarked needs in rural and remote communities if there are proceeds from the further sale of Telstra.*

*A targeted communication fund needs to be established, and continually supported by the USO providers to ensure funds are available in the future to upgrade services to those customers deemed by the telecommunication industry to be “uneconomic”.<sup>462</sup>*

*CTN would prefer to ensure that all Australians share in future telecommunications benefits by keeping the customer access network in public ownership. If that is not achievable, we would prefer a structural separation of Telstra. However, if Telstra is to be entirely privatised, we would want the proceeds of sale to be committed to a fund for infrastructure development. We need to consider how we might best achieve communications sustainability if the establishment of such a fund is the only realistic option.<sup>463</sup>*

The Inquiry has no view on the future sale of Telstra, but believes a trust fund, however it is financed, would be an effective mechanism.

As indicated, decisions on the source of, and mechanisms for future funding are ultimately a matter for the Government. What is important is that there be an ongoing and highly reliable source of Commonwealth funding for telecommunications services improvements in regional, rural and remote Australia.

---

462 ICPA of Australia, submission, p.4

463 Consumers' Telecommunications Network, submission, p.15

## THE LEVEL OF COMMONWEALTH FUNDING

Few submissions suggested an actual amount for ongoing Commonwealth funding.

*WAFarmers has resolved:*

*“That we request as part of the agreement to the full privatisation of Telstra that 25per cent of the net sale price be placed in a Trust and the income used to ensure technological advances in telecommunications are advanced to rural and remote Australia in perpetuity and at an affordable cost.”<sup>464</sup>*

The Inquiry has not actively pursued this matter, and considers the size of any eventual funding allocation is essentially a matter for Government.

The Inquiry notes, however, that significant funding will be required into the future. For example, the Inquiry’s proposal in relation to the provision of equitable access to higher bandwidth services could cost well over \$100 million over three years. Similarly, investment in recent years in telecommunications infrastructure and services by both industry and government has been significant, running to hundreds of millions of dollars.

## A BETTER FOCUS ON REGIONAL, RURAL AND REMOTE AUSTRALIA

To support the review and strategic planning proposals recommended above, the Inquiry believes there should be a specific organisational focus on monitoring and assessing the telecommunications needs of regional, rural and remote Australia.

Some submissions have suggested that a specialist regional telecommunications office be established to protect and advance the interests of regional telecommunications users. For example:

*It is essential that either the current power of a component of public ownership is maintained or that a completely rural centric authority be formed to ensure timely and adequate telecommunications provision in rural areas.”<sup>465</sup>*

*This guarantee must be backed up by a regulatory authority that has substantial and transparent powers to vigilantly protect all rural and remote Australian’s [sic] right of access to a*

---

464 Western Australian Farmers Federation, submission, p.5

465 Mt Isa School of the Air, submission, p.2

*communications network that will always parallel the baseline standards of comparable urban service in capacity, for features and affordability.*<sup>466</sup>

*... Australia requires a statutory body to oversee and in the final analysis supply telecommunications services to regional and rural consumers appropriately comparable to urban services on a sustainable basis.*<sup>467</sup>

*AgForce suggests that a statutory body be established with funding to spend on specific, targeted infrastructure. This body should deliver ongoing, coordinated and a sustained focus to address regional, rural and remote telecommunications concerns—now and into the future.*<sup>468</sup>

However the Inquiry considers the functions envisaged for a regional telecommunications office would largely duplicate existing ACA and Ministerial functions and increase bureaucracy and the cost to the public purse with little additional benefit. While recognising advantages in such an office, functions to support monitoring and review of regional telecommunications could effectively be fulfilled by refinement of the ACA's existing functions, structure and operations.

## THE ACA AS THE REVIEW BODY

The ACA, with input from external experts and regional representatives, would be an appropriate body to undertake the reviews. The ACA has an appointed member with a specific role to represent the interests of regional Australia. Secretariat services for the review would be appropriately provided by the ACA, particularly if its monitoring and reporting functions are enhanced as recommended by this Inquiry.

The review body should be independent from executive Government, allowing it to give Government an external perspective, and to reassure regional, rural and remote stakeholders that recommendations would not be influenced by other Government fiscal or policy priorities. The ACA is a statutory body with the necessary degree of independence from the Government to satisfy this requirement.

---

466 ICPA of NSW, submission, p.5

467 Australian Consumers' Association, submission, p.4

468 AgForce, submission, p.9

## OTHER ENHANCEMENTS TO THE ACA'S ROLE

An effective alternative to a separate office of regional telecommunications would be the establishment of a specific regional communications unit within the ACA. This could draw together the ACA's regional activities and regulatory oversight, which are already extensive. These current functions could be enhanced to improve the focus on regional, rural and remote telecommunications, through:

- monitoring and reporting on industry performance and regulatory compliance in regional, rural and remote areas on a more disaggregated basis (including in relation to remote Indigenous communities);
- monitoring and reporting on technological and other industry trends of particular relevance to regional Australia, with a view to supporting the review panel. This work could also feed into the development of the strategic plan, and inform Government assessment of review recommendations; and
- monitoring trends internationally in relation to regional telecommunications.

### RECOMMENDATION 9.6

The Government should ensure that regular reviews of regional telecommunications services are supported by organisational arrangements that provide a strong focus on monitoring and assessing regional, rural and remote service levels. The Australian Communications Authority would be an appropriate body to undertake this function.

## SUMMARY OF RECOMMENDATIONS

### RECOMMENDATION 9.1

The Government should put in place a process to regularly review telecommunications services in regional, rural and remote Australia, and to assess whether important new service advancements are being delivered equitably in those areas.

The review process should be linked to a strategic plan for regional telecommunications, and underpinned by ongoing arrangements that provide a high degree of certainty that Government funds will be made available to support service improvements in regional, rural and remote Australia, where they will not be delivered commercially within a reasonable timeframe.

### RECOMMENDATION 9.2

Establishing a structure for future reviews of regional, rural and remote telecommunications services should:

- provide certainty for regional, rural and remote communities;
- ensure that reviews are independent from executive government;
- allow for flexible and appropriate policy responses to meet the range of needs in regional, rural and remote Australia; and
- promote competition and commercial service delivery as the most effective and sustainable service outcome.

### RECOMMENDATION 9.3

The scope of regular reviews of regional, rural and remote telecommunications services should be flexible, but there should be a core focus on assessing whether important new telecommunications services are available equitably across Australia.

### RECOMMENDATION 9.4

Future governments should be legally obliged to respond publicly to the recommendations of future reviews, and to justify responses that are not in accord with review recommendations.

### RECOMMENDATION 9.5

The Government should provide funding for future service improvements in regional, rural and remote Australia, rather than imposing financial obligations on industry.

### RECOMMENDATION 9.6

The Government should ensure that regular reviews of regional telecommunications services are supported by organisational arrangements that provide a strong focus on monitoring and assessing regional, rural and remote service levels. The Australian Communications Authority would be an appropriate body to undertake this function.



# APPENDIX A

## SUBMISSIONS, MEETINGS AND CONSULTATIONS

### SUBMISSIONS AND MEETINGS

The Terms of Reference note that:

*In conducting its assessment the panel will be expected to consult with representatives of regional Australia, including the National Farmers' Federation. It will also take submissions from the public.*

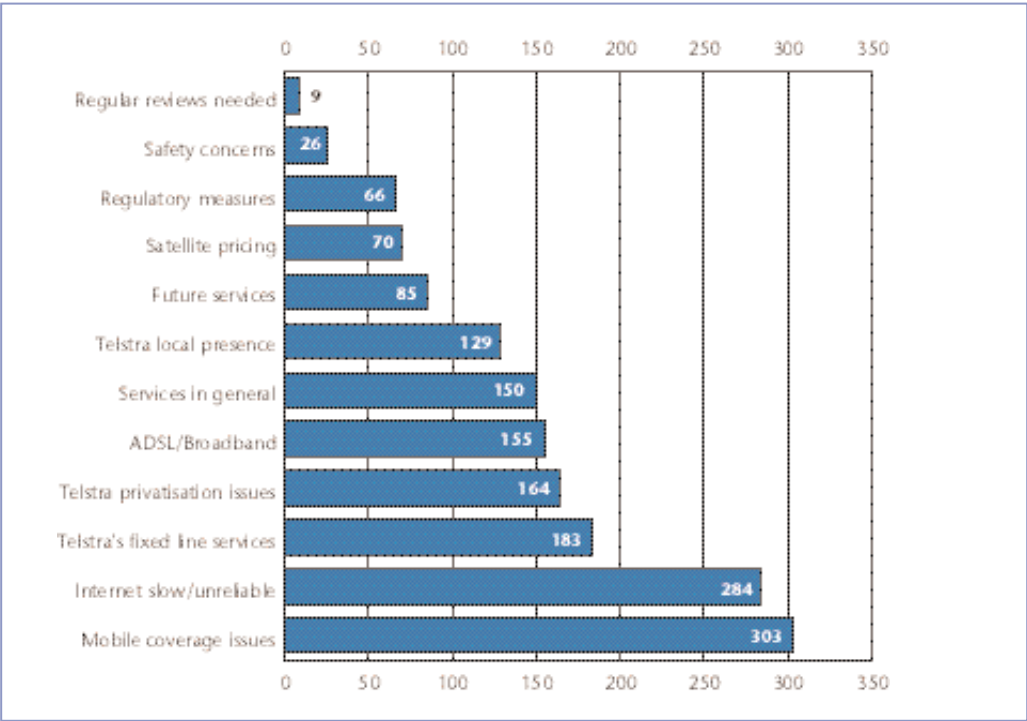
On 23 August 2002, the Regional Telecommunications Inquiry (the Inquiry) announced that it was seeking submissions addressing its Terms of Reference. Submissions were sought in writing and were to close on 27 September 2002. Late submissions received prior to 22 October 2002 were also accepted, although submitters were advised that the Inquiry could not guarantee all submissions received after 27 September 2002 would receive full consideration.

To inform people about the submission process and the Inquiry, a free call 1800 number and dedicated website were established. A total of 140 calls were made to the 1800 number, and there were more than 111 000 visits to the website. The total number of submissions received was 606 at close of business 22 October 2002.

The submissions raised a number of issues, the main three being mobile phone coverage, Internet speed and the reliability and quality of Telstra's fixed telephone network. These were the same broad set of issues that were highlighted in the Telecommunications Service Inquiry (TSI) report, although it is worth noting that there was a considerably increased emphasis on the need for higher bandwidth Internet services in submissions made to the Inquiry. Although it was not within the Inquiry's Terms of Reference, some submissions expressed opinions about the privatisation of Telstra.

Submissions were received from a broad cross section of the community including individuals, industry, carriers, community organisations, governments and members of Parliament at both the State and Federal levels. The majority of submissions raised concerns and criticisms about telecommunications services, both in relation to particular service problems, and about the state of telecommunications more generally. However there were also some positive submissions noting progress in the provision of telecommunications services to regional, rural and remote Australia. The Inquiry found the submissions in general to be sincere, well-considered and a very valuable contribution to its consideration of the issues.

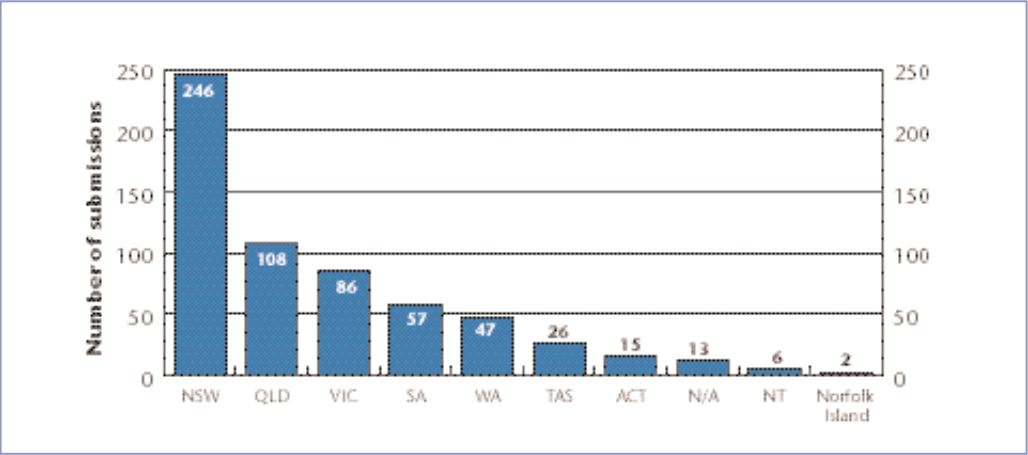
Figure A.1: Issues raised in submissions \*



\* Issues are drawn from submissions 1–606. Some submissions referred to multiple issues.

The 606 submissions were received from the following geographical regions.

Figure A.2: Submissions received by geographic region



## CONSULTATION

### STAKEHOLDER MEETINGS

During the course of the Inquiry meetings were held involving 40 separate representative groups and organisations. Details of those meetings are as follows.

Date/location	Organisation/representatives
Newcastle	
30 August 2002	<ul style="list-style-type: none"><li>• Telstra</li></ul>
Mackay	
30 August 2002	<ul style="list-style-type: none"><li>• Mackay Sugar</li></ul>
Canberra	
1–2 September 2002	<ul style="list-style-type: none"><li>• Telstra</li><li>• Australian Communications Authority</li><li>• Aboriginal and Torres Strait Islander Commission</li></ul>
Launceston	
5 September 2002	<ul style="list-style-type: none"><li>• Tasmanian Department of Education</li></ul>

Date/location	Organisation/representatives
<b>Canberra</b>	
9–10 September 2002	<ul style="list-style-type: none"> <li>• Singtel Optus</li> <li>• Australian Information and Communications Technology in Education Committee/Tasmanian Department of Education</li> <li>• Australian Telecommunications Users Group</li> <li>• AAPT</li> <li>• Telstra</li> <li>• Vodafone</li> <li>• National Farmers' Federation</li> </ul>
<b>Perth</b>	
18–19 September 2002	<ul style="list-style-type: none"> <li>• Telstra</li> <li>• Western Australian State Government <ul style="list-style-type: none"> <li>- Minister for State Development, Tourism and Small Business, the Hon Clive Brown MLA</li> </ul> </li> <li>• Western Australian Farmers Federation</li> <li>• Kondinin Group</li> <li>• Pastoralists &amp; Graziers Association of WA</li> <li>• Shire of Ngaanyatjaraku <ul style="list-style-type: none"> <li>- Consultant, Mr John Thurtell</li> </ul> </li> <li>• Isolated Children's Parents' Association of Western Australia</li> <li>• Regional Development Council of Western Australia <ul style="list-style-type: none"> <li>- Minister for Local Government and Regional Development; the Kimberley, Pilbara and Gascoyne, the Hon Tom Stephens</li> </ul> </li> <li>• Western Australian Local Government Association</li> </ul>
<b>Sydney</b>	
20 September 2002	<ul style="list-style-type: none"> <li>• Telstra <ul style="list-style-type: none"> <li>- Mr Ziggy Switkowski, Chief Executive Officer</li> </ul> </li> <li>• Consumers' Telecommunications Network</li> </ul>
<b>Longreach</b>	
25 September 2002	<ul style="list-style-type: none"> <li>• Agforce</li> <li>• Longreach Shire Council, Winton Shire Council and Tambo Shire Council</li> <li>• Cloncurry Shire Council, Richmond Shire Council and McKinlay Shire Council</li> </ul>
<b>Mt Isa</b>	
25–26 September 2002	<ul style="list-style-type: none"> <li>• Isolated Children's Parents' Association of Queensland</li> <li>• Mount Isa School of the Air</li> </ul>

Date/location	Organisation/representatives
<b>Townsville</b>	
26 September 2002	<ul style="list-style-type: none"> <li>• Telstra</li> </ul>
<b>Brisbane</b>	
27 September 2002	<ul style="list-style-type: none"> <li>• Telstra</li> <li>• Queensland State Government</li> </ul>
<b>Canberra</b>	
30 September– 1 October 2002	<ul style="list-style-type: none"> <li>• Comindico</li> <li>• Telecommunications and Disability Consumer Representation</li> <li>• Online Council Regional Telecommunications Working Group, including State Government representatives from: <ul style="list-style-type: none"> <li>- Department of Corporate and Information Services Northern Territory</li> <li>- Office of Information Technology New South Wales</li> <li>- Chief Minister's Department Canberra</li> <li>- Department of Innovation and the Information Economy Queensland</li> <li>- Multimedia Victoria—Victoria</li> <li>- Information Economy Policy Office South Australia</li> <li>- Department of Industry and Technology Western Australia</li> </ul> </li> <li>• Australian Competition and Consumer Commission</li> <li>• Communications, Electrical and Plumbing Union</li> </ul>
<b>Brisbane</b>	
7 October 2002	<ul style="list-style-type: none"> <li>• Queensland State Government <ul style="list-style-type: none"> <li>- Minister for Innovation and Information Economy, the Hon Paul Lucas</li> </ul> </li> </ul>
<b>Canberra</b>	
16–18 October 2002	<ul style="list-style-type: none"> <li>• National Farmers' Federation</li> <li>• Comindico <ul style="list-style-type: none"> <li>- Dr Terry Cutler, Adviser</li> </ul> </li> <li>• Telstra</li> </ul>

Date/location	Organisation/representatives
Canberra	
21 October 2002	<ul style="list-style-type: none"> <li>Northern Territory State Government</li> <li>- Minister for Communications the Hon Dr Peter Toyne</li> </ul>

A meeting was requested with the Telecommunications Industry Ombudsman (TIO), but the Ombudsman was overseas and not able to meet with the Inquiry. Advice on issues of relevance has been sought and received from the TIO.

## LIST OF SUBMITTERS

Of the 606 submissions received, 24 were classified as confidential by the submitter, and these have not been included in the list below. In some handwritten submissions it was difficult to discern the exact spelling of names. The Inquiry regrets any inaccuracies or omissions that may have arisen as a result.

### Alphabetical

Submission #	Name	State
7	Agforce	QLD
473	Agforce	QLD
245	Ainslie, I	TAS
296	Alford, B	NSW
347	Alice Springs School of the Air	NT
44	Allen, M	
487	Amos, B & A	NSW
383	Anderson, B	NSW
340	Andren, P, MP	NSW
472	Andren, P, MP	NSW
167	Anonymous by request	NSW
518	Arbuckle, J	QLD
497	Archer, B	NSW
153	Armstrong, I MP	NSW
48	Atkins, T	NSW
124	Atkinson, A	QLD
181	Atkinson, K	QLD
353	ATSIC	ACT

Submission #	Name	State
398	Australian Association of the Deaf	NSW
481	Australian Business Ltd	NSW
180	Australian Communication Exchange	NSW
148	Australian Consumers' Association	NSW
264	Australia's Holiday Coast Development Board	NSW
352	Balmoral & District Development Association	VIC
325	Balnaves, D	SA
550	Balnaves, P	SA
23	Banham, B	TAS
262	Banks, K	QLD
393	Barcoo Shire Council	QLD
388	Barraba Shire Council	NSW
2	Bartlett, M W	VIC
265	Bathurst City Council	NSW
17	Battersby, C	SA
221	Baumber, M and S	VIC
61	Beare, D	QLD
426	Begbie, AHM and DK	NSW
464	Begbie, D	NSW
39	Berrigan Shire Council	NSW
233	Berriman, J	TAS
151	Billing, RH and MJ	NSW
442	Blackett, R	VIC
357	Boating Industry Association of South Australia	SA
217	Bogan Shire Council	NSW
276	Boland, M J	NSW
517	Booth, L	NSW
424	Bornholm, CJ and MJ	NSW
459	Bowles, RV	QLD
446	Broadcast Australia	NSW
380	Broadsound Shire Council	QLD
115	Broomhead, J	NSW
477	Brown, C, MLA	WA
565	Brown, M	SA
47	Brown, R and J	SA

Submission #	Name	State
435	Broz, S & B	VIC
100	Buchanan, G	State unknown
244	Budde, P	NSW
371	Bundaberg City Council	QLD
63	Burgoyne, P	VIC
25	Burgoyne, PF and KL	VIC
246	Burleigh, B	VIC
306	Burton, R	WA
152	Cabonne Shire Council	NSW
330	Campbell, I and M	QLD
241	Campbell, K and S	NSW
35	Carroll, J	NSW
341	Cathcart, G and J	QLD
475	Central Coast Group Industry	NSW
448	Chadwick, R	NSW
281	Chamberlain, S	NSW
546	Cheal, JH	NSW
545	Cheal, RG	NSW
544	Chez Nous	NSW
193	Chidgey, G	NSW
492	Chinchilla Shire Council	QLD
161	Chisholm, I	NT
511	Ciantar, R	WA
309	City of Greater Shepparton	VIC
92	City of Whyalla	SA
437	Clarsen, B	VIC
18	Clout, J	NSW
299	Collins, H	QLD
32	Collins, T	QLD
69	Collins, T	NSW
15	Colson, C	TAS
174	Colson, C	TAS
456	Communications Electrical and Plumbing Union	ACT
586	Community Teleservices Australia	QLD
359	Consumers' Federation of Australia	ACT
415	Consumers' Telecommunications Network	NSW

Submission #	Name	State
453	Coomalie Community Govt Council	NT
408	Cooma-Monaro Shire Council	NSW
179	Cooper-Southam, A	NSW
186	Coowonga Community Reference Group	QLD
540	Cotter, T	NSW
329	Counter, Dr K	NSW
366	Cowell, P	SA
164	Cowling, S	VIC
251	Cox, Professor K	VIC
213	Cox, R	QLD
116	Cr Lorraine Thomas	WA
70	Crain, G	NSW
85	Crain, G	NSW
208	Crain, I	NSW
463	Crane, J	QLD
461	Cripps Clark, A	NSW
157	Crookwell Shire Council	NSW
485	Crossling, S	NSW
524	Cumming, J	VIC
552	Cumming, R	NSW
230	Cunningham, M	SA
423	Cush, J and D	NSW
525	CWA NSW	NSW
95	CWA of NSW	NSW
605	CWA of TAS	TAS
223	CWA of VIC	VIC
363	Dabron, V P	VIC
171	Dale, A	NSW
360	Daveriadams, L	SA
591	Dawber, K	VIC
3	Dawson, I	VIC
573	De Weaver, L	NSW
394	Deafness Forum of Aust	ACT
508	Dell, K	NSW
554	Dempster, D	ACT
187	Denham, J	NSW
211	Deniliquin Shire Council	NSW
478	Department of Health and Ageing	ACT

Submission #	Name	State
468	Dickie, J	QLD
185	District Council of Cleve	SA
450	District Council of Coober Pedy	SA
348	District Council of Grant	SA
338	District Council of Lower Eyre Peninsula	SA
137	District Council of Orroroo/Carrieton	SA
379	District Council of Robe	SA
603	Dixon, M	WA
256	Doak, S	TAS
142	Doorakkers, G	VIC
372	DOTARS	ACT
31	Douglas, S and B	WA
543	Downey, J	NSW
98	Drabsch, S B and G	QLD
404	Dumais, M	VIC
488	Dunkley, C	VIC
602	Earle, A	NSW
113	Eason, K	VIC
535	Edwards, G	NSW
507	Edwards, M	QLD
30	Eggins, A and N	SA
555	Elliot, D	QLD
120	Elliot, P	NSW
215	Elliott, J	NSW
139	Elphinstone, J	TAS
458	Emery, T	NSW
301	Ermacora, H	NSW
351	Eumarra Pastoral Co. Brewarrina	NSW
320	Everett, J	TAS
307	Eyre Regional Development Board	SA
45	Farmer, D	
255	Fennell, L	SA
402	Finlay, M and M	NSW
89	Fletcher, S	QLD
397	Flett, H	VIC
355	Fong, G	VIC
205	Formby, Dr J	NSW
569	Forsythe, W	NSW

Submission #	Name	State
440	Foskey, D	NSW
384	Foster, E	NSW
387	France, E	TAS
54	Freeman, A	ACT
183	French, J	NSW
315	Gall, J and C	QLD
396	Garbutt, R	NSW
150	Garside, J	NSW
328	Geldard, J	QLD
173	Gerrie, B	ACT
190	Gidgegannup Progress Association	WA
129	Gill, K	NSW
564	Gillies, I	SA
486	Gilmour, SG and WA	VIC
375	Gladstone Area Consultative Committee	QLD
604	Glossop, H	NSW
541	Goff, M	NSW
51	Goor, I	NSW
96	Gore, D	State unknown
252	Gosford City Council	NSW
561	Graham, M	NSW
337	Gray, G	QLD
165	Great Southern Area Consultative Committee	WA
491	Green, Dr W	WA
20	Green, K	SA
324	Green, S and A	VIC
436	Greenhill, B	QLD
36	Greenhough, J	QLD
271	Grieves, C	QLD
295	Grundy, EG and MD	NSW
144	Guest, R	NSW
19	Gugger, V	VIC
389	Gulf Savannah Development	QLD
138	Gundry, H	QLD
34	Gunhold, H	NSW
202	Gunning Shire Council	NSW

Submission #	Name	State
192	Guyra Shire Council	NSW
520	Hall, AJ	VIC
422	Halton, C	ACT
326	Hamilton, E	NSW
74	Hamilton, JI	VIC
75	Hanington, N	NSW
367	Hann, J, P, S, P and M	NSW
5	Hanrahan, G	QLD
175	Hartley, B	N/A
593	Hartsuyker, L, MP	NSW
385	Hay Shire Council	NSW
483	Hayes, J	NSW
313	Henderson, C	NSW
273	Hercock, H	WA
293	Heriot, V and T	NSW
16	Heslop, B	NSW
428	Hickey, P	NSW
94	Hill, CD and R	NSW
119	Hodgetts, L and C	TAS
77	Holland, K	QLD
66	Hope, K	SA
318	Horan, M, Leader of the Opposition, QLD	QLD
106	Horsfield, M and G	NSW
60	Hoy, B	NSW
451	Hrynevich, C	VIC
277	Hull, K, MP	NSW
572	Hume, P	NSW
219	Hurle, M	NSW
406	Hurst, G	WA
562	Hutchison (Orange)	NSW
83	Hutchinson, G	VIC
599	Hutchinson, T	QLD
433	Indigenous Remote Communications	QLD
261	Ipswich City Council	QLD
502	Ireland, D	NSW
130	Irvine, P	NSW

Submission #	Name	State
392	Isolated Children's Parents' Association of Australia	NSW
275	Isolated Children's Parents' Association of NSW	NSW
411	Isolated Children's Parents' Association of SA	SA
227	Isolated Children's Parents' Association of WA	WA
577	Ivory, K	QLD
212	Jacobsen, D D	SA
558	Jamieson, P	NSW
438	Jessup, P	
542	Johnson, RB and NJ	NSW
596	Johnson, T and S	QLD
427	Johnson, V, MP	QLD
26	Johnson-Bade, K	NSW
312	Jolly, M	VIC
300	Jones, Dr D	NSW
71	Jones, J	VIC
499	Jones, K	WA
1	Jones, M	VIC
322	Kahler, J	QLD
364	Kairn, J	VIC
163	Keenan, CP	WA
13	Kelly, R	NSW
405	Kelly, T, MLC	NSW
10	Kilborn, P	NSW
257	Kilcoy Shire Council	QLD
501	King, G	ACT
344	King, P	NSW
225	Kingborough Shire Council	TAS
466	Kingston District Council	SA
198	Knight, A and H	NSW
580	Kobelt, P	SA
177	Konz, H	NSW
122	Kowalski, R	VIC
557	Lachlan Shire Council	NSW
199	Laird, W	QLD

Submission #	Name	State
235	Lake, L	ACT
196	Landymore, R and I	NSW
6	Lane, M	VIC
57	Langfield, R	TAS
12	Lawrence, C	QLD
532	Lawrence, P	NSW
22	Lawrowicz, J	NSW
149	Lee, C	WA
553	Lee, K	NSW
240	Lefevre, M and S	NSW
108	Leiseboer, J	QLD
52	Lekamge, M	VIC
176	Leonard, CR and JN	NSW
314	L'Estrange, H and S	QLD
571	Letcher, G	ACT
8	Lilliebridge, J	NSW
285	Lindwall, J R	NSW
50	Linwood, LW	QLD
104	Little, GJ	WA
332	Local Government Association of New South Wales	NSW
519	Local Government Association of QLD	QLD
395	Local Government Association of SA	SA
474	Local Govt Association of Tasmania	TAS
361	Lock, K and K	SA
455	Low, B	NSW
601	Lowe, R	NSW
117	Lucas, M	VIC
509	Lucas, P, MP—Minister for Innovation and Information Economy	QLD
64	Luckraft, J	SA
317	Luders, P	NSW
538	Lynch, P	NSW
539	Lynch, Z	NSW
496	Mackay City Council	QLD
86	MacKirdy, J	VIC
476	Maguire, D	QLD
311	Mahoney, B	QLD

Submission #	Name	State
298	Males, C	TAS
536	Mallon, A	NSW
537	Mallon, M	NSW
288	Manning, B	NSW
204	Mannix, D	NSW
409	Mansell, A	VIC
268	Marshall, S and S	State unknown
111	Martin, G	SA
118	Martin, K	NSW
282	Masters, GG	QLD
33	Masters, S	
209	Matches, R G	VIC
158	Matheson, AR and I	NSW
452	Matthews, I	QLD
243	Mayer-Zirn, E	SA
93	McAllister, G	SA
504	McColl, S	NSW
439	McCorquodale, A	NSW
381	McCullagh, M	NSW
272	McDonald, Dr T	NSW
38	McGorlick, S	VIC
522	Mcintyre Valley Cotton Growers Association	QLD
201	McKenzie, G	NSW
90	McKenzie, J	QLD
218	McKenzie, M and J	QLD
65	McLean, LS	VIC
132	McPherson, P	QLD
297	McRobert, A and L	NSW
97	Meares, A	NSW
239	Melling, R and O	WA
228	Mid West Development Commission	WA
4	Miller, A	QLD
203	Moodie, R	NSW
493	Moorabool Shire Council	VIC
159	Moore, V F	QLD
335	Morgan, R H	NSW
127	Morgans, P	NSW

Submission #	Name	State
156	Morrow, S	VIC
56	Moss, R and S	TAS
91	Mt Isa School of the Air	QLD
189	Mync J	QLD
207	Nalder, D M	NSW
356	Nalder, K	NSW
567	National Farmers' Federation	NSW
551	National Party Barmedman	NSW
216	National Party, Nyngan	NSW
279	Nauschutz, K	QLD
53	Neville, B	WA
121	Newland, N	VIC
214	Newsham, R	QLD
99	Nhulunbuy Corporation Ltd	NT
342	Nicholls, D	NSW
266	Nissen, P	SA
454	Noble, J	NSW
80	Noble, S	VIC
188	Noonan, J and L	NSW
471	North Midlands Voluntary Regional Organisation of Councils	WA
260	Northern Regional Development Board	SA
512	Noyce, P and V	SA
585	NSW Dept of Information Technology	NSW
584	NSW Farmers' Association	NSW
514	NSW Inland Forum	NSW
200	NT Government	NT
125	O'Dwyer, B	VIC
588	O'Hara, K	
105	O'Hearns, M	NSW
319	O'Neill, F	NSW
566	Optus	NSW
421	Orme, E and V	NSW
289	Osborn, I and L	NSW
598	Osborne, M J	VIC
376	Ottrey, R F	VIC
370	Outback Areas Community Development Trust	SA

Submission #	Name	State
377	Owen Community Centre Committee	SA
503	Owen, B	NSW
140	Page, B	NSW
345	Page, B	SA
563	Parker, C	TAS
444	Parkes Shire Council	NSW
166	Parrick, R and A	State unknown
526	Passauer, RW	SA
308	Pastoralists and Graziers Association Western Australia	WA
67	Patterson, WH and MI	VIC
278	Payphone Industry Association	NSW
274	Perry Shire Council	QLD
521	Phillips, N	VIC
354	Piccoli, A, MP	NSW
597	Piccoli, A, MP	NSW
425	Picken, N and C	VIC
414	Pike, J	WA
429	Piper, M	NSW
291	Pitt, I and B	NSW
143	Plamondon, J	WA
248	Poland, P	WA
430	Pooncarie and District Development Association	NSW
447	Port Flinders Development Association and Weeroona Island Progress Association	SA
287	Porter, J	SA
78	Powell, T	NSW
484	Power, R	QLD
548	Prout, W and LJ	NSW
37	Prudames, A and G	QLD
109	Purser, D	NSW
146	QLD Legislative Assembly Travelsafe Committee	QLD
362	Queensland Rural Women's Network	QLD
528	Reed, J	NSW
498	Regional Development Council of WA	WA

Submission #	Name	State
568	Reid, A	WA
79	Reilly, B and W	QLD
284	Reye, KA	QLD
304	Ricegrowers' Association Australia	NSW
220	Richard, C	NSW
589	Richards, J	NSW
386	Ridley TI	SA
400	Riedl, N	VIC
123	Riethmuller, K	QLD
253	Riley, HG	NSW
172	River Cove Progress Association	SA
403	Riverina Regional Development Board	NSW
5269	Roach, T	NSW
431	Roark, M	TAS
556	Roberts, A	WA
516	Roberts, R and R	VIC
9	Robinson, B	QLD
222	Robinson, B	QLD
234	Robinson, H	QLD
534	Roe Family	WA
160	Rosalie Shire Council	QLD
238	Ross, B	State unknown
24	Ruge, P	VIC
482	Ruiz, J and M	NSW
419	Rural City of Wangaratta	VIC
549	Russ, JJ	NSW
531	Ryall, M	NSW
373	SA Farmers' Federation	SA
141	Salen, R	VIC
249	Samios, W and J	NSW
114	Sanderson, C	NSW
570	Sadow, K	NSW
368	Sawday, R	SA
126	Schaefer, M and M	QLD
416	Scharbow, J	NSW
500	Schwenke, P	QLD
154	Scott, J and M	NSW
247	Secker, P, MP	VIC

Submission #	Name	State
560	Seddon, H	NSW
399	Selvarajah, K	NSW
510	Serpentine Jarrahdale Shire	WA
46	Sharp, C	QLD
11	Sharps Creek residents	NSW
49	Shire of Chapman Valley	WA
346	Shire of Cue	WA
182	Shire of Dandaragan	QLD
82	Shire of Donnybrook/Balingup	WA
527	Shire of Flinders	QLD
155	Shire of Gnowangerup	WA
302	Shire of Greenough	WA
336	Shire of Hinchinbrook	QLD
449	Shire of Laverton	WA
494	Shire of Narembeen	WA
206	Shire of Toodyay	WA
84	Shire of Wiluna	WA
147	Shire of Yalgoo	WA
68	Short, S	NSW
495	Sides, L	NSW
480	Sims, E	QLD
441	Sirl, S	NSW
232	Sisters Beach Community Association	TAS
263	Smallwood, L	ACT
489	Smarsz, T	SA
327	Smith, L	VIC
21	Smith, M	QLD
72	Smith, M and R	QLD
523	Smith, P	QLD
62	Smithson, P	SA
343	Somerville, CN and GR	NSW
103	South Gippsland Shire Council	VIC
374	South West Development Commission	WA
184	South, M	SA
286	Southern Mallee District Council	SA
73	Speed, G	VIC
178	St Patricks River Progress Association	TAS
168	Staley, L	VIC

Submission #	Name	State
58	Steele, P	NSW
76	Stemm, M	TAS
606	Stephenson, J	NSW
236	Stevenson, F	NSW
378	Stewart, GL	QLD
27	Stewart, P	QLD
600	Stienissen, H	NSW
574	Stipeikis, S	VIC
582	Stone, N	VIC
128	Stow, G	VIC
413	Strathbogie Shire	VIC
88	Sturmfels, G	QLD
59	Styles, B	NSW
145	Sutherland, J	NSW
465	Sutherland, J	VIC
407	Sutton, MS	NSW
515	Tamworth City Council	NSW
94	Tanner, P and B	NSW
210	Taroom Shire Council	QLD
191	Tasmanian Farmers' and Graziers' Association	TAS
136	Taylor, M	VIC
590	Taylor, N	NSW
559	TEDICORE	QLD
547	Telstra	NSW
81	Temple, J	VIC
316	Tenterfield Economic Development Corp	NSW
369	Tenterfield Shire Council	NSW
43	The Ratepayers and Voters Association of Western Fitzroy Shire	QLD
170	Thompson, J and A	VIC
467	Thomson, B	NSW
162	Thorne, J	QLD
390	Thorneycroft, S	VIC
283	Threadgold, RA and LL	SA
229	Three Rivers Landcare Group	QLD
469	Thurtell, J	WA

Submission #	Name	State
339	Timperon, S	TAS
107	Tinker, PJ	NSW
267	Tomalin, C	NSW
250	Tomkins, ML	NSW
55	Tongue, J	NSW
576	Tonking, AI	NSW
505	Torres Strait Regional Authority	QLD
110	Torres Strait Regional Employment Committee	QLD
418	Townsend, M	
382	Townsville Shire Council	QLD
224	Towong Shire Council	VIC
231	Turner, B and J	NSW
290	Turner, B and P	NSW
310	Tweed Shire Council	NSW
197	Undera Community Group	VIC
14	Unidentified submission	QLD
434	Victorian Farmers Federation	VIC
410	Vodafone Australia	NSW
513	WA Chamber of Commerce	WA
331	WA Farmers' Federation	WA
237	WA National Party	WA
169	Wagnon, E and A	State unknown
349	Wakelin, B, MP	SA
581	Wakelin, B, MP	SA
445	Walgett Shire Council	NSW
226	Walker, A	SA
41	Walsh, B	QLD
323	Ward, M	NSW
280	Waring, D & B	VIC
575	Warne, JN	WA
333	Waterford, A	QLD
420	Webster, M	VIC
134	Weekes, T	NSW
533	Wells, PE	NSW
321	West Coast Council	TAS
470	Western Division Group of the Shires Association of NSW	NSW

Submission #	Name	State
303	Wheatbelt Development Commission	WA
135	White, RJ	VIC
358	Wilding, D	NSW
350	Wilhelm, DP	NSW
101	Wilira, W	QLD
28	Willaton, C	VIC
42	Williams, A	NSW
195	Williams, D	NSW
194	Williams, E & E	QLD
391	Wilson, G	VIC
258	Wise, P	NSW
305	Women with Disabilities Australia	ACT
102	Wood, KF	SA
490	Wood-Bradley, P	NSW
133	Woodhead, S	NSW
401	Woods, T	WA
292	Wooli Minnie Water Chamber of Commerce	NSW
529	Worthing, P	NSW
131	Wright, I	QLD
334	Yeates, Y	TAS
443	Young, A	QLD
259	Young, J	QLD

# APPENDIX B

## TELSTRA'S CSG COMPLIANCE—ANNUALISED DATA BY STATE

**Table B.1: In-place connections (%)**

	1998–99	1999–2000	2000–01	2001–02
National	97	97	95	97
NSW/ACT	97	97	94	96
VIC	97	96	95	96
QLD	97	98	95	97
TAS	98	98	96	98
SA	96	98	96	97
NT	95	97	94	97
WA	97	98	95	97

Source: Australian Communications Authority (ACA), *Telecommunications Performance Report* and ACA, *Telecommunications Performance Monitoring Bulletin*

**Table B.2: New connections with infrastructure (%)**

*New connections with infrastructure in all areas*

	1998–99	1999–2000	2000–01	2001–02
National	Not reported	Not reported	92	93

Source: ACA, *Telecommunications Performance Monitoring Bulletin*

*New connections with infrastructure in Urban areas*

	1998–99	1999–2000	2000–01	2001–02
National	88	90	91	93
NSW/ACT	87	90	91	93
VIC	91	91	91	92
QLD	91	91	91	91
TAS	87	92	93	94
SA	85	91	91	95
NT	74	84	91	95
WA	86	87	90	95

Source: ACA, *Telecommunications Performance Report* and Telecommunications Service Inquiry (TSI)

*New connections with infrastructure in Major Rural areas*

	1998-99	1999-2000	2000-01	2001-02
National	89	92	94	95
NSW/ACT	89	92	95	96
VIC	90	92	93	94
QLD	91	95	95	96
TAS	91	93	95	97
SA	88	93	94	97
NT	78	89	94	95
WA	86	91	94	96

Source: ACA, *Telecommunications Performance Report* and TSI

*New connections with infrastructure in Minor Rural areas*

	1998-99	1999-2000	2000-01	2001-02
National	97	99	96	96
NSW/ACT	97	98	96	97
VIC	97	99	96	96
QLD	98	99	97	96
TAS	98	99	97	96
SA	97	99	94	96
NT	94	99	94	94
WA	95	98	94	96

Source: ACA, *Telecommunications Performance Report* and TSI

*New connections with infrastructure in Remote areas*

	1998-99	1999-2000	2000-01	2001-02
National	91	97	97	97
NSW/ACT	94	99	92	93
VIC	100	100	100	100
QLD	95	98	98	97
TAS	Not reported	Not reported	Not reported	Not reported
SA	98	99	95	95
NT	80	94	97	97
WA	94	97	95	97

Source: ACA, *Telecommunications Performance Report* and TSI

**Table B.3: New connections without infrastructure (%)***New connections without infrastructure in all areas*

	1998-99	1999-2000	2000-01	2001-02
National	Not reported	Not reported	87	94

Source: ACA, *Telecommunications Performance Monitoring Bulletin**New connections without infrastructure in Urban areas*

	1998-99	1999-2000	2000-01	2001-02
National	71	82	84	92
NSW/ACT	64	82	85	91
VIC	71	80	82	91
QLD	84	87	86	94
TAS	70	88	96	91
SA	62	83	81	92
NT	66	76	87	96
WA	83	81	82	93

Source: ACA, *Telecommunications Performance Report* and TSI*New connections without infrastructure in Major Rural areas*

	1998-99	1999-2000	2000-01	2001-02
National	62	77	85	92
NSW/ACT	62	77	86	92
VIC	54	74	83	91
QLD	73	84	88	91
TAS	58	81	94	94
SA	69	81	87	96
NT	41	57	88	92
WA	69	78	82	96

Source: ACA, *Telecommunications Performance Report* and TSI

*New connections without infrastructure in Minor Rural areas*

	1998–99	1999–2000	2000–01	2001–02
National	97	98	96	98
NSW/ACT	94	97	96	98
VIC	98	99	97	98
QLD	99	99	96	98
TAS	99	100	98	99
SA	99	99	97	98
NT	82	91	98	97
WA	98	99	95	97

Source: ACA, *Telecommunications Performance Report* and TSI

*New connections without infrastructure in Remote areas*

	1998–99	1999–2000	2000–01	2001–02
National	96	99	95	97
NSW/ACT	92	98	95	98
VIC	100	100	100	100
QLD	98	100	94	96
TAS	Not reported	Not reported	Not reported	Not reported
SA	97	100	92	95
NT	94	97	95	97
WA	98	99	97	100

Source: ACA, *Telecommunications Performance Report* and TSI

**Table B.4: Fault repair (%)**

*Fault repair in all areas*

	1998–99	1999–2000	2000–01	2001–02
National	Not reported	Not reported	90	90

Source: ACA, *Telecommunications Performance Monitoring Bulletin*

### *Fault repair in Urban areas*

	1998-99	1999-2000	2000-01	2001-02
National	76	82	88	87
NSW/ACT	73	81	86	87
VIC	82	83	89	87
QLD	81	85	90	87
TAS	76	88	93	92
SA	80	77	87	87
NT	64	71	89	95
WA	70	79	87	88

Source: ACA, *Telecommunications Performance Report*

### *Fault repair Rural areas*

	1998-99	1999-2000	2000-01	2001-02
National	82	86	93	94
NSW/ACT	80	86	93	92
VIC	84	85	92	94
QLD	85	91	95	94
TAS	83	88	93	94
SA	93	87	96	97
NT	73	78	94	96
WA	67	76	93	96

Source: ACA, *Telecommunications Performance Report*

### *Fault repair in Remote areas*

	1998-99	1999-2000	2000-01	2001-02
National	65	72	84	95
NSW/ACT	77	86	88	96
VIC	81	80	84	96
QLD	73	80	86	94
TAS	Not reported	Not reported	Not reported	Not reported
SA	76	74	82	97
NT	52	58	82	95
WA	48	56	78	94

Source: ACA, *Telecommunications Performance Report*



# APPENDIX C

## COMPARATIVE DISTRIBUTION OF DISTRIBUTION AREAS (DAs) BY FAULT RATE, 1999 AND 2002

The following tables depict the number of DAs with specified Customer Access Network (CAN) faults per 100 services in operation (SIOs) per year. Please note that the total number of DAs increased by 493 from 71 722 to 72 215 between 1999 and 2002. Due to a significant reallocation of DAs from Metropolitan to Regional it is not appropriate to compare disaggregated performance across the years. However, a meaningful comparison can be made of the totals.

**Table C.1: Comparative distribution of DAs by fault rate—Country/Regional**

CAN faults per 100 SIOs	1998–99	%	Cumulative %	2001–02	%	Cumulative %
0–5	2413	17.17	17.17	5596	20.40	20.40
6–10	2751	19.57	36.74	6868	25.04	45.44
11–20	3284	23.37	60.11	6958	25.37	70.81
21–30	1657	11.79	71.90	2871	10.47	81.28
31–50	1797	12.79	84.69	2513	9.16	90.44
>50	2152	15.31	100.00	2622	9.56	100.00
<b>Total</b>	<b>14 054</b>	<b>100.00</b>		<b>27 428</b>	<b>100.00</b>	

**Table C.2: Comparative distribution of DAs by fault rate—Metropolitan**

CAN faults per 100 SIOs	1998–99	%	Cumulative %	2001–02	%	Cumulative %
0–5	15 140	26.25	26.25	9334	20.84	20.84
6–10	20 650	35.81	62.06	14 660	32.73	53.57
11–20	16 131	27.97	90.03	14 428	32.21	85.79
21–30	3146	5.46	95.49	3481	7.77	93.56
31–50	1443	2.50	97.99	1700	3.80	97.36
>50	1158	2.01	100.00	1184	2.64	100.00
<b>Total</b>	<b>57 668</b>	<b>100.00</b>		<b>44 787</b>	<b>100.00</b>	

**Table C.3: Comparative distribution of DAs by fault rate—Total**

CAN faults per 100 SIOs	1998–99	%	Cumulative %	2001–02	%	Cumulative %
0–5	17 553	24.47	24.47	14 930	20.67	20.67
6–10	23 401	32.63	57.10	21 528	29.81	50.49
11–20	19 415	27.07	84.17	21 386	29.61	80.10
21–30	4 803	6.70	90.87	6352	8.80	88.90
31–50	3240	4.52	95.38	4213	5.83	94.73
>50	3310	4.62	100.00	3806	5.27	100.00
<b>Total</b>	<b>71 722</b>	<b>100.00</b>		<b>72 215</b>	<b>100.00</b>	

Sources: *Telecommunications Service Inquiry Report*, p.231 and Telstra communications, 15 and 16 October 2002

# APPENDIX D

Indicative list of Internet Service Providers (ISPs) offering national untimed local call access.

## National access providers with national local numbers (NLN)

Name	NSW	VIC	QLD	WA	SA	TAS	NT	ACT	NLN	POPs
"AskAussie" Internet Services Provider		X		X					X	3
AAPT Smartchat Internet	X	X	X	X	X	X	X	X		72
Aardvark Internet	X	X	X	X	X	X	X	X		8
Access Net Australia	X	X	X	X	X	X		X	X	20
AOL Australia	X	X	X	X	X	X	X	X		72
AT&T Global Network	X	X	X	X	X	X	X	X		12
Beyond Net NQ			X						X	1
Blaze Internet Services	X	X	X	X			X		X	33
CompuServe Pacific	X	X	X	X	X	X	X	X		10
connect.com.au Pty Ltd	X	X	X	X	X	X	X	X		72
CybaNet Internet Services Pty Ltd	X	X	X	X	X	X	X	X		14
dingo blue	X	X	X	X	X	X	X	X		37
DoveNetQ	X	X	X	X	X	X	X	X		71
Down Under Internet Services	X	X	X	X	X	X	X	X		71
EISA	X	X	X	X	X	X	X	X		14
Escape Online Internet	X	X	X	X	X	X	X	X		41

Name	NSW	VIC	QLD	WA	SA	TAS	NT	ACT	NLN	POPs
EZWeb Pty Ltd	X	X	X	X	X	X	X	X		41
HoloHost	X	X	X	X	X	X	X	X	X	27
Hotlinks Internet Services	X	X	X	X	X	X	X	X		68
Instant Communications	X	X	X	X	X	X	X	X		53
Internex	X	X	X	X	X	X	X	X		30
Internode Professional Access	X	X	X		X			X	X	12
Lamp Internet	X	X		X					X	5
LibertyOne Online (Uses dial-up network of OzEmail Access One)	X	X	X	X	X	X	X	X		59
Locall Internet									X	0
Mac Connect (Uses dial-up network of OzEmail Access One)	X	X	X	X	X	X	X	X		73
Myaccess	X	X	X	X	X	X	X	X		33
Network Technology Pty Ltd	X	X	X	X	X	X	X	X		45
Nobby's Net	X	X	X	X	X	X	X	X		96
Nornet	X		X						X	6
Octa4	X	X	X	X	X	X	X	X	X	10
Optus Internet	X	X	X	X	X	X	X	X		41
OzEmail	X	X	X	X	X	X	X	X		80
OzEmail Access One	X	X	X	X	X	X	X	X		59
OzGuide	X	X	X	X	X	X	X	X		72
Ruralnet	X		X					X	X	5
Sapphire Planet	X	X	X	X	X	X	X	X		55
solutionone.com.au	X	X	X	X	X	X	X	X		65

Name	NSW	VIC	QLD	WA	SA	TAS	NT	ACT	NLN	POPs
Spiderweb Access	X	X	X	X	X	X	X	X		53
Telstra Big Pond Home	X	X	X	X	X	X	X	X	X	59
Totalise	X	X	X	X	X	X	X	X		97
TPG Internet	X	X	X	X	X	X	X	X		84
True Blue									X	0
TrueBlue Internet Services Provider									X	0
TrumpNet		X				X			X	11
Ultraset			X						X	3
Vision Internet Services						X			X	14
winNET	X	X	X	X	X	X	X	X		78

Note: A mark under a state denotes the ISP has at least one dial-up location in that State or Territory. There is also a column if they have a nationwide local call number (NLN), and a column for the number of Points of Presence (POPs) they have in different locations.

Source: The Australian ISP list at <http://www.cynosure.com.au/isp/@national>, viewed 23.10.02



# GLOSSARY

## OF ACRONYMS AND TERMS

### A

#### **ACA—Australian Communications Authority**

Commonwealth regulatory authority for telecommunications and radiocommunications.

#### **ACCC—Australian Competition and Consumer Commission**

Commonwealth regulatory body with responsibilities derived from the *Trade Practices Act 1974* and telecommunications-specific legislation, with competition, pricing and trade practices responsibilities in relation to the telecommunications industry.

#### **ACIF—Australian Communications Industry Forum**

Established in May 1997 as a communications industry self-regulatory body. ACIF develops and administers technical and operating arrangements that promote both the long term interests of end-users and the efficiency and international competitiveness of the Australian communications industry.

#### **ADSL—Asymmetric Digital Subscriber Line**

A technology for the delivery of digital data over existing twisted pair copper subscriber lines. The analogue telephone service shares the copper with the ADSL signals. The data rate is asymmetric, with downstream rates (to the user) up to a maximum of about six megabits per second (Mbps). The upstream data rate would be less than 512 kilobits per second (kbps). In practical applications, ADSL downstream data rates are limited to around 1.5 Mbps or lower.

#### **AGM—Area General Manager**

The manager of one of 28 Telstra Country Wide<sup>®469</sup> areas across regional Australia.

#### **AICTEC—Australian Information and Communications Technology in Education Committee**

AICTEC is a cross-sectoral, national committee responsible for providing advice to all Australian Ministers of Education and Training on the economic and effective utilisation of online technologies in Australian education and training.

---

469 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

**AMPS—Advanced Mobile Phone System**

The Telstra analogue mobile phone service, phased out 2000.

**ATM—Asynchronous Transfer Mode**

A high bandwidth, low-delay, packet-based switching protocol that allows voice, video, text and data to be multiplexed together into a single transmission network with different qualities of service.

**ATSIC—Aboriginal and Torres Strait Islander Commission**

Australia's national policy making and service delivery agency for Indigenous people. It is an independent statutory authority established by the Commonwealth Government under the *Aboriginal and Torres Strait Islander Commission Act 1989*.

**AUSTEL—Australian Telecommunications Authority**

The telecommunications industry regulator until 30 June 1997.

## B

**Backbone network**

Trunk or inter-exchange telecommunications network.

**BAG—Broadband Advisory Group**

The BAG was established by the Government to provide high level advice on broadband development and also acts as a vehicle for fostering communication between stakeholders on both the supply-side and demand-side of the broadband issue. The Group met for the first time on 29 April 2002 and it is expected that their activities will conclude by the end of 2002.

**Bandwidth**

In analogue systems bandwidth is a measure of the amount of occupied spectrum and is measured in Hertz (Hz). In digital systems bandwidth is a measure of the data throughput capacity of a given communications network. Bandwidth is measured in bits per second (bps).

**BARN—Building Additional Rural Networks**

Part of the Government's Networking the Nation (NTN) program, with an objective to promote alternative networks in regional, rural and remote Australia.

**Big Pond<sup>®470</sup>**

Telstra's Internet Service Provider (ISP).

---

470 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

**bps—bits per second**

A common measure of data speed for transmission carriers. The speed in bps is equal to the number of bits transmitted or received each second. Larger units are often used to denote high data speeds for example, kbps (kilobits per second) = one thousand bits per second; Mbps (megabits per second) = one million bits per second; and Gbps (gigabits per second) = one thousand million bits per second.

**Broadband**

A generic term for high bandwidth capacity, with no commonly agreed specific definition. Any system with the ability to deliver digital data at hundreds of thousands of bits per second would be currently considered broadband.

**Byte**

A byte is defined as eight binary bits that allows for 256 different combinations.

**C****CAN—Customer Access Network**

The CAN is that part of the telephone network that allows telephone users to connect to the local switch or exchange. It is also known as the 'local loop' and largely consists of pairs of twisted copper wires.

**Call congestion**

By design any line based telephone network has limited simultaneous call capacity dictated by the size of the exchange switch. In mobile networks it is typically limited by available spectrum. If a mobile network is operating at maximum call capacity then any attempt to make further calls will be flagged by a recorded message.

**Call drop-out**

The unintended disconnection of a call, either by a mobile handset (usually owing to a fall in the strength of the mobile radio signal) or on a fixed line modem connection due to line interference or other abnormal conditions.

**Carrier**

The holder of a telecommunications carrier licence in force under the *Telecommunications Act 1997*.

**CCF—Consumer Consultative Forum**

The forum provides the Australian Communications Authority (ACA) with a formal mechanism for consulting consumer representatives on matters relating to its telecommunications functions. The CCF ensures that consumer interests are considered in the ACA's decision-making. Members of the CCF include organisations that represent consumer interests, government agencies and industry bodies.

**CDMA—Code Division Multiple Access**

A sophisticated spread spectrum technique that can be used in a variety of wireless delivered services, including mobile phones. CDMA employs a bandwidth much larger than the original signal. Each signal is uniquely encoded and decoded and allows many signals to occupy the same spectrum.

**CEPU—Communications, Electrical and Plumbers Union**

The union covering many of the workers in the telecommunications industry.

**CNI—Customer Network Improvement database**

Formerly 'E71' database. Telstra database which tracks the progress of maintenance tasks.

**Community Service Towns**

Telstra identified towns that provide a certain level of basic services such as emergency services, schooling, medical, dental, shopping, banking, vehicle fuelling and community services to which concessional telephone calls are available from some remote localities.

**CPE—Customer Premises Equipment**

End-user equipment that is located on the customer's premises (physical location) rather than on the provider's premises or in between. Telephone handsets, modems and personal computers are examples of CPE.

**CRU—Communications Research Unit**

An economic research branch within the Department of Communications, Information Technology and the Arts that collects industry performance data, analyses industry performance, provides economic research, briefing and consultancy research services to external clients.

**CSG—Customer Service Guarantee**

A set of performance requirements established by the Government and placed by the Australian Communications Authority (ACA) on suppliers of the standard telephone service. The service guarantee sets time limits and other standards for the rectification of faults, connections and appointments. Consumers are entitled to established scale compensation payments if the standards are not met.

**CSP—Carriage Service Provider**

A person who supplies, or proposes to supply, certain carriage services, including a commercial entity acquiring telecommunications capacity or services from a carrier for resale to a third party. Internet and pay television service providers also fall within the definition of CSPs under the *Telecommunications Act 1997*.

**CTN—Consumers' Telecommunications Network**

A national coalition of consumer and community organisations representing residential consumer interests in telecommunications.

## D

### **DA—Distribution Area**

A customer area fed by a distribution element such as a pillar, cabinet or main cable direct feed. A distribution area will typically have several hundred services but can range from tens to thousands.

### **DCITA—Department of Communications, Information Technology and the Arts**

Commonwealth Department responsible for communications policy.

### **DDSO—Digital Data Service Obligation**

A legislated obligation requiring providers to ensure the availability of data services operating at a specified minimum speed of approximately 64kbps.

### **DECT—Digital Enhanced Cordless Telecommunications**

DECT is a cordless technology that is designed for small area coverage working off a base station in the user's premises, such as a farmhouse, or in an urban environment such as a private automatic branch exchange. DECT also lends itself to other applications such as Wireless Local Loop (WLL).

### **Dial-up**

A telephone connection in a system of many lines shared by many users. In the context of Internet use, it refers to using the telephone network to 'dial-up' a link to an Internet Service Provider (ISP). The link to the ISP is only maintained for the duration of the connection. In contrast, some higher bandwidth Internet services enable 'always on' service.

### **DIC—Discrete Indigenous Community**

A geographic location, bounded by physical or legal boundaries, that is inhabited or intended to be inhabited predominantly by Indigenous people, with housing or infrastructure that is either owned or managed on a community basis.

### **DRCS—Digital Radio Concentrator System**

A communications system designed by Telstra for voice and very low speed data applications in remote areas. It is an ageing technology and is currently being replaced under Telstra's Remote Australia Telecommunications Enhancement (RATE) program with High Capacity Digital Radio Concentrator (HCRC) systems.

### **DSLAM—Digital Subscriber Line Access Multiplexer**

A network device normally located in a telephone exchange that receives signals from multiple customer Digital Subscriber Line connections and puts the signals on a high-speed backbone line using multiplexing techniques.

## E

### E1

The E1 signal format carries data at a rate of 2.048 megabits per second (Mbps) and can carry 32 channels at 64 kilobits per second (kbps) each.

### ESA—Exchange Service Area

An area served by a Telstra exchange. There are approximately 5090 ESAs around Australia.

### Easycall™<sup>471</sup>

Telstra name for a range of exchange-based enhanced call handling facilities.

### Exchange

Network node where various numbers and types of communication lines are switched by the telecommunications user or network operator. Exchanges operate at local, trunk and international levels.

### Extended Zones

The charging zones for remote areas of Australia. There are 111 Extended Zones covering approximately 80 per cent of the Australian landmass and containing approximately 40 000 services in total.

### Extended Zones Agreement

An agreement between the Commonwealth and Telstra to provide the residents of Telstra's remote Extended Zones with untimed local calls within their zone, to neighbouring zones and to the community service town they use to access the various community services they need. Improved Internet services are also part of the agreement.

## F

### Frame relay

A telecommunication service designed for data transmission for intermittent traffic between local area networks and between end-points in a wide area network. Frame relay puts data in a variable-size unit called a frame and leaves any necessary error correction up to the end-points, which speeds up overall data transmission. For most services, the network provides a permanent virtual circuit which means that the customer sees a continuous, dedicated connection without having to pay for a full-time leased line.

---

471 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

**FSA—Field Service Areas**

A geographical area identified by Telstra for monitoring services and public reporting purposes. There are 43 FSAs around Australia, for example, Sydney South, Sydney North and the Gold Coast.

## G

**Gbps—Kilobits per second**

One thousand million bits per second. For further information, see 'bps'.

**GPRS—General Packet Radio Service**

A packet based data protocol for mobile phones that overlays on Global System for Mobile Communications (GSM) networks. GPRS differs from standard GSM data services in that it enables faster data rates—up to 115kbps compared with 9.6kbps—and enables data to be sent in discrete packets.

**GSM—Global System for Mobile Communication**

A digital cellular telecommunications standard used by many countries.

## H

**HCRC—High Capacity Radio Concentrator system**

A microwave technology which provides expanded telephony capacity, together with facsimile and faster dial-up data services to customers in remote areas.

**HF—High Frequency radio**

A HF radio communicates over long distances and can work in harsh conditions such as torrential rain, heavily wooded areas and undulating ground.

## I

**IAP—Internet Assistance Program**

A program jointly established by the Commonwealth Government and Telstra to help customers maximise their dial-up Internet service performance. The program assists customers to achieve a minimum throughput of 19.2kbps or equivalent over the Telstra fixed telephone network.

**IP Address—Internet Protocol Address**

A 32 bit number that identifies each sender or receiver of information that is sent across the Internet. For example, when accessing a web page, the requesting IP address is sent to the requested page via the Internet's underlying communication standard, which then sends back the requested page using the requestor's IP address.

**IRIM—Integrated Remote Integrated Multiplexer**

Similar to a Remote Integrated Multiplexer (RIM) with the exception that the transmission protocol is integrated with the telephone exchange software. Eliminates the need for demuxing at the telephone exchange.

**ISDN—Integrated Services Digital Network**

A digital access network for voice and data. It is a system specifically designed for the delivery of data and an alternative to the analogue public switched telephone network for data delivery.

**ISP—Internet Service Provider**

A commercial organisation which provides the link between an end user and the Internet, usually by means of a dial-up service. An ISP may also provide help desk, web hosting and email services to the end user.

**K****kbits—Kilobits per second**

One thousand bits per second. For further information, see 'bps'.

**L****LAN—Local Area Network**

A localised data transmission network, often within a single building, which carries data between computer terminals, printers and other devices.

**Local Call Access Internet**

A charging arrangement that allows Internet users to access their Internet Service Provider (ISP) for the cost of a local call, irrespective of their distance from the physical point of presence (PoP). Such an arrangement is universally available in Australia via Telstra's MegaPoP<sup>®472</sup> product.

**M****MB—Megabyte(s)**

When used to describe data storage it is  $2^{20}$  (1 048 576) bytes. When used to describe data transfer rates it is one million bytes ( $10^6$ ).

**Mbps**

The transmission of one million binary bits per second.

---

472 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

### **MegaPoP<sup>®473</sup>**

Refers to Telstra's wholesale local call Internet access product that enables an Internet Service Provider's (ISP's) customers to access their services at the cost of a local call, irrespective of their geographic location.

### **MNP—Mobile Number Portability**

The ability for a customer to take their existing mobile number to a new provider.

### **Mobile coverage**

A geographic area in which calls are able to be made on a mobile phone. Coverage can be increased by installing radio base stations in new areas or by installing equipment which can effectively extend the range of coverage.

### **Modem**

Derived from **mod**ulator and **dem**odulator, it is a device that converts digital data into analogue signals for transmission on analogue networks and analogue signals back into digital data.

### **MSD—Mass Service Disruption**

A disruption to service generally caused by circumstances outside the control of carriers, and which affects carriers' abilities to connect or repair services.

## **N**

### **Narrowband**

Narrowband is a generic term. It is commonly used to describe the data speed that can be achieved though the public switched telephone network when using a dial-up modem (e.g. 33kbps)

### **NCF—National Communications Fund**

An element of the Commonwealth's response to the Telecommunications Service Inquiry (TSI), the NCF will assist in the roll-out of the infrastructure and applications to enable high-speed telecommunications networks to deliver education and health services in regional Australia.

### **NFF—National Farmers' Federation**

The peak organisation of Australian farmers. The NFF is made up of State farm organisations, commodity councils, associates and affiliates.

### **NOIE—National Office for the Information Economy**

The Commonwealth agency responsible for information economy issues.

---

473 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

**NRF—National Reliability Framework**

A three tiered regulatory framework established by the Government to monitor Customer Service Guarantee (CSG) fault levels in Telstra's Customer Access Network (CAN), and to pre-empt and remediate multiple faults. The NRF monitoring is at the Field Service Area (FSA), Exchange Service Area (ESA) and individual service levels. The NRF is scheduled to commence operation in January 2003.

**NRS—National Relay Service**

A service providing people who are deaf or who have a hearing or speech impairment with access to the standard telephone service through the relay of voice, modem or teletypewriter communications. It operates as a translation service between voice and non-voice users of the standard telephone service, and is currently provided by the Australian Communications Exchange.

**NTN—Networking the Nation**

A Commonwealth grants program providing funding to not-for-profit organisations to support activities and projects designed to address a range of telecommunications needs in regional, rural and remote Australia.

## O

**One-way satellite**

A means of accessing the Internet that uses one-way data transfer to the customer by satellite and the telephone network for the return path.

**Online Access Centres**

Government funded telecentres and public Internet access terminals including centres with full or part-time staff, unstaffed Internet kiosks, computers in public libraries with Internet access and Rural Transaction Centres.

## P

**Pair gain system**

A transmission system that uses concentrators or multiplexers so that fewer wire pairs may be used than would otherwise be required to provide service to a given number of subscribers.

**PoP—Point of Presence**

A geographic location where Carriage Service Providers (CSPs) and Internet Service Providers (ISPs) can be accessed by a customer. Normally used in relation to services requiring dial-up access to the Internet.

**PSTN—Public Switched Telephone Network**

The part of the telecommunications network which enables any customer to establish a connection for voice communication with any other customer either automatically or with operator assistance.

**Q****QOS—Quality of service**

The service quality of a carrier's network, including fault rates, connection times and call centre response times.

**R****RATE—Remote Australia Telecommunications Enhancement program**

RATE is a \$400 million Telstra program to upgrade remote telecommunications services to approximately 20 000 remote customers on the Analogue and Digital Radio Concentrator Services (ARCS and DRCS) systems. The aim of the program is to provide improved telephony service and increase wide band data capacity.

**Regional, rural and remote Australia**

The Inquiry is, in part, using the same geographical categorisation as used for Customer Service Guarantee (CSG) monitoring purposes, namely:

- urban, >10 000 population;
- major rural, 2500–9999 population;
- minor rural, 200–2499 population; and
- remote, <200 population.

The Inquiry is therefore generally considering, for statistical purposes, non-urban (regional) Australia to be population centres of less than 10 000. The Inquiry is also including larger regional centres in its overall considerations.

**Regional Connect**

A Telstra broadband Integrated Services Digital Network (ISDN)/one-way satellite Internet access product, currently being trialed.

**Regulatory Compliance Assurance Program**

A Telstra program that aims to ensure that compliance with Telstra's industry regulatory obligations is viewed as a minimum standard acceptable in guiding behaviour within Telstra.

**RIM—Remote Integrated Multiplexer**

A device that enables different services to be carried over the same transmission cable. It operates with another unit, usually situated in the telephone exchange, that demultiplexes the transmissions back to the individual services.

## Roaming

A mobile communications service which allows subscribers to use their cellular telephone in the coverage area of another carrier using the same mobile technology.

## S

### Satellite

A radio relay station in orbit above the Earth that receives, amplifies and redirects radiocommunications signals. There are various types, including geostationary (synchronous with the rotation of the Earth) and non-synchronous low Earth orbit and medium Earth orbit systems.

### SDDSO—Special Digital Data Service Obligation

A legislated obligation requiring a designated provider to supply customers who cannot receive Integrated Services Digital Network (ISDN) service with access to an approximately equivalent service (normally one-way satellite), supported by a subsidy of either 50 per cent of the cost of buying and installing the satellite equipment or \$765, whichever value is lower.

### SMS—Short Message Service

A service for sending messages of up to 160 characters (224 characters if using a 5-bit mode) to mobile phones that use GSM communication.

### Social Bonus

A term covering a range of Government communications projects and programs, funded from the proceeds of the sale of the second tranche of Telstra shares.

### SFOA—Standard Form of Agreement

A SFOA outlines the standard terms and conditions associated with the purchase of telecommunications products and/or services. These terms and conditions form part of a consumer's contract.

### SIOs—Services in operation

Fixed line services in operation at a specified time.

### STS—Standard Telephone Service

Provides a voice telephone service or an equivalent service to meet the requirements of the *Telecommunications Act 1997* and the *Disability Discrimination Act 1992*.

### SWING—Subscriber Wireless Integrated Network Gateway.

A wireless system being trialed by Telstra as a possible replacement for the Digital Radio Concentrator System (DRCS).

## T

### **TAPRIC—Telecommunications Action Plan for Remote Indigenous Communities**

Released in May 2002 by the Government following its response to the Telecommunications Service Inquiry (TSI) report, TAPRIC sets out a policy framework and support programs to improve telecommunications in remote Indigenous communities.

### **TCW—Telstra Country Wide<sup>®474</sup>**

A business unit of Telstra established to improve Telstra's business performance and the provision of telecommunications and information technology services to customers in regional, rural and remote Australia.

### **TIC—Telstra Internal Commitments**

Yearly internal agreements that set the level of service to be provided to Telstra Country Wide<sup>®475</sup>.

### **TIO—Telecommunications Industry Ombudsman**

An industry funded independent dispute resolution body established in December 1993, for consumers unable to resolve complaints with their telecommunications carrier or Carriage Service Provider (CSP).

### **TSI—Telecommunications Services Inquiry**

An inquiry established in March 2000 to independently assess the adequacy of telecommunications services in metropolitan, regional, rural and remote Australia. It reported on 30 September 2000.

### **TTY—Teletypewriter**

Equipment used for communication with people who are deaf or who have a hearing, speech or communication impairment. Communication is typed after the call is connected.

### **Two-way satellite**

An always-on service with data transfer and return path both via satellite transmission.

### **3G—3rd generation**

High capacity digital mobile phone systems which will offer services such as voice, Internet and real time video, operating on terrestrial and satellite based networks.

### **2G—2nd generation**

Existing narrowband digital mobile phone systems providing voice and data messaging.

---

474 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

475 Registered trade mark of Telstra Corporation Limited. ABN 33 051 775 556

## U

### **USO—Universal Service Obligation**

The obligation under the *Telecommunications (Consumer Protection and Service Standards) Act 1999* to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all Australians on an equitable basis, wherever they reside or carry on business.

### **USO contestability**

Government trials to test competition in the supply of Universal Service Obligation (USO) telephone services in designated areas with subsidies attached to these services and available to approved competing providers. They are being undertaken in Northern New South Wales/South-East Queensland and Western Victoria/South-East South Australia.

### **USP—Universal Service Provider**

A carrier or Internet Services Provider (ISP) responsible for fulfilling the Universal Service Obligation (USO).

## V

### **VPN—Virtual Private Network**

A way to use a public telecommunication infrastructure, such as the Internet, to provide remote offices or individual users with secure access to their organisation's network.

## W

### **WAP—Wireless Application Protocol**

A set of protocols which standardise the way in which wireless devices, such as mobile telephones, can be used for Internet access.

### **WLL—Wireless Local Loop**

Technology using radio transmission, rather than wire or coaxial cable, to provide connection between a handset (fixed or mobile) and a telecommunications base station or network exchange. Particularly suitable for use in large facilities (such as airports or military bases) or in regional areas.