

Your Reference:
Our Reference MIN: 44058.03

Mr R York
Director – Regulatory
Telecommunications
Australian Competition and Consumer Commission
GPO Box 520J
MELBOURNE VIC 3001

Dear Mr York

Re: The current Australian Competition and Consumer Commission (ACCC) Mobile Telephone Services Review

I welcome the opportunity to provide this submission from the Queensland Government to the ACCC's Review into Mobile Services (the Review).

I note that the Review has asked for comment and information regarding five different issues pertaining to the provision of mobile services. In this submission I will only address one of these topics, "the domestic intercarrier roaming service". The other issues, while important, relate to commercial-in-confidence data to which the Queensland Government does not have access.

During December 2002 I undertook a tour of western Queensland (Listening Trip) to determine constituents' concerns regarding their telecommunications services. During this trip the issue of continuous mobile coverage was raised by nearly every delegation. I have enclosed a copy of my report on the Listening Trip which details the concerns delegates raised regarding mobile telephone services and request that you consider it as part of this submission.

Continuous mobile telephone coverage is seen as providing outback Queenslanders with a business tool and contributing to safety for travellers. However, continuous coverage is only the first step in providing consumers with ubiquitous access to mobile services. Intercarrier roaming is also necessary to enable mobile phone users to make a call wherever there is an appropriate signal.

Currently at least four separate networks provide partial coverage to Western Queensland. Telstra provides significant Global System for Mobile (GSM) network coverage in addition to its widespread Code Division Multiple Access (CDMA) mobile network. Vodafone has an extensive GSM network built using National Highways funding of \$37.7 million¹ while Optus has localised GSM network coverage in some provincial cities and towns.

Roaming agreements for CDMA services between Optus, Hutchinson and Telstra enable all CDMA customers to access all CDMA cells across Queensland and indeed the nation.

In rural and regional Queensland GSM customers experience an even poorer service due to the lack of intercarrier roaming agreements. GSM is by far the most common mobile technology nationally. Paul Budde indicates that there are 11,790,000 GSM subscribers across the nation and only 900,000 CDMA subscribers².

Queensland Department of Main Roads data indicates a total of 45,300,150 traffic movements occur annually on State strategic roads and national highways within Queensland. Given the preponderance of GSM subscribers, I would suggest the majority of these travellers would be carrying GSM handsets. However, GSM subscribers have much less access to GSM coverage even where it exists due to the lack of intercarrier roaming.

None of the GSM network owners (Telstra, Optus and Vodafone) has any form of roaming agreement in place. This means that GSM subscribers may not be able to make a call, even where GSM coverage is available, if their network owner does not provide the coverage.

All mobile customers irrespective of the technology they are using will continue to pay high tariffs and experience limited service until the domestic intercarrier roaming service becomes a declared service. Service declaration will enable new service providers to enter the mobile telecommunications market at a reasonable cost bringing with them competitive price pressures and enhanced services.

Section 152AB(2) of *The Trade Practices Act 1974* indicates declaration of a service must:

- be technically feasible;
- be in the Long Term Interests of End-users (LTIE);
- promote competition, achieve end to end connectivity; and
- provide economically efficient use and investment in infrastructure.

Certainly declaration of domestic intercarrier roaming will positively address all these objectives. It may also speed the rollout of continuous coverage and implementation of affordable second and third generation mobile services through the introduction of new competitors into the regional and rural mobile market.

¹ http://www.dcita.gov.au/Printer_Friendly/0,,0_1-2_1-4_15906-LIVE_1,00.html

² www.budde.com.au

I note that in its previous 1998 inquiry into mobile services, the ACCC considered the possibility of declaring the domestic intercarrier roaming service. At that time *the Commission considered that it was likely that the future level of competition would be promoted to a degree without declaration of domestic intercarrier roaming services. This was because there were indications that carriers would provide intercarrier roaming on a commercial basis such that there would be opportunities for effective entry for niche mobile services without national coverage*³.

Since then competition in the mobile industry has diminished, consumer costs have risen and it has become clear that network owners will not willingly enter into intercarrier roaming agreements.

I believe it is now time to put the long term interests of end users to the fore by declaring the domestic intercarrier roaming of mobile services thus clearing the way to redress the mobile telephone issues raised by rural Queenslanders during my Listening Trip last year.

I trust this information will be useful to you. Should you have any further inquiries, please contact my Departmental representative, Ms Marjo Timson, either by telephone (07) 322 46484 or email Marjo.Timson@iie.qld.gov.au

Yours sincerely

PAUL LUCAS MP
Minister for Innovation
and Information Economy

Encl.

³ Mobile Services Review 2003 – An ACCC Discussion Paper



Queensland Government

Department of **Innovation and Information Economy,**
Sport and Recreation Queensland

Community Concerns on Telecommunications Issues in Western Qld

following

Listening Trip

by

Minister Paul Lucas

11-13 December 2002

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INTRODUCTION

From 11-13 December 2002 I travelled to Mt Isa, Longreach, Winton, Charleville, Roma and Chinchilla as part of a three-day visit to north-west and western Queensland. The purpose of the trip was to listen to the opinions of communities in the context outcomes of the Federal Government's Regional Telecommunications Inquiry that services in the bush are adequate.

TELECOMMUNICATIONS ISSUES FOR WESTERN QUEENSLANDERS

Mobile Coverage

Continuous mobile coverage on Queensland highways was a key issue raised by nearly all deputations. The Commonwealth undertook to provide a mix of continuous and "spot" mobile coverage on 35 national regional highways. In Queensland, this program produced coverage of 76 percent of the length of the specified roads, whereas in New South Wales, coverage was 82 percent with Victoria benefiting to the extent of 96 percent coverage.

The only continuous coverage announced under this plan for Queensland was along the Pacific, Cunningham and New England highways. Of these, the Pacific required only ten kilometres (approximately) of new coverage. Both the Cunningham and New England highways provide the relatively short links between the New South Wales border and Brisbane. These roads already had continuous mobile CDMA coverage.

Coverage of the remaining major roads in Queensland was reliant on fortuitous coverage from the Networking the Nation (NTN) and Telecommunications Services Inquiry (TSI) programs, both of which served the fixed populations in major regional centres rather than being designed to include the needs of business operators and tourism traffic moving along the intervening roads.

While an assortment of programs has been implemented over the last two years there are still several major highways in Queensland which require additional mobile coverage. These predominately are the Landsborough Highway between Winton and Cloncurry, the Flinders Highway between Mt Isa and Townsville, the Gregory Development Highway between Charters Towers and Emerald, the Carnarvon Development Road between Rolleston and Injune, the Barcaldine to Emerald and Barcaldine to Blackall Roads, the St George to Cunnamulla, and the Roma to Boulia Roads.

As funding for mobile telephony from the NTN program is now exhausted, other avenues of Commonwealth funding need to be explored by the Queensland Government to assist communities. Local communities with the help of the Queensland Government should be encouraged to access this funding to improve mobile coverage throughout Queensland. This activity is a high priority for the Department and will be actively pursued in the New Year.

In addition, the Whole-of-State Government mobile telephone tender, which is currently being evaluated, offers an opportunity for the State to aggregate demand

with one carrier in exchange for either significantly upgraded highway coverage or other improvements such as the rollout of data services on the CDMA network. This opportunity will be pursued with mobile carriers and depending on their responsiveness could be a major factor in the selection of the successful tenderer or tenderers.

Internet Access

A major concern for rural Queenslanders is slow Internet access speeds. This is of particular concern to those people living in Standard Zones who are currently serviced by either Digital Radio Concentrator (DRCS) or High Capacity Radio Concentrator (HCRC) systems and not entitled to the Bigpond Broadband Two-way Satellite Internet Service (Attachment 2). This service was offered free of charge for both equipment and installation for people living in Extended Zones for a short period of time from 30 July 2001 to 13 September 2002. This offer included three separate subsidised packages from 33.6kbps for the Home Sat service, at \$16.95 per month, to the Business Sat service, which had a download speed of 400kbps and an uplink speed of 64kbps, for \$60 per month.

The two-way satellite Internet offer was not extended to customers located in Standard Zones who currently are only able to get data rates of less than 9.6kbps on DRCS and 19.2kbps on HCRC. These customers are typically located between the outskirts of rural towns and distances up to approximately 100km from the town. The numbers of users in this situation was estimated by various delegations at between 700 and 2000 in Queensland. A priority for the Department is to actually identify the number of users in this situation and estimate the cost of providing upgraded two-way satellite Internet services to fix their problems.

It is appropriate for the Queensland Government to continue to bring to the Federal Government's attention the need to provide two-way satellite services to all users affected by this problem.

DRCS/HCRC

The DRCS provides voice and low speed data services to customers in Standard and Extended Zones. It is primarily a voice service, but capable of low speed data at 9.6kbps.

DRCS is being replaced by the HCRC system, which again is primarily a voice service but is capable of data speeds of up to 19.2kbps. Most delegations were satisfied with the voice services provided by both DRCS and HCRC, but considered the upgrading to HCRC to be an inappropriate solution considering the modest increase in Internet access speed and the fact that optimum speeds had rarely, or in some cases, never been achieved. Delegates consider this to be completely unacceptable for commercial or educational use and only very marginal for home use.

The technical solution of choice expressed by most delegations is to continue with the DRCS/HCRC as a voice service and provide a subsidised two-way satellite

service for Internet access. A side benefit to this is that it provides two communications channels to each user, so that should one service fail a backup is available.

An alternative technology which was only mentioned in passing by some deputations, was the use of CDMA mobile technology for fixed voice and data services. The upcoming trial of CDMA data services (1XRTT) will determine whether this is a viable alternative service delivery mechanism for rural users. The major drawback compared to satellite and DRCS, is that CDMA is concentrated primarily on highways in Western Queensland and the cost of rolling out data services on CDMA will be expensive and protracted.

School of Distance Education

Schools of distance education are phasing out the use of High Frequency radio for conducting classes. In future all classes will be conducted using telephone services. While untimed local calls in Extended Zones has been of major benefit to Schools of Distance Education, many of the schools have pupils who reside in Extended Zones which are not immediately adjacent to the zone where the school is located. Consequently, these calls attract a long distance charge, which in some cases can be \$6-\$8 per half hour session.

Schools of distance education are concerned about the previously mentioned slow Internet access speeds in Standard Zones where DRCS/HCRC are in use. Resolution of this problem, as previously mentioned, will address an important issue for schools of distance education.

CONTEXT AND SOLUTIONS

Mobile phones

In 2000, the Queensland Government, supported by a score of local governments and some 1,000 survey responses from across regional and remote communities, sought funding under the NTN program for mobile coverage of State Strategic Roads and National Highways (a total of 2,600 kilometres). The map at Attachment 1 shows the coverage sought.

Although the initial application was rejected, subsequent Commonwealth funding programs implemented, in part, the coverage sought in the original submission. As at the end of 2002, approximately 53 percent of the coverage sought by the Queensland Government has been provided. The Telstra costing for the coverage sought in the application was for \$28.75 million.

The community response during the listening visit confirmed that the initial Queensland Government submission made in 2000 was in line with community expectations – many of the roads not yet provided with mobile coverage were again nominated by many communities as needing such services.

By utilising unspent Commonwealth allocations and re-purposing some existing Commonwealth programs, it would be possible to generate funding to close these

remaining gaps in the mobile coverage sought in the original submission. The following potential sources are identified:

- There is a balance of some \$4 million in the Queensland element of the Building Additional Rural Networks (BARN) Fund.
- There is an apparent unexpended balance in the Queensland allocation of some \$12.25 million under the TSI program for mobiles in small communities.
- Queensland communities would also be entitled to the state share of unexpended national funding under the TSI initiatives.
- There is also a significant level of under expenditure reported in the Internet Access Program (IAP) with the possibility of some under-expenditure in the Untimed Local Calls in Extended Zones project.

The following options for Commonwealth action are proposed to achieve comprehensive mobile coverage in western Queensland:

- Consider how it might exercise its powers, as the majority shareholder in Telstra, to require Telstra to provide the mobile coverage described above.
- Amend the provisions of the Universal Service Obligation (USO) to include not only fixed voice services but also mobile voice services. In this way, the costs of comprehensive coverage can be equitably distributed across the market as a whole, the dividend being the creation of a truly national mobile infrastructure.
- Require the Australian Communication Authority (ACA), as a matter of urgency, to resolve the issue of roaming, eliminating unaffordable duplication of mobile infrastructure and ensuring that service is available regardless of the carrier selected by the traveller.
- Review the satellite subsidy program in terms of the cap presently imposed on expenditure to ensure that those in truly marginal areas can continue to be served, at affordable entry and recurrent costs.

Data Services

The demand for data services in the areas covered by the listening visit is fast outstripping the capacity of the current data communications model that the Commonwealth Government has devised for rural, regional and remote areas.

In these areas, the Commonwealth's preferred model for data communications is to optimise the digital radio DRCS and HCRC networks for both voice and data services. As in metropolitan areas, the existing copper network serving rural towns and surrounding areas is also used to carry data services. These digital radio and copper wire networks comprise the Customer Access Network (CAN).

While the CAN in metropolitan areas is generally capable of data rates between 33 and 53 kbps, in the areas covered by the listening visit the digital radio and copper wire CAN has much more limited performance. DRCS is restricted by its

technology to no more than 9.6 kbps and while HCRC can be optimised to 19.2 kbps, its performance is reported as often being less than that. Those connected to the copper network reported highly varied performance for data, suffering various forms of regular and irregular interference. In addition, note was made of the poor quality of repairs and the persistence of temporary repairs.

The community in rural and regional areas covered by the visit is well aware of the value of online services, including financial and purchasing transactions, file transfer and the Internet. These users are well disposed to the use of online services which are seen not so much as a matter of choice but more as a necessity to keep pace with what are standard commercial processes in place in the general business environment. Reliable online payments and online purchasing are an everyday part of that business environment in metropolitan areas.

Given that community members in the areas visited are informed users of on line services, with real-world, business-driven reasons for needing commercial quality performance, it is not surprising that they voiced strong disappointment at the performance of the digital radio/copper wire CAN.

Unsatisfactory performance generally is noted in two areas:

- slower-than-advertised speeds (leading to unusually long sessions with longer sessions adding to the incidence of other problems – the longer you are connected, the more likely you are to have a problem) and
- interruptions (drop-outs and disconnections) resulting in loss of data and the need for re-transmissions.

As specific instances:

- Online banking sessions were reported as taking up to sixty minutes, with the associated uncertainty and loss of confidence in the integrity of the financial transactions.
- The occurrence of replicated transactions such as the recording, as separate billable items, of the multiple attempts made to purchase an airline ticket, following sequential “drop-outs”. This latter incident was fortunately resolved by a follow-up telephone call, which revealed the multiple billing and enabled a correction to be made.
- Inability to download school assignments when students returned home from boarding school with assignments to complete. Given the competitive nature of secondary schooling, what might appear as a relatively minor matter with little or no economic significance, has considerable importance for the students and families affected.

Operating on this basis destroys the confidence that is essential to online transactions and sabotages the potential of information technology to improve the efficiency of business dealings in rural and regional enterprises.

Although the IAP is offered as a means of improving data speeds, the data rate for DRCS links of 9.6 kbps is limited by the technology and cannot be increased. While the IAP can theoretically optimise HCRC performance, the experience is that performance is frequently variable and the transmission of longer files or the conducting of banking or electronic purchasing transactions is still an uncertain business.

Business operators and pastoralists used to the reliable performance of their day-to-day farming technology lack confidence in the ability of the telecommunications network to deliver availability of business-grade performance. They naturally resent the expectation that they should be willing to pay premium prices for services which are more cheaply available to their competitors elsewhere.

In the experience of the communities in western Queensland, business processes are already outstripping the capacity of DRCS and HCRC networks to provide the data services needed to keep them connected to the wider world, whether for business, education or private use purposes.

The people of western Queensland are awake to the risk of being short-changed in relation to data services – they genuinely fear being cut adrift from the national economy by being denied their right to participate fairly in the communications networks that are now the basis of everyday commercial transactions.

It was clear from the information volunteered that communities affected by circumstances in which they experience highly variable data service performance will no longer accept excuses based on future “catch up” strategies.

Even now, and certainly into the immediate future, the need is for a new data service strategy capable of generating affordable, quality data services that deliver a consistent performance and reliability, and realistic speed. Such an infrastructure needs to be scaleable with the capacity to respond to such rapid growth in demand.

The data connection mode preferred by the people who made representations during my listening tour was to offer generally the two-way satellite service provided by Telstra under the Untimed Local Calls in Extended Zones.

In this view, voice services should be left to the well-regarded DRCS network, with little need required to upgrade to HCRC if the only purpose was to add a data capacity to the digital radio network.

To generate further options for meeting the need for scaleable, quality data communications in those areas where DCRC and HCRC systems operate, the Commonwealth could:

- Profile the market for two-way satellite services to be provided to existing DRCS and HCRC customers in both Standard and Extended Zones, based on the options offered under the Telstra special two-way satellite Internet connection offer provided as part of Telstra's response to the provision of the Untimed Local Calls in Extended Zone service.

- Install a new USO for data, based on the Telstra special offer noted above. This solution delivers 33.6 kbps for a monthly fee of \$16.95 over an eighteen month contract period, with potential to upgrade the standard of service to meet higher performance level requirements.
- Evaluate the cost benefits of a dual voice/data strategy, providing voice services via DRCS/HCRC and data via two-way satellite connections for those in Standard and Extended Zones.
- Reassess the strategy to employ HCRC voice systems for data services because of the variability of field performance in the data mode.
- Suspend the funding program for the HCRC conversion pending the outcome of the cost benefit analysis above and revise the IAP program (the latter being rendered obsolete with the substitution of satellite service for digital radio as the data carrier) with the balance of funds allocated to implementing the two-way satellite data USO.
- Identify the scope and potential of Telstra using CDMA Wireless Local Loop to provide improved data service via 1xRTT.

Customer Access Network (CAN) performance

The two major Commonwealth inquiries (Besley and Estens) have identified the condition and performance of the CAN (predominantly the copper network) in rural and regional areas as a matter of concern. My discussions indicate that there are concerns with the performance of both the copper and digital radio components of the CAN.

In addition to the usual complaints about the state of repair of the copper CAN in rural and regional areas – crackles and pops on the line, regular drop-outs, exposed cabling, “temporary permanent” repairs, and failures when it rains – there were similar complaints about the digital radio CAN. The drop-outs when operating data connections are sufficient to cause customers to lose confidence in using online services such as banking.

The Department of Innovation and Information Economy previously offered support to the Telstra \$187 million program to improve the CAN and remains prepared to assist in identifying shortfalls in CAN performance.

To generate further options for meeting the need for scaleable, quality data communications in those areas where DRCS and HCRC systems operate, the Commonwealth could:

- Install a monitoring regime for CAN performance that is able to compare and contrast the apparent optimism of CAN operations reflected in reports such as the ACA report on Customer Service Guarantee Benchmarks (June 2002) with public perceptions of quite variable performance in rural and regional areas.
- Examine the outcomes of the current inquiry into the structural separation of Telstra to identify any benefits for the quality of the CAN to be derived from splitting Telstra's core network from its other businesses.

- Address with the national carrier the potential for dilution of the capacity of Telstra Country Wide (TCW) to respond to issues in rural and regional areas, given the recent inclusion of near-metropolitan areas in the TCW scope of operations.

Education

Distance education is a necessity for the many Australians who need to get their schooling at home because of their isolated circumstances, whatever the cause – whether based on personal circumstances or because their families live and work on trawlers, grazing properties, mining camps or in itinerant industries.

The emergence of the information society and the knowledge economy, accompanied by the national expansion of telecommunication services, has seen significant changes in the delivery of distance education.

The two key changes are the substitution of telephone conferences for the legendary “on air” lessons via high frequency radio and the availability of the Internet providing access to the wider world and enabling the instant exchange of lesson material, student responses and teacher feedback.

Families with children enrolled at the Charleville School of Distance Education meet the cost of computer facilities to enable their children to benefit from these changes and to keep pace with changes in educational use of technology in schools at large. They are also being asked to meet the costs of the timed connections to teleconference lessons. The majority are able to benefit from the Commonwealth Government’s changes to zonal charging regimes, with 130 out of the full 240 enrolment paying only 22 cents for the connection. A further 50 families pay 82 cents. There are, however, 60 families who pay between \$6 and \$8 to join their lessons across two charging zones. With a weekly charge of \$30 to \$40 dollars for each child, multiple enrolments in a family can produce a substantial annual bill.

The Commonwealth has a long standing role in assisting with the additional costs facing families who need to educate their children at a distance - whether at home through Schools of Distance Education or away from home through boarding schools.

On that basis, it would be consistent for the Commonwealth to consider how to ease the high telecommunications costs facing those families with children enrolled at Schools of Distance Education and connecting across two zones to participate in teleconference lessons.

SUMMARY OF ISSUES RAISED IN DEPUTATIONS

Deputation/Contact	Issues
MT ISA	
<p>Cr Ron McGlinchey Mayor, Boulia Shire Council</p>	<ul style="list-style-type: none"> • Poor CDMA coverage along the highways around Mt Isa, particularly between Mt Isa and Townville. Comment was made that the Federal Government wasted \$5M in Queensland duplicating GSM infrastructure between Brisbane and Cairns. It was pointed out that this \$5M achieved only an additional 5km of coverage along that route. • Mayor McGlinchey also made mention of the lack of coverage along the road from Mt Isa, through Djarra to Boulia. • Satellite access can sometimes be very slow and there was concern that with increasing numbers of users this could be further exacerbated. Has found that it was faster with the old cable system. • DRCS has continuing intermittent faults; also there are “loud clicking” noises on the line. Telstra is investigating, however this matter has been going on for sometime. • An often overlooked concern with telecommunications in remote areas is the fact that generators do not operate at all times. This can be a particular problem with fax machines. • The sale of Telstra is not supported by Boulia Shire Council, however, should it go ahead they require assistance from the State to ensure that the network would be upgraded in the future to keep pace with technological improvement.
<p>Ms Alison Bohannan Manager Mt Isa Community Development Association</p>	<ul style="list-style-type: none"> • Said mobile coverage is extremely important to the commercial development of Mt Isa and surrounding districts. • Said the Telstra shop in Mt Isa is very short of expertise and needs staff that can do more than just hand out brochures and offer a very basic level of service. Would like to see more demonstrations of equipment and assistance with solutions to business problems. • Concerned about the lack of service along the Mt Isa/Townsville Highway, especially if a driver experiences problems (this occurs quite often in the wet). • Believes that there are major bandwidth problems within the town.
<p>Mr Ian and Mrs Marianna Campbell</p>	<ul style="list-style-type: none"> • The Campbell’s are situated 28km from Mt Isa and have a DRCS service. The maximum speed they have

<p>and Ms Margaret Campbell (Mother) Rifle Creek Station</p>	<p>achieved is 7.2kbps which they find inadequate for commercial purposes in running their large property and for their children's education with Mt Isa School of Distance Education (SODE). Their Internet was dropping out every three minutes. As they are in a standard zone they are ineligible for the subsidised satellite two-way Internet service. They are concerned if the DRCS service is upgraded to a HCRC service this will only be a stopgap measure which would give them a maximum of 19.2kbps. They have corresponded with Telstra and have written to broadcaster Allan Jones in an attempt to have this situation resolved.</p> <ul style="list-style-type: none"> • They are most disappointed that Mr Estens held no public meetings in Mt Isa when he visited there to gather facts for his inquiry. They stated that only selected town people were invited to make a deputation to Mr Esten. • They have no CDMA or GSM coverage and no ABC radio. • Mrs Campbell finds it "absurd" that there is 50km of fibre optic cable running through their property but are unable to use this cable. • A Satellite phone is too expensive for them to operate and they "would just like the same as everyone else". • Their neighbours are in a very similar situation.
<p>Mr Darcy Redman and Mr Mike Popovic</p> <p>Mt Isa Chamber of Commerce and Mt Isa Townsville Economic Zone (MITEZ)</p>	<ul style="list-style-type: none"> • CDMA coverage between Mt Isa and Townsville is inadequate. There are 319 business movements per day on the highway, which will benefit from continuous CDMA coverage. There is also the safety aspects associated with long distance travel in the region. • DRCS telephone services around Mt Isa are inadequate to meet the needs of property owners. Also, the School of distance education is moving from high frequency radio to telephone based services which may result in congestion on radio based telephone services. Internet speeds are completely inadequate for home based education and must be upgraded as a matter of urgency. • Telecommunications competition in the Mt Isa district is very difficult to achieve. The Chamber of Commerce would rather see a telephone service with much wider coverage rather than attempting to introduce competition into this very small market. • The issue of Vodafone's provision of services along the coast was raised as an example of inefficient use of Federal Government subsidies. While it was noted that roaming had been introduced into Victoria it was proving very expensive and not seen as an answer to Mt Isa's mobile telephone coverage problems.

<p>Mr Ralph Lahey and Mr Steve Hirvonen ATSIC</p>	<ul style="list-style-type: none"> • The homeland policy in the Gulf was explained whereby indigenous communities have been established in very remote areas which are only occupied at certain times of the year. Plans are in place to provide these homelands with water and power but provision needs to be made for telecommunication services. • ATSIC is seeking assistance in the provision of telecommunication services.
<p>Mr Tom Swann JCU</p>	<ul style="list-style-type: none"> • Believes there are significant problems with communications and data communications in particular in rural and remote areas of Australia. Mainly due to the cost of access. • Considers the network architecture model in Australia to be part of the fault because it is a centralised rather than decentralised model. • The main concern is the points of interconnection within the network between different network providers tends to be in the capital cities or in most cases Sydney or Melbourne. Consequently, most Internet traffic from remote areas such as Mt Isa would tend to travel to the nearest point of interconnect and then back which in many cases is Mt Isa, Sydney, Mt Isa. • Stated that a fully redundant national backbone together with local routing would eliminate this problem. • Acknowledgement was made that while this may be achievable in more densely populated countries it will be very expensive to put in place in Australia in the short term.
<p>Ms Di Waters Business Development Unit, Mt Isa TAFE</p>	<ul style="list-style-type: none"> • Concern was expressed that generally communications in the area were considered unreliable and examples were given with the main trunk fibre being cut twice in the last year and the loss of DRCS services during periods of heavy rain. • Frequent dropout of Internet services is common and Telstra seems to be at a loss to explain why. This is both frustrating and expensive, as a new connection has to be made after each dropout. • Problems have been experienced with the automated directory service which recognises the word “TAFE” but because of the large number of TAFEs it provides the wrong number for the Mt Isa TAFE. • Mobile coverage in the Mt Isa area is considered very poor on any of the major roads out of Mt Isa. Both safety issues and impact on Tourism were raised as consequences of this poor mobile coverage.

LONGREACH	
Meeting with Longreach Council	<ul style="list-style-type: none"> • Many DRCS services are being upgraded to HCRC but customers are experiencing a high level of dropouts and “crackling”. A comment was made that Telstra provided a very good service but have been unable to locate the cause of the problem.
Mr Lawrie Cremin Remote Area Planning and Development Board (RAPAD)	<ul style="list-style-type: none"> • Stated Telstra is not always to blame for telecommunications problems and suggests that the Federal Government should allocate more funds to improving telecommunications services in the West. • Suggested that the one-way satellite subsidy be discontinued and transferred to the two-way offer. • Believes that the separation of Telstra into retail and wholesale is a good idea and presented a written submission on ways of achieving this. Priority should be given to CDMA coverage on the Longreach Boulia and Longreach Hughenden highways. • Mr Cremin said that there were often fluctuations in Internet speed. • Supportive of main roads coverage but would like to see other regional centres covered also. • Stated that the Federal Government should be using some of the money from the sale of Telstra to fix the problems – said that Senator Alston had made a commitment to the area. • 50 000 tourists travel the road to Birdsville each year and Mr Cremin feels that this is a safety issue as there is no coverage along this road. • Road between Aramac and Hughenden is not covered, or Winton to Cloncurry, or Winton to Boulia.
Mr Jim Meteyard Desert Uplands	<ul style="list-style-type: none"> • Strongly advocated improved coverage of CDMA mobile services on the Flinders highway. Emergency services are often called out to highway accidents and other emergencies and although there is a mobile tower at Pentland there are large sections of the highway without coverage which causes them considerable concern. A comment was made that coverage seems to be restricted to a narrow band along the highway and that little coverage is provided either side. Suggested that all coverage should be omnidirectional. • Said more discussion needs to be held between Telstra and communities in the siting of towers to see if the most optimal coverage can be obtained. • Difficulties being experienced in repairing telecommunications faults. In some instances call centre operators are located in other states and have little

	<p>appreciation for local geography. This has caused problems for some people with medical and other needs which has resulted in some distress. Unaware of the priority assistance program and would appreciate details.</p> <ul style="list-style-type: none"> • Mr Meteyard cited the example of when his telephone was faulty and Telstra informed him that it was going to be 10 to 12 days until it was fixed. His daughter was staying with them and was heavily pregnant and they lived 150km away from the closest doctor. They said the delay to repairs was also unacceptable because they used the phone for business. • Mr Meteyard was unaware that customers were entitled to a refund for late repair of telephone services. • Telstra sometimes had problems locating properties where faults had been reported because of a lack of street names and numbers.
<p>Ms Jane Willis Agforce</p>	<ul style="list-style-type: none"> • Agforce members have reported that satellite Internet services slow considerably with increased usage with typical data speeds in the order of 38kbps (they are paying for over 64 but are barely getting 38kbps). • Considerable problems being experienced by people in standard zones with DRCS or HCRC radio telephone services. Downloading updates to the Norton antivirus software taking up to three hours. On such services online banking is virtually impossible. • DRCS services experiencing crackling, usually on the hour for periods of 10-15 minutes. A high rate of dropouts is also being experienced. Users report that the introduction of broadband two-way satellite services seems to be the cause of the problem. • Satellite delays cause problems with faxes, also fax communication is impossible during periods where power blackouts occur. • The School of Distance Education will be using telephones soon to conduct classes. Ms Willis raised concerns about the Internet speeds associated with this move.
<p>Ms Rosemary Philp Isolated Children's and Parents Association (ICPA)</p>	<ul style="list-style-type: none"> • Expressed concern with the Education Queensland project called "Genesis" which uses dial-up telephone services for student voice lessons. Lessons are typically for thirty minutes and can prove quite expensive unless students are in an adjacent extended zone to the school of distance education and need to dial in prior long distance. This is also an issue if Education Queensland sub-contract the system to a private supplier who locates conference bridging equipment in Brisbane or Sydney, which again attracts long distance call charges.

	<ul style="list-style-type: none"> • Education Queensland was urged to locate conference bridges within the local area of the school of distance education so that advantage could be taken of local call rates in extended zones. • A recommendation was made that DRCS services should not be upgraded to HCRC as very little was gained in the way of Internet access speeds and that customers on these radio telephone services should be provided with two-way satellite as a matter of urgency.
Mr Tony Robinson Golden West	<ul style="list-style-type: none"> • Golden West is a training and employment organisation operating throughout western Queensland. They currently manage 150 apprentices in the Longreach and Charleville area. Field officers spend a considerable amount of time on the road and find that mobile communication is in general poor. Mr Robinson said upgraded mobile services on highways would improve safety and business efficiency for Golden West. • Stated the lack of ADSL services in Longreach is hampering the ability of Golden West to distribute training and other material to field officers, apprentices and employers. • Golden West considers that “enormous” productivity gains are available through the use of telecommunications. They base this on the productivity gains already made from the use of fax machines. High bandwidth affordable telecommunication services would also allow them to make more use of video-conferencing as a training medium. • When asked what a reasonable cost of broadband services would be, Mr Robinson noted that \$100 per month would be acceptable but \$200 would be too expensive.
LORRAINE STATION – WINTON	
Jocelyn and Mark Rutherford, Lorraine Station Karen Mitchell (Neighbour) and Donna Paynter (Neighbour)	<p>The following issues have also been raised with Senator Ron Boswell, but have not received a response.</p> <ul style="list-style-type: none"> • DRCS is about to be upgraded in the area to HCRC. This was considered to really be a waste of money, as the increase in Internet access speed would not be improved. The current DRCS system provides adequate voice communications. A very strong plea was made for all stations in the area to be provided with two-way satellite Internet services and retain the existing DRCS service for voice. • Said current Internet speeds are completely inadequate particularly for commercial use and education purposes. Comment was made that it can take up to ten minutes to do simple banking tasks such as obtaining the status of a

	<p>cheque account.</p> <ul style="list-style-type: none"> • Regular dropout of the service prevents it being used for any banking transactions. • As an example of the frustration being experienced a recent attempt to book an airline ticket was interrupted many times by dropouts without a confirmation receipt being received. A phone call to the airline revealed that nine separate bookings had in fact been made. • There are 15 properties in the area surrounding Lorraine Station, which are unable to access this subsidised satellite two-way Internet offer. The area covered by these stations is the size of Victoria. • Children on holidays from boarding school are particularly disadvantaged when trying to complete assignments which require access to the Internet to research background material. • Mrs Paynter as a representative on the Longreach School of Distance Education Council said she was particularly hampered in her ability to contribute as she could not effectively exchange emails with the school in Longreach. • At a day-to-day level shopping on the Internet is virtually impossible because websites are not normally designed for very slow Internet speeds and consequently access to online catalogues is a very long and frustrating process. • Mrs Paynter was advised by Telstra that they would be included in the satellite offer but paper work to apply for the service was never received. Mrs Paynter is a very active member of the ICPA, and said this offer was made just prior to an ICPA conference where she was to speak on the problems being experienced by rural students. • A new CDMA installation is currently being installed at Chorregon; however, local station owners are unaware of its actual location or the area of coverage it will provide. This supports other comments that local communities received very little consultation on the location, time of commissioning or coverage of new CDMA installation. • Mrs Paynter wrote to Senator Alston outlining the problems being experienced in the region but received a very unsatisfactorily reply. <p>NOTE Since the visit to Lorraine Station Mrs Paynter has advised the following: “We have had a break through! I got a call on Monday from NDC. I spoke to an Ann Cross, she had been instructed to change our phone number because we had been incorrectly zoned. We have been</p>
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	<p>allocated a new number and she said paper work on the satellite offer will follow when they had finished rezoning other people across Qld. I asked who in our area was on her list and she only had Jocelyn and I. We are not sure where the list came from and how to get the right people on it! But something is happening so it's a start."</p>
CHARLEVILLE	
<p>Mayor Wendy Choice Brooks Murweh Shire Council</p>	<ul style="list-style-type: none"> • Said mobile coverage in the area should be greatly improved with the commissioning of the Augathella and Morven CDMA sites. • While town access to the Internet is adequate, Council is aware of problems being experienced by people in the Standard Zone on DRCS/HCRC services. • Council is upgrading its technology and most council business is now conducted via electronic means. Council meetings are conducted using Laptop Computers and all minutes are distributed via email. • The Council wishes to develop a website/portal and electronic access service. They are unaware of the Networking the Nation (NTN) grant given to the Queensland Local Government Association to assist with website development and have sought additional information.
<p>Karen Riethmuller School of Distance Education</p>	<ul style="list-style-type: none"> • Concern was raised that a digital divide is beginning to appear between the students enrolled at the school which is the result of some students having access to only very slow Internet speeds. • Classes are conducted in half hour segments. There are 240 students enrolled in the School of Distance Education. Of these, 130 students have access via local call, 50 students are in extended zones at a cost of 82c per half hour session. The other 60 students are outside the adjacent extended zones and consequently are paying long distance telephone charges of approximately \$6-\$8 per lesson. • Ms Riethmuller suggested that special consideration should be given to students paying long distance charges which could become significant over the year particularly when more than one student is enrolled and where families are experiencing financial difficulties. • The student households have 89% computer ownership which is very high on a national average. This was put down to the fact that most computers are used to conduct business. This in itself can cause a problem where business and education needs compete for access time to

	<p>the computer.</p> <ul style="list-style-type: none"> • The school operates a computer loan scheme and would like assistance in identifying alternative sources of computers. A major problem for this scheme is the technical support of the computers and software. • Queensland Government Minister for Education, Anna Bligh, announced on 3 February 2003 that the State Government will subsidise the cost of computer hardware and software for home-based distance education students.
<p>Dugald Cameron Agforce Charleville</p>	<p>Mr Cameron was unable to attend the deputation but sent a written submission:</p> <ul style="list-style-type: none"> • Low Internet speed via DRCS • Two-way satellite ineligibility • Concerned with lack of mobile coverage/affordability
<p>ROMA</p>	
<p>Mr Bruce Garvie Mayor, Roma Town Council</p>	<ul style="list-style-type: none"> • A major priority for Roma is attracting people to come to town and to retain existing population and expertise. The Mayor was concerned that education was dismantling its local regional headquarters and there is a growing trend for teachers in the area not to bring their families to Roma but to commute back to south-east Queensland. • A challenge for the Council is to be able to promote Roma as providing a lifestyle which is attractive. Part of that lifestyle includes access to modern telecommunications facilities. • Should the sale of Telstra proceed Roma Council would seek the assistance of the State Government to ensure that regional telecommunications technology was kept up to date and that Telstra Country Wide or its equivalent remained in place. • Cr Garvie stated that Roma was considered an ideal location for the establishment of call centres due to the dual fibre ring which services the town and connects it to south-east Queensland. The Council would particularly like to target Telstra with the assistance of the State Government. • Cr Garvie said there has been a noticeable reduction in the number of Telstra technicians available to perform maintenance and installation facilities in the town. He said this could hamper economic development initiatives within Roma. The methane gas field being developed at Taroom was put forward as an example. • He acknowledged that mobile phone coverage on highways had greatly improved within the last two years even though there are still some dead spots on the

	<p>highway to the west of the town and some gap filling was needed on the highways north and south.</p>
Mr Richard Golden	<ul style="list-style-type: none"> • Mr Golden raised the issue of poor Internet speeds provided by DRCS/HCRC in Standard Zones. He gets between 9.4 and (rarely) 13kbps, it takes 60 minutes to conduct two banking transactions. The service is very unreliable, sometimes not operating at all. • Mr Golden stated that Lindsay McDonald who is on the NTN board estimates that 2000 customers in Queensland fall into this poor service category. • His family set up their system via the Internet Assistance Program and despite being one of the “first” clients and cooperating fully with Telstra, 14 months later have never achieved the minimum speed. • In Dec 2001 Mr Golden was offered special attention from Telstra, offering them a modified one-way satellite which never eventuated and locked them out of receiving any other Internet solution. • His family was offered a data compression product at public expense with no improvement to services, only to find out recently that it was blocking effective downloading. • DRCS problems with voice and data including system failure to disconnect has been ineffectively rectified by replacement handsets. • He said many other customers on the Wattle Park 23522 system are suffering similar problems.
Ms Heather Hall (St Luke’s Nursing)	<ul style="list-style-type: none"> • St Luke’s provides nursing care services for 64 patients in an area from Roma to the western boarder and covering an area as big as Victoria. It has 20 permanent staff and 16 personal care workers. • St Luke’s major concern is inadequate mobile coverage on highways. They considered this a work place health and safety issue. They were particularly concerned about the lack of coverage around Roma and stated that CDMA coverage on the Western highway only extended out to approximately 6-10 km. • Ms Hall has requested her staff call before they travel so she can allow the amount in drive time before they arrive at their destination. If anything hasn’t been heard from them within the expected time frame, they have taken to driving out and looking for them in case they are broken down on the side of the road. • Ms Hall lives 16km out of Roma and she can’t get coverage. She believes that there isn’t adequate coverage from Roma to the border or from Longreach to

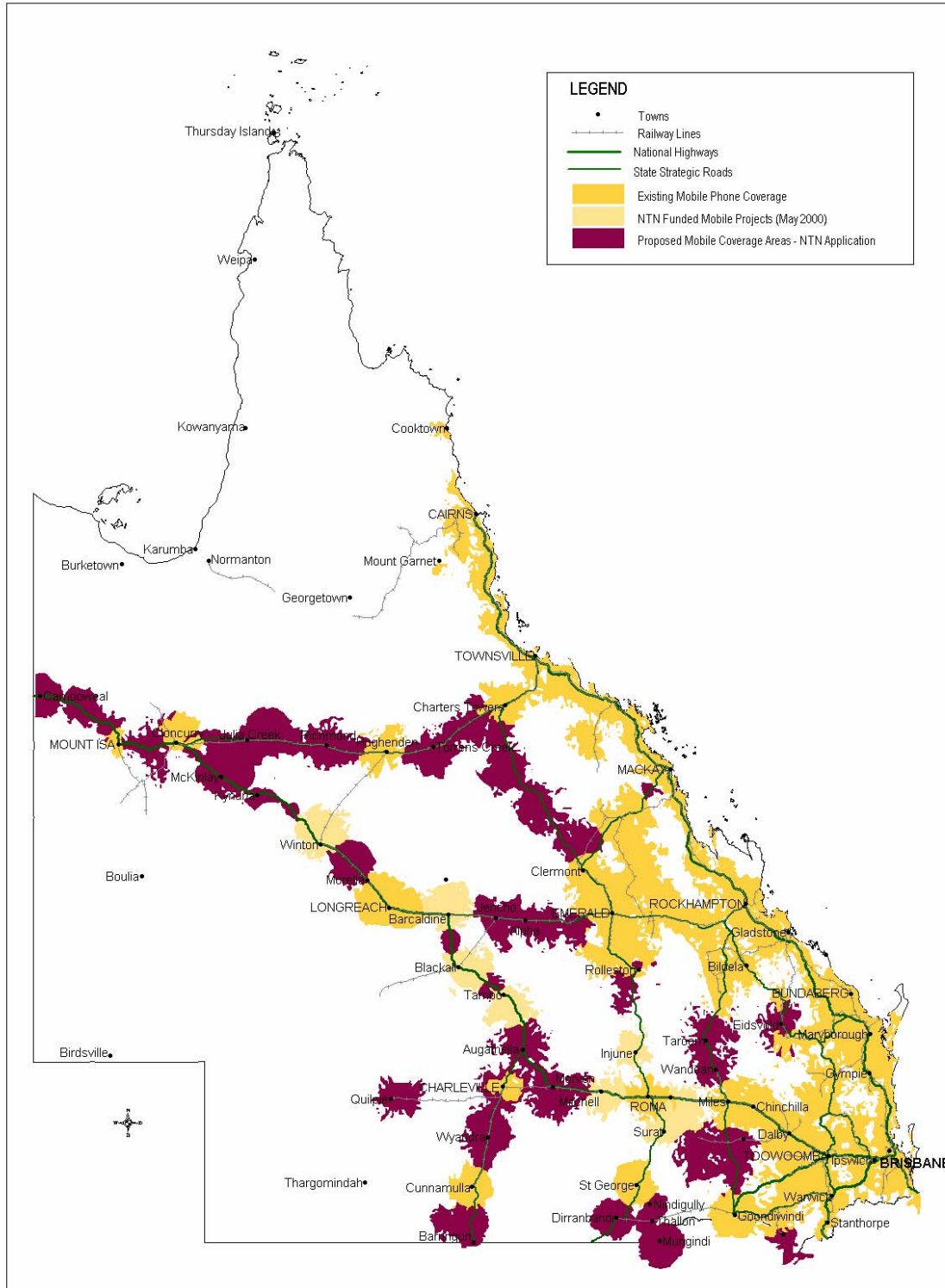
	Jundah.
Mr Bob Fulton Golden West	<ul style="list-style-type: none"> • Golden West administers 600 employees in the Roma, Charleville and Longreach area. While they have ADSL services in Roma, they are finding this service to be “fickle”. They are also concerned that outposts in Charleville and Longreach do not have ADSL. • They pay \$120 000 in communication costs per year, of which \$60 000 is in data network costs. • Contrary to the previous deputation, coverage on highways was considered adequate and vastly improved over recent years. • Mr Fulton noted that it takes 2 hours to download a Microsoft update.

<p>Cr Jill Baker (Bungil Shire Council) Mrs Megan McNicoll (ICPA) Mr Tony Klein (Maranoa and District Regional Organisation of Councils) Gayle Baldwin and Richard Golden (Agforce) Juliet Collins (Maranoa Online)</p>	<ul style="list-style-type: none"> • Three major issues in the area: Standard Zone DRCS/HCRC problems, Mobiles on highways coverage and general access speed issues with the Internet. • Richard Golden from Agforce stated they were dissatisfied with the “passing parade of inquiries” continuing to be conducted by the Federal Government. Agforce is particularly concerned about customers who are “stuck in the cracks between Telstra’s Extended Zone and the Federal Government’s Internet assistance program”. • The role of the State Government was acknowledged to identify current deficiencies in telecommunications and facilitate corrective action. The limited funding available to provide fibre optic cables throughout the State was acknowledged and it was considered that two-way satellite broadband is the only real option for many rural and remote users. • All generally felt that non-subsidised high-speed two-way satellite costs of \$140 per month would exclude many businesses and families within the region from access to high capacity broadband. • Ms Baldwin raised the necessity for basic training in new technology as being a priority for communities. • Ms Juliet Collins from Maranoa Online was interested in hearing what ICT Training programs were administered by the State Government. The Minister informed her of grants run by this department and also others from other Departments. • Mr Tony Klein had indicated that his role covers a 2 hour drive circle around Roma. He believes that there are still coverage gaps in the highways and was interested in knowing whether NTN Funding was still available. • He was advised that the department was investigating alternative funding programs. • Mrs McNicoll, the federal president of the ICPA reiterated problems in the Standard Zone with regard to DRCS/HCRC and fully supported the use of two-way satellite. She considered this should be incorporated within the USO. Her property operates a two-way satellite which she has funded herself and utilised speeds of 64/256 kbps. • Mrs McNicoll stated that this can sometimes be quite slow especially the outward leg. She considered that the 19.2kbps currently nominated as the digital data obligation is far too slow for commercial use. She re-emphasised that two-way satellite Internet was the answer for the bush. • An example was provided of above ground cabling
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	<p>which is repaired on a temporary basis only to cause problems again within a short time. It was also mentioned that the slow repair of below ground pits in many cases causes a safety hazard.</p> <ul style="list-style-type: none"> • Ms Jill Baker commented that her concerns had been covered by other deputation members but reconfirmed that mobile access and download speeds were major issues.
CHINCHILLA	
<p>Chinchilla Shire Council Mayor Bill McCutcheon Ed Hoffmann (CEO) Glenn Bedden (Rural Fire Councillor) Kay and Jim Bock (Public) Neville Edwards (Public) Janele Maben (Teacher Aid at Chinchilla SHS) Paul Hodson (Public)</p>	<ul style="list-style-type: none"> • Chinchilla Mayor Bill McCutcheon stated that the Council was against the sale of Telstra, however if it did go ahead they would require a “cast iron” agreement which would assure upgrading of services with technological improvements and assurance of a strong local telecommunications maintenance repair presence. • Said the Brigalow area was experiencing considerable service problems, however these were not defined. • Stated there had been improvement in mobile phone coverage over recent years and the service of Telstra Country Wide has improved. • Said the Internet assistance program was of no help as the basic problem is that Internet access speeds in the area on DCRS/HCRC are too slow for commercial and domestic use. • All stated their usual speed was 9.6kbps which rose to a maximum of 12.6kbps “on a good day”. They also stated there were many timeouts/dropouts and that this was a major impediment to increase productivity for rural properties. • Many landlines in the area are installed above ground for distances of up to 20miles. If they are cut, repairs are generally made on a temporary basis which results in continuing service difficulties. Telstra has indicated that they do not have the funds to bury these services. Specific problem west of Miles was mentioned. • Comment was made by Janele Maben that mobile coverage on the Jandowae to Dalby road was very poor. She has an 18 year old daughter driving on this road with a mobile phone but it continually drops out of coverage and she is concerned about her safety. Her family lives 48km out of Jandowae and they have 3 mobile phones which they feel are useless as they only work in a regional town (such as Dalby or Miles). • Several people at the meeting said that in the country, car kits are extensively used to gain the maximum advantage of mobile coverage available, however, because of the lack of standardisation of car kits a change of mobile

	<p>phone resulted in considerable extra expense required to procure a new car kit.</p> <ul style="list-style-type: none"> • Jim and Kay Bock mentioned their neighbours who were facing similar telecommunication problems. They were Yvonne and Peter Webster (“Somerset” 590 Wandoan) and Sue and Darryl Newton “Big Valley” 590 Wandoan).
<p>Mr Keith Dowd (Bell) (Mr Dowd was unable to attend the deputation, however, he provided his comments via a telephone conversation with the Minister’s Office).</p>	<ul style="list-style-type: none"> • Mr Dowd considers CDMA access poor. • Stated that CDMA coverage extends only 3 to 4km west of Dalby. • There are significant gaps in coverage on the road from Bell to Dalby. • Signal drops out approximately 20-25km east of Dalby. His daughter also lives on a property in Bell and does not have coverage. • Mr Dowd finds it hard to believe that “in this day and age you cannot get coverage for your phone on Queensland highways whereas the highway between Sydney to Canberra has full mobile coverage.”
KOGAN	
<p>Mr & Mrs Schaefer and Mr Bill Anderson Meeting at Schaefer’s house</p>	<ul style="list-style-type: none"> • The phone service was considered adequate except that the three days allowed for in the service guarantee to repair faults was considered too long. • Kogan has no CDMA coverage, however, improvements in CDMA coverage on highways were acknowledged. • Considerable annoyance expressed at the need for councils to contribute to the installation of mobile telephone base stations as this was considered a penalty on country people particularly small councils who could ill afford the \$10,000 contribution required by the Federal Government. • Generally, Internet speeds were very slow, although 33kbps were acknowledged in some cases. Although ISDN was available the fixed costs and usage charges were considered a major barrier to the take up of this service. • All said that there was not enough competition in telecommunications services in rural Queensland. • They said they supported the split of Telstra into retail and wholesale with only the retail component being sold if need be. • They suggested that Telstra bypass could be achieved using the power distribution system and that this may be practical in many country areas.

Mobiles for Highways Map submitted to NTN September 2002



Queensland Government
 Department of Communication and Information,
 Local Government, Planning and Sport

CONCEPTUAL MAP FOR DISCUSSION PURPOSES ONLY

Map prepared by IEI Development, DCILGPS, September 2000
 For further information contact IEI Development on (07) 3224 4919
 Data Sources Include: DCILGPS, Department of Main Roads, Queensland Rail, Telstra Corporation

ciid: NTNApp2000/AppFinal

Information Kit on 2-way Satellite Internet Services

Attachment 2