

Mobile Coverage Programme Discussion Paper

Submission Cover Sheet

Submission Information

This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper.

Contact Details:

Name of respondent:	██████████
Name of organisation:	Australian Communications Consumer Action Network (ACCAN)
Phone:	██████████
Email:	██████████
Website (if applicable):	http://accan.org.au/
Date:	28/02/14

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All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests.

Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.

Do you want all or parts of the submission to be treated as confidential? Yes No

If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):

If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:

Submission Instructions

Submissions are to be made by **5:00pm (AEST) Friday 28 February 2014**.

Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based formats via the email address mobilecoverage@communications.gov.au

Alternatively, submissions can be sent to the postal address below (to arrive by the due date):

The Manager
Mobile Coverage Programme
Department of Communications
GPO Box 2154
CANBERRA ACT 2615

All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.



Mobile Coverage Expansion Program

Submission by the Australian Communications Consumer Action Network to the Department of Communications

February 2014

About ACCAN

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards availability, accessibility and affordability of communications services for all Australians.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will activate its broad and diverse membership base to campaign to get a better deal for all communications consumers.

Contact



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1. Introduction: The importance of improved mobile coverage

ACCAN's engagement with rural, regional and remote consumers has continually highlighted to us the importance of improving mobile communications outside of urban centres.

A survey by the NSW Farmers Association, an ACCAN member organisation, found that rural Australians are at a severe disadvantage due to poor mobile phone coverage and recommended, among other things, that mobile be considered an essential phone service, and that the government invest to expand mobile coverage¹.

ACCAN therefore welcomes the Government's mobile network expansion and black spots programs. It is clear to us that government has a vital role to play in ensuring that people in regional Australia are not further left behind as mobile communications becomes ever more important.

We note that in 2008 the Mobile Connect Program, which aimed to extend terrestrial mobile coverage by offering subsidies of up to 100 percent of capital costs, did not receive any applications indicating that carriers are at or very close to, the limits of their commercial interest in further coverage, particularly for locations with no accessible backhaul.²

As such, exploring other options such as utilising existing infrastructure and opening up NBN fixed and satellite backhaul is a welcome initiative.

Better mobile coverage will yield a range of benefits to regional Australia including improved business opportunities, better access to essential services and enhanced safety and well-being.

There is support in regional Australia for competitive arrangements to encourage open access to infrastructure sharing. However as there is no coverage at all in some areas, competition in those areas is a secondary consideration to securing coverage.

1.1. Proposed delivery options and criteria

1.1.1. Program delivery

ACCAN believes that all three delivery options proposed in the Discussion Paper have potential benefits. However, it is important for factors beyond design specifications to be taken into account in assessing the relative merits of these options. These include:

- The future cost to consumers and the quality of the service for consumers;
- Cultivating a sustainable competitive wholesale and retail market, whether through infrastructure sharing or shared local roaming. Regulation designed to actively assist new operators to break into markets with barriers to entry is now common in developed economies³.

¹ http://www.nswfarmers.org.au/__data/assets/pdf_file/0009/33678/Telecommunications-Survey-Final-Summary-13-December-2011.pdf

² http://www.archive.dbcde.gov.au/2009/july/mobile_connect

³ Grant, A and Howarth, D. (2011). Access and structural regulation. In: Grant, A and Howarth, D *Australian Telecommunications Regulation*. 4th ed. Sydney: CCH Australia Limited. 195-196.

1.1.2. \$20m Black Spots project: Stage 2 Expressions of Interest (EOI)

All EOIs that are submitted must include a commitment to provide a co-contribution towards the proposed base station. As suggested by the paper this co-contribution could be provided, for example, by the local government, significant local businesses, large community groups, or the state or territory government. ACCAN believes it is important that these contributions be assessed in a manner that recognises fully the value of in-kind contributions.

Industry players at ACCAN's recent mobile expansion forum, 'Connecting the Country', noted that contributions such as land access or coordinated agreement on base station locations would be valuable to network operators considering an investment. Such facilitating contributions should be recognised and included in evaluations.

1.1.3. Assessment criteria

Co-contributions

ACCAN believes that the assessment should be as transparent as possible. As such we are concerned to ensure that information on proposed co-contributions be made publicly available to assist interested parties who may wish to consider a co-contribution. We are also concerned as to whether a state/territory government's failure to commit to a co-contribution would effectively block a proposed base station.

Discussion Paper Question 16: *should the proposed criteria be weighted and if so how?*

It is ACCAN's view that weighting should not be applied to any of the criteria proposed as this could reduce incentives for proposals in more marginal areas without accounting for the social and economic gains that providing a service could have for those communities.

If a key priority for this program is to provide coverage for areas most in need of service, ACCAN recommends an additional assessment criterion of meeting an acute community need.

1.1.4. Service quality standards

ACCAN supports high quality standards that meet the needs of regional communities. Minimum standards should allow for monitoring and performance measurement with consumer feedback from new coverage areas taken to gauge quality of service experience.

Discussion Paper Question 1: *Would an appropriate minimum quality standard be that base stations must provide high-speed 4G LTE mobile broadband data communication services and also high quality 3G mobile voice and broadband data services? If this is not an appropriate minimum quality standard, what is?*

ACCAN believes that standards should be based on maximising coverage. Adopting the 4G LTE service as a minimum standard may mean limiting the number of stations and

mandating a technology that is not yet fully accessible in rural areas where geographic distance can affect signal transmission on some bands currently used for 4G⁴.

In contrast, adopting high quality 3G mobile voice and broadband data services as the minimum standard may allow bidding companies to offer more stations to cover more areas providing a better outcome for the largest number of communities.

In addition it is reasonable to assume that infrastructure can later be upgraded by providers incrementally in the course of their normal business and within the scope of planned upgrades.

1.2. Open access

ACCAN is aware that some mobile expansion plans have stalled despite community support due to Telstra's reluctance to invest (Gladstone, Queensland and Junee/Temora in NSW)⁵. In light of examples such as these, increased competition is an important consideration for regional Australia. Precedents exist in infrastructure sharing arrangements between network providers which, for example, boost mobile reception in road tunnels.

To best facilitate service expansion and competition, future programs may wish to look at incentivising open access for existing stations.

Open access arrangement to existing base stations and backhaul

The Discussion Paper proposes that open access arrangement relate to new base stations and fibre backhaul, but does not contemplate that this will extend to existing infrastructure. Consideration should be given to including existing infrastructure in these arrangements, to mitigate against scenarios where the business case for open access arrangement for new infrastructure in more marginal areas can only be supported if there is open access in 'brownfields' areas.

Discussion Paper Question 13: *should the proposed open access provisions be applicable to base stations funded under the \$20 Million component, or should there be scope to exclude some base stations from these requirements?*

As reflected in our comments above ACCAN suggests that the open access provisions should apply to all base stations included in this incentive under both program components. However, where the need for coverage in a community is particularly acute, the unviability of open access provisions should not be an impediment to government subsidy to increase coverage.

1.3. Coverage transparency and strategic consultation

It is important that all stages of the project are carefully considered to enable competitive bids.

⁴ <http://telcoantennas.com.au/site/telstra-4g-explained>

⁵ ACCAN letter to Department of Communications, December 2013

The paper explains that the Department is compiling a list of locations in need of improved coverage based on community identification, identification by state and territory governments, and empirical data⁶. However, there is a lack of clarity about how this list is to be used in the design of the overall programme. In particular, it is of concern that:

- This list is identified as an element bidders ‘should have regard to’⁷. ACCAN suggests that this list should be adopted as one of the mandatory criteria to be addressed under each bid.
- The list is identified as an element to be taken into account under Option 1 of the \$80m component, but not under Options 2 or 3. Again, our view is that for the object of the programme to be met, it must be clear that all bids must address locations identified on the list.
- There is no mention of the list of locations in the Proposed Assessment Criteria identified in the Discussion Paper. Subsequently, it is unclear how the list will inform the evaluation of bids under the proposed assessment criteria for both the \$80m and \$20m components. More explanation and transparency is needed so that communities can understand how the areas they have nominated for more coverage will be taken into account in the assessment process. ACCAN strongly suggests that the list of locations be clearly identified as one of the criteria to be addressed by bidders, so that community input is taken into account upfront.

Many communities have already invested time and resources in identifying areas in need of coverage. As noted by Parliamentary Secretary for Communications Paul Fletcher at ACCAN’s recent ‘Connecting the Country’ forum, 800 locations have already been identified to the Department. The scale of this list so far demonstrates its importance as an access point for community contribution in this project and highlights the need for this process to be transparent and subject to scrutiny. To achieve this we suggest that this list be made available on the Department’s website.

Network service provider coverage maps can provide some insight into coverage issues. However this information should be supplemented by additional evidence. ACCAN consultation with members and stakeholders has identified that widespread inaccuracies exist in these maps. These observations have been supported by technical and experimental data gathered across a number of local government areas. The Digital Economy Group in particular has provided ACCAN with evidence that demonstrates the inaccuracy of network maps when assessed against its own independent testing⁸. Furthermore, former government personnel involved in existing projects in Western Australia and the Northern Territory have pointed to problems with storing and logging coverage information, and the inability to accurately assess, compare and prioritise anecdotal evidence from multiple sources as road blocks to successful program roll outs across regions.

Mobile Pulse

One way to meet the challenge of identifying black spots is Mobile Pulse – a network data performance monitoring app that allows users to monitor wireless network across devices, carriers and geographies over time. It can be used to create a comprehensive map of coverage strength, performance and consistency over time within specific geographical locations⁹.

⁶ Discussion Paper, p.4

⁷ Ibid, p.4

⁸ <http://digitaleconomygroup.com.au/index.html>

⁹ <https://play.google.com/store/apps/details?id=com.mobilepulse&hl=en>

There is existing evidence that this application has already been successfully used in completed government initiatives in the US to accurately monitor and assess coverage to improve usage, value for money and community safety¹⁰.

As the identification of coverage issues underpins this project, ACCAN believes that any method that can provide comprehensive and transparent process of black spot identification is valuable.

Discussion Paper Question 17: *Is there a more effective means of assessing seasonal demand than proposed in criterion 3(c)?*

Seasonal demand may be more effectively and reliably assessed by relying on existing tourism data rather than the number of sites, rooms or cabins adjacent to the area.

The unique nature of some of Australia’s most popular tourism hot spots means that areas of interest may be isolated or remote with visitors travelling some distance from their accommodation to view these areas. Coverage that encompasses tourist locations themselves is important for the provision of emergency services and the ability of tourism operators to maximise safety.

In addition point 3a (page 12) of the proposed assessment criteria states that extent of coverage benefit will be measured by the “number of premises located within the new mobile coverage footprint”¹¹. This clause has the potential to under-represent actual population numbers within potential coverage areas. Remote Indigenous communities in particular often consist of a large number of families who share homes. Census data indicates that a larger proportion of Aboriginal and Torres Strait Islander households are multiple-family¹².

ACCAN recommends the use of population data similar to that proposed under the \$20 million component to assure that criteria most accurately represent the number of people likely to be in a coverage area.

1.4. Utilisation of existing infrastructure and bridging options

Utilising existing infrastructure presents a valuable way for coverage to be improved. Any such initiatives should be coordinated and strategically targeted. ACCAN shares the view advocated by the Broadband for the Bush Alliance that opportunities could emerge from examining the practical application of existing infrastructure and new technological solutions most appropriate to specific areas.¹³

Some opportunities outlined in the Broadband for the Bush Alliance ‘Extending remote and rural cellular mobile’ discussion paper include use of existing privately owned fibre and outback phone towers (HCRC), and newer low cost microcells and microwave technologies.¹⁴

¹⁰ http://www.mobilepulse.com/assets/samples/Castle_Rock_Case_Study_using_Mobile_Pulse.pdf

¹¹ http://www.communications.gov.au/mobile_services/mobile_coverage_programme

¹² <http://www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/4704.0Chapter25Oct+2010>

¹³ <http://broadbandforthebush.com.au/wp-content/uploads/2013/05/Extending-remote-and-rural-cellularcoverage-May-2013.pdf>

¹⁴ <http://broadbandforthebush.com.au/wp-content/uploads/2013/05/Extending-remote-and-rural-cellularcoverage-May-2013.pdf>

The Government should undertake a study of regional and remote mobile communications, including what existing infrastructure can be utilised to extend coverage.¹⁵ This study would allow industry, government and consumers to make proposals for tailored solutions to remote coverage problems through the assessment of community needs and existing capabilities. Such an approach could lower costs and maximise efficiency and uptake. Existing studies such as the Telecommunications in Remote Indigenous Communities Report, a survey undertaken by the ACMA in 2008, may provide a good context for the design of such research¹⁶.

1.4.1. A greater role for NBN backhaul

ACCAN believes that utilising the NBN fixed wireless network for backhaul is an important and positive step which may provide increased access as the NBN wireless roll out expands into coverage deficient areas. The benefits in increasing competition through open access arrangements would be potentially significant for consumers within the designated NBN footprint area.

However, as the majority of NBN fixed wireless towers are currently situated and planned in regional areas that already have mobile coverage, the benefit to coverage expansion will likely be minimal. In light of this, ACCAN would like to raise the possibility that the use of NBN Co satellite infrastructure be considered as a way to facilitate coverage expansion through the use of these services for mobile backhaul.

iDirect, a leading satellite provider in this US, explains that satellite backhaul is a perfect solution for supporting the cellular industry and a particularly viable and competitive option for bringing cellular service to remote and rural areas¹⁷. Network provider Ericsson has also advocated the use of satellite backhaul as a means to provide coverage to difficult to service areas where a number of barriers (e.g. topography or distance) mean market investment incentive is low¹⁸. This solution has already been used in Australia, with both Telstra and Optus deploying satellite backhaul to extend coverage into regional and remote areas, particularly during emergency situations, and to facilitate the delivery of education services^{19 20}. Furthermore, at the recent ACCAN Connecting the Country forum, Optus and IPStar outlined the viability of satellite technology in expanding mobile coverage in remote communities.

Some industry representatives have argued that current backhaul access pricing is too high to make the business case viable for many regions, and further expansion of services will not be possible without a regulated reduction in cost²¹. ACCAN believes that opening up the NBN fixed and satellite backhaul services to universal MNO access is likely to be the smoothest path to overcoming some of the market reluctance.

¹⁵ <http://broadbandforthebush.com.au/wp-content/uploads/2013/05/Extending-remote-and-rural-cellularcoverage-May-2013.pdf>

¹⁶ <http://www.acma.gov.au/theACMA/telecommunications-in-remote-indigenous-communities>

¹⁷ <http://www.idirect.net/Applications/Cellular-Backhaul.aspx>

¹⁸ <http://www.ericsson.com/ourportfolio/telecom-operators/satellite-backhaul>

¹⁹ 11. Telstra; "2011 - 12 Regional Telecommunications Review - Submission from Telstra". Telstra Corporation Ltd., 16th December 2011 <http://www.rtirc.gov.au/files/2011/12/Telstra.pdf>

²⁰ 12. Optus; "Optus Submission to Regional Telecommunications Independent Review Committee; 2011-12 Regional Telecommunications Review". Optus; December 2011.

²¹ <http://www.telecompaper.com/news/vodafone-prefers-backhaul-regulation-over-aapt-takeover--974934>

1.5. Concluding remarks

ACCAN sees improved mobile coverage in regional Australia to be an urgent need. Improved mobile communications has the potential to bring a range of social, cultural, and economic benefits to a section of Australia's population who suffer from both economic and social disadvantages.

ACCAN is committed to working towards improved outcomes in mobile communications. We have already identified a number of areas in need of expanded coverage, and will continue to work with our members to bring these to the attention of the Department. We look forward to the official release of the terms of this program and future opportunities to work with our members, industry and government on this issue.