Summary of Telstra's submission on regulated mobile roaming

Regulation of mobile roaming will not address coverage issues in regional Australia. Rather, it will stall investment in regional mobile infrastructure, effecting a transfer of value from regional Australia to the cities and leave regional communities worse off.

Improving coverage matters for regional Australia, so encouraging investment is crucial.

We are consistently told by customers and stakeholders that expanding and enhancing mobile coverage is the most critical communications issue in regional Australia. We share this view.

Improving mobile coverage makes a real difference to peoples' lives. The increasing availability of high-speed mobile internet is building a bridge that regional communities can use to access services, markets and knowledge that was previously out of reach.

This improvement could not come at a more critical time as regional Australia is poised to benefit from significant technological change, underpinned by greater connectivity.

Whether it's providing telemedicine and robotic diagnostic services to remote communities; helping deliver the world's best education to isolated children; bringing millions of sensors and machines into the Internet-of-Things to boost productivity; or simply getting more accurate long-range weather forecasts – regional communities have a lot to gain.

This innovation and advancement in technology is not just happening 'to' regional Australia. It is empowering regional businesses, especially agriculture and mining operations, to thrive.

To ensure regional Australians can take full advantage of these opportunities, regulatory and policy settings need to encourage continued investment to expand and enhance mobile coverage.

The Australian mobile market is open, competitive and delivering good outcomes for consumers.

Australia has an open and competitive mobile market, with a number of operators competing on a level playing field. It is not a market that is failing or that requires regulatory intervention.

Investment is strong

Over the last six financial years, Telstra has invested over \$8 billion (on a fullyallocated basis, including spectrum). This has created a 3G network that reaches 99.3 per cent of the population and a 4G network that reaches 98 per cent of the population today.

We are committed to expanding the reach of our 4G network to 99 per cent of the Australian population by the end of June 2017, assuming retention of current regulatory settings. We continue to invest in technology enhancements and capacity upgrades as part of an ongoing investment cycle to provide the broadest coverage and the best possible experience for customers.

Our investment in the mobile network is heavily weighted towards expanding

coverage and delivering new technology to regional and remote Australia. Over the last 10 years, approximately 15 per cent of our investment in the mobile network has gone to provide services to the most remote 2 per cent of the population.

Coverage is good, but we are committed to making it better

The coverage of Australia's mobile networks puts us ahead of countries like the USA, Canada, Norway and New Zealand where a smaller percentage of population has mobile coverage.

The amount of 4G coverage in Australia also exceeds many countries with higher population densities, such as the UK and Germany. Only three countries - Sweden, Finland and the Netherlands - have more of their population covered with 4G.

This is not only due to Telstra's superior network; Australia's 2nd and 3rd largest 4G mobile networks (Vodafone and Optus) have greater coverage than their counterparts in countries such as the US.

Telstra recently announced a commitment to continuing our work to improve regional mobile coverage. Over the next five years Telstra will invest \$350 million in new technology and regional base stations, up to \$240 million to continue our work on the first two rounds of the successful Mobile Black Spot Programme, and a further \$100-\$200



million set aside for new regional coinvestments.

With the co-investments, this could represent a \$1 billion boost to regional, rural and remote mobile coverage.

Australia is a world leader

According to the GSMA Mobile Connectivity Index, Australia ranks first in the world for mobile connectivity overall, sixth in the world for mobile infrastructure coverage (despite Australia's dispersed population) and eighth in the world for mobile network performance.

In 2015, the OECD ranked Australia sixth highest for penetration of wireless broadband in the OECD behind only Japan, Finland, Sweden, the US and Denmark.

And the International

Telecommunications Union's Measuring the Information Society Report 2015 ranks Australia 9 out of 182 countries for the low cost of mobile services relative to GDP.

Across the broader Australian economy, the use of mobile technology has delivered significant economic benefits. According to research conducted by Deloitte Access Economics, the Australian economy was around \$34 billion larger in 2015 than it would otherwise have been as a result of the long-term productivity benefits generated by mobile technology.

Nationally consistent pricing means regional customers share in the benefits

A national pricing approach means that customers across the country have benefited from price reductions and data growth, even where they have a limited number of mobile providers to choose from.

Network operators compete intensely to win over customers in high-density, metropolitan areas by lowering prices and increasing data allowances. Customers in low-density, regional areas – where it is more expensive for network operators to provide services – benefit from the metro competition through national pricing.

According to the ACCC's mobile services index, average retail mobile prices have fallen 52.6 per cent since 1997. The combination of lower prices and higher data usage has meant customers are now getting ever greater value for money.

MVNOs add another layer of competition that benefits customers

Australia's strong Mobile Virtual Networks Operator (MVNO) ecosystem also provides customers with the ability to choose from a wider range of retail providers.

Thanks to a competitive wholesale market, there are now around 60 MVNOs competing in the retail market. MVNOs resell services supplied by network operators, but drive benefits for customers by offering lower prices, more data inclusions, or other incentives. In the Australian market there are 2.38 MVNOs for every million customers. That compares favourably with the global average, where there are only 0.13 MVNOs per million customers, and Europe, where there are only 0.78.

The ACCC has also confirmed that MVNOs have spurred more aggressive competition from network operators in the retail market.

Australia's market is underpinned by investment, co-investment and technology innovation.

Strong competition is driving investment and growing the network

Competition has led to much greater mobile network coverage for regional and rural customers. As the ACCC said in its most recent annual telecommunications report:

Competition in the retail mobile market has benefited many consumers living in regional Australia. As MNOs compete on the basis of network coverage, competition in the retail mobile market has helped to extend mobile coverage in Australia. Being able to offer customers the largest mobile network is Telstra's point of difference in a competitive market.

Competition to win customers drives investment, investment grows the mobile networks, and the result is Australians are able to use their phones and other devices to do more things, in more places, than ever before.

Despite the fact that Telstra will never recover the costs involved in building many individual base stations and other infrastructure in remote areas, we continue to spend money improving coverage because we know our customers right across Australia put a high value on having access to Australia's biggest mobile network.

Co-investment is a smart way to improve regional coverage

Co-investing allows network operators like Telstra to partner with governments, other businesses and local communities to deliver more coverage and new technology.

Our work with the Barcoo and Diamantina Shires, the Queensland Government and the Federal Government to deliver a fibre link and new mobile bases to Birdsville, Jundah, Stonehenge, Windorah, Bedourie, as well as joint funding to deliver fibre and mobile services in Aurukun, are just some examples where we can do more for regional communities by working with governments.

These projects make a real difference to peoples' lives. When construction is completed in mid-2017 these local communities, their councils, businesses, schools and health services will have access to the same, if not better, internet speeds as people in the city. That unlocks new job opportunities, better ways to get medical attention, and new types of learning.

Telstra has committed up to \$240 million to the Australian Government's Mobile Black Spot Programme. The first round alone has helped deliver a \$370 million investment in regional Australia's mobile coverage, with \$165 million from Telstra, \$100 million from the Federal Government, \$20 million from Vodafone and tens of millions in targeted additional funding from State and Local Governments. Through the Programme thousands of Australians who previously had little to no reception can now access Telstra's network. We've already delivered more than 20,000 square kilometres of new and improved mobile coverage.

Co-investments help drive choice, coverage and competition further into regional and rural Australia.

We're delivering new technology to improve lives

Mobile networks are constantly being upgraded, with augmented capacity and new generations of technology installed to meet significant increase in demand for mobile data.

Telstra was the first network operator to bring 4G technology to regional Australia, which we now offer in more than 600 regional towns.

In 2014 Telstra began rolling out 4GX, allowing more Australians, including in remote areas, to experience more reliable connections and ultra-fast mobile internet.

We have consistently worked on technologies to help regional communities make the most of existing coverage. For example we have helped create better international standards on spectrum use; developed a Blue Tick system to show customers which devices offer the best possible coverage in regional and rural locations; and extended the range of our mobile base stations.

With our technology partners, we are already working on the fifth generation of mobile networks and connectivity, known as 5G. New capabilities include greater capacity for more devices on the network, much greater speeds and lower energy requirements that will enable significantly longer battery life.

Industries in Australia that will benefit from the additional capabilities of 5G include transport and logistics, agriculture, manufacturing, and water and resource management.

Regulated roaming would destroy investment and co-investment in regional Australia.

The competitive dynamic that characterises Australia's successful mobile market would be destroyed by regulated roaming.

Allowing our competitors to use the Telstra network in areas where we have invested to provide coverage and they have not would immediately remove the incentives for all network operators to maintain, upgrade and expand coverage in regional areas because it would remove the competitive tension created by the race to have the best coverage and the coverage differentiation that customers value.

A report from international consultants Ovum makes clear that:

Telstra essentially absorbs the cost of the coverage it provides in the most remote areas (including many small communities and extensive highway coverage) to retain its leadership position.

Ovum show that Telstra's approach to regional investment is underpinned by urban customers who are willing to pay for broader coverage. They also show that Optus and Vodafone could viably expand their coverage to narrow the gap should they chose to invest.

However, under regulated roaming, there is no incentive for network operators to invest and improve coverage beyond the footprint of competitors into areas where they can offer their customers a service via regulated roaming.

This risk to investment has been recognised in other jurisdictions that have examined the issue of regulated mobile roaming. In fact, when the United Kingdom debated regulated roaming in 2014, Vodafone argued against it on the grounds that:

"national roaming would also harm the business case for further investment in rural coverage: why should any operator invest in providing better coverage for the benefit of a competitor?"

Declaring 3G has the same negative impact

These negative impacts would be felt by regional communities even if regulated roaming was limited to specific technologies, such as 3G. That is because 3G coverage underpins Telstra's competitive advantage - our ability to offer the largest amount of coverage (99.3 per cent of Australians), compared to Optus (who cover 98.5 per cent) and Vodafone (96.9 per cent). Successful advertising based on "Australia's biggest and best network" could immediately be challenged in court by our competitors. A crucial dimension of market differentiation would be removed and with it the incentives to invest in expanding network coverage.

Consumer research also shows mobile customers rarely distinguish between 3G and 4G coverage when making their purchasing decisions.

A decision to regulate mobile roaming on the 3G network would send a strong signal to mobile market participants, shareholders and investors that regulation is the preferred solution to any challenge. It would also be a serious disincentive to continued research and investment in new technologies to maximise coverage.

Telstra has announced that we anticipate closing our 3G network after 2020, as the service is replaced with emerging technologies. Regulating roaming on the 3G network would therefore only provide a limited benefit for access seekers, far outweighed by the negative impact on customers.

The same is true for regulated roaming at the edge of, or selected sites within, Telstra's network if it removes our ability to offer Australia's largest mobile network. Removing this competitive differentiation destroys our ability to continue investing to expand coverage. This is equally true for all MNOs.

Commercial arrangements should be allowed to deliver

Telstra supports mobile roaming on a commercial basis. We have previously supplied a range of competitors with commercial arrangements that allow them to extend their coverage without undermining investment incentives by carefully preserving our national coverage superiority.

In 2013 Vodafone commenced a commercial roaming arrangement with Optus. Telstra is seeking to win Vodafone's roaming business when this agreement expires.

Competitors offering to pay a 'fair price' for regulated roaming will not prevent the adverse impact on customers

The costs of supplying mobile coverage in regional and rural areas are not recovered from the revenue generated in those areas.

On average, building a new base station in a remote area involves upfront costs of approximately \$1 million as well as tens of thousands of dollars each year for operating costs. These sites also typically generate the lowest amounts of revenue – often not enough to recoup ongoing operating costs, let alone the original investment.

Ovum finds that in areas it reviewed where Telstra is currently the only network operator, over 65 per cent of sites have revenue insufficient to recover the operating and capital costs.

These loss making base stations are supported by revenues from across the network generated by a large number of customers who value our high level of coverage.

In previous decisions, the ACCC has ruled out setting wholesale prices that properly take into account this kind of lost revenue that supports ongoing regional investment. Not allowing Telstra to account for these lost retail revenues represents a substantial value destruction of Telstra's strategic investment in rural and regional Australia, to the detriment of those consumers and businesses.

Even if our competitors were to pay regulated wholesale prices to Telstra when their customers roam on our network, the incentives to invest in improving regional coverage will still be destroyed because investment will no longer deliver coverage differentiation. Claims by competitors that they would pay a 'fair price' ignore these important points.

Current regulations are already promoting competition and choice.

Regulation in the Australian mobile market already promotes competition and choice by giving competing network operators access to one-another's base stations for co-location of equipment, as well as access to data transmission links at regulated prices (which the ACCC recently reduced by 72 per cent in regional areas).

This means that as Telstra continues to invest and co-invest to improve coverage, competition is made even easier because the amount of investment a competitor would need to make themselves is reduced.

The Australian Communications and Media Authority (ACMA) already places limits on the amount of spectrum any mobile network operator can purchase during auctions to ensure all competitors have equal opportunity to acquire spectrum.

Currently, just 0.5 per cent of the population only have Telstra as their choice of retail mobile provider where they live.

Respected economist Professor George Yarrow has said that regulated roaming would be a "suppression of competition," describing it as a "backward step" that would not be in the long term interest of customers.

International experiences do not show that regulated roaming leads to good outcomes for customers.

Most countries do not have regulated mobile roaming. Only a handful of countries regulate roaming, and they do so for specific reasons that do not apply in Australia.

For example, in Canada regulation was imposed to enable smaller carriers to offer national network coverage in competition with the three major carriers, because evidence showed there was limited competition. This is clearly not the case in Australia where strong competition between three network operators and over 60 MVNOs has created a vibrant market where customers have genuine choice.

Some other countries have some form of regulated roaming, but with prices negotiated commercially. Regulation is generally imposed by making it an upfront condition of spectrum auctions.

Several countries have withdrawn regulation over fears of the impact on investment. In the UK and France regulators have put a stop to, or are phasing out, regulated roaming over fears of the negative impact it was having on investment.

The development of Telstra's mobile network has been funded by shareholders and customers who value coverage, not by the Government or taxpayers.

Since Telstra's privatisation we have invested significantly to build a worldleading mobile network, growing the number of mobile base stations from around 2,000 in 1998 to over 8,500 today. This has been possible thanks to revenues from our customers who value coverage and a willingness of shareholders to make long-term investments.

Our mobile network was not funded by government. Prior to the recent Mobile

Black Spot Programme, government funding from various network extension programs accounts for less than 1 per cent of Telstra's investment in the mobile network.

In contrast to our competitors, Telstra is one of Australia's largest corporate tax payers. We paid \$7.8 billion in tax to the Australian government in corporate income tax over the five years ending financial year 2015 and we recognise that this is a fundamentally important contribution to our community.

Despite misleading claims by some, the Universal Service Obligation (USO) is not a subsidy that the Government pays to Telstra. The USO is a government policy that guarantees Australians access to a standard telephone service and reasonable access to a public payphone. Funding for the USO comes from a combination of levies paid by the telecommunications industry and Government funding. Telstra is the single largest contributor to the USO. The funding has been used to deliver fixed line voice telephony, not to fund mobile infrastructure.

We are open to reforms to the USO if they can be shown to deliver better outcomes for customers.



The best way to deliver wider coverage, the latest technologies, the lowest prices and the greatest choice is to encourage competition and the investment it drives, not impose regulation. If Australia ends up with regulated mobile roaming, the real losers will be regional communities.

Telstra remains committed to continuing its investment in regional telecommunications if the right regulatory and policy setting are in place to ensure fair competition.

It would be a significant backwards step for Australia if a regime that has led to such positive outcomes and that will underpin further investment in regional Australia were to be replaced by one that discourages investment and results in worse outcomes for customers.