

PUBLIC VERSION

DOMESTIC MOBILE ROAMING DECLARATION INQUIRY

PART A OF THE SUBMISSION BY VODAFONE HUTCHISON AUSTRALIA

SUPPLEMENTARY SUBMISSION

13 MARCH 2017

Executive Summary

Vodafone Hutchison Australia (VHA) thanks the Australian Competition and Consumer Commission (ACCC) for the opportunity to make this supplementary submission. This submission responds to a range of issues raised in the submissions of Telstra and Optus, as well as the various expert reports tabled by both Telstra and Optus.

- VHA is concerned by the level of unsubstantiated assertion in the Telstra and Optus submissions. Accordingly, VHA has provided extensive evidence in this submission to enable the ACCC to independently validate each VHA response. For example, VHA has provided further evidence that vigorous investment in incremental coverage and capacity has continued, or even been enhanced by, regulated roaming in the international markets for which data is available. Combined with the extensive evidence on capital intensity, the global evidence demonstrates that it is competition, enabled through domestic roaming, that drives investment, and not enduring monopoly. Telstra's concept that monopolists have an incentive to invest is foreign to modern economics and an entirely unsubstantiated proposition. Telstra's threat to unilaterally withdraw investment cements the case as it confirms that Telstra has no competitive incentive to invest.
- VHA is also concerned by the lack of precision (and resulting mischaracterisation) in the Telstra and Optus submissions. For example, a critical point of difference between the submissions of VHA, Telstra and Optus is that VHA only seeks declaration in areas with less than three mobile networks (Non-Competitive Areas), consistent with the ACCC's Discussion Paper of October 2016. However, both Telstra and Optus have made submissions that conflate the Non-Competitive Areas with the competitive areas, leading to a range of conclusions that, when applied to the Non-Competitive Areas alone, are demonstrably false.

Once the logic of the Telstra and Optus submissions are disentangled and carefully analysed, it is clear that the declaration of domestic mobile roaming by the ACCC will have an unequivocal and material net positive impact on each of competition, any-to-any connectivity, efficient use, and efficient investment.

The ACCC reached essentially this same conclusion in 2005 in its last consideration of the declaration of domestic mobile roaming. However, declaration did not occur at that time as the ACCC was satisfied that declaration was not necessary to ensure roaming was provided on a reasonable commercial basis. [CIC begins][CIC ends]

For the convenience of the ACCC, VHA has responded to the arguments made by Telstra and Optus in the context of the three statutory criteria for declaration set out in section 152AB of the *Competition and Consumer Act 2010* (Cth) (the **Act**):

Declaration will achieve the objective of promoting competition in relevant markets:

 Absence of roaming is harming innovation in regional Australia: Telstra asserts that declaration of roaming would harm innovation, but the exact opposite is true. [CIC begins][CIC ends] Vodafone is a world leader in M2M services. M2M supports many global products, including livestock monitoring, remote machinery, vehicle tracking, and remote diagnostics. Innovative Vodafone M2M services are supplied in most other countries, including New Zealand, driving productivity gains. Telstra's conduct will have a real adverse impact on innovation and productivity in the agriculture, mining, transport, energy and consumer sectors in regional Australia, as well as those businesses that have national operations but must operate in regional Australia.

[CIC begins][CIC ends] This is having and will continue to have a direct adverse impact on regional productivity. VHA has provided further evidence in this submission.

Telstra is recovering a vast monopoly rent from consumers: Ovum claims that Telstra requires a cross-subsidy in its report, but does not quantify that cross-subsidy. VHA has therefore done so using the data and insights provided by Ovum and Telstra. Under Ovum's calculations, the magnitude of any cross-subsidy for Telstra-only areas is trivial relative to the so-called "premium" that Telstra charges and is potentially zero depending on the allocation methodology for indirect costs. Even under Ovum's assumptions, Telstra is recovering a vast monopoly rent. Telstra is making an investment into the Non-Competitive Areas that is only a small fraction of this rent. Telstra's monopoly rent is far in excess of the cost of its limited investment in the Non-Competitive Areas.

At VHA's request, Richard Feasey has also independently sought to calculate the magnitude of Telstra's monopoly rent based on the information contained in Telstra's submissions. Mr Feasey has calculated a range consistent with the **\$1.4 billion per annum** calculated by The CIE. However, Mr Feasey's analysis suggests this may even be at the conservatively low end of the range. Telstra's annual report indicates a highly profitable EBITDA margin of 42% on annual mobile revenues of \$10.4 billion. Even on entry-level pricing, Telstra now charges some 37% more than comparable offerings from VHA.

Telstra's excessive charges cannot be justified by a cross-subsidy claim: While Ovum's data has assisted VHA to confirm the scale of Telstra's monopoly rent; VHA has other concerns with the Ovum model. Ovum has allocated non-incremental common costs that inflate Telstra's costs in its monopoly area. We do not believe such costs should be considered in the NPV of the business case for incremental site build. Among other concerns, Ovum also appears to have ignored the substantial taxpayer subsidies that Telstra has received. In addition, the treatment of depreciated Telstra assets in the Ovum model is unclear. Assets that have been fully depreciated should not be included in the model.

VHA's analysis of the Ovum model indicates that Telstra's substantial over-charging across all of Australia including metropolitan Australia cannot be justified by the additional costs of providing coverage in the Telstra monopoly area.

Declaration will cause retail prices to unambiguously fall: Telstra's and Optus' claim that prices will
rise if roaming is declared are unsubstantiated and demonstrably wrong. There is no evidence of price

rises in the many western economies that have regulated domestic mobile roaming services. In fact, the ability of the ACCC to set efficient wholesale access pricing will mean that retail prices will unambiguously fall.

Importantly, the declaration of roaming will provide consumers with greater choice, so those consumers who seek full mobile coverage could in future acquire it at a lower retail price. Telstra will finally become subject to real competition, benefiting both regional and metropolitan consumers. The magnitude and speed of the retail price decreases over time will be determined by the wholesale access pricing that is ultimately set by the ACCC.

Declaration will eliminate Telstra's stranglehold over regional Australia: VHA faces overwhelming barriers to entry in the Non-Competitive Areas. Australia's very low population density areas can only support one mobile network, so only Telstra has had the ability to invest (often with public funding). Ovum's modelling confirms the extensive scope of this natural monopoly. Efficient sharing of this network by domestic mobile roaming is the only way to deliver competition in natural monopoly areas.

In Non-Competitive Areas with higher (but still low) population densities, there is theoretical scope for further investment, but such investment is highly risky. Domestic mobile roaming is a fundamental catalyst for such investment, reducing risk and facilitating infrastructure-based competition. Yet while Telstra publicly maintains that such competition is possible, Telstra privately raises extensive impediments to future investment by VHA. Declaration of roaming is the only means to overcome Telstra's current stranglehold over competition and investment in regional Australia to facilitate VHA's ability to invest.

Coverage-based competition is not impeded by declaration: Telstra spends over half its submission painting a rose-tinted picture of mobile market competition in Australia. Telstra then asserts or implies that declaration would somehow jeopardise this. There is no evidence that declaration of domestic mobile roaming would reduce competition. The competitive benefits claimed by Telstra relate to the competitive areas in Australia. Declaration of roaming will only occur in the Non-Competitive Areas, so declaration could not undermine competition in the competitive areas. Declaration will materially increase competition.

Declaration of domestic mobile roaming will deliver immediate competition into the Non-Competitive Areas that does not currently exist. Declaration will also enable greater competition for and access to subsidies and will accelerate investment by access seekers, delivering long-term infrastructure-based competition. The main detriment for Telstra is that it will lose its monopoly rent due to the forces of competition. This rent will be redistributed to consumers in conjunction with greater product choice, greater mobile coverage, greater access to existing coverage, greater service innovation and lower retail prices.

Declaration will achieve the objective of promoting any-to-any connectivity:

• Absence of roaming is causing real consumer detriment and harm: Notwithstanding Telstra's cynical campaign to encourage its shareholders and Telstra-sponsored groups to oppose declaration, all of the Mobile Network Operators (MNOs) appear to agree that regional mobile consumers are currently suffering harm. In Telstra's own words, "more needs to be done". In Optus' own words, "there is scope to improve". VHA agrees – and the declaration of domestic roaming is the obvious, tried and tested regulatory, policy and political solution.

A key cause of regional consumer detriment and harm is an absence of any-to-any connectivity due to Telstra's refusal to supply roaming in the Telstra monopoly area. Not only are consumers in Telstra's monopoly areas left with no choice of supplier and forced to pay Telstra's premium prices, but customers who live in or travel to adjacent areas are also left with little choice. The submissions received by the ACCC provide a snapshot of many of the resulting public policy concerns.

For example, VHA customers in the Telstra monopoly area cannot receive SMS alert messages such as emergency bush fire warnings. International tourists may receive roaming coverage, but Australians cannot access the same coverage. Volunteers on different mobile networks cannot communicate during critical search and rescue operations. Regional consumers may need to buy multiple handsets at significant cost. M2M solutions may not work. VHA has quoted examples in this submission.

• Domestic mobile roaming is technically possible and already occurring: Telstra apparently engaged Aetha to provide an exhaustive list of potential "technical issues" with roaming. VHA has now provided evidence that these so-called "technical issues" are largely irrelevant and easily overcome. Domestic roaming arrangements are globally common and already contemplated by the mobile technologies involved. Telstra could easily supply roaming to VHA that was limited to the Non-Competitive Areas.

[CIC begins][CIC ends]

<u>Declaration will achieve objective of encouraging economically efficient use of, and invest in, infrastructure:</u>

• Telstra has no competitive incentive to invest in the natural monopoly areas: Telstra has a monopoly over some 60% of the mobile coverage area in Australia. Telstra has no competitive need or incentive to invest in further coverage when its market lead is already insurmountable and unassailable and the effect of further investment would be trivial. The evidence supports this conclusion. Telstra's investments into the Telstra monopoly area have been motivated principally by regulation (to enable CDMA closure in 2008), by government subsidies, by consumer revenues and by wider political considerations (including the risk of political intervention), not by competition.

Telstra's arguments amount to a claim that only a monopoly will efficiently invest and that any increased competition would impede such investment. With respect, Telstra's claims fly in the face of decades of fundamental economic logic. As VHA has demonstrated, the reality is that Telstra has not invested into the monopoly areas to the same extent as competitive areas. Much of the Telstra

monopoly area is still on 3G and has not been upgraded 4G five and a half years after it launched 4G in competitive areas. The evidence does not support Telstra's claims.

 Optus faces the same challenges as VHA and also faces serious barriers to investment: Optus has a strong commercial self-interest in maintaining the status quo. [CIC begins][CIC ends]

Optus claims that it can invest into the Telstra monopoly area, but its own submission (ironically) evidences that it has not done so to a significant extent. Optus claims that it can, and is, driving infrastructure-based competition, but Optus is only able to point to \$25.7 million of investment over 4 years, an average of \$6.4 million a year – clearly a nominal amount of investment.

In the Mobile Black Spot Program, Optus won no sites at all in Round 1, and only 114 in Round 2, compared to Telstra's 577. Telstra has used the Programme and its subsidies to increase the coverage gap. Telstra's monopoly coverage is continuing to grow over time and Optus is falling further and further behind. Optus faces the same fundamental barriers to competitive investment posed by Telstra's monopoly coverage area as VHA.

• Investment in regional Australia is enhanced by domestic mobile roaming: Telstra has campaigned that declaration would harm investment. But Telstra's own historic statements indicate that Telstra has always viewed declaration of roaming as entirely possible – and Telstra has still invested. Even in Telstra's disclosures in the T3 share offer prospectus a decade ago, Telstra expressly warned shareholders of the ACCC's ability to declare domestic mobile roaming and the impact on Telstra's profitability. The ACCC also clearly warned in 2005 that it may declare domestic roaming if reasonable commercial roaming arrangements did not continue.

In fact, declaration of roaming would facilitate investment. The international experience supports this. VHA has provided detailed capital intensity data from multiple international markets before and after domestic mobile roaming had been regulated which clearly demonstrates this. [CIC begins][CIC ends] Domestic mobile roaming has supported, and remains fundamental to, VHA's investment strategy in Australia.

Telstra's threat to freeze regional investment is not credible: Telstra has resumed its past practice of qualifying its future investment with a "regulatory asterisk" as it frequently did in the Sol Trujillo days a decade ago. The ACCC was historically highly critical of such conduct. Telstra is again cynically attempting to create an artificial counterfactual. Ironically, Telstra's conduct betrays its monopoly power in regional Australia, as a firm in a competitive market could not simply refuse to invest in the manner that Telstra has proposed.

Based on VHA's analysis, there is little (if any) substance behind Telstra's threats. Telstra's statements are ambiguous and carefully worded. They are statements of managerial intent, not any binding undertaking or commitment. The investment amounts are trivial relative to Telstra's monopoly rent and could well have been amounts that were destined for investment in any event.

The threats also lack credibility, as it seems highly unlikely that Telstra would freeze investment when the declaration of domestic mobile roaming would facilitate competitive investment by VHA and Optus. Once domestic mobile roaming is in place, other MNOs can finally compete to invest beyond Telstra's footprint and compete for subsidies for incremental investment. It is this competition, not an enduring monopoly, that will drive investment in regional Australia. This has been borne out in the investment data in similar international markets before and after regulation of roaming.

• Access pricing can fully resolve any investment concerns: Telstra will receive wholesale revenue from providing access to domestic mobile roaming services, gaining an additional wholesale revenue stream. If Telstra were operating in a competitive market, it would welcome this wholesale revenue. The only reason that Telstra is unwilling to supply roaming is because Telstra fears the effect on retail competition. As VHA has already highlighted, Telstra's refusal is anti-competitive under the Act as it is derived from protecting a coverage claim and monopoly rent that would not exist in a competitive market.

Telstra implies that regulated pricing for roaming is "too hard". With respect, commercial roaming arrangements are common and include precedents for pricing structures which deal with any complexities, so Telstra is exaggerating. As recognised by the ACCC and the Australian Competition Tribunal, optimal access prices are a solution to any adverse investment. Moreover, if the ACCC had any residual concerns regarding the impact on incentives for incremental investment, the ACCC can set terms for the declaration that stimulate regional investment.

• International experience supports mandating of domestic mobile roaming: Both Telstra and Optus claim that the international experience does not support mandating roaming. The evidence clearly illustrates otherwise. Virtually every western economy with a large land area and areas of low population density has regulated or decided to regulate domestic mobile roaming at some stage – the USA, Canada, New Zealand, Spain, France, Norway, South Africa, Italy and Austria.

While regional licensing and/or new entry have driven specific forms of domestic mobile roaming regulation at specific times, it is simply not credible to ignore the obvious pattern of roaming regulation in large western economies with areas of low population density. All of these countries have regulated because of market failure or likely market failure. These are precisely the reasons applicable in Australia, especially since commercial negotiations have failed.

VHA notes that the Minister for Communications requested that "any finding in favour of declaration be based on an overwhelming case for declaration and not simply on the balance of probabilities". [CIC begins][CIC ends]

Irrespective, VHA does consider that there is an overwhelming case for declaration of domestic mobile roaming. Competition will deliver billions of dollars of consumer welfare gains and enhance regional connectivity. Extensive evidence has been presented that shows that declaration has no adverse impact on investment and is, in fact, likely to promote investment. Telstra's cynical threat must be treated with great

caution Declaration will enhance regional coverage and enable greater participation in the Government's Mobile Black Spot Program. Declaration will eliminate Telstra's current stranglehold over investment and competition in regional Australia.

VHA is happy to discuss any aspect of this supplementary submission with the ACCC.

Vodafone Hutchison Australia Pty Ltd

13 March 2017

Structure of this submission

This VHA submission supplements VHA's previous submission to the ACCC dated 5 December 2016 (**Original Submission**) and various pieces of information and evidence VHA has provided to the ACCC relevant to the ACCC's domestic mobile roaming declaration inquiry.

This submission responds to the ACCC's comment in its letter of 10 February 2017 that VHA is welcome to make an additional submission to the inquiry by 5pm, 13 March 2017, and that the ACCC will take this submission into account in reaching its draft decision.

VHA's submission comprises two parts:

- Part A sets out VHA's response to Telstra's and Optus' submissions.
- Part B contains independent expert reports and other supporting materials accompanying Part A.

For the convenience of the ACCC team, VHA has structured its response to the various key points made by Telstra and Optus under the headings of the three criteria for declaration set out in section 152AB of the Act. VHA has also sought to substantiate its response with evidence and supporting factual content.

VHA is happy to meet with the ACCC to discuss any aspect of this submission.

II. Confidential information

As the ACCC will appreciate, various parts of VHA's submission contain confidential and commercially sensitive information of VHA and its shareholders and subsidiaries.

VHA has provided a public domain version and a confidential version of the documents comprising its submission to the ACCC. Any information contained in the confidential version that is not contained in the public version is given by VHA in confidence and comprises 'protected information' under section 155AAA of the Act (Confidential Information).

VHA requests that any Confidential Information is not disclosed by the ACCC to any person (other than confidentially to the ACCC's external advisors) without first obtaining the written consent of VHA, unless required by section 155AAA. We are happy to discuss this issue further with the ACCC as necessary.

Contents

Ex	ecuti	ive Summary	2
l.	St	tructure of this submission	9
II.	Co	onfidential information	9
Со	nten	ıts	10
1.	Ol	bjective of promoting competition	11
	1.1	Status quo is harming innovation in regional Australia	13
	1.2	Telstra is recovering a monopoly rent from consumers	16
	1.3	Telstra's charges cannot be justified by cross-subsidy claim	27
	1.4	Declaration will cause retail prices to unambiguously fall	30
	1.5	Declaration will eliminate Telstra's regional stranglehold	35
	1.6	Coverage-based competition is not affected by declaration	45
2.		Objective of promoting A2A connectivity	54
	2.1	Status quo leading to real consumer detriment and harm	54
	2.2	Roaming is technically possible and already occurring	58
3.		Objective of efficient use and investment	61
	3.1	Telstra has no competitive incentive to invest in monopoly	63
	3.2	Optus faces same challenges as VHA and has not invested	73
	3.3	Investment in regional Australia is enhanced by roaming	75
	3.4	Telstra's threat to freeze regional investment is not credible	84
	3.5	Access pricing can resolve investment concerns	89
	3.6	International experience supports mandating of roaming	92
4	Co	onclusions	99

1. Objective of promoting competition

Contrary to the submissions of Telstra and Optus, declaration will achieve the objective of promoting competition in relevant markets:

Absence of roaming is harming innovation in regional Australia: Telstra asserts that
declaration of roaming would harm innovation, but the exact opposite is true. [CIC
begins][CIC ends]

Vodafone is a world leader in M2M services. M2M supports many global products, including livestock monitoring, remote machinery, vehicle tracking, and remote diagnostics. Innovative Vodafone M2M services are supplied in other countries, including New Zealand, driving productivity gains. Telstra's conduct will have a real adverse impact on innovation and productivity in the agriculture, mining, transport, energy and consumer sectors in regional Australia, as well as those businesses that have national operations but must operate in regional Australia.

Given Telstra is now effectively blocking both of the only two ways for VHA to effectively deploy competing M2M services into regional Australia, VHA is now unable to bring this innovation to regional Australia, or to national businesses which have operations in regional Australia, or for applications which might travel through regional Australia (such as transport logistics). This will have a direct adverse impact on regional productivity. VHA has provided further evidence in this submission.

Telstra is recovering a vast monopoly rent from consumers: Ovum claims that Telstra requires a cross-subsidy in its report, but does not quantify that cross-subsidy. VHA has therefore done so using the data and insights provided by Ovum and Telstra. Under Ovum's calculations, the magnitude of any cross-subsidy for Telstra-only areas is trivial relative to the so-called "premium" that Telstra charges and is potentially zero depending on the allocation methodology for indirect costs. Even under Ovum's assumptions, Telstra is recovering a vast monopoly rent. Telstra is making an investment into the Non-Competitive Areas that is only a small fraction of this rent. Telstra's monopoly rent is far in excess of the cost of its limited investment in the Non-Competitive Areas.

At VHA's request, Richard Feasey has also independently sought to calculate the magnitude of Telstra's monopoly rent based on the information contained in Telstra's submissions. Mr Feasey has calculated a range consistent with the \$1.4 billion per annum calculated by The CIE. However, Mr Feasey's analysis suggests this may even be at the conservatively low end of the range. Telstra's annual report indicates a highly profitable EBITDA margin of 42% on annual mobile revenues of \$10.4 billion. Even on entry-level pricing, Telstra now charges some 37% more than comparable offerings from VHA.

Telstra's excessive charges cannot be justified by a cross-subsidy claim: While
Ovum's data has assisted VHA to confirm the scale of Telstra's monopoly rent; VHA
has other concerns with the Ovum model. Ovum has allocated non-incremental

common costs that inflate Telstra's costs in its monopoly area. We do not believe such costs should be considered in the NPV of the business case for incremental site build. Among other concerns, Ovum appears to have ignored the substantial taxpayer subsidies that Telstra has received. In addition, the treatment of depreciated Telstra assets within the Ovum model is unclear. Assets that have been fully depreciated should not be included in the model.

VHA's analysis of the Ovum model indicates that Telstra's substantial over-charging across all of Australia including metropolitan Australia cannot be justified by the additional costs of providing coverage in the Telstra monopoly area.

Declaration will cause retail prices to unambiguously fall: Telstra's and Optus' claim
that prices will rise if roaming is declared are unsubstantiated and demonstrably
wrong. There is no evidence of price rises in the many western economies that have
regulated domestic mobile roaming services. In fact, the ability of the ACCC to set
efficient wholesale access pricing will mean that retail prices will unambiguously fall.

Importantly, the declaration of roaming will provide consumers with greater choice, so those consumers who seek full mobile coverage could in future acquire it at a lower retail price. Telstra's full coverage pricing will finally become subject to real competition, benefiting both regional and metropolitan consumers. The magnitude and speed of the retail price decreases over time will be determined by the wholesale access pricing that is ultimately set by the ACCC.

• Declaration will eliminate Telstra's stranglehold over regional Australia: VHA faces overwhelming barriers to entry in the Non-Competitive Areas. Australia's very low population density areas can only support one mobile network, so only Telstra has had the ability to invest (often with public funding). Ovum's modelling confirms the extensive scope of this natural monopoly. Efficient sharing of this network by domestic mobile roaming is the only way to deliver competition in natural monopoly areas.

In Non-Competitive Areas with higher (but still low) population densities, there is theoretical scope for further investment. Domestic mobile roaming is a fundamental catalyst for such investment, facilitating infrastructure-based competition. Yet while Telstra publicly maintains that such competition is possible, Telstra privately raises extensive impediments to future investment by VHA. Declaration of roaming is the only means to overcome Telstra's current stranglehold over competition and investment in regional Australia to facilitate VHA's ability to invest.

• Coverage-based competition is not impeded by declaration: Telstra spends over half its submission painting an excessively rose-tinted picture of mobile market competition in Australia. Telstra then asserts or implies that declaration would somehow jeopardise this. There is no evidence that declaration of domestic mobile roaming would reduce competition. The competitive benefits claimed by Telstra relate to the competitive areas in Australia. Declaration of roaming will only occur in the Non-Competitive Areas, so declaration has zero impact in the competitive areas. Declaration will materially increase competition.

Declaration of domestic mobile roaming will deliver immediate competition into the Non-Competitive Areas that does not currently exist. Declaration will also enable greater access to subsidies and will accelerate investment by access seekers, delivering long-term infrastructure-based competition. The main detriment for Telstra is that it will lose its monopoly rent due to the forces of competition. This rent will be redistributed to consumers in conjunction with greater product choice, greater mobile coverage, greater access to existing coverage, greater service innovation and lower retail prices.

1.1 Status quo is harming innovation in regional Australia

1.1.1 Submissions made by Telstra

Telstra claims in its submission that declaration of domestic mobile roaming would have wider spillover economic effects to other services:

• Telstra claims (p4) that: "The effects of declaration will be most acutely felt by customers in regional and rural Australia because many areas would no longer be economically viable. The quality of coverage will reduce and access to the latest technologies will be limited, affecting business and agricultural productivity, and the effectiveness of health, education and government services delivered over mobile technology".

VHA rejects these claims and believes the exact opposite is actually true, namely that an absence of domestic mobile roaming is impeding the deployment of innovative new technologies to regional Australia, thereby harming competition and leading to wider adverse economic effects. VHA has provided evidence to support this conclusion below, arising in the M2M context.

1.1.2 Response by VHA to those submissions

VHA wishes to make two key points in response to Telstra's submission:

- First, the exact opposite of Telstra's submission is actually true the absence of domestic mobile roaming is resulting in real harm to regional consumers and is harming the delivery of innovative telecommunications services to regional Australia.
- Second, Telstra's arguments are overstated to an alarming degree with many adjectives and hyperbole, but little or no evidential support.

1.1.3 Evidence #1: The absence of domestic roaming is impeding innovation

Contrary to Telstra's arguments that the supply of domestic mobile roaming would impede innovation, the prevailing economic thinking dictates that competition, and not the continuation of market power, spurs innovation.

This is precisely the point made by Dr Derek Ritzmann, Compass Lexecon in his second independent expert report:

"Professor Yarrow takes a number of strong positions on the interaction of competition with investment and innovation. These positions in turn appear to be based on assumptions that appear to me to be difficult to defend, dated, and in my opinion at odds with the majority opinion of the economics profession today."

"In contrast, the more modern view is that competition in fact spurs investment in innovation as firms compete to outpace their rivals with new technologies, and that the harder the competition, the more firms are driven to innovate."

"Moreover, in my view, increased competition in the currently Telstra-only areas would likely spur competition and thereby investment and innovation, rather than to inhibit them."

VHA provides evidence of infrastructure investment incentives later in this submission and, in this section, provides evidence as to how declaration of domestic mobile roaming will spur real innovation and investment in products and services, for example M2M solutions.

[CIC begins][CIC ends] In the absence of a domestic mobile roaming declaration, Vodafone cannot otherwise supply its innovative global M2M solutions to some 60% of Australia's mobile coverage area.

Vodafone is a world leader in M2M services. M2M supports many global products, including livestock monitoring, remote machinery, vehicle tracking, and remote diagnostics. Innovative Vodafone M2M services are supplied in other countries, including New Zealand, driving productivity gains. Telstra's self-interested conduct will have a real adverse impact on innovation and productivity in the agriculture, mining, transport, energy and consumer sectors in regional Australia.

The failure by Telstra to supply domestic mobile roaming, [CIC begins][CIC end] is impeding VHA, and the broader Vodafone Group from supplying into regional Australia innovative machine to machine (M2M) technologies, including intelligent monitoring of livestock, water management, Smartphone management of agricultural businesses, remote machinery, and remote diagnostics. These ready-to-go products and services have been successfully launched by Vodafone globally, including in New Zealand. VHA provides more evidence below.

[CIC begins][CIC ends]

1.1.3 Evidence #2: Telstra's arguments regarding wider economic effects lack credibility

Even if one assumes that the declaration of domestic mobile roaming would somehow impede regional investment as claimed by Telstra (which VHA rejects for reasons identified in its Original Submission and as set out below), VHA does not see how Telstra's logic regarding wider economic effects can be correct:

- First, Telstra claims that the declaration of domestic mobile roaming will mean that "many areas will no longer be economically viable". This statement fails to recognise that:
 - (a) a domestic mobile roaming arrangement provides new wholesale revenue from VHA consumers (including those that churn from Telstra) and does not prevent Telstra recovering revenue from its existing retail customers, so Telstra will receive a new revenue stream;
 - (b) much of Telstra's network costs are sunk, therefore Telstra has little to gain (if anything) by closing mobile base stations as implied, given that Telstra's own financial modelling by Ovum demonstrates that the operational costs of such base stations are low;
 - (c) Telstra has received significant subsidies for such base stations that are contractually contingent on the services from those base stations remaining in place;
 - (d) Telstra's regional coverage is the subject of a very high degree of political and regulatory scrutiny with the Minister having a very broad discretion to impose licence conditions on Telstra in relation to coverage issues; and
 - (e) Telstra's very high degree of profitability across its mobile network means that it can certainly afford to cross-subsidise some regional base stations if it needs to, as Telstra claims that it currently does and is obviously willing to continue to do so.

The implication that Telstra would close its base stations is highly misleading. The implied threat in Telstra's submission that it would do so if domestic mobile roaming were declared is highly irrational and disingenuous.

Second, Telstra claims that the "access to the latest technologies will be limited". This statement fails to recognise that Telstra has been very slow to upgrade the Telstra monopoly area with the latest technologies and much of the area has remained on 3G, rather than 4G. Given Telstra's monopoly, Telstra has not had competitive incentives to provide access to the latest technologies in the Telstra monopoly area. VHA covers these issues in more detail below.

VHA has provided evidence to the ACCC later in this submission that declaration of domestic mobile roaming will not impede regional investment, but will rather stimulate efficient investment by injecting competitive incentives for investment and ensuring competition for government subsidies.

1.2 Telstra is recovering a monopoly rent from consumers

1.2.1 Submissions made by Telstra

Telstra claims that it's so-called "premium pricing" for coverage is set in a competitive market and that the profits that it generates are necessary in order to provide its premium coverage:

- Telstra claims (p4) that: "Competition is currently delivering world-leading outcomes to Australian consumers and businesses."
- Telstra claims (p5) that the negative effects of declaring roaming include that: "The business case for regional and rural investment would be undermined. MNOs could no longer sustain a competitive strategy of building in uneconomic areas on the basis that they will attract customers willing to pay for higher-quality coverage, so the incentive to invest will be removed."

VHA disagrees with those claims. Even if a cross-subsidy was required to fund Telstra's increased coverage, the level of that cross-subsidy is likely to be trivial relative to the size of the monopoly rents that Telstra actually extracts from Australian consumers.

1.2.2 Response by VHA to those submissions

VHA wishes to make five key points in response to Telstra's submissions:

- First, VHA commissioned The CIE to quantify the magnitude of Telstra's price premium. The
 CIE has identified that this price premium is in the order of \$1.4 billion per annum for Telstra
 mobile phone plans compared to its competitors.
- Second, Telstra has claimed this premium is legitimate to provide greater coverage, However,
 VHA's analysis of the Ovum modelling indicates that a cross-subsidy may not be required as
 Telstra's sites in the Telstra monopoly area may be standalone economic on an aggregate basis depending on how certain inputs are treated in the model.
- Third, even on Telstra's entry-level pricing in regional Australia, it is clear that Telstra currently charges a premium of some 37% more than VHA and Optus for basic mobile services supplied in regional Australia.

- Fourth, regional consumers have little choice but to choose Telstra, as evidenced by Telstra's high market share in regional Australia.
- Fifth, uniform national pricing does not place an effective competitive constraint on Telstra in circumstances where Telstra has been exercising market power that is derived from Telstra's natural monopoly (and hence is not subject to any effective competitive constraint from Optus or VHA).

VHA has addressed each of these points in turn below with supporting evidence. VHA also refers back to its Original Submission that provides extensive further evidence on these points.

1.2.3 Evidence #1: The CIE has estimated a price premium of \$1.4 billion per annum

VHA commissioned The CIE to update its report on Telstra's Price Premium from VHA's Original Submission. Given this report is already in evidence, VHA does not repeat that evidence here.

In its second submission, Telstra engaged Professor Jonathan Pincus to critique the report by The CIE. Given the criticism, VHA has asked The CIE to respond to the report by Professor Pincus.

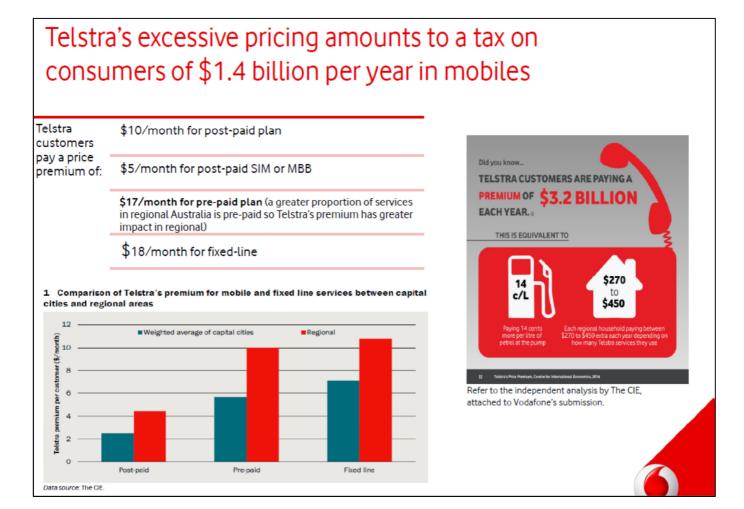
VHA finds Professor Pincus' criticism of The CIE report to be a little unusual. Professor Pincus appears to have misread The CIE report entirely and incorrectly assumed that The CIE were attempting to quantify the amount of Telstra's price premium that was derived from Telstra's market power. This is not actually the case. The CIE had been asked to quantify the level of Telstra's price premium relative to the prices of Telstra's competitors. There is no mention in The CIE's report of market power.

In conclusion, Professor Pincus has not identified any compelling reasons why the analysis of The CIE is incorrect. Given this, it remains in evidence that based on a comparison of retail products, Telstra is currently extracting a price premium from Australian mobile consumers of \$1.4 billion per annum.

As The CIE point out in a previous report:

"The level of price premium for the incumbent in the Australian market does not appear in overseas markets we have considered in previous analysis (The CIE, 2015). This suggests that structural issues are limiting the ability for competition to drive down market prices."

A slide summarising the conclusions from The CIE report is set out below:



VHA has asked The CIE to provide a second report addressing the concerns of Professor Pincus. The CIE's second report is provided in Part B of this supplementary submission.

1.2.4 Evidence #2: Telstra is charging a monopoly rent based on its own model

Separately from The CIE analysis, VHA has sought to quantify Telstra's excess revenues using Telstra's own data contained in its original submission to the ACCC.

Without having access to Telstra's actual accounts or costing information, it is not possible to undertake modelling of Telstra's excess revenues to a high degree of precision. However, VHA asked Mr Richard Feasey to calculate an estimate of the magnitude of excess revenues Telstra receives per annum based on an analysis of the Ovum modelling.

Mr Feasey reaches the following conclusions in his second independent expert report (provided in Part B of this supplementary submission):

"Recall that Telstra's actual retail revenue market share is closer to [CIC begins][CIC ends] today. The difference – [CIC begins][CIC ends] percentage points of revenue market share or at least \$2.1bn of annual revenues— are revenues which the Ovum model suggests Telstra does not need to earn in order to cover its network costs. They therefore provide an indication of the magnitude of 'excess returns' which Telstra derives from its market power."

The ACCC should have within its possession ample data which would assist with refining this analysis.

1.2.5 Evidence #3: Telstra's price premium harms the poorest Australians the most

As a further reality check on Telstra's prices and as an indication of the issues faced by regional consumers, VHA has sought to identify the level of the price premium that would be paid by a consumer if they sought to acquire an 'entry level' Telstra mobile plan, relative to a mobile plan of either Optus or VHA.

Based on VHA's analysis, Telstra customers do indeed pay a very significant price premium. For example, a Telstra mobile consumer pays \$55 per month for a 1GB/month post-paid plan, while Optus and VHA mobile customers each pay \$40 per month for an equivalent plan. This an entry level price difference of over 37%.

In addition, The CIE also calculated Telstra's price premium compared to the cheapest available plans (none of which are Telstra's retail mobile offerings) in the market. The results are eye opening.

The CIE showed that if Telstra's retail offerings are compared to the cheapest plans available only, Telstra's price premium is:

- \$17.90 per month in the non-handset post-paid mobile category;
- \$26.30 per month in the handset post-paid mobile category; and
- \$27.70 per month in the pre-paid mobile category.

As the poorest regional consumers do not have access to the cheapest plans available in the market, where Telstra is the only provider offering coverage. This means that these consumers would therefore have to pay a substantial premium to use Telstra's mobile services, as estimated by The CIE.

The CIE's second report is provided in Part B of this submission but the relevant conclusion is reproduced below:

30 ■ Non-handset post-paid premium ■ Handset post-paid premium 27.7 25 24.3 Fixed line premium Pre-paid premium Plan price (\$/month) 15 10 17.6 14.8 13.5 10.1 10.6 10.2 Non-Telstra plans (weighted average) Optus plans Cheapest plans

3 Different estimates of Telstra's mobile and fixed line premia

Note: The cheapest plans for post-paid, fixed line and pre-paid plans are those from Virgin Mobile, TPG Internet and ALDI respectively. Data source: The CIE.

1.2.6 Evidence #4: Regional consumers have no choice but to acquire from Telstra

If the market was as competitive as Telstra's submission suggests, we would expect the metropolitan market shares to apply uniformly throughout Australia. To put in a different way, if over 23.3 million Australians (about 96% of the population) can choose to acquire comparable mobile services from multiple providers as claimed by Telstra,¹ then we would expect that the 23.3 million Australian subscribers to be equally distributed between Telstra, Optus and VHA.

Mr Feasey states in his second independent expert report:

"Professor Yarrow is too quick in my view to assume that everybody who lives in urban areas must have competitive choices. His only basis for finding that the market is 'vigorously competitive' appears to be the observation that there a large number of MNOs and MVNOs. There are three MNOs and a number of MVNOs present in many urban areas, but it does not follow from this that every user living in those areas has a meaningful choice of provider. I am sure Professor Yarrow does not mean to suggest that we can draw conclusions about competitive dynamics from simply counting the number of firms, but I am afraid that in this instance he does not go beyond that."

¹ Page 16 of Telstra's original submission.

VHA provided evidence in its Original Submission that this is not the case. In practice, there are very substantial differences between the market shares in metropolitan Australia and the market shares of the MNOs in regional Australia.

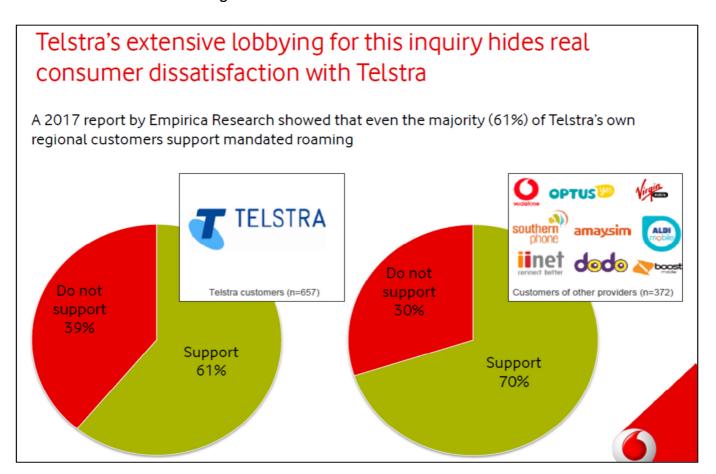
Even though Telstra is charging a very significant price premium (as identified by the evidence presented by The CIE), Telstra has a regional market share almost [CIC begins][CIC ends]

This conclusion betrays a fundamental problem with Professor Yarrow's claim that the Australian mobile market is working well without any regulatory intervention. In fact, Telstra has leveraged its market power and set its prices so as to force consumers that value coverage above all else to pay more than they should. These captive consumers are disproportionally located in regional Australia.

To emphasise this point, regional consumers currently pay a lot more for mobile telecommunications services than they should as they have no choice but to acquire mobile services from Telstra. The evidence of this is provided by market share information contained in VHA's Original Submission and are summarised in the following slide: [CIC begins][CIC ends]

The resulting level of consumer dissatisfaction with Telstra in regional Australia is also clear. VHA has provided various evidence to the ACCC that indicates the level of consumer dissatisfaction with Telstra and demand for domestic mobile roaming.

Even the majority (61%) of Telstra's own regional consumers support mandated roaming, as summarised in the following slide:



1.2.7 Evidence #5: Uniform pricing does not impose an effective restraint

A fundamental point of difference between Telstra and VHA arises in relation to the impact of uniform national pricing.

In Telstra's submission, Telstra claims that uniform national pricing is set by competition in metropolitan markets. Telstra suggests that this competition is intense and that the market is working effectively. Telstra claims that this competitively-set pricing is then applied to regional Australia, so Telstra has no ability to leverage any market power it may have.

VHA's approach is more nuanced:

 First, VHA has identified that uniform national pricing is a misnomer because there is belowthe-line discounting and there are a myriad of different price points that are marketed differently to different consumers. This means that there is still significant scope for Telstra to price discriminate against regional consumers in practice.

- Second, VHA suggests that Telstra appears to set its national pricing by way of optimisation across the market. In effect, Telstra sets a higher price in metropolitan areas and risks loss of market share to Optus and VHA from more price-sensitive consumers against the additional profits from captive regional consumers and premium coverage consumers that are largely captive to the Telstra network. Telstra then uses its mobile virtual network operators (MVNOs), whom often do not have access to Telstra's full coverage footprint, to target the price-sensitive consumers in metropolitan areas, rather than cannibalising Telstra's own brand.
- Third, as explained by Mr Feasey in his second report, metropolitan consumers are also captive to Telstra, and the "chain of substitution" world view advocated by Telstra and Professor Yarrow is hugely problematic and is discredited by evidence. Dr Ritzmann formed the same conclusion independently, having observed the evidence in Telstra's own submission.

VHA therefore considers that uniform national pricing has instead acted as a mechanism for transmission of Telstra's market power, arising from its natural monopoly coverage in regional Australia, into metropolitan areas.

- Telstra has been able to take a natural monopoly product that Telstra can only provide, namely coverage in the natural monopoly areas. Telstra has been able to deny access to that product at wholesale to its competitors, hence guaranteeing that only Telstra can provide that product at the retail level.
- That product is regarded as highly valuable by a subset of metropolitan consumers and is regarded as essential by most regional consumers. As the sole provider, Telstra faces no competition from Optus or VHA in the supply of that product.
- Telstra has then been able to set a monopoly price for the supply of that product, generating
 the substantial price premium identified above. Moreover, Telstra has bundled that monopoly
 coverage product with its contestable mobile services.

VHA's submission is supported by the range of evidence that VHA has presented to the ACCC in its Original Submission, including the premium pricing identified above, regional consumer surveys, and mystery shopper surveys. VHA's evidence is also supported by the conclusions of the various regional telecommunications inquiries and by various submissions that the ACCC has received from regional consumers in this declaration inquiry.

In such circumstances, it is clear that national uniform pricing does not provide the effective competitive constraint on Telstra that is identified by Telstra in its submission.

Ironically, national uniform pricing would provide an effective competitive constraint on Telstra if domestic mobile roaming was declared, because Telstra would then lose its market power to charge excessive pricing for the natural monopoly coverage (but would still recover its reasonable costs through access pricing).

The following slide summarises VHA's views:

Uniform national pricing does not place an effective competitive constraint on Telstra

- Telstra claims that its policy of uniform national pricing "allows the benefit of metropolitan competition to flow through to regional Australia". However, the converse is actually true.
- Metropolitan markets are not uniformly competitive. Competition is segmented. Competition exists between Optus and Vodafone, but Telstra is not effectively constrained.
- Telstra has focussed on the premium market and differentiates its offering based on coverage. As Telstra controls a natural monopoly to which it denies access, no other MNO can effectively compete.
- Telstra has absolute market power over customers within and near to its regional monopoly, and leverages that market power into metropolitan market segments that value coverage.
- Telstra sets a uniform 'premium price' which leverages its market power to extract rents from all its customers.

VHA also notes that there is a fundamental point of difference between Telstra and VHA as to the level of competition that is occurring in the mobile telecommunications market in Australia. Telstra claims that the markets are highly competitive and deliver outstanding results. VHA has pointed to a range of evidence to again illustrate that the issue is far more nuanced. While some segments of the mobile telecommunication markets are highly competitive, other segments are not, resulting in Telstra capturing consumers in metropolitan and regional Australia. The markets are also highly concentrated, as recognised by the ACCC itself in its review of the merger between Vodafone and Hutchison.

Relevantly, Mr Feasey makes the following observation in his second independent expert report:

"This is where I disagree with Professor Yarrow. I do not think the 'chain of substitution' operates so as to protect these urban users who are 'captive' to Telstra, nor to allow VHA or Optus to expand their coverage in the way that is supposed, as I explain later in this note. Instead, I think Telstra is able to sustain a price that is above the competitive level in respect of this group of users, and I think this group of users is quite large. It is not clear whether this is what Professor Yarrow has in mind when he refers to the risk that markets can 'bifurcate' and 'tip', but markets can and do bifurcate when the chain of substitution breaks down, and I believe it has in this case. When that happens groups of users who face competitive prices can co-exist alongside groups of users who do not, and insurmountable barriers arise to prevent competitors from moving along the chain and competing in some parts of the market."

"I disagree with all these assumptions. I think there is good evidence to suggest that the chain of substitution does not protect a significant group of urban users from paying more for their Telstra service than they ought or need to. Accordingly, I think Telstra's profits are evidence of market power and that this market power is not transitory in nature. I find that other parts of Telstra's submissions confirm this view, particularly the modelling by Ovum and Telstra's own claims that it would unilaterally withhold up to \$550m or more of investment in the event of declaration. I also find no evidence to support a belief that VHA or Optus would or could bridge the coverage gap with Telstra or that customers who are captive to Telstra today will be presented with a credible choice of network provider in the future. There is, in other words, clear evidence to show that the benefits of declaration exceed any potential costs by a margin of appreciation which far exceeds anything even Professor Yarrow would require."

Indeed, this is precisely the same conclusion reached by Dr Ritzmann. In his second independent expert report, he states the following:

"The ACCC's Discussion Paper notes in some detail that mobile telephony markets may work differently in different geographic locations of Australia, and the Yarrow Report attributes great importance to the idea of competition on coverage. This underscores the uncontroversial proposition and my belief that location matters greatly to end-users, and that end-users cannot switch readily between services delivered in different locations, because this would require traveling to the other location in order to make a mobile phone call. This can similarly be seen quite compellingly in some facts provided by Telstra in its submissions regarding the drivers of end-users' purchasing decision. Telstra's data show that just over 40% of all customers surveyed chose their provider in 1H2016 on the basis of which network offered better coverage as one of the factors. Strikingly, the data also show that 70.2% of Telstra customers cited coverage as a reason for their choice of provider, in contrast to 24.2% and 17.6% of Optus and VHA customers (respectively) who cited coverage

as a driver of network choice. In my view, this broadly appears to be a picture of different customer groups (some who require regional coverage, some who don't) roughly self-selecting into the different providers based on whether those MNOs can provide services in the different required locations. In respect of those customers who self-select into Telstra because they value coverage in the Telstra-only areas, Telstra is the only provider capable of meeting their needs, which conveys market power on Telstra in respect of those customers (I will return to this below)."

"The Yarrow Report helpfully states the following: "If coverage has value to a sub-set of HD [high density] end users, increasing coverage relative to rivals, whether by increasing an advantage or decreasing a disadvantage, has financial payoffs to an MNO in the form of increased revenues from HD customers, either by allowing a higher price to be sustained or by increasing sales volumes or both." In this description, Professor Yarrow acknowledges the market power that arises from an MNO having wider coverage than its rivals. Other statements throughout the documents similarly underscore this point. Moreover, Professor Yarrow asserts that the MVNOs operating on Telstra's network will provide a significant competitive constraint on Telstra. However, Telstra itself states that the MVNOs do not have access to the entire Telstra network, but rather only a subset of it constituting 1.6 million square kilometres of Telstra's total network coverage of 2.4 million square kilometres. This underscores the desirability to a MNO of having asymmetric coverage superior to its rivals, and the existence of the market power arising from it.

It is my opinion that this local market power, leveraged into other areas including by way of the mechanism I have outlined, accounts for at least some of Telstra's price premium as I have outlined in my First Report."

Lastly, VHA also suggests that the ACCC look at the financial information regarding Telstra's profitability. This profitability has been consistently very high by global standards, even at the time that Telstra's NextG network was deployed a decade ago. Telstra's profitability has continued to increase since that time.

VHA has previously shared with the ACCC, as evidence, financial information that demonstrates the surprisingly high level of profitability of Telstra.

For example, in May 2005, an analyst note from Christian Guerre at Goldman Sachs JBWere included the following comments (at page 1):

"Australian mobiles market? Competitive? You must be kidding.

Conventional wisdom suggests the Australian mobiles market is highly competitive, with revenues and margins under intense pressure.

In our view nothing could be further from the truth. Our analysis indicates the Australian mobiles market is currently a highly profitable industry with improving returns and an attractive payback."

VHA also notes that many other industry reports point to the high level of concentration of Australia's mobiles markets and question the level of competitiveness. IBISWorld, for example, describes the mobiles industry as "one of the highest levels of concentration in the Australian economy". In the IBISWorld Industry Report J5802 (Wireless Telecommunications Carriers in Australia), dated March 2016, IBISWorld comment as follows (p18):

"The industry has one of the highest levels of concentration in the Australian economy. The three major players account for over 90% of industry revenue."

1.3 Telstra's charges cannot be justified by cross-subsidy claim

1.3.1 Submissions made by Telstra

Telstra implies in its submission that Telstra is cross-subsidising its investment into the Telstra monopoly area using the high revenue that it generates from metropolitan areas:

- Telstra claims (p4) that: "In the mobile industry, competition is achieving the important social
 goals of universal service and parity in urban and regional pricing which in other sectors have
 required complex industry and regulatory solutions such as a monopoly provider (nbn co) and
 compulsory levies on all users (USO)."
- Telstra claims (p4) that a competitive dynamic of the mobile industry is: "Network expansion into regional and rural areas that would be uneconomic on a standalone basis".
- Ovum also claims: "Under this broader business case, 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 network leadership position".

VHA disagrees with these claims. VHA has analysed the revenue calculations provided in the Ovum report, and found that Telstra's mobile sites in the Telstra monopoly area may be 'stand-alone profitable' on an aggregate basis depending on how certain inputs are treated in the model.

1.3.2 Response by VHA to those submissions

VHA wishes to make four key points in response to Telstra's submissions:

- First, VHA's analysis of the Ovum modelling indicates that the "Telstra-only" sites may be stand-alone profitable on an aggregate basis depending on how certain inputs are treated in the model. Therefore there may be no need for any cross-subsidy using revenues from metropolitan areas. The ACCC should have data which will enable it to independently arrive at this conclusion.
- Second, VHA's analysis of the Ovum modelling indicates that the costs have been inflated by the inclusion of common costs that are not incremental. These common costs are not normally taken into account when making an NPV decision to extend incremental coverage.
- Third, VHA's analysis indicates that many of the sites claimed by Telstra to be unprofitable on a stand-alone basis could be profitable under a range of reasonable assumptions assuming 100% market share for consumers within the vicinity of the site.
- Fourth, Ovum's financial modelling does not appear to include the very extensive subsidies
 that Telstra has received from federal and state governments, and from customers (such as
 mining companies), to deploy sites that would otherwise be uneconomic.

VHA has addressed each of these points in turn below with supporting evidence. VHA also refers back to its Original Submission that provides extensive further evidence on these points.

1.3.3 Evidence #1: The Telstra-only area is stand-alone profitable

For the purposes of this submission, VHA has sought to "reverse engineer" the financial model provided by Ovum in order to identify the basis for Ovum's conclusions. In doing so, VHA has sought to confirm the magnitude of the cross-subsidy that the modelling implies could be required in order for Telstra to sustain its regional mobile network.

VHA was concerned that Telstra has not stated the magnitude of that cross-subsidy anywhere in its submission, suggesting that the figure was lower than Telstra's submission appears to indicate. VHA was concerned that Telstra was basing a significant part of the arguments in its written submission on an economic model that did not support Telstra's conclusions.

As identified below, it is clear that Ovum's model is likely to overstate the actual net cost to Telstra of its regional mobile network once revenues were taken into consideration.

Based on VHA's analysis and assuming the results of the Ovum modelling are robust, then depending on how certain inputs are treated, the model suggests Telstra's mobile sites in the Telstra monopoly

area could be 'stand-alone' economical on an aggregate basis and do not need to be subsidised using revenues from metropolitan areas at all.

Moreover, even if VHA's analysis assumed unreasonably favourable variables to Telstra, the resulting magnitude of the subsidy is trivial relative to the size of the monopoly rents that Telstra collects.

VHA notes that the reverse engineering required access to the confidential version of Telstra's submission and only a limited group of personnel at VHA were granted access. VHA can step the ACCC team through this analysis by way of a presentation.

The ACCC would be in possession of data that would not be available to VHA. The ACCC will be able to independently arrive at the above conclusion.

1.3.4 Evidence #2: Common costs distort Ovum's modelling

In its modelling, Ovum has [CIC ends]

Specifically, the Ovum report has identified a basket of costs that Ovum describes as "indirect operating costs". These are defined in the Ovum report (p15) as follows:

"Indirect operating costs: In considering the indirect operating costs associated with each site, we included all remaining Telstra mobile operating costs. This pool of costs includes customer care, billing, marketing, network maintenance and administration, and was derived from Telstra overall mobile EBITDA margin reported for FY 2016 and allocated as a proportion of revenue."

The costs that have been added by Ovum as indirect operating costs are significant and change the overall cost calculations. [CIC begins][CIC ends]

Importantly, non-incremental common costs (or Ovum's "indirect operating costs") are not normally taken into account in the NPV of an incremental site build as they are not an incremental cost that arises from the build of the site. Rather, they are common costs that have already been incurred in operating the entire mobile network and would be incurred irrespective of whether the new site was built.

By including such common costs, Ovum's modelling dramatically overstates the so-called unprofitability of Telstra's regional mobile network.

In turn, this impugns and undermines the credibility of Ovum's conclusion that "*Telstra's business case for these investments must consider broader revenue factors aside from direct revenue*", such as "*effective subsidisation of remote customers and travellers by urban customers*".

1.3.5 Evidence #3: VHA's natural monopoly financial modelling

VHA's natural monopoly financial modelling as provided to the ACCC in VHA's Original Submission showed that it would be possible to replicate Telstra's network in a number of regional areas assuming that VHA was able to obtain Telstra's 100% market share in the those areas.

VHA's calculations indicate that Telstra may be significantly under-stating the extent to which profitable sites are actually profitable, confirming VHA's analysis of Ovum's modelling as identified above and below.

Telstra's monopoly coverage areas are therefore significantly more profitable than Telstra would have the ACCC believe on a 100% market share basis.

VHA invites the ACCC to compare VHA's financial modelling with that of Ovum, as VHA has done.

1.3.6 Evidence #4: Ovum's modelling does not include the subsidies to Telstra

Ovum's financial modelling does not appear to include any recognition or quantification of the government subsidies that Telstra has received to build the relevant sites. Ovum's financial modelling therefore does not include any adjustment to the asset base to subtract out the subsidies.

Similarly, Ovum does not include any adjustment to the depreciation profile to reflect the likely fully- or partly-depreciated nature of many of the Telstra sites. There is also no transparency in the Ovum report regarding the depreciation rate that was applied to some of the longer-lasting assets, such as towers. VHA has therefore found it difficult to independently audit the Ovum modelling.

Given these features of the Ovum report, VHA again believes that it significantly overstates the actual costs that Telstra has incurred (and continues to incur) in operating its mobile network in the Telstra monopoly area.

The ACCC should be in possession of data that would allow it to independently confirm these results.

1.4 Declaration will cause retail prices to unambiguously fall

1.4.1 Submissions made by Telstra and Optus

Both Telstra and Optus assert in their respective submissions that declaration of roaming could lead to an increase in prices for mobile services, but for different reasons:

 Telstra claims (p4) that: "While MNOs continue to expand their competing coverage, the best way to ensure customers in Telstra-only areas get the benefits of competition is nationally averaged pricing, which declared roaming could unwind."

- Telstra claims (p5) that: "Customers would face higher prices. The roaming charge would need
 to be seven times the current retail revenue to recover site costs. Service providers could
 abandon national pricing to limit the impact of higher prices to only those customers that
 roamed. Regional and rural customers would pay more for their services than customers in
 metropolitan areas".
- Optus claims (p3) that: "There is a real risk that mobile coverage will be capped and that prices will increase."
- Optus claims (p3) that: "Whilst roaming may increase the choice of provider available in some regional areas, this is unlikely to lead to lower mobile prices. Mobile operators currently adopt a national pricing approach with regional customers receiving the same services and prices as metropolitan customers. Even where customers have no choice of provider they benefit from competition by virtue of the fact that mobile operators compete on the basis of their national retail plans. Rather than reduce prices it is more likely that regulation will lead to regional based pricing or increased national pricing as MNOs adjust their plans to reflect the costs of a roaming service."

VHA disagrees with these claims. VHA is not aware of any evidence to support these claims. Rather, the evidence indicates that prices would unequivocally fall.

1.4.2 Response by VHA to those submissions

VHA wishes to make five key points in response to Telstra's submissions:

- First, if domestic mobile roaming is declared, VHA could offer an optional full coverage product (as well as VHA's existing coverage product) that undercuts Telstra's monopoly pricing.
- Second, the declaration of domestic mobile roaming will lead prices to unequivocally fall and consumers that seek full coverage will have a choice of providers other than Telstra.
- Third, [CIC begins][CIC ends] and this has not caused prices to rise. Rather it has enabled VHA to invest and compete more effectively in regional Australia and has increased the competitiveness between VHA and Optus.
- Fourth, notwithstanding the first point, VHA is not aware of any instances globally where roaming has led to geographically unbundled pricing or rises in prices.

• Fifth, the nature of the decrease in retail prices would be driven by the access pricing construct adopted by the ACCC, so is ultimately a matter which is within the ACCC's control.

1.4.3 Evidence #1: VHA could offer an optional premium coverage product

As VHA understands it, Telstra's suggestion that prices will rise is based on an assumption that VHA would force all of its consumers to acquire full roaming coverage (even though they may not want it). This assumption is incorrect. That strategy is a current Telstra strategy, not a future VHA strategy.

VHA could propose to offer domestic mobile roaming services as an optional feature for VHA customers. Those customers that are willing to pay for full coverage in regional Australia would have the ability to 'opt in' to the full coverage. Those customers that are not willing to pay for full coverage would remain on their current call plans and pricing – or would simply not make use of the additional coverage available.

By doing this, VHA would provide a competitive alternative to Telstra in relation to the supply of a full coverage product without any need for VHA to increase existing retail prices. Moreover, Telstra customers will then have the opportunity to acquire a full coverage product from VHA at a lower price than they are currently acquiring that product from Telstra.

By way of evidence, VHA points to its extremely popular \$5 a day international mobile roaming service.

1.4.4 Evidence #2: Impact on pricing is that prices would unequivocally fall

VHA cannot envisage a scenario where the declaration of roaming would result in an increase in overall retail prices. Telstra's and Optus' claim that prices may rise is fanciful. Ironically, the more likely outcome is that, if roaming is not declared, Telstra would continue to increase (or, more precisely, not decrease as much as it should to reflect reducing data costs) its mobile retail prices over time, as it has been doing in recent years (as evidenced by the ACCC's own telecommunications reports).

[CIC begins][CIC ends]

In relation to the full coverage product, Telstra is the only MNO that currently offers this product and Telstra charges a price premium (as evidenced by the report by The CIE). Declaration of a domestic mobile roaming service would enable VHA to enter the regional market and offer a full coverage product at prices that undercut Telstra, delivering real competition to those consumers that seek full coverage. Prices would unequivocally fall.

Telstra has claimed in the public domain that providing mobile roaming access to the Telstra monopoly area would be "unfair" and would "erode Telstra's retail differentiation". These claims may be true if Telstra's monopoly area could be easily replicated by competition and there were low barriers to entry. In such circumstances, if Telstra made excess returns, then the forces of competition would remove those returns. However, these claims are not true in circumstances where Telstra leverages

from a natural monopoly with insurmountable barriers to entry. In such circumstances, the declaration of domestic mobile roaming is the only means by which competition can occur to constrain Telstra's pricing.

Following the declaration of domestic mobile roaming, VHA would be able to offer a full coverage product to all Australian consumers who wish to acquire that product. As a consequence, Australian consumers would have greater choice. VHA would anticipate that the price for full coverage would unequivocally fall relative to Telstra's current price points.

VHA has no knowledge of Optus' competitive strategy if domestic mobile roaming were declared. However, a rational MNO in the position of Optus would adopt a very similar strategy to VHA. Again, prices would fall. If Optus were to seek to use the declaration of domestic mobile roaming as an excuse to raise prices, then VHA would undercut Optus and would win market share from Optus. Any such strategy by Optus would not be sustainable.

Relevantly, Mr Feasey explains the downward pressure on prices that would occur if the ACCC declared domestic mobile roaming:

"The second of these quotations is the closest to my position. The reasoning is simple. Declaration will allow VHA and Optus to compete for a group of urban users who value coverage and who would not previously have regarded VHA and Optus as credible substitutes for Telstra. Unless wholesale prices were set in a very perverse way, more competition is likely to result in lower retail prices, not least because it would make little sense for VHA and Optus to buy domestic roaming from Telstra (or for VHA to participate so actively in this enquiry) if they had no intention of using it to acquire customers. Acquiring market share is likely to require VHA and Optus to discount against Telstra's price and for Telstra to respond in kind (this is the kind of price competition to which, as I noted earlier, Professor Yarrow seems to attach relatively little importance but which I think is critical in this enquiry and to the LTIE in this case). The prices paid by urban users who do not value coverage would be likely to remain undisturbed, since declaration has no impact on competition for this group of users (I explained at some length in my original report why they would not see their prices rising and why competition would ensure that they could not be forced into buying more coverage than they required). However, the prices paid by urban users who value coverage are also the prices that are likely to determine the prices paid by rural users for their service, since both require the same coverage (i.e. the 'geographic differentials in quality' to which Professor Yarrow refers to do not apply for these groups of users, even if they do apply as between rural users and urban users who do not value coverage) It follows that if prices for urban users who value coverage fall as a result of declaration, then so too will the prices paid by rural users."

1.4.5 Evidence #3: VHA already acquires roaming and prices have not increased

The claims by both Telstra and Optus fail to recognise that [CIC begins][CIC ends]

The claims by both Telstra and Optus also fail to recognise that VHA would grow market share as a consequence of the declaration of domestic mobile roaming. VHA anticipates, for example, that Telstra could lose market share in the order of [CIC begins][CIC ends] in the medium term based on those assumptions made by Ovum. That market share would be redistributed to Optus, VHA and others.

The increase in incremental revenue to VHA from the growth in market share would outweigh any increase in costs to VHA, meaning that VHA would be in a position to reduce prices, not increase them. Prices would unambiguously fall.

VHA assumes that Optus is in the same position as VHA and that it would grow market share if domestic mobile roaming were declared. [CIC begins][CIC ends]

From a Telstra perspective, Telstra is clearly over-recovering its costs by a huge margin at its current retail pricing. Given the extent of Telstra's excess revenue, there would be no cost pressure on Telstra to increase prices. Rather, Telstra would need to respond to competition from VHA and Optus by decreasing its retail prices. Prices would unambiguously fall.

By way of evidence, VHA points to the witness statement of Iñaki Berroeta, Chief Executive Officer (**CEO**) of VHA, and the second expert report by Mr Feasey.

1.4.6 Evidence #4: VHA is not aware of price increases in any other country

VHA is not aware of any evidence that retail prices have increased as a result of the mandating of domestic mobile roaming arrangements in any other country. Rather, as far as VHA can ascertain, prices have declined.

VHA is also not aware of any evidence that the mandating of domestic mobile roaming has led to any geographic deaveraging of mobile prices in any country in the world where roaming has been mandated. The geographic averaging of mobile prices occurs due to the inherent mobility of mobile consumers and the technical difficulties in implementing charging arrangements where the precise location of a mobile consumer may change over time and may not be unequivocally known.

Telstra would fly in the face of global mobile industry convention if it sought to formally geographically deaverage mobile prices, even if this were technically possible (which is doubtful). Telstra's claim that mobile prices could be formally geographically deaveraged is entirely spurious.

VHA notes that neither Telstra nor Optus have provided any international examples to support their baseless assertions that prices will rise if the ACCC declares domestic mobile roaming.

1.4.7 Evidence #5: Impact on retail prices would depend on ACCC's pricing

The precise retail price points and pricing structure for domestic mobile roaming at retail will be driven by the wholesale charges for roaming set by the ACCC in its access determination. This is a matter within the ACCC's discretion, so the ACCC itself has the ability to shape the downward trajectory of retail prices over the coming years by the manner at which it identifies wholesale access pricing.

Given the dependency of retail prices on wholesale prices, VHA is unable to definitively identify the magnitude of the likely decline in retail price, or the precise price points and structure for its domestic mobile roaming offering, until the wholesale access charges have been determined.

However, given the extent of Telstra's over-charging for its premium service, there is clearly scope for a significant price decline in the supply of a full coverage product relative to Telstra's existing prices for that product. The upshot is that prices would unequivocally fall and it defies common sense for Telstra (or Optus) to mischievously suggest otherwise.

By way of evidence, VHA points to the first independent expert report by Mr Feasey that was provided by VHA with its Original Submission partially redacted. This analysis stepped through the various access pricing constructs that could be applied by the ACCC in the context of the declaration of roaming and identified their likely impact on retail prices.

VHA provides the first report by Mr Feasey in full in Part B of this submission.

1.5 Declaration will eliminate Telstra's regional stranglehold

1.5.1 Submissions made by Telstra

Telstra claims in its submission that it faces a real threat of competitive over-build from another MNO that could use facilities sharing arrangements to achieve this:

- Telstra claims (p4) that "Declaration of a wholesale mobile roaming service is not in the longterm interests of end-users (LTIE) because it undermines infrastructure-based competition, particularly in regional and rural Australia."
- Telstra claims (p6) that: "The areas where Telstra is currently the only MNO are not 'enduring bottlenecks' warranting regulated access because the other MNOs are continuing to deploy network and, with nationally averaged pricing, Telstra is not in a position to leverage any advantage."
- Telstra claims (p6) that: "Facilities sharing arrangements are effective in regional and rural areas: in fact, there is more facilities sharing on Telstra towers in these areas than in metropolitan areas. Telstra would support an industry review of facilities access arrangements, including the non-carrier tower owners."

Ovum claims (p4) that: [CIC begins][CIC ends]

VHA disagrees with these claims. Telstra's claims are not supported by the evidence (including Telstra's own evidence). Telstra publicly maintains that infrastructure competition is possible, but in practice does everything in its power to raise barriers to expansion by VHA.

1.5.2 Response by VHA to those submissions

VHA wishes to make six key points in response to Telstra's submissions:

- First, there is a natural monopoly in the deployment of mobile infrastructure in regional Australia, so it follows that Telstra's submissions cannot be correct. Ironically, Telstra's submissions confirm there is a natural monopoly.
- Second, Ovum's financial modelling makes many unrealistic assumptions regarding the potential for competitive over-build that bear little correlation to actual market conditions.
- Third, VHA's Natural Monopoly Financial Modelling (Financial Model) had already assumed facilities sharing to the maximum extent, but it is still uneconomic for VHA to build a competing network in the natural monopoly areas.
- Fourth, in practice, Telstra has taken all manner of steps to raise barriers to network deployment by VHA, further impeding the practical ability of any infrastructure deployment to occur. Telstra's definition of "regional Australia" is also misleading.
- Fifth, access to domestic mobile roaming services on commercially reasonable terms is a critical factor that enables VHA to invest, as evidenced by VHA's Original Submission to the ACCC. A failure to declare domestic mobile roaming could harm investment.

• [CIC begins][CIC ends]

VHA has addressed each of these points in turn below with supporting evidence. VHA also refers back to its Original Submission, given the Original Submission already provides extensive evidence on these points.

1.5.3 Evidence #1: There is a natural monopoly in regional Australia

VHA provided detailed material in its Original Submission evidencing that a natural monopoly exists in regional Australia.

VHA's material included a Financial Model that identified the precise reasons why there is natural monopoly, namely that the market share of an MNO that would be needed to sustain a full network

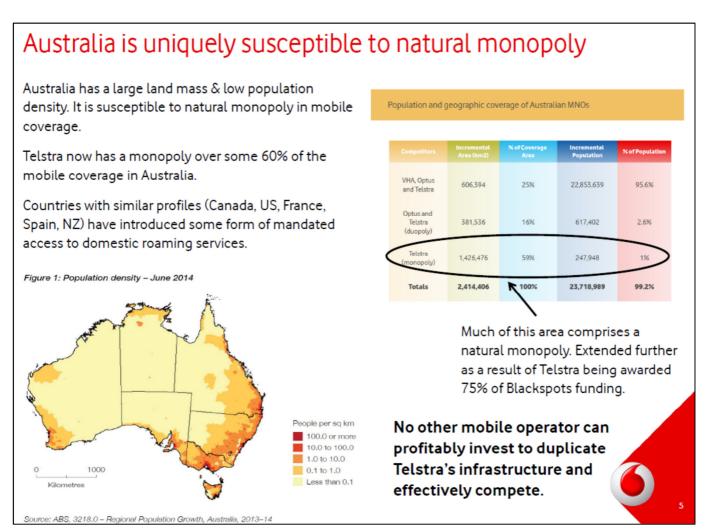
investment exceeds 50% in most areas in the Telstra monopoly area. Accordingly, only one MNO can sustain a network in such areas.

As confirmed in Ovum's analysis, there are many mobile sites in the Non-Competitive Areas where it is not even profitable for an MNO with a 100% market share to invest on an individual basis, hence government subsidies are required.

VHA also asked Dr Ritzmann to prepare an independent economic report on these issues and to critique VHA's Financial Model provided to the ACCC in VHA's Original Submission.

VHA does not consider that its conclusions are controversial. Many of these conclusions are selfevident and were already included in the ACCC's initial Discussion Paper. VHA's conclusions are consistent with the economic literature and extensive international experience.

Some of the key points made by VHA in the Original Submission are summarised in following slide:



VHA notes that the material submitted by Ovum in Telstra's submission actually confirms VHA's evidence. The Ovum material identifies that there are many Telstra sites in the 'unprofitable' category,

as one would expect to arise in circumstances of natural monopoly. It follows that there is an outer concentric circle of sites where not even one mobile network infrastructure can profitably supply those sites, even with a market share of 100%; hence government subsidies have been required. VHA's evidence differs from Telstra's evidence in the number of sites in this category; both VHA and Telstra apparently agree that this category exists. This category is undeniably a natural monopoly.

Stepping inward, there must necessarily be a zone of sites in which it is only profitable for a single mobile network to supply the sites. VHA's evidence again differs from Telstra's evidence in the number of sites in this category, but again both VHA and Telstra apparently agree that this category exists. This category is also undeniably a natural monopoly.

Stepping further inward there must therefore be a zone of sites in which it is only profitable for two mobile networks to supply the sites. This is a duopoly with the same type of barriers to entry as the natural monopoly. While VHA could potentially have been the second network in those areas, the existence of a first mover advantage in mobile network deployment means that Optus has captured this duopoly position on an enduring basis and is unwilling to share it. VHA can only engage in infrastructure-based competition in those areas where it is economically efficient to have three or more competing mobile network infrastructures, otherwise it is reliant on domestic mobile roaming..

Indeed, in Dr Ritzmann's comments in his second independent expert report (provided in Part B of this submission):

"This leads me to make two comments on the Ovum Report regarding the issue of duplication. First, the financial modelling results of the Ovum Report up to its last half-page are broadly comparable to the results in my First Report and they support the proposition that it would be uneconomic to duplicate mobile telephony infrastructure in the less densely populated regions of Australia."

In VHA's view, the debate in this declaration inquiry is not, therefore, so much whether a natural monopoly exists in mobile network infrastructure in regional Australia. All parties seem to agree, expressly or implicitly, that there undeniably is such a natural monopoly given the large land areas and low population density in the Non-Competitive Areas. The debate in this declaration inquiry is more over the magnitude and effect of that natural monopoly. More specifically, how much of the existing Telstra monopoly area could be profitably over-built by either Optus or VHA? How much of the existing Telstra-Optus duopoly area could be profitably over-built by VHA? VHA has addressed these questions in its Original Submission and provides further comments below.

Importantly, as a natural monopoly exists in the Non-Competitive Areas, it follows that Telstra's various submissions (that infrastructure-based competition will solve the problem in Non-Competitive Areas) cannot be correct and are overstated. In circumstances of natural monopoly, there can only ever economically be a single mobile network as it is not economic to replicate that infrastructure with

a further mobile network. In essence, there is no scope for efficient investment and hence no scope for infrastructure-based competition in the natural monopoly areas, as claimed by Telstra.

This conclusion is borne out by the practical reality of mobile network investment in regional Australia today. Telstra has a mobile network that covers an area almost twice that of Optus and VHA – and Telstra's coverage advantage continues to grow. The remaining two MNOs have been unable to make a business case to invest to match Telstra.

[CIC begins][CIC ends]

Moreover, for all the reasons identified in VHA's Original Submission and in the material provided by Dr Ritzmann, a natural monopoly in regional Australia will be an "enduring bottleneck" – and has been since government money was first provided for regional CDMA deployment almost 15 years ago. There is also an insurmountable "first mover" advantage arising from the sunk costs involved in mobile tower construction, as quantified in the various responses to the ACCC's information requests. Once Telstra (or any other MNO) has captured a natural monopoly location, it is not economical for any other MNO to build competing infrastructure at that location.

The same logic also applies in the duopoly areas.

By way of evidence, VHA refers to its Financial Model, the expert report by Mr Feasey, and <a href=[CIC begins][CIC ends]

1.5.4 Evidence #2: Ovum's financial modelling makes unrealistic assumptions

Ovum's financial modelling is, to put it simply, unusual.

On the one hand, Ovum has clearly overstated the costs of regional network build. As identified by VHA below, there does not appear to be any recognition of any government subsidies in the Ovum financial modelling. Ovum has also loaded the incremental regional network with very substantial non-incremental common costs that would not normally be included when determining the NPV of an incremental network extension.

On the other hand, Ovum reaches a conclusion that even with these very high (and overstated) costs, that [CIC begins][CIC ends] of Telstra's regional network could be over-built.

Firstly, it is worth noting that Ovum therefore appear to admit that there is a natural monopoly in regional Australia. If there were any possible business case for duplication of Telstra's regional mobile network, we assume that Telstra and Ovum would have put it forward, but they have not.

VHA considers that the difference between Ovum's financial modelling and reality is in the treatment of revenues from increased market share. The issue is far more nuanced than Ovum assumes and represents.

Ovum appears to make a key assumption that if Optus invests in a new site in a particular area, the market share of Optus in that area will immediately jump to Optus' national average market share (i.e. 27%) as soon as that investment has occurred as from Day 1. Ovum also implicitly suggests there is a linear relationship between coverage and market share. Neither of these assumptions are reasonable and they do not reflect market reality.

In relation to the latter point, as identified in the expert reports (both first and second) provided by Mr Feasey in Part B of this supplementary submission, there are a group of consumers who value coverage above all else. These consumers tend to be "all or nothing" consumers in that they will default to the largest coverage provider.

Given this conclusion, there is not a linear relationship between coverage expansion and market share growth. Rather, the relationship can be viewed as 'logarithmically convex' (i.e. there is a trivial effect until the coverage areas start to equalise, then there is a dramatic effect as coverage-sensitive customers start to see the second largest provider as a real alternative). This means that a substantial investment into coverage does not necessarily translate into any meaningful growth in market share, unless the investment into coverage is of such a magnitude that the coverage starts to equalise.

Based on Optus' current pace of investment and VHA's analysis of the Ovum report, it will take Optus more than 400 years to match Telstra's coverage measured today.

As well as the non-linear relationship between coverage and market share, VHA also notes that Ovum's assumption of an immediate jump as at Day 1 to the national average market share of the investing MNO following an investment does not reflect the market reality:

• Time component to market share: There is an important time lag between the point at which an investment occurs and the point at which that investment translates into increased revenue by increased market share. In the Telstra monopoly area, Telstra currently has a market share of 100% by definition. Any investment into the Telstra monopoly area would start from the position of eroding this 100% market share, so a second entrant would necessary start at 0% market share as at Day 1.

VHA's experience is that market share growth takes significant time, including, due to the need for marketing/advertising and due to the length of mobile contracts. In VHA's modelling, VHA has conservatively estimated [CIC begins][CIC ends] per annum in market share growth – which is at the very high end of growth which Vodafone Group has seen market share for new entrants or new entrants in particular areas. This experience is borne out across the Australian telecommunications market generally, where (absent mergers) market share tends to change relatively slowly – as evidenced by the ACCC's own annual telecommunications sector reports.

In contrast, Ovum claims that Telstra's network can be over-built in some areas because, for example, Optus would be able to apply its 27% national average market share immediately to any new site that is built. Telstra's experts have assumed a revenue component for a new site consistent with Optus' general market revenue at that 27% market share. This will never be the case. In this example, Optus will start from a position of 0% market share when investing into a new area and will gradually increase this over time in increments.

A domestic mobile roaming arrangement accelerates investment by allowing the process of market share growth to commence earlier.

• Complementary investments required to increase market share: Ovum also under-value the necessity to invest in complementary assets in order to drive market share. These are not only significant costs in themselves, but are a primary reason why it takes significant time to build market share. An MNO could not simply erect new radio equipment and expect to see any significant market share gain without substantial investments in retail stores and staff, local area advertising etc. These cannot be put in place overnight and are key components of any attempt to enter new markets.

For example, in the Optus example above, it is also not practically possible to change consumer perceptions overnight, so substantial additional investment would be required by Optus in marketing and advertising in the geographic area of deployment.

A domestic mobile roaming arrangement accelerates investment by permitting more granular investments to occur over time as a stepping stone to a holistic investment in a new area.

Geographic component to market share: Similarly, there is a geographic component to market share. Telstra's market share does not immediately step down from 100% (in its Telstra monopoly area) to the market average of 48% as soon as VHA installs new radio equipment in a given area; rather it steps down gradually and may stay at 99% for outer towers. Telstra's market share in regional Western Australia is [CIC begins][CIC ends]. Similarly, as evidenced by the regional market shares that VHA has provided to the ACCC, VHA's market share declines to zero as one heads out into regional Australia from metropolitan areas. The sites proximate to Telstra monopoly areas may involve a VHA market share of only a few percentage points, while Telstra accounts for almost the entire market share.

A domestic mobile roaming arrangement overcomes these geographic difficulties by allowing VHA to seek to grow market share holistically across an entire area. Hence network effects will mean that VHA will be able to compete for customers more effectively than on the basis of site-by-site investments. By doing so, VHA will have a greater chance of increasing market share at a particular site to a level that can sustain investment.

A roaming arrangement therefore accelerates investment by enabling immediate holistic competition across an area and providing the benefit of network effects, rather than site-by-site competition.

For the reasons set out above, Ovum's conclusion that [CIC begins][CIC ends] of Telstra's network can be easily over-built is manifestly incorrect. Rather, there are very substantial and practical barriers to entry for a second entrant, as identified in VHA's financial modelling shared with the ACCC. Domestic mobile roaming reduces those barriers to entry.

By way of evidence, VHA refers to its Financial Model and its assumptions regarding market share growth set out in its Financial Model.

1.5.5 Evidence #3: VHA's Financial Model assumes maximum facilities sharing

Telstra's submission makes much of the potential for facilities sharing. Telstra puts on a witness statement by Robert Joice (**Joice Statement**) that describes the extent of tower collocation and facilities sharing.

This declaration inquiry is not focussed on the extent of current infrastructure sharing (i.e. the three mobile network areas); this declaration inquiry is focussed on network sharing in the Non-Competitive Areas.

The key question in this declaration inquiry is whether the existing facilities access regime can provided an alternative to domestic mobile roaming such that competition can occur without any need for declaration of domestic mobile roaming in the Non-Competitive Areas. The answer to this question is simply that tower collocation is not a substitute to domestic roaming at all in the Telstra monopoly areas, and is not an effective substitute in the remainder of the Non-Competitive Areas (rather roaming is a necessary precursor and catalyst for infrastructure-based competition and hence facilities access). In any case, the Financial Model by VHA that has been shared with the ACCC has assumed tower collocation to the maximum extent practically achievable. VHA's modelling identifies that even very extensive tower collocation does not overcome the natural monopoly problem. VHA's modelling demonstrates that the low population density in regional Australia creates an insurmountable problem that only the declaration of regional roaming can overcome.

[CIC begins][CIC ends]

By way of evidence, VHA refers to its Financial Model and its assumptions regarding tower collocation set out in that Financial Model.

Finally, with the greatest of respect to Ovum, actions do speak louder than words. It cannot seriously be suggested that there is an obvious and profitable business case for substantial expansion in regional Australia, but that three of the most successful and experienced international mobile network challengers (Vodafone, Hutchison and Singtel) could be blind to it. If it was as easy to overbuild half

of the entire Telstra regional network as Ovum represents, then it would have already occurred. Given that neither Optus nor VHA have had the ability to make the investment that Ovum claims is possible, this begs the question as to where Ovum's financial modelling differs from reality.

1.5.6 Evidence #4: Telstra has sought to frustrate competitive build

VHA finds it ironic that in the public domain Telstra makes all manner of submissions as to how effectively the regulatory regime is working to deliver infrastructure-based competition, but behind the scenes Telstra adopts a wide range of tactics to successfully frustrate competitive build.

VHA has summarised some of the practical barriers to entry that VHA faces in investing in regional Australia in the following slide: [CIC begins][CIC ends]

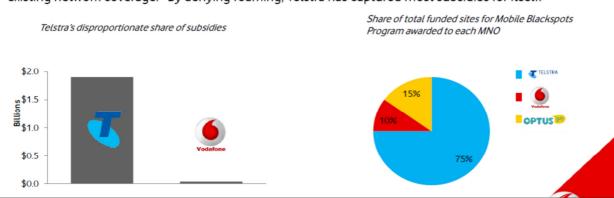
Of the two rounds of Mobile Blackspots funding already completed, it is no accident that Telstra has won 577 of the 765 sites awarded under the scheme, meaning that Telstra was not only awarded 75% of the total sites, but Telstra's natural monopoly area was extended even further, making it even less likely that any other MNO could win any substantial number of sites in further rounds. The Blackspots are by definition beyond Telstra's network coverage, meaning any other operator faces a more and more tenuous business case in building isolated sites up to 1.55 million square km remote from their network.

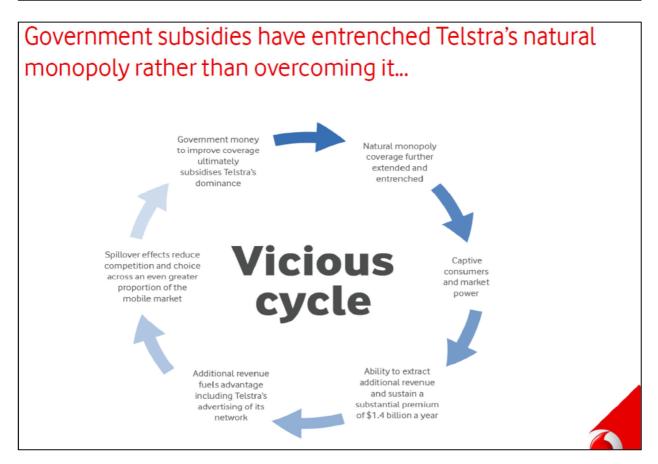
Declaration of domestic mobile roaming is the only way in which the necessary competitive tension could be quickly injected into the process for allocating regional mobile subsidies going forward, and increase the ability of public subsidies to deliver more on the government's coverage objectives.

VHA summarises its key points in the following two slides:

Telstra's refusal to supply roaming has enabled it to capture most public subsidies for its private use

- In other countries, infrastructure sharing and roaming arrangements have been the accepted policy solution for delivering competitive regional coverage. Australia's policy solution has been to award coverage subsidies.
- In theory, subsidies are awarded on a contestable basis. However, in practice, there is a high barrier to other MNOs winning subsidies since sites are 1.4m sq km or more remote from other MNOs networks. Telstra raises further barriers through eg transmission pricing. The lack of contiguous coverage makes with existing network coverage. By denying roaming, Telstra has captured most subsidies for itself.





[CIC begins][CIC ends]

1.5.7 Evidence #5: Roaming is a critical factor underpinning VHA investment

As VHA identified in its Original Submission to the ACCC, access to domestic mobile roaming has been an integral part of VHA's ability to invest in regional Australian to date. The evidence that VHA provided to the ACCC in its Original Submission explained that VHA has adopted the following investment strategy in regional Australia:

[CIC begins][CIC ends]

By way of evidence, please refer to the witness statement of Iñaki Berroeta, Chief Executive Officer (CEO) of VHA (provided in Part B of this supplementary submission).

For the benefit of the ACCC, a brief summary of the key reasons why domestic mobile roaming is so important to VHA is set out in the following slide:

Why is roaming so important to Vodafone?

- Roaming acts as a stepping stone for investment by enabling market share growth to a point where investment becomes profitable. Roaming underpins VHA's investment strategy.
- Roaming enables a competitive mobile service to be provided in circumstances where network economics do not support three competing mobile networks (i.e., areas of market failure).
- Roaming is the only basis on which effective competition can be delivered to regional Australia.



- Vodafone cannot compete for most government regional subsidies if it does not have contiguous roaming coverage with subsidised sites.
- Telstra leverages and bundles its natural monopoly into competitive areas in such a way that VHA cannot compete for a large part of the market.

1.5.8 [CIC begins][CIC ends]

1.6 Coverage-based competition is not affected by declaration

1.6.1 Submissions made by Telstra

Telstra repeatedly emphasises the importance of coverage-based competition in its submission and claims that declaration of roaming would place that coverage-based competition at risk. This is one of Telstra's fundamental arguments:

- Telstra claims (p6) that: "Telstra acknowledges the concerns of stakeholders in regional and rural areas about better coverage which they consistently value more than having a choice of retail provider. However, the coverage race is not over the three MNOs have announced plans to extend coverage in regional and rural areas and the recently announced Round 2 of the Mobile Black Spot Programme will add another 266 mobile sites. Telstra has established its own planned co-investment funding program with a \$100-200 million commitment."
- Telstra claims (p4) that: "The coverage race between MNOs despite Australia's vast landmass and dispersed population, coverage of the second and third MNOs in Australia is broader than in countries with higher population densities, e.g. the UK, the US, Canada, New Zealand, France and Germany"
- Telstra claims (p4) that "Declaring mobile roaming would put all of this at risk. It would disrupt
 the highly competitive mobile market by eliminating the race for coverage between mobile
 network operators (MNOs) which incentivises and funds investment in expanding and
 upgrading mobile networks across Australia."
- Telstra claims (p6) that: "The strength of the 'future without declaration' has already been demonstrated twice before following the ACCC's decisions not to declare roaming in 1998 and 2004. The race for coverage has been repeated across 2G, 3G and 4G, delivering improved coverage and more innovation with each technology generation."
- Telstra claims (p6) that: "The 'future with declaration' neutralises coverage as a fundamental driver of competition. It will see investment, competition and innovation focusing on metropolitan and other areas which are economically viable on a standalone basis, with a 'hinterland' of thinner, more limited coverage, less innovative technology and at higher deaveraged prices in regional and rural areas."
- Telstra claims (p5) that: "As Telstra's coverage advantage relies on its 3G network, a 3G-only declaration would still neutralise Telstra's coverage advantage and undermine its incentive to continue to invest in uneconomic areas. There is also not a sufficient difference in customer experience and perceptions of 4G vs 3G to support a race for 4G in areas already covered by 3G roaming"

VHA agrees with the proposition that coverage-based competition is important and has been effective, but VHA believes that Telstra is conflating two different concepts of coverage-based competition. As

such, Telstra's conclusions are fundamentally incorrect and declaration of roaming would promote competition.

1.6.2 Response by VHA to those submissions

VHA wishes to make five key points in response to Telstra's submissions:

- First, Telstra is conflating competition in new technology deployment, with competition relating to the total network coverage footprint. These are two different types of competition that have a different competitive dynamic.
- Second, declaration of domestic mobile roaming has no impact whatsoever on competition for network deployment within the three-network areas, so Telstra's submission significantly misrepresents and overstates the impact of declaring domestic mobile roaming.
- Third, in the Telstra monopoly area, Telstra does not face any coverage-based competition as, by definition, it is not economic for any competitor to deploy a network. Simply put, there is no competition.
- Fourth, Telstra can leverage its monopoly area from regional Australia such that other MNOs cannot place an effective competitive constraint on Telstra's coverage claim in metropolitan markets.
- Fifth, in two-network areas, there is a very high risk of coordinated conduct, as demonstrated by [CIC begins][CIC ends]

1.6.3 Evidence #1: Telstra is conflating two very different types of competition

VHA made the following important point on page 108 of its Original Submission

"Please note this point is critical. The Discussion Paper appears to conflate non-price competition based on absolute coverage beyond 98.2%, with non-price competition based on relative levels of deployment of upgrades and new technologies within the 95.4%. They are entirely different concepts. Coverage-based competition within 95.4% is not affected in any way by declaration and will remain. Declaration will only affect competition based on absolute coverage beyond 98.2%, which is inherently tainted by Telstra's natural monopoly in any event and wholly infective."

VHA has taken the opportunity in this submission to further clarify the intent of VHA's comment given it is critical in responding to Telstra's submission.

VHA considers that there is a fundamental difference between "technology upgrade competition" and "absolute coverage competition":

- "Absolute coverage competition" refers to an MNO advertising to the market that is has the
 network with the largest overall geographic coverage, namely Telstra's advertisements that it
 reaches 99.2% of the Australian population and covers 2.4 million square kilometres.
- "Technology upgrade competition" refers to an MNO advertising that it has deployed a new technology (such as 4G) by way of network upgrade to a certain level within this existing footprint, namely VHA's advertisements that it has deployed 4G to over 22 million Australians.

VHA considers that "absolute coverage competition" has not been effective. The key complication with absolute coverage competition is that absolute coverage can only be achieved by supplying coverage in the Telstra monopoly area. If access to this area is not shared by Telstra (as is currently occurring in Australia), it follows that only one firm can ever supply full coverage, namely Telstra. Accordingly, any competition involving "absolute coverage competition" is tainted by natural monopoly and is not contestable – there is inherently only one supplier of absolute coverage, so there is necessarily no competition in relation to the supply of absolute coverage.

As identified above, competition on the basis of "absolute coverage" has an "all or nothing" character, particularly as Telstra's network is over twice the coverage area of the next largest network. The correlation between an absolute coverage claim and market share is logarithmically convex (as explained above). Neither Optus nor VHA have any realistic ability to competitively challenge Telstra on absolute coverage in the absence of declaration of domestic mobile roaming.

While Optus claims that it can invest into the Telstra monopoly areas, its submission (ironically) evidences that it has not done so. Optus' own submission shows that it has invested approximately \$14.7 million over the past two years with announced future investments totalling approximately \$11 million in regional Australia. At its current pace of investment, Optus will need more than 400 years to catch up to Telstra's coverage as it is measured today.

In contrast, VHA considers that "technology upgrade competition" <u>has</u> been working effectively in Australia in those coverage areas that are served by three mobile networks. It is this competition in these areas that has driven the world class service and various awards that Telstra points to in its submission. There is no doubt that such competition has worked effectively in Australia and it is not disputed by VHA. It is this technology upgrade competition that Michael Wright of Telstra confusingly refers to in his witness statement as the "race for coverage".

However, VHA considers that "technology upgrade competition" has only been working effectively in Australia in those areas that are capable of being served by three mobile networks. Technology upgrade competition has been demonstrably <u>ineffective</u> in those areas that are served by only <u>one</u> mobile network. Evidence is provided by the following table:

Feature	Three mobile network areas	Telstra-only areas	
Number of mobile networks	Three	One	
Population coverage	Up to 95.4%	Beyond 98.2%	
Number of competitors	Three, plus various MVNOs	One	
Mode of competition	Race between the MNOs to deploy new technologies to consumers, resulting in a rollout race for 4G and higher speeds	Only Telstra can provide coverage, so Telstra determines when it wants to provide new technologies such as 4G or higher speeds	
Network quality	Very high with world leading 4G technology and speeds	Not high – currently still 3G with relatively low speeds in the vast majority of the 1.4 million km² Telstra monopoly coverage area	
Customer satisfaction	High	Low	
Pricing	Full range of market pricing	Telstra premium pricing only	

The Telstra submission makes none of the distinctions between the different types of competition and the different competitive dynamics in different geographic areas. Rather, Telstra's submission conflates all of these issues together and proclaims that competition is working effectively, thereby overlooking that some 60% of the Australian coverage area involves a monopoly provider that is not subject to competition.

1.6.4 Evidence #2: Declaration has no impact on competition in 3-network areas

Declaration of domestic mobile roaming impacts on the different types of competition identified above in the following ways, adopting a future with-and-without analysis for domestic mobile roaming:

The upshot of this analysis is that declaration of domestic mobile roaming has no impact on "technology upgrade competition" in the three network areas, so all the features of the market that Telstra has extensively praised in its submission will remain in place and would not be affected in any way by the declaration of domestic mobile roaming. This means that a lot of the criticism directed by Telstra at the declaration of domestic mobile roaming is entirely irrelevant and misguided.

Type of competition	Level of competition without declaration of domestic mobile roaming	Level of competition with declaration of domestic mobile roaming
Absolute coverage competition	No competition. Telstra is the sole supplier with absolute coverage and will control a natural monopoly	High competition. Each of Telstra, Optus and VHA would supply absolute coverage (the latter two via roaming on Telstra's network in its monopoly coverage area)
Technology upgrade competition (three network areas)	High competition	High competition. Declaration of domestic mobile roaming has no impact
Technology upgrade competition (two network areas)	Moderate competition	High competition in the areas that can support more than two networks, as VHA would gain an increased ability to deploy, so Telstra and Optus will be incentivised to deploy faster
Technology upgrade competition (Telstra monopoly areas)	No competition. Telstra would remain the sole supplier and has absolute discretion when to upgrade if network in the Telstra monopoly area	High competition in the areas that can support more than one network, as both VHA and Optus would gain an increased ability to deploy, so Telstra will be incentivised to upgrade faster

Declaration will not harm existing coverage-based competition – Telstra is scaremongering on this...

Declaration will not harm existing coverage-based competition...

- Coverage-based competition currently occurs between the three MNOs in those areas where they can each economically deploy infrastructure, namely to 95.6% of the population (and 25% of the total coverage area).
- Declaration will <u>not</u> apply in those areas, hence the three MNOs will still race to deploy
 the latest technologies. Investment incentives are not affected by declaration in those
 areas at all.
- Declaration will only apply in those areas that can only support one or two mobile networks, namely those areas serving the remaining 4.4% of the population (and comprising 75% of the total coverage area). In around 80% of this declaration area, Telstra is the natural monopoly supplier and faces no coverage-based competition at all.

Coverage-based competition does not exist in those areas that will be the subject of declaration. Declaration will therefore have no impact on investment incentives driven by competition. This is a fundamental point that Telstra glosses over in its submission.

1.6.5 Evidence #3: In natural monopoly areas, no coverage-based competition

As identified above, there is no coverage-based competition in the natural monopoly areas where Telstra is the sole MNO. By definition, no other MNO has the ability to deploy network infrastructure into those natural monopoly areas, so Telstra is the sole source of competition. It follows that declaration could not harm competition in those areas, as there is no existing competition to harm. However, there is some scope to improve competition in those areas by way of a declaration of domestic mobile roaming as identified in the table above.

VHA has provided evidence that Telstra is the sole MNO in some 60% of the mobile coverage area of Australia. This evidence is not disputed by Telstra or Optus.

1.6.6 Evidence #4: Telstra leverages its natural monopoly from regional to metropolitan areas

VHA provided extensive evidence in its Original Submission and above regarding Telstra's ability to leverage its control of the natural monopoly in regional Australia to harm competition in metropolitan areas.

VHA's evidence is provided by way of the independent expert reports of Dr Ritzmann. VHA's evidence is also provided by way of the independent expert reports from Mr Feasey. The conclusions of both experts are documented in VHA's Original Submission and in this submission, so are not repeated here.

However, a summary of these issues is set out in the following slide:

Fundamental competition concern is that Telstra is leveraging its natural monopoly to harm competition

- Fierce coverage-based competition does occur in those areas of Australia that can economically support more than one mobile network, resulting in 'rollout races'.
- Declaration of roaming will have no impact on this coverage-based competition as declaration will
 only be directed at those areas with less than three mobile networks.
- However, no coverage-based competition occurs in the Telstra natural monopoly areas because, by definition, these areas can only support one mobile network.
- When Telstra competes on the basis of <u>absolute</u> coverage, it is leveraging and bundling its natural monopoly position from a non-contestable part of the market into a contestable part of the market. Telstra's advertising conflates these issues.
- No other MNO can compete with Telstra on this basis, so Telstra is not subject to meaningful
 competitive constraints (i.e., for those consumers that value coverage, Telstra has market power to
 charge whatever is likes)

CONCERN: An MNO should not be permitted to capture a natural monopoly in coverage (partly taxpayer funded), refuse to provide access to that monopoly, then bundle that natural monopoly with its retail offering in such a way that no other MNO can effectively compete for a large part of the retail market.

1.6.7 Evidence #5: In duopoly areas, there is a high risk of co-ordinated conduct

VHA set out in its Original Submission various evidence that insufficient competitive tension exists between Telstra and Optus in relation to the supply of domestic mobile roaming services in the duopoly areas to result in commercially reasonable outcomes. [CIC begins][CIC ends]

As the ACCC will be aware, all the factors that are necessary for a high degree of co-ordinated conduct between competitors are present in the case of domestic mobile roaming. These factors are detailed in the ACCC's own Merger Guidelines and were considered previously by the ACCC in detail in the context of the ACCC's review of the merger of Vodafone and Hutchison.

[CIC begins][CIC ends]

VHA has set out more detail in relation to Optus' commercial incentives later in section 3.2 of this submission, including further evidence. Optus' conduct illustrates that there is insufficient competitive tension between Telstra and Optus in the duopoly areas to deliver effective competitive outcomes in those areas.

Objective of promoting A2A connectivity

Contrary to the various express and implicit submissions of Telstra and Optus, declaration will achieve the objective of promoting any-to-any connectivity:

Absence of roaming is causing real consumer detriment and harm: Notwithstanding Telstra's cynical campaign to encourage Telstra shareholders and Telstra-sponsored groups to oppose declaration, all of the Mobile Network Operators (MNOs) agree that regional mobile consumers are currently suffering harm. In Telstra's own words, "more needs to be done". In Optus' own words, "there is scope to improve". VHA agrees – and the declaration of domestic roaming is the obvious regulatory, policy and political solution.

A key cause of regional consumer detriment and harm is an absence of any-to-any connectivity due to Telstra's refusal to supply roaming in the Telstra monopoly area. Not only are consumers in Telstra's monopoly areas left with no choice of supplier and forced to pay Telstra's premium prices, but customers who live or travel to adjacent areas are also left with little choice. The submissions received by the ACCC provide a snapshot of many of the resulting public policy concerns.

For example, VHA customers in the Telstra monopoly area cannot receive SMS alert messages such as emergency bush fire warnings. International tourists may receive roaming coverage, but Australians cannot access the same coverage. Volunteers on different mobile networks cannot communicate during critical search and rescue operations. Regional consumers may need to buy multiple handsets at significant cost. M2M solutions may not work. VHA has quoted examples in this submission.

• Domestic mobile roaming is technically possible and already occurring: Telstra apparently engaged Aetha to provide an exhaustive list of potential "technical issues" with roaming. VHA has now provided evidence that these so-called "technical issues" are largely irrelevant and easily overcome. Domestic roaming arrangements are globally common and already contemplated by the mobile technologies involved. Telstra could easily supply roaming to VHA that was limited to the Non-Competitive Areas.

[CIC begins][CIC ends]

2.1 Status quo leading to real consumer detriment and harm

2.1.1 Submissions made by Telstra and Optus

Interestingly, both Telstra and Optus acknowledge that there is scope to improve the provision of mobile services to regional Australia and that more needs to be done:

- Telstra claims (p4) that: "While competition has produced great outcomes, Telstra acknowledges that more needs to be done to meet the demands of mobile customers, particularly those in regional and rural areas who value coverage above all else."
- Optus also comments (p3) that: "Whilst we recognise that there is scope to improve the
 provision of mobile services to some regional communities and businesses, we do not support
 the declaration of roaming as a means to achieve these improvements."

VHA agrees with Telstra and Optus that the evidence unequivocally demonstrates that regional consumers are suffering real consumer detriment and harm. The parties disagree on whether declaration of domestic mobile roaming is the appropriate regulatory solution.

2.1.2 Response by VHA to those submissions

VHA wishes to make two key points in response to Telstra's and Optus' submissions:

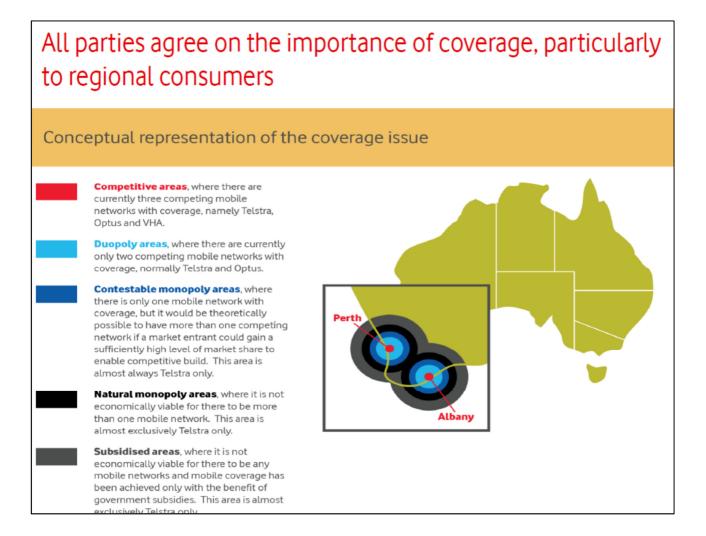
- First, all parties agree on the importance of coverage, particularly to regional consumers.
- Second, the submissions to the ACCC confirm that consumers are suffering real consumer
 detriment and harm arising from the inability of VHA and Optus subscribers to connect with
 Telstra subscribers in regional Australia. Declaration of domestic mobile roaming will
 eliminate this from continuing to occur.

2.1.3 Evidence #1: All parties agree on the importance of coverage

VHA believes that it is clear from the various submissions that the ACCC has received that mobile coverage is regarded as important in regional Australia. This conclusion underpins current government policy and is consistent with the conclusions of the previous regional telecommunications reviews.

VHA provided extensive submissions and evidence on the importance of coverage to regional consumers in its Original Submission, so does not provide any further evidence here.

The following slide summarises the zones of coverage that a VHA customer currently face when travelling between different regional centres, illustrating that regional connectivity is a particular problem for VHA consumers:



2.1.4 Evidence #2: Submissions evidence consumers are suffering harm

VHA has also provided extensive evidence in its Original Submission regarding the harm that regional consumers are suffering due to an absence of competing coverage from VHA in the Telstra monopoly areas. Declaration of roaming would achieve any-to-any connectivity.

VHA notes that a number of the submissions that the ACCC has received underscore this point. Three examples are as follows:

 The recent bush fire emergencies underscore the importance of mobile communications in regional Australia from a health and safety perspective. However, the current Emergency Alert system relies on an SMS-based messaging system. An absence of domestic mobile roaming means that a VHA or Optus customer will not receive the SMS warning if they are located in a Telstra monopoly area. From a public policy perspective, this is potentially life threatening.

For example, the submission from Hon Andrew Broad MP (Federal Member for Mallee) commented:

"Across country Victoria people struggle to make mobile phone calls or access data when required. Not only is this a big concern for the tourism industry and small business in these regional communities but it is also concerning when you talk about safety. Fire warnings, weather warnings and public safety announcements are today, spread via apps or messaging services, with many towns in my electorate suffering from extreme weather and long fire seasons it is of a real concern to me that one day someone isn't going to get the message and they won't make it out in time".

"I also find it hard to support Telstra's argument when I have farmers and other property owners in my electorate who have to buy and carry on them, two separate mobile phones with separate service providers. No person should have to, in today's world pay for and carry two phones to be able to make phone calls whilst out on their property, this is just ludicrous."

A number of submissions to the ACCC have highlighted the absurdity of a situation where an
international visitor to Australia has a mobile phone that can roam onto the full Telstra
network with full regional coverage, but an Australian consumer is denied such roaming.
Submissions have highlighted that this is discriminatory against Australian consumers.

The submission from Julian Sortland, for example, commented as follows:

"Likewise, in places such as Jenolan Caves (located in a deep valley), there is a single Telstra microcell, so only Telstra users can use their 'phones, along with tourists with home-country services which have roaming including Telstra. Actually, it must appear odd that their home country 'phone works but not their Vodafone SIM. It has also been said that tourists whose home country providers have roaming contracts with multiple Australian companies get better service than Australians!"

• The submission by Mr Sortland was one of the more perceptive of the submissions from consumers to the ACCC. Mr Sortland made critical observations that go to the heart of the any-to-any connectivity issue in relation to communications in regional Australia and illustrate precisely why declaration is so important: "As a member of WICEN, a volunteer communications support group, we periodically provide radio communications support to a wide range of search agencies. At one search our base on the ridge in the Kanangra Falls area had Telstra service from Picton, a significant distance away, which worked acceptably using a hand-held 'phone, and well using a mast-mounted antenna and hot-spot device which also provided sockets for office-style phones. The problem was, that while we had reliable telephone service, the other volunteers using Optus or Vodafone could not be contacted, even if they were somewhere in the base area. In one case, this caused some inconvenience."

VHA has provided extensive evidence of the harm to regional consumers in its Original Submission, so does not repeat it further here. VHA notes that the genesis of this current declaration inquiry was partly due to concerns expressed in the context of many previous government reviews and inquiries on these issues. A number of these reviews recommended in favour of domestic mobile roaming as a policy solution.

2.2 Roaming is technically possible and already occurring

2.2.1 Submissions made by Telstra

Telstra engaged Aetha to prepare an expert report listing all manner of so-called "technical issues" with the implementation of roaming. Telstra has repeated some of those points in its submission:

- Telstra claims (p5) that: "Congestion in regional and rural networks would increase, resulting
 in degradation to the user experience, including reduced data speeds, to the detriment of all
 users of those networks."
- Telstra claims (p5) that: "Roaming would provide a poor end user experience, with call dropouts, periods where devices cannot be used as they 'ping-pong' between networks, reduced battery life and risk of network failure."

VHA has provided evidence that these so-called issues are overstated, largely irrelevant and easily practically overcome. VHA does not consider that there are any technical reasons why Telstra could not provide domestic mobile roaming; particularly as such roaming is already provided in Australia and overseas.

2.2.2 Response by VHA to those submissions

VHA wishes to make three key points in response to Telstra's submissions:

- First, the Aetha report identifies a range of theoretical risks without identifying the practical and commercial solutions or indicating the relevant proportionality of the risk.
- Second, there are a wide range of technical and commercial solutions that can be adopted to mitigate or eliminate the risks identified such that they are practically trivial.
- Third, domestic mobile roaming agreements are globally common and already exist in Australia, illustrating that practically the issues raised by Aetha are "non-issues".

2.2.3 Evidence #1: Aetha's report identifies theoretical risks, ignores solutions

Telstra engaged Aetha to prepare a report listing all manner of 'technical issues' with roaming. VHA has provided expert evidence that these so-called 'issues' are not applicable or easily overcome.

The technical issues identified in the Aetha report are overstated and ignore practical realities, particularly:

- There is no material impact on battery life if a mobile device that is roaming is instructed to search for its home network in the same period that it performs a location update. Such instructions can be easily sent by VHA in an over-the-air message.
- The risk of ping-ponging would be negligible in practice in regional areas where roaming would be declared and indeed, VHA has been able to resolve any risks with [CIC begins][CIC ends]
- The risk of a cascading network failure is theoretical and has [CIC begins][CIC ends]. In addition there are commercial off-the-shelf products that would prevent such failures from occurring in practice.
- Any capacity issues are overstated as network operators are experienced in managing capacity requirements across their network. [CIC begins][CIC ends]

In addition, the Aetha report is incorrect in several aspects, particularly as seamless handover is possible in both 3G and 4G networks. Declaration of roaming can only improve the end user experience, and regional consumers will no longer need to have two phones as suggested by the submission of the Hon Andrew Broad MP.

By way of evidence, VHA refers to the witness statement by Easwaren Siva, General Manager, VHA.

2.2.4 Evidence #2: There are a wide range of practical and commercial solutions

[CIC begins][CIC ends]

By way of evidence, VHA refers to the witness statement by Easwaren Siva, General Manager, VHA.

2.2.5 Evidence #3: Roaming agreements are common and exist in Australia

Roaming arrangements are globally common and [CIC begins][CIC ends]

VHA considers that this point is self-evident.

3. Objective of efficient use and investment

Contrary to the submissions of Telstra and Optus, declaration will achieve objective of encouraging economically efficient use of, and invest in, infrastructure:

• Telstra has no competitive incentive to invest in the natural monopoly areas: Telstra has a monopoly over some 60% of the mobile coverage area in Australia. Telstra has no competitive need or incentive to invest in further coverage when its market lead is already insurmountable and unassailable and the effect of further investment would be trivial. The evidence supports this conclusion. Telstra's investments into the Telstra monopoly area have been motivated principally by regulation (to enable CDMA closure in 2008), by government subsidies, by consumer revenues and by wider political considerations (including the risk of political intervention), not by competition.

Telstra's arguments amount to a claim that only a monopoly will efficiently invest and that any increased competition would impede such investment. With respect, Telstra's claims fly in the face of decades of fundamental economic logic. As VHA has demonstrated, the reality is that Telstra has not invested into the monopoly areas to the same extent as competitive areas. Much of the Telstra monopoly area is still on 3G, not 4G. The evidence does not support Telstra's claims.

 Optus faces the same challenges as VHA and has not invested: Optus has a strong commercial self-interest in maintaining the status quo. [CIC begins][CIC ends]

Optus claims that it can invest into the Telstra monopoly area, but its submission (ironically) evidences that it has not done so. Optus claims that it can, and is, driving infrastructure-based competition, but Optus is only able to point to \$25.7 million of investment over 4 years, an average of \$6.4 million a year – clearly a nominal amount of investment.

In the Mobile Black Spot Program, Optus won no sites at all in Round 1, and only 114 in Round 2, compared to Telstra's 577. Telstra has used the Programme and its subsidies to increase the coverage gap. Telstra's monopoly coverage is continuing to grow over time and Optus is falling further and further behind. Optus faces the same fundamental barriers to competitive investment posed by Telstra's monopoly coverage area as VHA.

• Investment in regional Australia is enhanced by domestic mobile roaming: Telstra has campaigned that declaration would harm investment. But Telstra's own historic statements indicate that Telstra has always viewed declaration of roaming as likely – and Telstra has still invested. Even in Telstra's disclosures in the T3 share offer prospectus a decade ago, Telstra expressly warned shareholders of the ACCC's ability to declare domestic mobile roaming and the impact on Telstra's profitability. The ACCC also clearly warned in 2005 that it may declare domestic roaming if reasonable commercial roaming arrangements did not continue.

In fact, declaration of roaming would facilitate investment. The international

experience supports this. VHA has provided detailed capital intensity data from multiple international markets before and after domestic mobile roaming had been regulated which clearly demonstrates this. [CIC begins][CIC ends] Domestic mobile roaming has supported, and remains fundamental to, VHA's investment strategy in Australia.

Telstra's threat to freeze regional investment is not credible: Telstra has resumed its past practice of qualifying its future investment with a "regulatory asterisk" as it frequently did in the Sol Trujillo days a decade ago. The ACCC was historically highly critical of such conduct. Telstra is again cynically attempting to create an artificial counterfactual. Ironically, Telstra's conduct betrays its monopoly power in regional Australia, as a firm in a competitive market could not simply refuse to invest in the manner that Telstra has proposed.

Based on VHA's analysis, there is little (if any) substance behind Telstra's threats. Telstra's statements are ambiguous and carefully worded. They are statements of managerial intent, not any binding undertaking or commitment. The investment amounts are trivial relative to Telstra's monopoly rent and could well have been amounts that were destined for investment in any event.

The threats also lack credibility, as it seems highly unlikely that Telstra would freeze investment when the declaration of domestic mobile roaming would facilitate competitive investment by VHA and Optus. Once domestic mobile roaming is in place, other MNOs can finally compete to invest beyond Telstra's footprint and compete for subsidies for incremental investment. It is this competition, not enduring monopoly, that will drive investment in regional Australia. This has been borne out in the investment data in similar international markets before and after regulation of roaming.

• Access pricing can fully resolve any investment concerns: Telstra will receive wholesale revenue from providing access to domestic mobile roaming services, gaining an additional wholesale revenue stream. If Telstra were operating in a competitive market, it would welcome this wholesale revenue. The only reason that Telstra is unwilling to supply roaming is because Telstra fears the effect on retail competition. As VHA has already highlighted, Telstra's refusal is anti-competitive under the Act as it is derived from protecting a coverage claim and monopoly rent that would not exist in a competitive market.

Telstra implies that regulated pricing for roaming is "too hard". With respect, commercial roaming arrangements are common and include pricing, so Telstra is exaggerating. Regulated pricing for roaming is also common and has been successfully applied in many jurisdictions with numerous precedents, including in Canada. As recognised by the ACCC and the Australian Competition Tribunal, optimal access prices are a solution to any adverse investment. Moreover, the ACCC can set terms for the declaration that stimulate regional investment.

 International experience supports mandating of domestic mobile roaming: Both Telstra and Optus claim that the international experience does not support mandating roaming. The evidence clearly illustrates otherwise. Virtually every western economy with a large land area and areas of low population density has regulated or decided to regulate domestic mobile roaming at some stage – the USA, Canada, New Zealand, Spain, France, Norway, South Africa, Italy and Austria.

While regional licensing and/or new entry have driven specific forms of domestic mobile roaming regulation at specific times, it is simply not credible to ignore the obvious pattern of roaming regulation in large western economies with areas of low population density. All of these countries have regulated because of market failure or likely market failure. These are precisely the reasons applicable in Australia, especially since commercial negotiations have failed.

3.1 Telstra has no competitive incentive to invest in monopoly

3.1.1 Submissions made by Telstra

Telstra appears to claim in its submission that Telstra has invested in the monopoly areas in response to coverage-based competition, while declaration of domestic mobile roaming would remove this competitive incentive to invest:

- Telstra asserts (p51) that: "investment in mobile network infrastructure in regional and rural
 Australia is often uneconomic on a standalone basis and is only commercially justified by the
 ability to derive a competitive advantage from that investment".
- In his statement, Michael Wright of Telstra states: "Under roaming, Telstra will have no incentive to expand 4G beyond its competitors' footprints, and similarly, Optus and Vodafone, assuming they act in an economically rational way, would be unlikely to invest in building new sites where they can service their customers via roaming".
- Telstra also claims (p5) that the negative effects of declaring roaming include that: "Regional
 and rural customers (including businesses) would miss out on coverage being extended into
 new areas and coverage in existing areas being upgraded and, over time, some would lose
 mobile coverage".
- In his statement, Michael Wright of Telstra further states: "I firmly believe that the inability to differentiate itself on this basis would impact Telstra's ability to commercially justify a range of future planned and potential investments in regional and rural Australia, and would also provide disincentives to Optus and Vodafone to continue to invest substantially in infrastructure in these areas. In my view, it would effectively "freeze" any further investments in coverage."

VHA notes that Mr Wright's statement is very carefully worded (as identified below) and therefore should be read with (and treated with) a high degree of caution by the ACCC. The evidence indicates that Telstra has little or no competitive incentive to invest in the Telstra monopoly areas – and Telstra has either under-invested or invested for wider commercial, political or regulatory reasons.

3.1.2 Response by VHA to those submissions

VHA wishes to make six key points in response to Telstra's submissions:

- First, Telstra's own evidence indicates that it has invested in the Telstra monopoly areas for reasons other than network competition, namely to capture subsidies and to meet regulatory and political requirements.
- Second, Telstra has no competitive incentive to invest in some 60% of the mobile coverage area, given it is not subject to any coverage-based competition in those areas.
- Third, the evidence is that Telstra has not invested to the extent it could have (or should have)
 in the Telstra monopoly areas.
- Fourth, Telstra's evidence appears to conflate the concepts of investment at the network edges (where Telstra faces no competition) with investment within metropolitan areas (where Telstra faces intense competition), so some caution is required when reviewing Telstra's evidence.
- Fifth, Telstra's evidence does not recognise that access pricing can alter the conclusions, so
 they are not as absolute as Telstra would have the ACCC believe and efficient access price
 will balance competition and investment.
- Six, Telstra has engineered a self-serving counterfactual based on vague commitments on future investments. Telstra's claims should be disregarded as not credible.

3.1.3 Evidence #1: Telstra has not invested because of competition

Telstra implies (or states expressly with careful qualifications) in Telstra's submission that Telstra invested into the Telstra monopoly areas in response to competition from Optus and VHA. However, this cannot be correct, since neither Optus nor VHA have the economic ability to invest into the natural monopoly areas.

The question then arises, why did Telstra actually invest? VHA believes that Telstra's investments were actually motivated by several different factors, other than the competition that Telstra implies, as follows:

 First, VHA considers that government regulation has been a fundamental driver of investment into regional Australia.

As identified in the witness statement by Mr Wright provided by Telstra, the original extent of Telstra's 3G build over the period 2006 to 2008 was to meet regulatory obligations to enable the closure of Telstra's CDMA network at that time. Mr Wright comments (p12):

"In order for Telstra to be allowed to close the CDMA network it was required to demonstrate to the government that the Next G network had coverage equivalence. The Government, through the Australian Communications and Media Authority (ACMA), engaged independent consultants to test this coverage equivalence."

While Mr Wright's witness statement provides little further detail on this issue, it is fundamental. Historically, Telstra was only permitted to close its AMPS (1G) network once it could demonstrate that its CDMA (2G) network provided equivalent regional coverage. This was documented in a carrier licence condition imposed on Telstra at the time that required Telstra to maintain CDMA coverage in favour of regional consumers.

When Telstra sought to close its CDMA network, Telstra was required to engage with the government given the existence of the carrier licence condition. In the context of those engagements, the historic carrier licence condition was replaced by a new carrier licence condition that enabled Telstra to close the CDMA network only if Telstra could demonstrate that its NextG (3G) network provided equivalent coverage and quality of service to CDMA.

Clause 15 of the Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 at the time required that "the Alternative Network provides coverage equivalent to or better than the coverage provided by the licensee's CDMA network that was in place as at 1 July 2007". A similar obligation applied to retail services. Clause 15 detailed how coverage and service equivalence was to be calculated.

The media from the time indicated that this proved to be a difficult task for Telstra. There was also considerable political opposition from rural constituencies regarding the closure of the CDMA network. The ACMA initially determined that Telstra's "Alternative Network", namely the NextG 3G network, provided insufficient equivalence. Accordingly, closure of CDMA was delayed while further investment by Telstra occurred into NextG.

As a consequence, VHA understands that Telstra likely invested significantly more than it would have otherwise done, in expanding the regional footprint of the NextG network, in order to persuade the government that NextG was a suitable replacement for CDMA.

VHA notes that Telstra's footprint at the time that Senator Conroy authorised the closure of the CDMA network was around 6,000 mobile sites, based on Figure 3 of Telstra's main

submission. At the time, Telstra was claiming that the coverage being achieved on NextG was 98.8% of the Australian population, covering approximately 2 million square kilometres.

Any claim by Telstra that its NextG investment into the Telstra monopoly areas was initially driven by competition should therefore be treated with scepticism. The evidence indicates that it was in fact driven by regulation.

Second, VHA considers that Telstra's desire to capture federal, state and customer subsidies
has been a fundamental driver of investment in the Telstra monopoly areas.

Relevantly, Mr Feasey reaches the following conclusion in his second independent expert report:

"I am led to the conclusion that Telstra's commitments are not being driven by competitive pressures at all. Indeed, it is not clear to me that very many of the investments made by Telstra in regional Australia in recent years have been driven by purely commercial considerations. Many of them seem to involve participation in Government Black Spots programme, where we might think of Telstra being forced to bid to do things which it would not otherwise choose to do absent Government intervention. It would be interesting to know how much capital Telstra has invested in remote rural areas outside of these various Government projects, since this would give us a better indication of what Telstra has chosen to do unilaterally. I do not have these figures, but again the ACCC could no doubt ask Telstra for them."

As identified in VHA's submission, Telstra has captured an overwhelming proportion of the various federal, state and customer subsidies for the deployment of sites in regional Australia. VHA quantified the level of government subsidy in VHA's Original Submission, but notes that this figure explains most of the subsequent build of new sites by Telstra in regional Australia since 2008. Telstra also received significant subsidies in relation to its CDMA investment before this date.

The number of sites that have been, and are currently being subsidised, is very significant. For example, in the current Mobile Black Spot Program there are a total of 765 mobile sites that are being subsidised, of which Telstra has won 75% (i.e. 577 sites). VHA does not have precise information on the number of sites, but assumes that most (if not all) of Telstra's sites in the zone between 98.8% population coverage (as at 2008) and the current 99.2% population coverage (as at 2016) would have had some element of government or customer subsidy.

The ACCC may wish to obtain further information from Telstra regarding the numbers and locations of subsidised sites. Again, any claim by Telstra that its investment in subsidised sites in the Telstra monopoly area is motivated by competition should be treated with scepticism. The evidence indicates that Telstra contracted to build these sites in consideration for receipt of subsidies.

Third, Telstra's definition of network coverage is measured using an external antenna. The use
of an external antenna grossly confuses (and may materially overstate) the actual coverage
provided by Telstra. This suggests Telstra has invested less in coverage than the 99.2%
population coverage figure suggests.

This is potentially misleading and has the potential to deceive consumers who purchase a mobile service from Telstra based on an understanding that they will receive mobile coverage on a basic mobile handset in 99.2% population coverage (i.e. a 2.4 million square kilometre coverage area) when in fact, it is unlikely they can.

The ACCC should require Telstra to provide its network coverage measured using a basic mobile handset and compare that with Telstra's 98.8% population coverage (i.e. a 2 million square kilometre coverage area) reach as measured by the Australian Communications and Media Authority in 2008 to determine whether Telstra has, in fact, invested in coverage to the degree it has publically claimed.

Fourth, as identified in VHA's Original Submission, VHA considers that network upgrades can
be motivated by drivers other than competition, including a desire to reduce costs.
Furthermore, as explained above, these upgrade investments are not affected by declaration,
and should be viewed separately from investments relating to coverage.

By way of example, 3G was a much more efficient technology than 2G. Similarly, 4G is a much more efficient technology than 3G. On a stand-alone basis, there are presumably wider cost savings that could be obtained by Telstra by ultimately closing its 3G network and migrating all customers to 4G. Telstra will therefore at some point need to upgrade its regional network from 3G to 4G in the Telstra monopoly area to achieve this.

 Fifth, as identified in VHA's original submission, investment into regional Australia can be driven by pure revenue considerations, not competition as claimed by Telstra.

If investment in a base station in a particular regional location would result in the generation of new mobile revenue that exceeds the costs of the investment, that investment would be stand-alone economical irrespective of the wider competitive environment. Similarly, if the

absence of a base station in a particular location is causing difficulties maintaining revenuegenerating calls (such as a black spot on a regional highway), an investment in a base station at the location may allow the continued generation of mobile revenue in a manner that justifies the investment.

Sixth, there are wider political reasons for investment. In the roaming context, for example,
Telstra has suggested that it may invest in regional Australia if domestic mobile roaming is not
declared – this is a response to regulatory pressure applied by the ACCC, not a response to
competition.

In summary, the evidence contradicts Telstra's assertion that it has invested into the Telstra monopoly areas in response to competition. There are in fact many reasons why Telstra has invested other than any response to competition, including in response to regulation.

3.1.4 Evidence #2: Telstra has no competitive incentive to invest in monopoly areas

VHA identified and evidenced in its Original Submission that Telstra has a monopoly in the Telstra monopoly area, so has no competitive incentive to invest.

VHA provided evidence that Telstra has not invested in upgrading its regional network to the extent it was implying, resulting in regional consumers in the Telstra monopoly area receiving lower quality 3G services, rather than the higher quality 4G services that are being provided elsewhere in Australia.

As identified in VHA's Original Submission, Telstra's arguments amount to a claim that a monopoly will efficiently invest in regional Australia, but that any competition would undermine the incentives for investment. This flies in the face of decades of economic logic and legal precedent.

It defies belief that a firm that already controls an insurmountable natural monopoly and that has twice the coverage of its next largest competitor would further invest in absolute coverage to 'differentiate its network' on coverage - a high degree of scepticism is deserving of such claims by Telstra.

Telstra has no competitive incentive to invest in some 60% of the mobile coverage area...

A coverage monopoly has no competitive incentive to invest in further coverage when its market lead is insurmountable and immense:

- Telstra's arguments amount to a claim that only a monopoly will efficiently invest in regional Australia, but that any competition would undermine such incentives. This flies in the face of decades of economic logic...
- Any investments that do occur are motivated by factors, including cost savings from new technologies, incremental revenue from new services, the threat of government regulation, and by direct subsidies.
- Telstra has claimed that its investment in the monopoly areas is a response to coverage competition. This conflates a number of competitive nuances and, with respect to Telstra, is misleading:
 - It is on the public record that Telstra extended coverage to 2 million sq km to politically satisfy a
 carrier licence condition to allow CDMA closure. This fact is disclosed in Telstra's own witness
 statement. Telstra's investment was therefore driven primarily by regulation, not competition.
 - Telstra's subsequent coverage growth has been motivated more by a desire to capture direct subsidies and to appease political pressures for regulation, not by competition.

3.1.5 Evidence #3: Telstra has under-invested in Telstra monopoly areas

VHA identified in its Original Submission that Telstra has, in fact, under-invested in the Telstra monopoly area, so these areas have lagged behind the rest of Australia in the level of technology and speed.

Specifically, while the rest of Australia has moved to 4G services, the Telstra monopoly area lagged behind and remained on 3G services. Only recently (following the requests for declaration of domestic mobile roaming) has Telstra moved to upgrade more of its mobile sites in the Telstra monopoly areas to 4G.

VHA believes that a further investigation of the pattern of Telstra investment in regional Australia will indicate that it has been tactical. Telstra has invested quickly into those areas where it faces competition, but it has not invested (or has invested slowly) into those areas where Telstra does not face competition. The ACCC should be able to obtain information from Telstra that would allow it to independently arrive at the same conclusion.

VHA's experience has also been that in those areas where there has been competition between the three MNOs in regional Australia, that Telstra's investment in regional Australia has still tended to lag behind the other carriers. Telstra is a first mover in metropolitan Australia, but is not necessarily a first mover in regional Australia. VHA's suspicion is that Telstra's coverage dominance in regional Australia is now so overwhelming that Telstra has lost some of the competitive drive to upgrade and invest, as it knows that regional consumers are largely captive.

In practice, this means that there are a number of instances where VHA has deployed a 4G network into a regional location before Telstra has upgraded that regional location from 3G to 4G. However, even though VHA offers a product that is technologically superior to that which is offered by Telstra (i.e. 4G vs 3G), Telstra has been able to delay upgrading to 4G because regional consumers are captive and Telstra maintains a superior coverage footprint in these areas and more generally by way of the Telstra monopoly area.

[CIC begins][CIC ends]

Regional consumers have therefore been left with a difficult choice - 4G with higher speeds and enhanced content but reduced coverage, or 3G with low speeds and low content but high coverage. Declaration of domestic mobile roaming would solve such issues.

3.1.6 Evidence #4: Telstra's evidence conflates the different types of investment

VHA submits that the ACCC should be wary of the various statements made by Telstra regarding the locations in which Telstra investment is destined to occur. There is a degree of imprecision in Telstra's submission and in such statements that is concerning to VHA. This imprecision has allowed Telstra to conflate different issues and give a misleading impression.

As identified above, Telstra faces intense competition in the deployment of technology upgrades in the three-network areas. However, Telstra faces no competition in the deployment of technology upgrades in the Telstra monopoly area. Telstra has conflated these issues and attempted to argue that competition acts as a constraint on Telstra in the Telstra monopoly areas.

VHA has sought to unpick some of the Telstra core arguments in the following slide for the ACCC's benefit:

Telstra has significantly overstated its incentive to invest and conflated various issues...

Те	elstra's core argument	VHA's response
•	Telstra claims its investment in the monopoly areas is uneconomic, so Telstra cross-subsidises from metropolitan consumers.	VHA's economic modelling indicates that Telstra's arguments are significantly over-stated, particularly when direct public and private subsidies are included.
•	Telstra sets 'premium pricing' at retail to recover this cross-subsidy and hence invest.	 Telstra's retail charges are far in excess of what could legitimately be required to recover any cross-subsidy.
•	Telstra has invested in the Telstra monopoly areas in response to coverage competition.	Telstra faces no coverage competition in the monopoly areas. Telstra's investment was partly to politically facilitate CDMA closure and partly to capture subsidies.
•	Telstra will continue to invest into the Telstra monopoly areas so as to maintain its 'coverage claim'.	 Telstra's position is so overwhelming that it has no competitive incentive to further extend coverage (except to capture subsidies or avoid regulation).

3.1.7 Evidence #5: Telstra does not recognise the importance of access pricing

Telstra makes many of its submissions as "absolutes". However, as the ACCC will be aware, the issues involved in investment are much more nuanced and finely balanced. A key example of this is provided by the absence of any qualifications in Telstra's submission regarding the impact on investment of different levels of access pricing.

As the ACCC will be aware, the appropriate level of access pricing can have a substantial impact on the incentives of the parties. However, in Telstra's submission, Telstra has tended to take the extreme position that access pricing would always favour the access seeker. In doing so, Telstra has set up a 'straw man' in its submission – and then criticised that 'straw man'.

Telstra has not addressed its arguments at a more reasonable position of access pricing that had been determined by the ACCC to balance the different interests of the parties.

VHA has previously asked independent expert Mr Feasey to consider how the ACCC could impose a reasonable access pricing. The relevant section of Mr Feasey's first expert report was redacted by VHA in its Original Submission. VHA now submits Mr Feasey's first expert report in full in Part B of this submission.

3.1.8 Evidence #6: Telstra has created an artificial counterfactual

As the ACCC will be aware, Telstra has undertaken (and continues to undertake) an extensive campaign to lobby Telstra shareholders, regional organisations, and politicians to oppose domestic mobile roaming. For example, the following comments were attributed to Telstra chairman John Mullen in October 2016:

"If the ACCC decides to declare mobile roaming, it would absolutely be at the expense of you, the Telstra shareholders," he warned. "If you do feel strongly we would suggest that you make your views known to the ACCC."

[CIC begins][CIC ends] The Hon Andrew Broad MP (Federal Member for Mallee), for example, states:

"It does concern me, the way that Telstra has strong armed our regional local governments into supporting [Telstra's] submissions to this inquiry. Many local governments are concerned that infrastructure projects will cease if roaming is allowed and that Telstra will no longer invest in the future of regional Australia."

All of this explains many of the submissions to the ACCC in this declaration inquiry, many of which simply parrot Telstra's self-serving position without giving any evidence to validate Telstra's position.

Telstra's angle in lobbying regional stakeholders and Telstra shareholders has been that any declaration of roaming would lead to a decrease in regional coverage. However, as identified in VHA's Original Submission and as identified below, VHA considers that this statement is manifestly inconsistent evidence and highly mischievous.

Telstra has sought to create an artificial counterfactual by announcing in the public domain that it will make an investment into regional Australia, then simultaneously stating that this investment may not necessarily occur if roaming were declared by the ACCC. Telstra has then used its own artificially-created counterfactual on its own investment to justify Telstra's statements in the public domain.

Telstra's comments have caused immense confusion among regional stakeholders, resulting in a range of submissions to the ACCC that have taken Telstra's lobbying and comments at face value.

The reality is that declaration of roaming will have no adverse impact on regional coverage – and, in fact, will bring competitive forces into play that will stimulate further investment. The only impact of declaration on regional investment is an artificial impact of Telstra's own making.

3.2 Optus faces same challenges as VHA and has not invested

3.2.1 Submissions made by Telstra and Optus

Telstra appears to make much of Optus' investment in regional Australia, while Optus itself implies that declaration of domestic mobile roaming could result in future investment being revisited:

- Telstra claims (p4) that: "While coverage may be their first priority, Telstra also acknowledges
 that regional and rural customers are entitled to choice as much as metropolitan customers.

 Optus is 'hot on Telstra's heels' with an aggressive program to improve its rural coverage".
- Optus also claims (p3) that: "Declaration of roaming will almost certainly result in MNOs
 revisiting their current and future investment plans. Since network coverage will no longer
 provide a point of differentiation it will be difficult to justify investments in new coverage in the
 more remote areas."

VHA considers that Telstra is overstating the level of Optus' investment, while Optus is overstating the impact of declaration on Optus' future investment. The evidence supports VHA's views.

3.2.2 Response by VHA to those submissions

VHA wishes to make four key points in response to Telstra's and Optus' submissions:

[CIC begins][CIC ends]

- Third, by no stretch of the imagination could Optus ever be portrayed to be 'hot on Telstra's heels' as claimed by Telstra in its submission – impugning the credibility of Telstra's submission.
- Fourth, Optus appears to be parroting public statements by Telstra and also conflates different concepts of coverage competition in a confusing manner.

3.2.3 Evidence #1: Optus does not wish to offer roaming on reasonable terms

Optus has a strong commercial self-interest in maintaining the status quo. [CIC begins][CIC ends]

VHA also notes that the lack of competition between Telstra and Optus to supply domestic mobile roaming services to VHA is not unique to Australia, but appears to be a characteristic of markets that have a high level of network asymmetry. For example, the Canadian Radio-television and

Telecommunications Commission (CRTC) in Canada has made the following comment in relation to the need to mandate domestic mobile roaming in Canada:²

"The national wireless carriers have little, if any, incentive to offer wholesale roaming to smaller wireless carriers at reasonable terms and conditions. Indeed, there is little, if any, evidence on the record of this proceeding that the national wireless carriers compete with each other for the business of smaller wireless carriers. Therefore, the Commission finds that there is a lack of rivalrous behaviour in the national market for GSM-based wholesale roaming between the national wireless carriers."

3.2.4 Evidence #2: Optus faces the same challenges as VHA

Optus has taken the approach of opposing the declaration of domestic mobile roaming given the strategic risks to Optus of having VHA as a stronger competitor, in conjunction with the risks involved in losing its bargaining power against VHA in relation to the supply of domestic mobile roaming.

Notwithstanding, it is clear from the evidence that Optus faces the same challenges as VHA. As identified in the slide below, Optus' investments into regional Australia are surprisingly low:

- Optus' capital intensity has declined in recent years.
- Optus' submission can only identify some \$25.7 million of regional investment over the 4 years, hence \$7 million per annum (approximately 7-14 mobile sites). This amount is trivial in comparison to the number of mobile sites in the Telstra monopoly area. At its current pace of investment, Optus will need more than 400 years to catch up to Telstra's coverage as it is measured today.
- Optus has won a similar number of sites to VHA in the Mobile Black Spot Program, a figure that is substantially lower than Telstra. In Round 1, Optus did not win any sites at all. Optus is facing a similar difficulty to VHA in gaining access to subsidies.

VHA also cautions that both Optus and Telstra appear to have adopted definitions of regional Australia than include investments into the three MNO areas, rather than the duopoly or monopoly areas.

Generally, the evidence suggests that Optus is facing exactly the same difficulties and challenges as VHA, but that Optus is not willing to admit this for tactical reasons. Rather, Optus appears to have determined that it would be better to support Telstra and maintain the status quo, given that Optus knows that this leaves VHA worse-off than Optus, even though both are left worse-off overall.

² See Telecom Regulatory Policy CRTC 2015-177, http://www.crtc.gc.ca/eng/archive/2015/2015-177.htm

[CIC begins][CIC ends]

3.2.5 Evidence #3: By no stretch of the imagination is Optus 'hot on Telstra's heels'

Telstra has made much in its submission of potential regional investment by Optus. Telstra has then used various adjectives and hyperbole to embellish this point further in Telstra's submission, including, by stating that Optus is supposedly 'hot on Telstra's heels'.

Optus is not 'hot on Telstra's heels' in relation to geographic coverage. The ACCC could test this proposition simply by asking Optus how much it thinks it would cost to duplicate Telstra's geographic coverage, and how long Optus thinks it would take to match Telstra in geographic coverage assuming the most optimal business conditions.

As identified above, Optus' actual investment into regional Australia over a 4 year period is trivial. As outlined above, at its current pace of investment, VHA estimates that Optus will need more than 400 years to catch up to Telstra's coverage as it is measured today.

Ironically, VHA has the highest mobile capex spend as a proportion of revenue compared to both Telstra and Optus. VHA has and will continue to invest in regional Australia, but at the same time VHA recognises that the Telstra monopoly area is largely a natural monopoly as it is simply uneconomic for another operator to overbuild on top of Telstra's mobile network in significant parts of Australia.

[CIC begins][CIC ends]

Ironically, only the declaration of domestic mobile roaming would lead to further co-investment by VHA and Optus – as this would remove the perverse incentives for Optus (and Telstra) to refuse to share infrastructure under a wider arrangement.

3.2.6 Evidence #4: Optus conflates different concepts of competition

As with Telstra's submission, Optus has conflated different concepts of competition. VHA does not consider that this is intentional on Optus' part, but may be because Optus has adopted a lot of the arguments that Telstra has made in the public domain. VHA refers to its comments above in relation to coverage-based competition and notes that these comments apply equally to Optus.

3.3 Investment in regional Australia is enhanced by roaming

3.3.1 Submissions made by Telstra and Optus

Telstra asserts that the declaration of domestic mobile roaming would have an adverse impact on network investment. Optus largely parrots Telstra on that issue, again largely repeating Telstra's public domain comments:

- Telstra claims (p5) that: "Declaring 3G-only roaming also would have a chilling effect on investments in 4G and future technologies (5G and beyond) because investors would fear that the regulatory intervention would be repeated once those investments are irreversible."
- Telstra claims (p5) that: "Confining declaration to particular geographic areas would not resolve the dampening effects of declaration on competition and investment incentives."
- Telstra claims (p4) that: "Maintaining the strongest incentives to invest in mobile networks is the best way to continue to produce world-leading customer outcomes."
- Optus claims (p3) that: "Declaration of a domestic roaming service is fundamentally at odds with the principle of infrastructure based competition that has driven such successful outcomes in the Australian mobile sector."

VHA notes that neither Telstra nor Optus have identified precisely why declaration of domestic mobile roaming would reduce investment, except to suggest that equalisation of coverage would reduce incentives to invest. However, VHA submits that the evidence actually indicates that the contrary is true – that declaration would promote efficient investment.

3.3.2 Response by VHA to those submissions

VHA wishes to make six key points in response to Telstra's and Optus' submissions:

- First, roaming would promote efficient sharing of infrastructure in the natural monopoly areas in a manner that delivers retail competition.
- Second, roaming would facilitate and promote investment by access seekers, such as VHA, by acting as a stepping stone towards investment and infrastructure competition.
- Third, roaming would facilitate competition for government subsidies at the network edge, thereby promoting a growth in network coverage and ensuring competitive tension in tenders.
- Fourth, Telstra has campaigned that declaration would harm investment, but Telstra's own historic statements indicate that Telstra has always viewed declaration of roaming as likely – and Telstra has still invested.
- Fifth, world leading consumer outcomes involve a combination of competitive pricing, high quality services, and efficient investment – not excessive pricing as is currently occurring.
- Sixth, the international experience demonstrates that domestic mobile roaming promotes competition and investment.

3.3.3 Evidence #1: Roaming promotes efficient sharing to enable retail competition

As VHA identified in its Original Submission, the declaration of roaming will deliver the most efficient use of infrastructure consistent with the maximisation of retail competition.

By definition it is not possible for access seekers such as VHA to replicate Telstra's network in the natural monopoly areas. In these areas, it follows the appropriate focus should not be on infrastructure-based competition, but on efficient sharing of infrastructure (i.e. efficient "use" in the language of section 152AB(2)(e) of the Act).

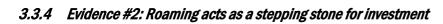
As identified in VHA's Original Submission, the sharing of telecommunications networks is a common policy solution that is now adopted globally to ensure competition still occurs in areas that may only sustain a single mobile network. The domestic mobile roaming service is the most efficient and simplest means to achieve sharing of Telstra's network in the Telstra monopoly area in a manner that can introduce and intensify retail competition.

VHA provided extensive evidence of these issues in its Original Submission, including, by quoting from an important OECD study on these issues that surveyed these issues across the various OECD countries.

Declaration will facilitate efficient use of mobile infrastructure in natural monopoly areas

The declaration of roaming will deliver the most efficient use of infrastructure consistent with the maximisation of retail competition:

- By definition, is not possible for access seekers to replicate Telstra's network in the natural monopoly areas. In such areas, the focus should be on efficient sharing of infrastructure (i.e., efficient 'use' under Part XIC).
- Sharing of networks is the common policy solution now adopted globally.
- In relation to coverage expansion, declaration will promote efficient investment, because declaration will facilitate competition for subsidies:
 - Roaming will provide the contiguous coverage which is fundamental for a MNO to bid for a subsidy in a new mobile coverage area. In this manner, declaration will assist Optus and Vodafone to compete to win subsidies for new areas of coverage.
 - Because there will be competition for government subsidies, Telstra will have an incentive to rely less on subsidies and instead fund infrastructure deployment itself.
- Moreover, if Telstra chooses not to invest, both Optus and Vodafone will gain the
 capability to do so, creating competition for incremental build. Any decision by Telstra
 not to invest would be at its peril...



In VHA's Original Submission, VHA explained the manner in which the declaration of domestic mobile roaming could act as a stepping stone for investment by access seekers. [CIC begins][CIC ends]

This fact is well recognised internationally – and also explains why a number of jurisdictions have mandated domestic mobile roaming in order to facilitate mobile market entry, including New Zealand. The mandating of roaming acts as a 'ladder for investment', as illustrated by the following slide:



Declaration will facilitate investment by access seekers in contestable areas – via competition

Declaration acts as a 'ladder for investment' by enabling an MNO to grow its market share until it becomes profitable to invest:

- There are some parts of the Telstra monopoly areas that are not a natural monopoly, but are rather areas where investment has not occurred because the access seeker forecast market share is not sufficient to sustain investment.
- In order to invest, an MNO needs to have confidence that it will recover its investment. Yet the MNO's ability to gain market share in a new area over time is constrained, resulting in market share growth of a few % per annum (it cannot immediately jump to 30% as claimed by Telstra's experts!).
- Declaration of roaming allows market share growth to occur on a 'buy' basis before the 'build' becomes economic.
- The incentives to 'build' rather than 'buy' once the market share thresholds are
 reached will be driven by appropriate access pricing. The access pricing would mean it
 would be more economic for an access seeker to build, rather than buy, as soon as it
 was economic to do so.



3.3.5 Evidence #3: Roaming enables competition for coverage subsidies

As VHA documented in its Original Submission, in order for VHA to bid for the subsidy for a particular site it needs to have contiguous mobile coverage with the particular site. The essence of a mobile network is mobility in which a mobile user can move around a particular locality without their mobile call dropping out, or involving a call being passed from site to site within that area. If cellular hand-off cannot be provided, mobile end users will simply grow frustrated with the service.

For this reason, VHA is only practically able to bid for subsidies in relation to those sites that are contiguous with VHA's existing coverage reach. Optus and Telstra also have coverage in the same areas, so will be able to compete for those subsidies, ensuring competition for the subsidies.

However, for sites contiguous to the Telstra monopoly areas, Telstra is the only MNO with contiguous coverage. Therefore, unless Telstra supplies domestic mobile roaming in those areas to other MNOs, it follows that Telstra will be the only MNO in a position to bid for subsidies to further extend out the edges of its mobile network. This means there is no practical competition for government subsidies in such cases.

The declaration of domestic mobile roaming will enable any MNO to bid for a subsidy in relation to any site. Each MNO will be able to use a roaming arrangement to provide contiguous coverage to any site that is outside its current network footprint. Accordingly, the declaration of domestic mobile roaming will complement existing government policy by making government subsidies fully contestable.

If government subsidies are fully contestable, it follows that the benefits of competition will follow. VHA and Optus will be able to access government funding to compete with Telstra to deploy infrastructure in areas outside the existing "all networks" footprint. One would expect that the downward pressure will occur on the bids submitted by Telstra. Hence the government will receive more for its subsidies than is presently the case, delivering real benefits to the taxpayer.

VHA provided evidence in its Original Submission to show the manner in which Telstra has leveraged from its contiguous coverage to dominate the Mobile Black Spot Program and capture most subsidies for itself.

3.3.6 Evidence #4: Regulation of domestic mobile roaming has existed and was foreshadowed

Telstra has made a point in its submission that declaration of domestic mobile roaming by the ACCC would harm incentives to invest because access providers may "fear that the regulatory intervention would be repeated once those investments are irreversible".

Telstra made a similar point to the High Court in 2008 in an attempt to challenge the validity of the Part XIC access regime. The High Court unanimously dismissed Telstra's case at that time, holding that the rights held by Telstra in its network assets were rights that were always subject to a statutory access regime that permitted other carriers to use those assets. A similar conclusion applies to the present circumstances – any investor in Australian telecommunications network infrastructure already knows that the investment is subject to potential declaration under Part XIC.

Moreover, in the domestic mobile roaming context, it is very clear that there is, and has always been a possibility, that a roaming service could be declared in Australia under Part XIC of the Act for the following reasons:

- First, the mandatory supply of a domestic mobile roaming in Australia dates back to the early days of the first mobile networks in which Telstra was required to provide roaming to Optus and VHA pursuant to carrier licence conditions.
- Second, the ACCC has already held two declaration inquiries. In the last inquiry the ACCC concluded that all of the declaration criteria were met, but decided against declaration due to the existence of commercial arrangements that were satisfactory to the parties. It follows that if there are no commercial arrangements, that declaration of roaming would follow.

- Third, in the last declaration inquiry the ACCC expressly made the comment: "..the Commission proposes to monitor developments with respect to the provision of domestic inter-carrier roaming services, and may initiate a further inquiry should it receive information indicating that declaration of a 3G domestic inter-carrier roaming service may be appropriate." Accordingly, the possibility of a further declaration inquiry has been clearly foreshadowed.
- Fourth, Telstra is well aware that roaming has been mandated in a range of other countries in similar circumstances, including in New Zealand. Declaration of domestic mobile roaming in Australia can hardly be described as unexpected.
- Fifth, Telstra is well aware of the proposals for the declaration of domestic mobile roaming that have been made in previous regional telecommunications reviews. Telstra has been a participant in those reviews and has made submissions to those reviews.
- Sixth, many of the government subsidies that Telstra has historically received have included a condition requiring roaming to be supplied, as identified by VHA in its Original Submission.

Ironically, Telstra itself has made various statements in the public domain that it expected that its mobile network could be declared by the ACCC under Part XIC at some point in time. For example, in the prospectus for the T3 privatisation, Telstra stated as follows in relation to regulatory risks:

"A key part of Telstra's transformation strategy involves deploying next generation networks, including its new NEXT G wireless network. The ACCC may hold a public inquiry at any time in whether compulsory competitor access to this network should be required."

In conclusion, the evidence indicates that Telstra is well aware of the possibility of declaration of domestic roaming services in circumstances where Telstra refuses to share access to its mobile network. Telstra cannot claim that any fear of regulatory intervention would deter investment, as it has invested with the existing knowledge of that risk.

3.3.7 Evidence #5: World leading consumer outcomes also involve other criteria

Telstra claims in its submission that "maintaining the strongest incentives to invest in mobile networks is the best way to continue to produce world-leading customer outcomes". This is a misinterpretation by Telstra of the objectives of the Part XIC access regime. Telstra has emphasised just one part of only one of the three criteria that are relevant to this declaration inquiry. This is a recurrent theme of Telstra's overall submission.

As the ACCC will be aware, there are three criteria for declaration of a service under Part XIC, namely promoting competition, promoting any-to-any connectivity, and promoting efficient use of, and

investment in, infrastructure. These criteria are balanced by the ACCC to promote the long-term interests of end users.

Investment in mobile networks is only part of one of those criteria. Moreover, it is qualified by the words 'efficient'. The objective of the Part XIC regime is not to maximise investment blindly, but rather to ensure that investment occurs efficiently. At the same time, the regime also seeks to ensure that existing infrastructure is efficiently used. The regime does not focus on investment alone.

At the current time, Telstra is denying VHA access to the Telstra monopoly area, so Telstra's infrastructure in those areas is certainly not being efficiently used. Moreover, Telstra is not making efficient investments in the Telstra monopoly area, but is rather relying on subsidies and tending to under-invest.

The best way to produce world-leading consumer outcomes is to ensure that the existing infrastructure is efficiently shared and that future investment efficiently occurs, consistent with the objectives of the Part XIC regime.

As well as the focus on efficient investment and use, the Part XIC also places a strong emphasis on competition. The objective of competition is to drive further efficiencies (including efficient investment) as well as to place constraints on market power and hence excess prices. The role of competition is fundamental to Part XIC, particularly as Part XIC was enacted as part of Australia's competition laws and policies and is administered by Australia's competition regulator.

The best way to produce world-leading consumer outcomes is to also maximise the level of competition in Australia's telecommunications markets, thereby ensuring that Telstra does not continue to over-charge consumers for regional coverage. Accordingly, the best way to produce world-leading consumer outcomes is to declare domestic mobile roaming.

As well as the focus on efficient investment and use, and on competition, Part XIC also focuses on the promotion of any-to-any connectivity. This is particularly important in regional Australia for the various reasons already discussed and is currently denied to Optus and VHA consumers in the Telstra monopoly area. The best way to produce world-leading consumer outcomes is to also ensure that the mobile consumers of all three mobile networks can communicate throughout Australia while they within the mobile coverage area.

3.3.8 Evidence #6: International experience shows roaming promotes investment

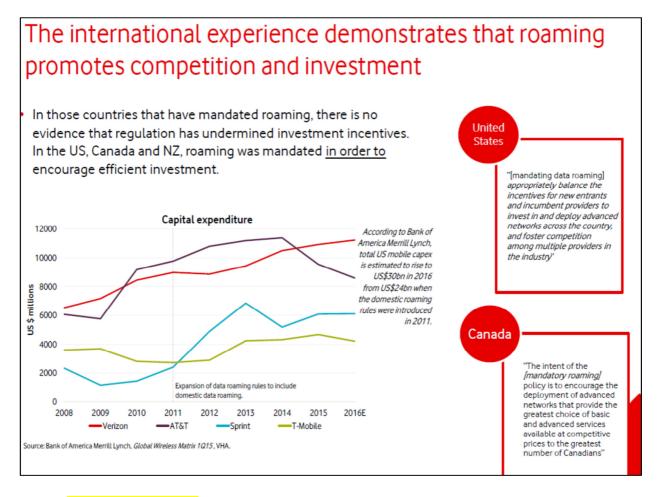
As VHA identified in its Original Submission, the international experience demonstrates that domestic mobile roaming promotes investment.

In those countries that have mandated domestic mobile roaming, there is no evidence that regulation has undermined investment incentives. In the United States, Canada and New Zealand, roaming was mandated <u>in order to</u> encourage efficient investment.

The Federal Communications Commission in the United States concluded, for example:3

"We conclude that adopting a roaming rule tailored for mobile data services will... appropriately balance the incentives for new entrants and incumbent providers to invest in and deploy advanced networks across the country."

This is summarised in the following slide:



[CIC begins][CIC ends]

See "Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services", WT Docket No)5-265, 7 April 2011, https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-52A1.pdf

The upshot of this various material is that there is no international evidence that roaming agreements or mandated roaming have resulted in decreased investment by the access provider to extend absolute coverage reach or investments to newer technologies. The opposite is true.

3.4 Telstra's threat to freeze regional investment is not credible

3.4.1 Submissions made by Telstra

Telstra has made various implied and overt threats in the public domain that it will freeze certain investments in regional Australia if domestic mobile roaming is declared.

- Telstra makes the following threat at page 5 of its submission, reflecting previous comments in various fora: "Telstra has announced to the market that its investment plans will continue to be disproportionately weighted towards regional and remote Australia. This includes the following planned investments:
 - \$350 million to expand coverage and capacity in regional and rural Australia;
 - Up to \$240 million contribution to Rounds 1 and 2 of Mobile Black Spot Programme; and
 - \$100-200 million contribution to a co-investment fund for the next five years for jointly funded projects to support infrastructure investment that is uneconomic on a standalone basis.

Telstra's planned \$350 million investment and contributions to the co-investment fund are contingent on the current regulatory settings remaining in place."

VHA notes that the monopoly rent that Telstra is extracting far exceeds these amounts. Moreover, Telstra's threat not to invest to expand absolute network coverage is not credible, given if the ACCC were to declare domestic mobile roaming, VHA or Optus would be in a position to invest at the outer edges of Telstra's network if Telstra did not – so competition would lead to Telstra investment.

In any case, if there were a residual concern, this can easily be dealt with in the detail of the declaration, such as by exempting new or recent investment for a defined period of time.

3.4.2 Response by VHA to those submissions

VHA wishes to make four key points in response to Telstra's submissions:

• First, the monopoly rent that Telstra is extracting is far in excess of the amounts that Telstra itself stated that it will invest back into regional Australia.

- Second, Telstra's threat not to invest is very carefully qualified and discretionary, so lacks credibility in circumstances where Telstra would be facing increased competition for subsidies.
- Third, Telstra's threat not to invest amounts to regulatory gaming and is precisely the type of conduct that the ACCC has publicly criticised in the context of merger clearances.
- Fourth, if there were residual concerns that a declaration of roaming could impact these sorts
 of investments, there are mechanisms that can be included in the terms of the declaration
 that continue to encourage investment such as by exempting new investment from
 mandated domestic mobile roaming for a defined period of time.

3.4.3 Evidence #1: Telstra's monopoly rent far exceeds its promised investment

VHA notes Telstra's regulatory condition (i.e. Telstra's threat not to invest) does not apply to Telstra's investment in the Mobile Black Spot Program. Indeed, Telstra's contributions to the Mobile Black Spot Program are contractually committed and cannot simply be withdrawn as Telstra has implied. Telstra also receives a government subsidy only if it co-invests.

This means that the so-called 'promised investment' that Telstra has suggested will occur if domestic mobile roaming is not declared is in the order of \$450 million to \$550 million over a period of 5 years, hence roughly \$100 million in new investments per annum.

Assuming that Telstra's threat was correct and Telstra did not invest this money, this suggests (on a very rudimentary analysis that equates the benefit of an investment with its face value) that the ACCC would need to be confident that the declaration of domestic mobile roaming would deliver a benefit to consumers that exceeded \$100 million per annum over the next 5 years.

VHA believes that the ACCC can indeed confidently reach that conclusion.

VHA's included in its original submission a report from the CIE which estimated that Telstra is extracting a 'premium' of approximately \$1.4 billion a year. The question arising from that report was how much of that 'premium' can be attributed to Telstra's market power derived from Telstra's control of natural monopoly coverage. Telstra focussed on this specific question in its response. In this submission, VHA has therefore shared evidence of the extent to which Telstra's 'premium' can be justified on the basis of the costs of regional coverage.

Specifically, as identified above, Mr Feasey has calculated a range consistent with the \$1.4 billion per annum calculated by The CIE. However, Mr Feasey's analysis suggests this may even be at the conservatively low end of the range. Telstra's annual report confirms this by indicating a highly profitable EBITDA margin of 42% on annual mobile revenues of \$10.4 billion. Moreover, even on entry-level pricing, Telstra now charges some 37% more than comparable offerings from VHA

Based on VHA's evidence, Telstra's monopoly rent is far in excess of the cost of its limited investment in the Non-Competitive Areas. Even assuming the monopoly rent is the figure of \$1.4 billion identified by the CIE, this monopoly rent is more than 10 times larger per annum than the amount that Telstra has suggested that it would refuse to invest if domestic roaming were declared.

The declaration of domestic mobile roaming will expose Telstra's pricing to competition and Telstra will need to decrease its prices to prevent churn of its customers to VHA and Optus.

The question arises as to the magnitude of the price decrease that would be required. The conclusions above suggest that the Telstra price premium would need to decrease by at least 10%. Applying the conclusion of The CIE, this would suggest that Telstra's average pricing would need to decline, for example, by \$1 for a post-paid mobile plan. This is entirely achievable in the circumstances.

3.4.4 Evidence #2: Telstra's threat lacks credibility given competition will increase

However, the conclusions above assume that Telstra's threat can be taken at face value – namely that Telstra will forgo \$100 million per annum in investments if domestic mobile roaming is declared. VHA considers that this threat lacks any credibility.

- First, Telstra's threat is expressed in very vague terms and is not given in any kind of binding manner. Telstra may equally change its mind and choose to invest, or choose not to invest, or invest any amount it pleases at any time. Ultimately, it is nothing but a managerial statement of possible intent, subject to potential reconsideration at any time.
- Second, Telstra's stated investment is not specifically said to be directed at the Telstra
 monopoly area or expanding the overall mobile coverage footprint beyond those areas.
 Rather, it includes mention of capacity as well as coverage, refers to 'regional and rural' and
 also refers generally to infrastructure investment, rather than mobile network investment. The
 investment could equally be made in areas of existing network competition or to enhance
 transmission capacity or Telstra's fixed network.
- Third, Telstra will need to invest in the Telstra monopoly area in any event to upgrade those
 areas to 4G pending the likely closure of Telstra's 3G network. VHA assumes that this may be
 money that has been earmarked for expenditure in any event and that will be recovered on the
 cost savings arising from the 3G network closure at some point in the future.

For all of these reasons, VHA believes that Telstra's threat not to invest can be entirely discounted by the ACCC and should be for the purposes of the declaration inquiry.

Revisiting VHA's conclusion in the previous section, this suggests that any decline in prices would deliver a net benefit to Australian consumers. Moreover, there would also be a benefit arising from

increased competition for government subsidies that would likely reduce the level of government subsidisation required over time.

Moreover, there would likely be increased investment by VHA and Optus in regional Australia (as well as potentially by others) given that these entities would be able to use roaming as a stepping stone for investment.

3.4.5 Evidence #3: Telstra's threat amounts to regulatory gaming

As the ACCC will be well aware, Telstra's threat to free regional investment is an artificial counterfactual that amounts to regulatory gaming and political scaremongering.

Telstra seems to be suggesting that if Telstra is permitted to retain its monopoly (generating at least \$1.4 billion in monopoly rent per annum), then Telstra will invest some of the resulting profits (\$100 million per annum) back into regional Australia. Telstra will then pocket the remaining more than \$1 billion per annum for itself.

Ironically, Telstra can only make this threat because Telstra does not face competition in the monopoly area. Declaration of domestic mobile roaming would introduce competition and enable Optus and VHA to compete for subsidies, thereby enabling both entities to step into Telstra's shoes if Telstra does not invest.

VHA notes that the Commissioners at the ACCC have recently been scathing in their condemnation of parties attempting to manipulate the counterfactual in the context of merger reviews. VHA considers that Telstra's threat not to invest is a similar attempt to manipulate the counterfactual.

Telstra's threat to freeze investment is an attempt to create an artificial counter-factual... and VHA is happy to invest

Telstra's threat to the ACCC...

- Some 5 years since 4G was launched, Telstra only announced that it would deploy 4G into the Telstra monopoly areas after this declaration inquiry was announced.
- Telstra has threatened to freeze this and other regional investment if roaming is declared; attempting to 'bully' the ACCC.
- With respect, this is an artificial counterfactual that amounts to regulatory gaming. This approach has been heavily criticised by the ACCC in merger reviews.
- Ironically, Telstra can only make this threat because it does not face competition (and has absolute investment discretion) - illustrating why declaration is required.

...and VHA's response to that threat

- The declaration of roaming will facilitate competition for subsidies. If Telstra does not invest, VHA (or Optus) will have the ability to step into Telstra's shoes to do so.
- Declaration will enable VHA to divert some investment to expanding the aggregate 'all network' Australian coverage footprint, rather than inefficiently replicating Telstra's existing coverage. Roaming will lead to an expansion in aggregate coverage.
- This is consistent with international experience.
- If the ACCC has any residual concerns, it has the ability to define the declared service in a manner which eliminates this concern.

As the ACCC will be aware, this is not the first time that Telstra has adopted such a strategy, which is referred to colloquially as the "regulatory asterisk". As commented in an article by Stephen Bartholomeusz from the Business Spectator in January 2009:

"In the earliest phase of Trujillo's reign at Telstra it was common for the group to stud its slides with asterisks that directed readers to a footnote that said forward-looking financial information was subject to reasonable regulatory outcomes. That was during a period when Telstra was at war with the Australian Competition and Consumer Commission over issues like the price and structure of access to its unconditioned local loop, operational separation and safe harbours for new investments."

VHA suggests that the ACCC may wish to be as dismissive and cynical of Telstra's clear attempts to place pressure on the ACCC as the ACCC was in relation to such conduct during the Sol Trujillo era.

3.4.6 Evidence #4: Terms of declaration can be set to encourage investment

As identified in VHA's Original Submission, it is open to the ACCC if it has any concerns regarding impact on regional investment to set terms for the declaration of domestic mobile roaming that create incentives for investment.

For example, the ACCC could exclude from the scope of any regional roaming service any new towers built within the previous 2 years. A consequence of such exclusion would be to promote competition between the MNOs to invest in new infrastructure at the network edge and to compete aggressively for new government subsidies at the network edge.

If Telstra had the opportunity to gain a coverage advantage by investing at the network edge, it seems unlikely that Telstra would be willing to forgo this coverage advantage to Optus and VHA by choosing not to invest while its competitors invest. The more likely reaction is that Telstra would divert some of its monopoly profits towards greater regional investment.

3.5 Access pricing can resolve investment concerns

3.5.1 Submissions made by Telstra

Telstra asserts that it is not possible for the ACCC to set an access price for roaming that balances the need for competition against the need for investment:

• Telstra claims (p5) that: "The ACCC cannot set a roaming price which accounts for an MNO's loss of retail revenue or which substitutes for the lost competitive dynamic of the coverage race and its beneficial outcomes for consumers. The access price will not preserve Telstra's incentive to continue building nor ensure that access seekers use roaming only as a step to building their own network."

VHA notes that Telstra's submission directly contradicts the legal position adopted by the Australian Competition Tribunal, as well as previous ACCC decisions. Telstra's assertion is demonstrably incorrect and it is indeed possible to set an access price that balances these interests.

3.5.2 Response by VHA to those submissions

VHA wishes to make five key points in response to Telstra's submission:

 First, Telstra's submission directly contradicts the legal position in Australia that investment incentive issues can be addressed by identifying the optimal access price.

- Second, given the ability to set optimal access pricing, the issue of adverse impacts on investment is largely irrelevant – as the access price can be used to address those issues.
- Third, commercial domestic mobile roaming arrangements are commercially common and already exist in Australia, so clearly it is possible to identify a pricing for domestic mobile roaming.
- Fourth, it would be entirely possible to identify regulated access pricing for roaming in Australia, as identified in VHA's Original Submission.
- Fifth, VHA suggests that access pricing for domestic mobile roaming adopts more of a "retail minus" construct but with benchmarking against Telstra's existing wholesale offering, thereby avoiding the complications in detailed cost modelling.

3.5.3 Evidence #1: Telstra's submission is inconsistent with Australian case law

VHA quoted from the Australian Competition Tribunal's reasoning in *Telstra Corporation Ltd (No 3)* (2007) ACompT 3 and *Seven Network Limited (No 4)* (2005) ATPR 42-056 at page 110 of VHA's Original Submission.

These cases indicate that access prices can be set that create appropriate incentives for investment.

As identified in VHA's submission, the declaration of domestic mobile roaming will introduce competition into various aspects of the mobile market that are not currently competitive, including the supply of full coverage (and access to regional coverage in the Telstra monopoly areas) and access to government subsidies beyond the Telstra monopoly area. The forces of competition will naturally increase productive, allocative and dynamic efficiency, generating an efficiency dividend.

The key to unlocking the efficiency dividend is to set appropriate access prices.

VHA provided evidence to the ACCC in its Original Submission on the manner in which access pricing in the context of VHA's current domestic mobile roaming agreement had the effect of continuing to maintain investment incentives, resulting in VHA's current [CIC begins][CIC ends]

3.5.4 Evidence #2: Access pricing removes concerns regarding investment effects

In the ACCC's final decision in its previous domestic mobile roaming inquiry, the ACCC commented as follows in relation to the potential for the declaration of roaming to impact on investment: "The Commission, however, can minimise the impact of declaration on investment incentives through its approach to access pricing".

VHA agrees with the ACCC's historic comment that access prices can be set that minimise any impact of declaration on investment incentives.

VHA provided extensive material in its Original Submission on the factors that would need to be considered by the ACCC in setting access prices. VHA had previously maintained that the material provided by Mr Feasey on access pricing was confidential.

Given the critical importance of this material to the ACCC, VHA has now provided into evidence a version copy of the original Mr Feasey report that can be released into the public domain, if the ACCC wishes to test any of this material.

3.5.5 Evidence #3: Pricing in roaming agreements is obviously possible

Telstra asserts in its submission that: "The ACCC cannot set a roaming price which accounts for an MNO's loss of retail revenue or which substitutes for the lost competitive dynamic of the coverage race and its beneficial outcomes for consumers."

As Telstra ought to be aware, commercial domestic mobile roaming arrangements are a common feature of mobile operations throughout the world. Mobile operators regularly identify a price between them. Telstra historically entered into domestic mobile roaming agreements (including with VHA) that had commercial pricing within them.

Telstra's claim that the ACCC cannot determine an appropriate roaming price is patronising to the ACCC and fails to recognise that such prices are commonly determined commercially throughout the world.

There is plenty of evidence available to the ACCC in the public domain that roaming pricing can be easily determined.

3.5.6 Evidence #4: Identification of regulated access pricing is obviously possible

Similarly, the ACCC is not facing a situation where domestic mobile roaming prices have never been regulated by any regulator in the world previously. In fact, extensive consideration has been given in many jurisdictions to the appropriate regulated pricing for access to domestic mobile roaming services. The ACCC will have the benefit of this material upon making a decision to declare the roaming service.

For example, the CRTC in Canada has considered the appropriate approach to the regulation of domestic mobile roaming prices in a Canadian context and has reached the following conclusions in favour of an incremental costing methodology (known as a "Phase II costing approach" in Canada) in that particular case:⁴

Public version | 91

⁴ See "Telecom Regulatory Policy CRTC 2015-177" which is available at the following URL: http://www.crtc.gc.ca/eng/archive/2015/2015-177.htm

"The Commission considers that using a retail-minus approach to set rates for wholesale roaming provided by the national wireless carriers would not be appropriate. The prevalence of bundled pricing (e.g. for Internet, home phone, and mobile wireless services) and wireless pricing plans (e.g. one price for voice, text, and data) in the retail market makes it difficult to establish, with accuracy, an appropriate rate for any particular service. Also, the retail-minus approach would require frequent adjustments to the rates given the dynamic nature of retail pricing.

An approach based on the Commission's Phase II costing approach is more appropriate because it captures the underlying cost elements relevant to the provision of a particular service and takes into account costs over a period of time. The Commission considers that using a cost-based approach to establish wholesale rates will confer price certainty within the wireless industry and enable the national wireless carriers to recover their costs and obtain a fair return on their investments."

There are a range of other examples globally where an appropriate regulated pricing methodology for domestic roaming has been determined. There is plenty of evidence available to the ACCC in the public domain that access pricing for a domestic mobile roaming service can easily be determined.

To assist the ACCC, VHA provided detailed material from Frontier Economics and Mr Feasey to accompany VHA's Original Submission by way of evidence. This material provides significant detail on the manner in which access pricing could be determined for domestic mobile roaming service and the different options available to the ACCC.

3.5.7 Evidence #5: A "retail minus" or "benchmarking" approach avoids complexity

While the CRTC has favoured an incremental costing approach, it would be open to the ACCC to initially favour a more straightforward form of access pricing such as a "retail minus" methodology or a "domestic benchmarking" approach.

In Mr Feasey's report, he has suggested that the ACCC adopt a combination of the two approaches in which roaming charges would be benchmarked against Telstra Wholesale's pricing of its wholesale mobile resale service when supplied on a 'full footprint' basis.

VHA understands that matters of access pricing would be considered by the ACCC only once declaration occurs. However, VHA notes that this material can provide the ACCC with a high degree of confidence that the ACCC can indeed determine appropriate access pricing that balances the interests of the various parties.

3.6 International experience supports mandating of roaming

3.6.1 Submissions made by Telstra and Optus

Both Telstra and Optus claim that the international experience supports a position in which domestic mobile roaming is not regulated, but for different reasons and with regard to different countries:

- Telstra comments (p6) that: "International precedents do not support mandated roaming. Some countries, including the UK and France, are moving away from mandated roaming out of concerns for the impact on investment. Countries which have mandated roaming are seeking to address country-specific problems which inhibited commercial roaming arrangements, such as the difficulties of small regional carriers negotiating with nationwide carriers."
- Optus comments (p3) that: "Whilst Optus acknowledges that mandated roaming has been a regulatory policy tool applied in some other jurisdictions, it is clear that the circumstances in which such policies have been applied are not applicable to Australia. Roaming has either been mandated to enable operators to provide national services in jurisdictions where regional spectrum licences are prevalent (USA and Canada) or it has been used to assist a new entrant to enter the market (New Zealand, France, and Norway etc.). In the latter case roaming is usually time bound and subject to investment obligations on the new entrant. Neither of these circumstances applies to Australia, where we have three established providers with access to national spectrum licences operating nationwide networks."

VHA believes it is important that the reasons for mandating, or not mandating domestic mobile roaming, in those countries are fully understood. Once this occurs, it is clear that global best practice supports the mandating of roaming in circumstances analogous to those existing in Australia.

3.6.2 Response by VHA to those submissions

VHA wishes to make four key points in response to Telstra's and Optus' submissions:

- First, the Australian circumstances are focused on natural monopoly in areas of low population density, consistent with the identified need for roaming in Canada and the United States.
- Second, the regulatory instrument for mandating domestic mobile roaming will differ widely between different regulatory regimes, so is not a relevant consideration.
- Third, where reasonable commercial arrangements have been achievable, the global position is not to mandate domestic mobile roaming – but otherwise, roaming is mandated.
- Fourth, the Part XIC regime is designed to promote commercial outcomes, so is not a heavyhanded intervention in the manner portrayed by Telstra and Optus.

3.6.3 Evidence #1: Comparison should be based on low population density

VHA notes that both Telstra and Optus have pointed to different international precedents and claimed that the international experience does not support the mandating of roaming. This is not correct. The international experience very clearly supports the mandating of roaming in Australia.

There are two important factors why domestic mobile roaming should be declared in Australia that are relevant to the application of international best practice:

- First, there is a natural monopoly problem in regional Australia caused by the large geographic area and very low population density by global standards.
- Second, Telstra is refusing to provide access to this natural monopoly area. Hence commercial arrangements are not working and regulatory intervention is therefore required.

When looking at the international precedents, the key issue is therefore whether roaming is commonly mandated in this scenario. The unequivocal answer is yes.

The countries that are identified in the various submissions with the closest circumstances to Australia in relation to very low population density and a failure of commercial arrangements are Canada, New Zealand, Norway and the United States. All of these jurisdictions have mandated roaming.

To assist the ACCC and by way of further evidence, VHA has set out below a table which indicates the different population densities and geographic areas of the various countries including those mentioned by both Telstra and Optus.

	Population (million)	People per km2	Size of country (km2)	% land covered by mobile network	% population covered by mobile network
Australia	23.78	3	7,692,000	31%	99%
Canada	35.85	4	9,985,000	20%	99%
Norway	5.2	14	385,178	79%	98%
NZ	4.6	17	268,021	98%	98%
USA	321.42	35	9,834,000	>90%	100%
South Africa	54.96	45	1,221,000	82%	99%
Spain	46.42	93	505,990	98%	99%
Austria	8.61	105	83,879	98%	99%
France	66.81	122	643,801	97%	99%
Italy	60.8	206	301,338	97%	98%
Germany	81.41	234	357,376	99%	99%

UK 65.14 269 243,610 97% 99%

Source: The World Bank; Trading Economics.

It is clear from the above table that Canada is closest to Australia in terms of geography, population density, and mobile coverage (by geography and population), followed by Norway. Both of these countries have mandated the supply of domestic mobile roaming. Likewise, the next two countries on the list, ie New Zealand and the United States, have also mandated the supply of domestic mobile roaming services.

3.6.4 Evidence #2: The precise regulatory instrument is irrelevant

In Optus' submission, Optus has apparently suggested that the international experience is not relevant in Australia as the mandating of domestic mobile roaming was achieved by different regulatory instruments in those countries.

However, the manner in which roaming is mandated in different jurisdictions will depend on the regulatory regime in a particular jurisdiction. The Part XIC access regime is fairly unique to Australia, although the New Zealand regime is based on the Australian regime (and New Zealand has mandated domestic mobile roaming).

Rather than enacting a specific access regime, other countries around the world tend to use licensing as a vehicle for regulation. Regulatory obligations are therefore imposed in the context of licences, including spectrum licences and carrier licences.

Spectrum licences have provided a key means to impose regulatory obligations on mobile operators as they are government-issued and are critical for the operation of the mobile operator, so are a convenient platform of regulation. Accordingly, mandated roaming obligations are frequently set out in the terms of those licences.

Relevantly, Optus' original submission stated that France does not mandate domestic mobile roaming. This is incorrect. Domestic mobile roaming was mandated to grant Free Mobile national roaming rights.⁵

In summary, the submission by Optus can be disregarded as it is irrelevant.

⁵ ARCEP, media release http://www.arcep.fr/index.php?id=8571&L=1&tx_gsactualite_pi1%5buid%5d=1363&tx_gsactualite_pi1%5bbackID%5d=1&cHash=78a8f6c060.

3.6.5 Evidence #3: Roaming mandated where no reasonable commercial outcome

The international experience indicates that regulatory intervention has <u>not</u> occurred where industry stakeholders have proved to be able to enter into reasonable commercial domestic mobile roaming agreements for themselves.

VHA notes that this was the key reason why the ACCC did not declare domestic mobile roaming in the last inquiry in 2004, namely that the parties had reached commercial arrangements and had advised the ACCC that they were happy with these arrangements.

In the United Kingdom, for example, political pressures were applied to the industry participants to encourage a commercial solution under threat of regulatory intervention. As commercial arrangements were concluded, the mandating of domestic mobile roaming was deemed unnecessary. As the ACCC will appreciate, Vodafone was involved in the development of a commercial solution in the United Kingdom.

However, this situation does not arise in Australia. [CIC begins][CIC ends] Reasonable commercial domestic mobile roaming arrangements have failed.

[CIC begins][CIC ends]

The purpose of this declaration inquiry is to determine whether declaration should occur, not the terms of any access determination. However, VHA notes that regulators in other jurisdictions have considered the appropriate terms and pricing for domestic mobile roaming arrangements. Some of the issues identified above have therefore already been the subject of extensive regulatory consideration, confirming VHA's views.

For example, in the context of mandated roaming in Canada, the CRTC issued a decision on 1 March 2017 titled "Telecom Decision CRTC 2017-56" which set out its consideration of proposed price and non-price terms in a domestic mobile roaming arrangement proposed between two entities. In relation to any anti-competitive restriction on advertising, the CRTC commented (at para 244):⁶

"In the wholesale wireless framework, the Commission imposed a condition on wholesale roaming providers, pursuant to section 24 of the Act, that prohibits them from preventing wireless carriers from disclosing the identities of their wholesale roaming providers to their current or potential customers (the section 24 condition). This condition applies to all wireless carriers that provide wholesale roaming, regardless of the network technology being used. The intention of the section 24 condition was to ensure that Canadians have the information they need to make informed choices about their wireless services"

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A copy of the CRTC's decision of 1 March 2017 can be found at the following URL: http://www.crtc.gc.ca/eng/archive/2017/2017-56.htm

"The original intention of the section 24 condition is clear: the wholesale roaming customer should be able to disclose to its end-users which incumbent's network they use for roaming. If end-users are aware of the wholesale roaming provider's identity, they will be able to easily access publicly available information about the incumbents' coverage areas. In the Commission's view, there is very little potential for harm to the incumbents if wholesale roaming customers are permitted to point to this publicly available information when providing information to their own end-users."

3.6.5 Evidence #4: Declaration of roaming promotes commercial outcomes

In the context of international comparison, VHA notes that both Telstra and Optus have exaggerated the effect of Part XIC declaration by characterising it as a heavy-handed regulatory intervention. This is incorrect and misstates the purpose of Part XIC.

As the ACCC will be aware, the Part XIC regime is designed to promote reasonable commercial outcomes in the long-term interests of end users. Following the changes to the regime that occurred in 2011, commercial negotiations have been given even more primacy than was the case historically.

Declaration of a service is the gateway for the application of statutory obligations that are intended to promote reasonableness and fairness in the commercial supply of the service. As such, they are intended as an antidote to asymmetric situations of monopoly where the access provider has overwhelming market power and can dictate unreasonable terms of supply (as in the case of roaming).

Once declaration has occurred, the standard access obligations apply. These apply a fundamental standard of reasonableness based on non-discrimination. The ACCC also has the ability to make procedural directions to encourage commercial negotiations. The ACCC has the ability to make access determinations that set out default terms and conditions and pricing, if commercial negotiations were to fail.

Ultimately, the Part XIC regime seeks to promote a reasonable commercial outcome that balances the interests of the stakeholders in a way that is consistent with the long-term interests of end users.

However, the flip side of not declaring domestic mobile roaming is that both Telstra and Optus can otherwise continue to delay, discriminate, over-charge and generally handicap VHA's ability to compete in regional Australia (ultimately to the long-term detriment of mobile consumers).

Moreover, the ACCC has recently advocated the repeal of the Part XIB sectoral competition regime and the Bill to give effect to that repeal is currently before Parliament. In the absence of the Part XIB regime, the only means by which the ACCC can intervene to address anti-competitive conduct by Telstra (short of litigating as a breach of generic competition law) is by ensuring that the relevant service is declared beforehand under Part XIC.

[CIC begins][CIC ends]

The following slide summarises these points:

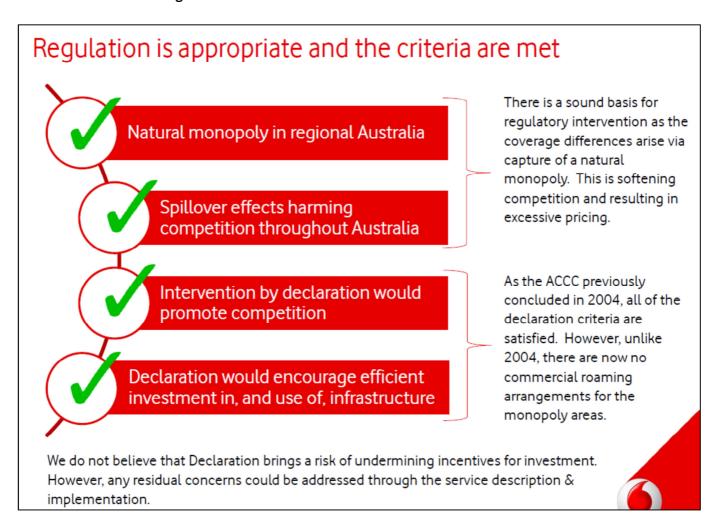
Part XIC is intended to facilitate reasonable commercial outcomes in the consumer interest

- Telstra and Optus have misrepresented the nature of the Part XIC access regime by suggesting it is a 'heavy handed intervention'. Rather, the regime is designed to encourage reasonable commercial outcomes.
- Once declaration has occurred:
 - The standard access obligations apply. These apply a fundamental standard of reasonableness based on non-discrimination.
 - The ACCC has the ability to make procedural directions that require the parties to negotiate
 to a timeframe and to share useful information.
 - The ACCC has the ability to make an access determination that can set out default terms and conditions and pricing, should commercial negotiations fail.
 - Parties can agree any commercial solution, overriding the access determination.
- The flip side of not declaring roaming, is that both Telstra and Optus can otherwise continue to delay, discriminate, over-charge and generally handicap VHA's ability to compete in regional Australia (ultimately to the long-term detriment of mobile consumers).

4. Conclusions

Please refer to the Executive Summary for the overall conclusions from this submission. Please let us know if you wish to discuss any aspect of this submission.

A slide summarising VHA's overall submission is set out below for the ACCC's convenience:



Yours faithfully

Vodafone Hutchison Australia Pty Limited

13 March 2017