



TELSTRA CORPORATION LIMITED

Superfast Broadband Access Service and Local Bitstream Access Service Final Access Determination Joint Inquiry

Telstra's response to the ACCC's Discussion Paper

Public version

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[CIC begins] = information not to be released even with a confidentiality undertaking



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EXECUTIVE SUMMARY

A benchmarking approach to Local Bitstream Access Service (LBAS) and Superfast Broadband Access Service (SBAS) pricing is appropriate

Telstra's preference for pricing the LBAS and SBAS services is a building block model (BBM) that reflects the cost of providing the various services covered. However, given the likely complexity of developing a BBM that incorporates the range of network types, Telstra considers that it would be appropriate to use a benchmarking approach.

The most appropriate benchmarks for the regulated prices for the SBAS and LBAS are the regulated NBN and Telstra's wholesale ADSL services. These benchmarks have similar characteristics to SBAS and LBAS Ethernet Layer 2 services and Telstra's Fibre Access Broadband (FAB) service.

Interoperability between networks is a significant barrier to entry for Retail Service Providers (RSPs)

Telstra considers that the barriers to entry for RSPs who wish to provide services over non-NBN networks are significant where additional costs must be incurred to interface with those networks. As such, Telstra Retail does not currently offer services over these non-NBN networks. The establishment of NBN Co as a 'wholesaler of alternative networks' would address this, and could also assist with minimising compliance costs for non-NBN network providers.

The costs to develop a standalone FAB or Layer 2 bitstream service in South Brisbane and Velocity estates are significant

Telstra does not consider that it would be in the long term interests of end users (LTIE) for the ACCC to require Telstra to provide a FAB service where no active voice service is present, given the high cost to develop a 'naked' FAB product and the low number of services that would potentially benefit.



01 A benchmarking approach to LBAS and SBAS pricing is appropriate

1.1. A benchmarking approach is appropriate given the complexity of incorporating the range of covered network types into other pricing models

Telstra's preference for pricing the LBAS and SBAS services is a building block model (BBM) that reflects the cost of providing the various services covered.

However, developing a BBM for the pricing of SBAS and LBAS services would involve considerable complexity given the wide range of network types, size, products and providers that deliver SBAS and LBAS services. As noted in the ACCC's Discussion Paper, the regulatory costs for both the regulator and access providers would be excessive due to the small number of services supplied to end-users and high cost of obtaining detailed cost and technical information from a number of different suppliers.¹

Telstra considers that the use of a retail minus approach to set wholesale prices for LBAS and SBAS would also result in unnecessary complexity in determining the level of retail costs to subtract from each provider's retail offering, and would require further manipulation to obtain an estimate for wholesale-only providers.

This approach is also likely to result in inconsistency between networks and service providers, and may risk under-recovery of costs depending on the approach taken to inputs such as the average cost of supply. The nature of the retail market at present also means that the ACCC will need to make a number of assumptions to implement a retail-minus methodology, such as the treatment of bundled products. The ACCC has previously acknowledged some of the difficulties of a retail-minus approach relating to transparency and potential inconsistency with wholesale costs in the Wholesale ADSL (WADSL) Final Access Determination (FAD) inquiry.²

Additionally, if the ACCC considers that adopting this methodology would also require further regulatory measures in order to police providers' behaviour, Telstra would expect that the increased regulatory burden would have an impact on deployment of SBAS and LBAS networks.

In the absence of a cost-based BBM, Telstra considers it would be most appropriate and cost effective to use a benchmarking approach.

1.2. SBAS and LBAS should be benchmarked against the regulated NBN and Telstra wholesale ADSL service prices

The most appropriate benchmarks for the regulated prices for the SBAS and LBAS are the regulated NBN and Telstra wholesale ADSL services. The NBN benchmark has similar characteristics to SBAS and LBAS Ethernet Layer 2 services and Wholesale ADSL is similar to Telstra's FAB service.

¹ ACCC, Superfast Broadband Access Service and Local Bitstream Access Service Final Access Determination Joint Inquiry – Discussion Paper, September 2016, p15-16

² ACCC, Public inquiry to make a final access determination for the Wholesale ADSL service – Draft Report, March 2013, p24-25



Benchmarking the regulated prices to the NBN service and Telstra’s wholesale ADSL service would also address any remaining concerns that the ACCC may have regarding the potential emergence of small non-NBN networks and compliance with the level playing field provisions, as the use of benchmarking would enforce consistent national pricing for all wholesale providers of these services, at a level that would ensure that customers receive consistent pricing regardless of whether the underlying network used is the NBN or a non-NBN network. If the objective of the declaration, and setting of prices, for SBAS and LBAS is to ensure that “providers of superfast carriage services ... were subject to the same conditions as NBN Co”³ then prices based on the regulated NBN and Telstra services should be carried over.

1.3. Benchmarked prices should not include adjustment factors due to the high potential for error

While there may be factors that could drive differences in costs between networks and service providers, any attempt to address these through the inclusion of adjustment factors is subject to a high risk of regulatory error. There is also a risk that determining which adjustments to make will result in “cherry picking” and sub-optimal outcomes that do not reflect the costs of service provision – this is especially likely where proposed adjustments are based on calculations which were developed for specific purposes:

- While Telstra’s wholesale ADSL port charges are currently based on two geographic zones, the majority of FAB services are supplied in Zone 1 areas, and so already implicitly include a geographic price differential. This renders any other geographic adjustments unnecessary and potentially excessive.
- Although the regulated pricing of Telstra’s wholesale Domestic Transmission Capacity Service (DTCS) product has a geographic parameter included in the pricing calculation, this formula was based on a set of services which have different characteristics and are therefore not comparable to the provision of SBAS and LBAS services.
- The NBN benchmark prices are geographically averaged, which allows an implicit cross subsidy of more costly areas to serve across the country. However, an adjustment to the benchmark to lower the regulated price in the SBAS and LBAS FAD, to ostensibly reflect a lower cost to serve, could tilt the level playing field. Differentiated pricing of products would not be in the LTIE if these similar products were able to be purchased in the same area.
- Conversely, the ACCC’s proposal that scale diseconomies could exist for smaller SBAS and LBAS networks⁴ implies that an upward adjustment could be considered. However, the difficulty in determining the quantum of such an adjustment could outweigh any perceived benefit, as well as such an adjustment offsetting any of the other possible downward adjustments, rendering them null.

As noted above, needlessly complicating the methodology and process for setting wholesale prices for SBAS and LBAS would only add to the regulatory costs borne by both the regulator and wholesale providers.

³ ACCC, Superfast Broadband Access Service and Local Bitstream Access Service Final Access Determination Joint Inquiry – Discussion Paper, September 2016, p4

⁴ ACCC, Superfast Broadband Access Service and Local Bitstream Access Service Final Access Determination Joint Inquiry – Discussion Paper, September 2016, p16



02 Interoperability between networks is a significant barrier to entry for retail service providers

2.1. Interfacing with numerous third-party networks is costly and technically complex

RSPs must invest significant capital to integrate with the NBN (and NBN Co systems) in order to supply services to end users. As a result, RSPs' decisions to use third-party infrastructure, including services supplied by SBAS or LBAS providers, will depend on the extent to which they must spend additional capital to develop order, activation, interface and network service and supply processes for each network.

Telstra does not provide retail services to customers in areas serviced by third-party networks (i.e. networks other than Telstra's or NBN's networks) due to the high costs associated with establishing connections with those networks and developing systems and capabilities to supply services to end-users.

2.2. This cost and complexity is a barrier to entry

There are a significant number of small networks identified by the ACCC as providing superfast broadband services, including 13 networks servicing 20,000 or fewer end users and 7 networks servicing between 20,000 and 100,000.⁵ For most RSPs, the additional development costs required to provide retail services over these networks are unlikely to be offset by the revenues gained by competing for such small numbers of end users.

Given that Telstra has already invested a significant amount in developing systems and technical interfaces with NBN Co, it does not make commercial sense to incur additional costs to interface with each additional non-NBN network, particularly given the low number of services involved.

2.3. Establishing NBN as a 'wholesaler of alternative networks' would simplify and reduce interfacing costs

The Government has previously recognised the importance of minimising the number of network interfaces that RSPs must integrate with in order to provide services to end users.⁶ Telstra considers that the most effective means of achieving this aim is for NBN Co to become a 'wholesaler of wholesalers' with responsibility for translating third-party infrastructure ecosystems into NBN-equivalent networks and interfaces that RSPs can access without the need to develop new systems to connect with each additional network. Alternatively, LBAS and SBAS providers must develop technical and business systems and interfaces that are consistent with NBN specifications, though this would potentially result in LBAS and SBAS incurring high costs to reconfigure their current systems and interfaces.

Telstra notes that even where providers must develop order, activation, interface and network service and supply processes that align with NBN's processes, or provide wholesale services via NBN as a wholesaler of wholesalers, there will remain many factors on which differentiation will still be possible for

⁵ ACCC, Superfast Broadband Access Service declaration inquiry – Final Decision, July 2016, p5

⁶ Commonwealth Government, Telecommunications infrastructure in new developments policy, March 2016, p14-15



LBAS and SBAS providers. Cost discipline and efficiency at the wholesale level, and vigorous retail competition resulting from all RSPs being able to compete for all customers serviced from the same basic set of wholesale services, will maximise the positive effects of competition at wholesale and retail levels and therefore outcomes for consumers.



03 The costs to develop a standalone FAB or Layer 2 bitstream service in South Brisbane and Velocity estates are significant

3.1. Developing a standalone FAB or Layer 2 bitstream service would require significant modification to existing systems and processes

This section sets out the technical features of the FAB service and an estimate of the costs required to reconfigure the FAB service as a Layer 2 bitstream or standalone broadband service as proposed by the ACCC in its Discussion Paper. Telstra will provide the ACCC with more detailed cost (and other) information in response to a separate information request.

3.1.1. Technical features of the FAB service are not the same as the Layer 2 bitstream service

As Telstra has previously stated, the FAB service is not a Layer 2 bitstream service based on accepted definitions of the service, or a standalone 'naked' broadband service.

Telstra's fibre deployments in South Brisbane and Velocity estates were a direct result of the construction of the Queensland Children's Hospital (South Brisbane) and the need for a cost effective choice in new (Velocity) estates (as opposed to copper extension). These deployments were not made for the purpose of providing high speed broadband services but rather to replace or augment our PSTN network. Telstra's network and product design was targeted to PSTN emulation to mirror our existing (non-NBN; non-Next Generation Network [NGN]) network capabilities rather than to provide new fully functioning Layer 2 bitstream services that enable a suite of IP-based NGN services as per NBN and other new superfast networks .

As configured, FAB is a best efforts, non-prioritised service and is not capable of supporting Quality of Service (QoS). FAB also does not enable standalone broadband services. To acquire FAB, an end user must acquire a PSTN service either from a wholesale service provider or Telstra Retail. If the wholesale service provider wishes to be the provider of this PSTN service, they would need to acquire Wholesale Line Rental (WLR), Local Carriage Service (LCS) and either Originating and Terminating Access (OTA) or rebill calling products (Subscriber Trunk Dialling (STD)/International Direct Dialling (IDD)/etc). In South Brisbane and Velocity estates, Telstra provides wholesale customers with FAB and WLR which in technical and pricing construct terms is essentially a fibre-based version of the copper-based wholesale DSL (WDSL). The requirement for an underlying PSTN service is not a commercial bundling construct; rather, it is a function of Telstra's network architecture and is integral to how Telstra provisions these services. Telstra does not forcibly bundle FAB and PSTN access services. It is simply a technical requirement that FAB services must be supplied over an active PSTN service. The PSTN service is essential for the ordering, provision and management of the FAB service.

3.1.2. Costs to develop standalone FAB or a Layer 2 Ethernet Bitstream service in South Brisbane and Velocity estates are significant

If required to provide a Layer 2 Ethernet bitstream service, or a standalone broadband FAB service in the South Brisbane and Velocity estates, Telstra would need to make significant systems and process modifications. This would include changes to Telstra's network architecture, equipment selection, provisioning and service assurance processes, IT support systems and billing platforms to enable a service to be provisioned as a separate service that is independent of an underlying PSTN service. Telstra may also need to construct new points of interconnect with wholesale customers, develop new



B2B capability for interaction with wholesale customers, and develop new commercial and technical product constructs.

The cost to make the necessary changes to deliver a standalone broadband FAB service in South Brisbane and Velocity estates would be at least [c-i-c begins] [c-i-c ends]. This estimate was originally provided to the ACCC in 2011 in the context of the South Brisbane Upgrade. Since then, the costs would have risen significantly due to increases in, for example, parts and labour costs.

In order to properly estimate the current costs of providing a Layer 2 bitstream service or a standalone FAB service for both South Brisbane and Velocity estates Telstra would need to undertake a full scale scoping exercise, which has both cost and resource implications. Telstra estimates that it would take around 12 months to develop a Layer 2 bitstream product and approximately another 3 months to rollout, including to allow for wholesale customers to undertake the necessary changes to their systems so they could consume the service.

3.2. The period for cost recovery of a standalone or Layer 2 bitstream service is likely to be limited

The period for possible cost recovery is likely to be limited to the time until the NBN transition occurs, which constrains Telstra's ability to recover costs. The likely transition of Telstra's South Brisbane FAB services to NBN Co, as well as NBN Co's overbuild of Velocity estates set out in the Definitive Agreements in the short to medium term would render any investment in developing a naked FAB product obsolete.

3.3. If the ACCC requires Telstra to develop a standalone FAB service, Telstra should be able to recover reasonable costs

In the WADSL FAD inquiry, the ACCC decided against declaring a Wholesale Naked DSL service because Telstra did not sell retail 'Naked DSL' products using its copper network and would need to change its systems to be able to offer these services, which would be a costly exercise. The ACCC considered that "*it would be in Telstra's legitimate business interests to recover the costs to modify its network to accommodate a fully or hybrid unbundled service.*" It accepted that "[t]hese costs are likely to be high and will involve testing and the costs associated with obtaining and developing the expertise required to upgrade PSTN legacy systems."⁷ The same reasoning is applicable in respect of developing a Layer 2 bitstream service or naked FAB service in South Brisbane and Velocity Estates.

Telstra would be unable to recoup the costs of developing Layer 2 bitstream services or naked FAB services for South Brisbane and Velocity estates without charging significantly higher wholesale prices. Exacerbating this, in addition to the limited period for cost recovery, is the low number of services in South Brisbane and Velocity estates over which these costs must be recovered. Implementing this capability on the FAB service would also require the delay and replacement of other projects that are currently underway in Telstra's IT development and deployment schedule, which may impact retail and wholesale customers and not be in the LTIE.

⁷ ACCC, Public inquiry to make a final access determination for the Wholesale ADSL service – Final Report, May 2013, p76



If Telstra introduced a Layer 2 bitstream service or naked FAB service, wholesale customers would need to undertake matching IT changes to interface with new or modified Telstra systems. This investment by wholesale customers would also be wasted as they will likely acquire Layer 2 bitstream services directly from NBN Co after the South Brisbane Fibre to the Premises (FTTP) Network is folded into the NBN. Telstra considers that it would be unreasonable for wholesale customers in South Brisbane, who have already incurred costs in relation to the migration from copper to fibre (which were mitigated to an extent by a rebate applied by Telstra to South Brisbane wholesale customers), to be required to incur additional costs in relation to system changes or higher wholesale prices for any further reconfigurations of the FAB service. Indeed, the requirement to incur additional costs in order to supply services in South Brisbane may result in wholesale customers electing not to do so with a resulting loss in competitive supply for end-users.



ATTACHMENT A: Responses to the ACCC's questions

Question	Telstra response
<p>1. Should price regulation apply to all SBAS and LBAS wholesale product tiers currently offered or only to the base tier SBAS and LBAS offerings as anchor products? Do you consider a different product tier should be used as the anchor product? Please outline your reasons for this view.</p>	<p>The current SBAS Interim Access Determination (IAD) and LBAS FAD prices apply to base product tiers – 25/5 and 30/1 for FAB. These products are the most widely used products – as noted by the ACCC products within the 25 Mbps product tier account for 77% of NBN's superfast services.</p> <p>Telstra considers that it is appropriate for this to be maintained for the current FAD.</p>
<p>2. What are the implications for investment and competition (and therefore the LTIE) if only the base tier SBAS and LBAS offerings are subject to price regulation? How do these relate to the statutory criteria in sub-section 152BCA (1) of the CCA?</p>	<p>As noted in Telstra's response to Q1, the base tier SBAS and LBAS offerings are the most widely used products.</p> <p>Regulating a base tier SBAS offering provides appropriate regulatory constraint while maintaining flexibility for providers to offer alternative (high speed) products in response to customer demand.</p>
<p>3. Is it appropriate to benchmark regulated prices for the SBAS and LBAS against the regulated NBN and Telstra's wholesale ADSL charges?</p>	<p>In the absence of a cost-based BBM, Telstra considers that it is appropriate to benchmark regulated prices for the SBAS and LBAS against the regulated NBN and Telstra's wholesale ADSL services. These benchmarks have similar characteristics to SBAS/LBAS and Telstra's FAB service.</p>
<p>4. How do the current regulated wholesale prices (specified by the SBAS IAD and LBAS FAD) compare to the wholesale costs of providing these services? Please provide as much detail as possible.</p>	<p>Telstra does not provide a Layer 2 Ethernet bitstream service and is not in a position to comment on the wholesale costs of providing those services.</p> <p>Telstra's FAB product is closely aligned to the WDSL product in terms of the product construct and underlying cost to deliver services. Accordingly, the prices set out in the SBAS IAD which align FAB prices to WDSL prices are appropriate.</p>
<p>5. What, if any, adjustments should the ACCC make to the SBAS and LBAS IAD prices for these to more accurately reflect the costs of providing the SBAS and LBAS services (for example to reflect different POI locations, higher expected traffic per end-user or diseconomies of scale of smaller networks)?</p>	<p>While there may be factors that could drive differences in costs between networks and service providers, any attempt to address these through the inclusion of adjustment factors is subject to a high risk of regulatory error.</p> <p>There is also a risk that determining which adjustments to make will result in 'cherry picking' and sub-optimal outcomes that do not reflect the</p>



	costs of service provision – this is especially likely where proposed adjustments were developed for specific purposes that are unrelated to the pricing of SBAS or LBAS services.
6. Do particular adjustments need to be made across all price components, or only some of the components (e.g. the aggregation charge)?	Please see Telstra’s response to Q5 .
7. Do you have suggestions for how appropriate adjustments might be determined? Please explain how these relate to the statutory criteria.	Please see Telstra’s response to Q5 .
8. Do you support the application of a retail-minus pricing methodology for the setting of wholesale prices for the SBAS and LBAS? Please provide reasons, linking them to the statutory criteria in subsection 152BCA (1) of the CCA.	<p>Telstra does not support the application of a retail-minus pricing methodology for setting wholesale prices for SBAS and LBAS.</p> <p>This approach is likely to be subject to a high risk of regulatory error as a result of the requirement to estimate inputs such as retail costs of supply and a ‘typical’ retail superfast broadband offer.</p> <p>This approach is also likely to result in inconsistency between networks and service providers, and may risk under-recovery of costs depending on the approach taken to inputs such as the average cost of supply.</p> <p>The nature of the retail market at present also means that the ACCC will need to make a number of assumptions to implement a retail-minus methodology, such as the treatment of bundled products.</p>
9. What, if any, ongoing transparency or equivalence measures should the ACCC impose on access providers if it were to adopt a retail minus pricing approach for SBAS and LBAS?	Telstra considers that the imposition of ongoing complementary regulatory measures appears to be a heavy handed regulatory approach given the small number of services covered by the declaration. Telstra’s experience is that such regimes are costly and likely to outweigh the benefits. Further, implementing these measures would be inconsistent with the ACCC’s concerns about the cost of compliance with the declaration.
10. Please advise if you would be able to provide the ACCC (on a confidential basis if required) with the total annualised retail costs of supplying SBAS and LBAS access and aggregation services as well as the costs expressed per customer line and/or Mbps of traffic?	Telstra notes that the retail costs (as distinct from the wholesale costs identified in Q4) will vary widely depending on the retail product construct within which the SBAS or LBAS service is offered, including whether it is bundled with other services such as voice or content services. Retail costs will also vary depending on the business model of the RSP offering SBAS or LBAS services to end-users, including whether they offer non-SBAS/LBAS services to end users which use common retailing systems and processes.



	For these reasons, Telstra is not able to provide an annualised retail cost particular to SBAS services.
11. Should wholesale prices or retail costs be determined for each individual SBAS and LBAS network or should overall or sample averages be applied for each of these networks? Why?	As set out in Telstra’s response to Q8 , Telstra does not support the implementation of a retail minus pricing approach. Given the wide range of Wholesale only, Retail only and vertically integrated network operators identified by the ACCC, ⁸ determining prices either individually or overall using a retail minus approach would be needlessly complex and impose further regulatory costs.
12. What retail broadband prices should be used for implementing the retail minus pricing approach? Please provide reasons, having regard to the statutory criteria in subsection 152BCA (1) of the CCA.	As set out in Telstra’s response to Q8 , Telstra does not support the implementation of a retail minus pricing approach. There are a range of different retail pricing approaches taken by RSPs which can vary across geography and access type. Further, RSPs offer superfast broadband services within a range of product constructs, such as bundled service offerings. This diversity in retail product construct and pricing approach means that there is no ‘typical’ retail broadband price that could be used to implement a retail-minus approach without a high degree of estimation and adjustment which has a high risk of error.
13. Please outline any practical implementation issues you think could arise in the application of a retail minus pricing approach for SBAS and LBAS?	Please see Telstra’s response to Q8 and Q12 .
14. Are there other suitable pricing approaches, including any used overseas that might be adopted for pricing the SBAS and LBAS? Please outline your reasons for favouring these approaches.	As outlined in Telstra’s response to Q3 , Telstra considers benchmarking to be an appropriate pricing methodology for SBAS and LBAS.
15. What impacts would your preferred or non-preferred pricing approaches for the SBAS and LBAS have on the provision of retail broadband services?	Telstra considers that the market for retail broadband is a national market, where SBAS and LBAS networks are a part of this, rather than separate geographic markets. It should also be noted that a number of RSPs including Telstra, Optus and iPrimus offer common retail price points across different access types (such as ADSL and NBN). The competitive effects of SBAS and LBAS pricing approaches should therefore be considered in the context of competitive constraints that operate at the national level.

⁸ ACCC, Superfast Broadband Access Service declaration inquiry – Final Decision, July 2016, p5



<p>16. What impacts would your preferred or non-preferred pricing approaches for the SBAS and LBAS have on the deployment of SBAS and LBAS networks?</p>	<p>Telstra is not in a position to comment on other networks' deployment decisions. Telstra expects that an overly complicated and burdensome regulatory regime such as transparency requirements relating to a retail-minus pricing approach would act as a disincentive for providers to deploy networks.</p>
<p>17. Are there any other price components for the SBAS and LBAS services that should be price regulated in addition to port and aggregation charges currently regulated?</p>	<p>The price components for the SBAS and LBAS services that should be price regulated should remain the port and aggregation charges, as included in the SBAS IAD and LBAS FAD. This ensures consistency between the various service providers and networks. While Telstra considers that there is no incentive to raise any other charges to excessive levels, the ACCC has the ability to monitor this and take action if required.</p>
<p>18. Do you charge (or are you charged) for port and aggregation services separately and what factors determine whether this charge is imposed separately?</p>	<p>Telstra applies an end user access port charge which is based on the transmission bandwidth of the port and the exchange area zone that the end user is located in.</p> <p>Separately Telstra applies a Broadband VLAN (aggregation) charge which is based on the subscribed data speed of the VLAN.</p> <p>Telstra also applies an Ethernet Access charge which the customer procures under a separate agreement with Telstra.</p> <p>Telstra notes that Broadband VLAN and Ethernet Access services are able to carry a mix of FAB and DSL traffic.</p>
<p>19. What aggregation elements do you require as an access seeker of the SBAS or LBAS?</p>	<p>Telstra is not an access seeker of SBAS or LBAS services.</p>
<p>20. What aggregation elements do you supply as an access provider of the SBAS or LBAS?</p>	<p>Telstra provides Broadband VLANs and Ethernet Access services in order to supply FAB services.</p> <p>Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC's separate information request.</p>
<p>21. What factors need to be taken into account in determining regulated aggregation charges for the SBAS and LBAS? Should they differ between LBAS and SBAS or particular providers or classes of providers?</p>	<p>Regulated pricing should only differ between LBAS and SBAS or particular providers or classes of providers to the extent that the base tier services are materially different, as is the case with Telstra's FAB service.</p>
<p>22. Do any of your answers to questions 17 to 21 above change on whether an adjusted benchmarking or a retail minus pricing approach is adopted for the LBAS or BAS? If so, please outline how.</p>	<p>Please see Telstra's response to Q8 and Q13.</p>



23. What are the compliance costs to access providers of supplying an LBAS?	Telstra does not supply LBAS services.
24. What are the likely compliance costs to access providers of supplying an SBAS? Do they differ from those faced by LBAS suppliers?	<p>The magnitude of compliance costs faced by Telstra to supply an SBAS will depend on whether changes are made to the SBAS service description to amend the FAB service. If the FAB service description remains in its current form set out in the IAD these compliance costs will be low as Telstra currently makes this service available to wholesale customers.</p> <p>Amendments to the service description to require Telstra to deliver a Layer 2 bitstream or standalone 'naked' FAB service would incur significant other costs which are set out elsewhere in this submission. At minimum these costs would include changes to Telstra's network architecture, equipment selection, provisioning and service assurance processes, IT support systems and billing platforms.</p> <p>The cost to make the necessary changes to deliver a standalone broadband FAB service in South Brisbane and Velocity estates would be at least [c-i-c begins] [c-i-c ends].</p> <p>Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC's separate information request.</p>
25. Do the compliance costs for supplying a SBAS/LBAS vary according to the size and or location of the telecommunications network on which they are supplied? Please outline how and why these costs vary.	<p>Telstra considers that, in an NBN environment, there should be a level playing field on the rules that apply to industry participants in the supply of services to residential and small business customers. This includes the requirement to provide wholesale access.</p> <p>As noted by the ACCC, a number of smaller network providers have demonstrated that the costs of providing such access can be recovered via the regulated rate (although this may be dependent on the ACCC maintaining its current approach to pricing). Nevertheless, Telstra acknowledges that the requirement to implement wholesale provision may impose costs on some network providers or require a transition period. Absent a detailed understanding of the position of these network providers, Telstra is not in a position to comment on the appropriate approach to be taken by the ACCC in these circumstances.</p>
26. Of the costs discussed above which of them are one-off costs and which are recurrent? (Please itemise costs against systems/software changes, equipment purchases, staffing costs etc. Parties should also specify the type of	The costs identified in Q24 are largely one-off costs associated with developing a standalone FAB service and making it available to wholesale customers.



ordering and other business systems they would implement/use in order to provide a wholesale service)	Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC's separate information request.
27. Is it appropriate to put in place transitional arrangements for new SBAS/LBAS pricing? Why, and how does this relate to the statutory criteria in subsection 152BCA (1) of the CCA? What transitional arrangements (if any) should be implemented?	Please see Telstra's response to Q25 .
28. Are there any barriers to entry into relevant retail markets and what are they?	<p>Interfacing with numerous third-party networks to provide retail services is costly and technically complex, creating a barrier to entry in retail markets where the underlying service is provided by these networks.</p> <p>Telstra does not provide retail services to customers in third-party estates due to the high costs associated with establishing connections with those networks. Given that Telstra has already invested a significant amount in developing interfaces with NBN Co, it does not make commercial sense to incur additional costs to interface with non-NBN networks particularly given the low number of services involved.</p>
29. Are there thresholds that must be met in order to justify entry into retail markets or submarkets supplied particular superfast networks? What are these thresholds and how do they affect entry decisions?	<p>In order to justify the high cost to develop underlying systems and establish connections with third-party networks, there must be a sufficiently large pool of end-users serviced by the network from which the RSP can recover these costs.</p> <p>As noted elsewhere in this submission, there are a significant number of networks identified as providing superfast broadband services that service less than 100,000 end users. For most RSPs, the additional development costs to connect to these networks are unlikely to be offset by the revenues gained by competing for such small numbers of end users.</p>
30. To what extent do you consider the location of POIs, provision and assurance arrangements and wholesale product constructs differ between different superfast networks and to what extent do they act as barriers to entry into associated retail markets or submarkets? Please outline any additional costs each of the factors impose on access seekers seeking to acquire the SBAS/LBAS on these networks?	Please see Telstra's responses in Part 2 of this submission.
31. Are there any other barriers to entry on non-NBN superfast networks and what are they? Please outline the extent to which they differ from arrangements or standards used by NBN	Please see Telstra's responses in Part 2 of this submission.



Co and the extent to which they act as a barrier to entry.	
32. Do you consider it appropriate for any SBAS/LBAS FAD terms to mandate consistent arrangements or standards with the NBN? Why? How do these relate to the subsection 152BCA (1) statutory criteria?	Please see Telstra’s responses in Part 2 of this submission.
33. What would be the costs faced by access providers in adopting consistent arrangements or standards with the NBN. Please itemise these costs. What would be their effect on the legitimate business interests of the access provider and other efficiency and competition considerations?	<p>There are costs associated with constructing fibre networks and developing systems for access providers to provide services that are consistent with NBN. As outlined in Part 2 of this submission, these costs would primarily relate to the development of order, activation, interface and network service and supply processes.</p> <p>However, the Government has recognised the importance of networks adopting minimum or consistent standards between third-party networks and the NBN in its Telecommunications in New Developments Policy and subsequent proposed Carrier Licence Conditions.</p> <p>Adopting consistent standards with NBN Co would efficiently address many of the interoperability issues that currently pose a barrier to entry to the retail market for SBAS and LBAS services. However, as a requirement to develop systems and processes may be cost-prohibitive for some SBAS and LBAS providers, Telstra considers that the most effective means of reducing barriers to entry and minimising compliance costs is for NBN to become a ‘wholesaler of wholesalers’ as outlined in Part 2 of this submission.</p>
34. Is it possible for Telstra supply a superfast broadband service in its South Brisbane and Velocity estate networks where no active voice service is present?	<p>As set out in Part 3 in this submission, it is not possible for Telstra to supply a superfast broadband service where no active voice service is present in South Brisbane and Velocity estates without incurring significant costs to modify current systems and processes.</p> <p>Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC’s separate information request.</p>
35. What costs would Telstra face in supplying a superfast broadband service on these networks where no active voice capacity was present?	<p>Please see Telstra’s responses in Part 3 of this submission.</p> <p>Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC’s separate information request.</p>
36. What costs would Telstra be likely to face in transforming the current FAB service to a Layer 2 Ethernet protocol service?	Please see Telstra’s responses in Part 3 of this submission.



	Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC’s separate information request.
37. If a ‘naked’ FAB service could be provided, should the ACCC put in place some type of charging to allow Telstra to recover the reasonable costs of operating its legacy copper-based systems to supply a FAB? Please specify what these costs would be – including the extent to which they are common costs.	<p>Please see Telstra’s responses in Part 3 of this submission.</p> <p>Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC’s separate information request.</p>
38. Would RSPs with customers in Telstra’s South Brisbane and Velocity Estate Networks or that are considering supplying customers in these areas supply services to customers on these networks if Telstra could supply an SBAS without an active voice capacity present?	<p>Telstra is not in a position to comment on the decisions of other service providers.</p> <p>As noted in Telstra’s previous submissions on the SBAS declaration inquiry, there are a number of RSPs currently providing services in South Brisbane and Velocity estates today under the current FAB product construct.</p>
39. Should the ACCC consider transitional arrangements, such as the use of a glide path, for the pricing Telstra FAB services once it has determined the final regulated charges that should apply to these networks under the SBAS FAD?	<p>As outlined above, Telstra considers that benchmarking is an appropriate approach to setting prices for SBAS. Under a benchmarking approach, Telstra considers that FAB prices should be directly linked to benchmark charges, such that any changes to the WADSL prices flow through to FAB services.</p> <p>Provided that there are no changes made to the current service description for FAB services set out in the SBAS IAD, Telstra does not consider that a glide path approach for FAB services would be appropriate, as incremental price changes would likely result in a high cost to implement any new pricing.</p> <p>If the FAB service description is amended such that Telstra must incur additional costs to reconfigure FAB as a ‘naked’ broadband service or a Layer 2 bitstream service, a glide path approach which delays Telstra’s cost recovery would not be suitable, given the short time period over which Telstra would be able to recover costs.</p>
40. Are there any costs relating to the Telstra FAB service prior to its transfer to the NBN that the ACCC should be aware of in setting transitional arrangements?	Telstra expects that NBN would intend to replace Telstra’s network termination device with their own device once the South Brisbane and Velocity networks are transferred to NBN. There will be costs associated with decommissioning Telstra’s network termination devices that should be considered when setting transitional arrangements.



	Telstra notes that we will address detailed questions regarding the FAB service in response to the ACCC's separate information request.
41. What costs will be incurred by non-Telstra network providers that would warrant transitional arrangements for these providers in applying the final regulated charges under the SBAS FAD?	Telstra is not in a position to comment on other network providers' costs.
42. Should all the non-price terms for the LBAS FAD and SBAS IAD be continued? If not, which terms be removed and on what basis?	Telstra considers that the non-price terms set out in the SBAS IAD are appropriate.
43. Do you support non-price terms and conditions applying uniformly to LBAS and SBAS? If not, which terms should differ, and what are your reasons for recommending this?	To ensure consistency between various service providers and networks, and to mitigate the network interoperability issues outlined above, non-price terms and conditions should apply to SBAS and LBAS as uniformly as possible.
44. Should the ACCC include in LBAS and/or SBAS service specifications the use of data and voice ports on a network termination device at the end-user premises? Please provide reasons.	<p>Telstra considers that the use of data and voice ports on network termination devices at end-user premises should not be specified. This specification would be overly prescriptive and difficult for network owners to implement, given the range of different network configurations and potential for end-users to self-supply their own network termination device.</p> <p>Currently the FAB service only supports the Telstra-supplied network termination device, which provides Ethernet broadband ports, POTS ports and an RF port. End-users are then able to supply their own home network gateway device to connect to the network termination device.</p>
45. What, if any, other service specifications should be included in the LBAS and/or SBAS FAD? Please provide reasons.	Telstra is not aware of any additional service specifications that should be included in the SBAS FAD.
46. Is an exemption of small providers from the application of the SAOs, as set out in the SBAS IAD, appropriate? Please provide reasons.	Generally Telstra considers that a level playing field should apply in terms of applicability of the FAD to all SBAS suppliers. However, Telstra recognises that for smaller SBAS suppliers the costs to comply may be disproportionate. The ACCC has the ability to monitor smaller service providers and take action at a later date if circumstances require.
47. If yes, how should such an exemption operate? Please explain how this exemption relates to the statutory criteria in subsection 152BCA (1).	Telstra is not in a position to comment on the operation of a small provider exemption for these networks.
48. Are there any other exemptions that the ACCC should consider?	Telstra is not aware of any other exemption that should be included in the SBAS FAD.
49. What is an appropriate duration for each of these FADs?	Telstra considers that at this point in time it is reasonable to determine that the FADs should



	expire in line with the declaration of SBAS, which expires on 28 July 2021.
50. Are there any circumstances that warrant a difference in the expiry dates of the SBAS FAD and the SBAS declaration?	Please see Telstra’s response to Q49 .
51. Is it appropriate to link the expiry dates for the LBAS FAD and the SBAS FADs? If not why?	Telstra does not consider that there is any reason why the LBAS and SBAS FADs should not be linked.