

TELSTRA CORPORATION LIMITED

Response to the Commission's Issues Paper (a second discussion paper) into the public inquiry to make a final access determination for the wholesale ADSL service

Executive Summary

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Executive Summary

1. Telstra welcomes the opportunity to respond to the Commission's Public inquiry to make a final access determination for the wholesale ADSL service – Issues Paper (**Issues Paper**). Telstra notes that although the Issues Paper primarily addresses non-price terms and conditions, Telstra has taken the opportunity to provide further information regarding the price terms and conditions for the Wholesale ADSL Final Access Determination (**FAD**). Telstra has set out its response to the Issues Paper in its submission titled, *Response to the Commission's Issues Paper (a second discussion paper) into the public inquiry to make a final access determination for the wholesale ADSL service – Non-Price Terms*. Telstra's initial views concerning price terms for Wholesale ADSL (**WDSL**) are set out in its submission titled, *Response to the Commission's Issues Paper (a second discussion paper) into the public inquiry to make a final access determination for the wholesale ADSL service: Pricing to Improve Customer Experience*.
2. As Telstra noted in its previous submission to the FAD process, it is critical that the Commission adopts a sound approach to the future regulation of the WDSL service, ensuring that it achieves an appropriate balance between regulating WDSL through price and non-price terms and conditions, and allowing the competitive market for broadband services to work freely. If such a balance is not achieved, the Commission risks undoing many of the competitive, investment-driven outcomes from which end users currently benefit. Further, the Commission risks deterring future investment, exacerbating the engineering challenges raised from growing use of ADSL services and the networks and reducing dynamic efficiency, all to the detriment of the long term interests of end users (**LTIE**).
3. In setting price and certain non-price terms for WDSL, it is vital to recognise the distinctiveness of WDSL when compared to other regulated telecommunication services. The distinct differences in the market structure, competitive outcomes, usage profile and investment requirements of WDSL, as compared to voice resale services or unbundled CAN services (ULLS or LSS), mean that the application of the same principles and approaches to the regulation of WDSL as the Commission has previously applied to traditional fixed line services would be detrimental to the LTIE. Specifically, Telstra considers that the Commission must consider the implications of the following key facts:
 - a. As recognised by the Commission, there is competition in the market for ADSL services. This competition has been driven by ongoing investment in competitive DSLAM infrastructure. In many areas of Australia, Telstra's ADSL network faces direct retail and wholesale competition from service providers that have utilised ULLS and LSS services to deploy their own ADSL networks. All objective measures of market structure (including market shares, concentration and churn) and market outcomes – such as the development of new services, and changes to end user prices – reveal ADSL to be distinctly different to other regulated telecommunication services.
 - b. The infrastructure required to support the provision of ADSL services requires continuous upgrading and investment. The Telstra ADSL network provides services to around 3 million retail and wholesale end users connected to over 14,000 DSLAMs, in over 2,000 ESAs throughout Australia. These DSLAM devices are linked via thousands of fibre optic transmission links and aggregation devices, ultimately interconnecting to either Telstra's retail internet network (BigPond) or wholesale customer networks.

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- c. In deploying ADSL services, Telstra has sought to efficiently utilise the existing PSTN CAN in order to maximise the number of Australians able to be provided a Telstra ADSL service. In addition, Telstra relies on the PSTN's assurance, provisioning and service management systems (and our PSTN experience) in order to efficiently provide wholesale and retail ADSL services.
 - d. In recent years, while the number of SIOs on Telstra's ADSL network has remained relatively steady, total network traffic has increased significantly – with throughput volumes growing by around 100% each year since 2009. This ongoing growth is driven by increased use of over the top video streaming services (most notably YouTube), IPTV, movies and other real-time entertainment services. As the utilisation of ADSL services has increased in recent years, the strain placed on the network has increased.
 - e. Ensuring that this extraordinary growth does not reduce the quality of service for all end users therefore presents an ongoing challenge and requires ongoing investment, engineering innovation and pricing signals. With respect to pricing, socially efficient prices need to take into account the impact of congestion on the network.
 - f. The deployment of the NBN is exacerbating the challenge of investing in ADSL infrastructure to maintain quality services for end users. With network demands forecast to continue to grow significantly year on year, it is simply not possible to “sweat” ADSL network assets and maintain current service levels. At the same time, the payback period for new investments is becoming truncated with the risk of asset stranding due to the NBN deployment.
4. Taking these facts into account, it is then a question of how best to approach the regulation of the WDSL service to promote the statutory criteria.

Recognise the extent of competition in the market for ADSL services

5. Where there is clearly effective competition in the market for ADSL services, the Commission should grant geographic exemptions from the Standard Access Obligations for all providers of wholesale ADSL services. For example, within the 289 exchange service areas (ESAs) nominated by Telstra, end users can choose from services offered by at least four different ADSL networks (and many resellers of ADSL services over these networks). Intense competition is delivering outcomes in those exchanges that are demonstrably in the LTIE, including lower pricing and a wide choice of retail and wholesale ADSL products.
6. The observed competitiveness in the market for ADSL services within the 289 ESAs (and metropolitan areas more generally) has been driven in large part from the Commission not having declared resale ADSL services until February 2012. In the absence of a declared service access seekers relied on ULLS and LSS services to not only replicate Telstra's ADSL offerings, but to offer innovative services and service bundles (at both the retail and wholesale layer).
7. By setting price and some non-price terms of access in such an effectively competitive environment, the Commission runs the risk of reducing competitive incentives and reducing end user choice. This risk can be seen in the divergent market outcomes for fixed line voice and ADSL services – a divergence primarily due to the market responding to different long-term regulatory approaches by the Commission.



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8. Where the Standard Access Obligations do apply, they should apply to all providers of wholesale ADSL. To do otherwise would exacerbate distortions arising in the market from regulation, counter to the statutory criteria.

Set prices for WDSL that recognise the impact of competition on retail prices, and do not risk increasing congestion on ADSL networks through misaligning price signals or deterring investment

9. Telstra's aim is to compete by providing the best quality of service for our retail and wholesale ADSL customers at the best value price.
10. In such a dynamic and changing marketplace, this can be a challenge. Our customers are living increasingly connected lives, consuming a growing range of online content and intelligent applications, and demanding more complex services that require faster and larger networks. They are using more and more data every year.
11. Ensuring that this (now business as usual) growth does not reduce the quality enjoyed by our customers is an ongoing challenge and requires a careful mix of the right investment incentives, clever engineering, and setting the right price signals.
12. In declaring WDSL, the Commission can now set investment incentives and price signals, and hence manage two thirds of the equation that governs the experience and value for money to our customers. As such, the implications of regulatory interventions in this process are significant for all end users.
13. We consider that the pricing principle that would best promote the long term interests of end users is one that results in no substantial worsening of experience for our retail and wholesale ADSL customers relative to current levels. Given the significant, ongoing growth in traffic demand, this is a difficult objective to meet.
14. However, it is possible to improve customer experience, or at least maintain it, and also promote the long term interests of end users if WDSL prices are set to manage congestion. The socially efficient level of WDSL price is likely to be higher than current RMRC prices. Traffic growth has outpaced capacity growth after the Interim Access Determination (IAD) prices were determined, yet retail and wholesale prices have been unable to respond.
15. An alternative option for the Commission is to continue the current RMRC pricing principle so that it delivers the same or similar prices. This will likely leave customers worse off since the prices they face will likely stay the same, but their customer experience will likely worsen if they become more affected by congestion.
16. The worst outcome for customers and the long term interests of end users would be if prices are set by the Fixed Line Service Model (FLSM). Price based on the FLSM would not reflect the cost of congestion, so they would be socially inefficient. Furthermore, the Commission has, in Telstra's view in error, a policy of not allowing Telstra to recover its actual costs if demand for a service is less than its historical peak. Given that ADSL SIO demand is not as high as its historical peak, using the FLSM to price ADSL would prevent the recovery of ADSL costs, including new investment costs. Further, building block models generally are ill-suited to such dynamic and competitive markets.

Not force Telstra to fundamentally change its network architecture or service provisioning systems to enable new services

17. With respect to other non-price terms, the Commission should not require Telstra to extend the WDSL service to provide additional PoIs or new services such as Naked DSL. Requiring Telstra to make significant changes to services it supplies and/or how it supplies existing services is unreasonable and not in accordance with the statutory criteria.

Naked Wholesale ADSL Services

18. In addressing the options put forward by the Commission with respect to Naked ADSL, there are two key points Telstra wishes to make clear. First, the requirement for an ADSL service to be provided on a line with an active PSTN service is not a commercial bundling construct, rather it is a fundamental aspect of how Telstra has deployed ADSL technology on its network and is integral to how Telstra provisions these services:
- a. Telstra provides ADSL services to both retail and wholesale customers as a product provided on top of PSTN services. In this way, ADSL services are analogous to long distance calling services or messaging services.
 - b. Telstra relies on the presence of an underlying active PSTN service for the ordering, assurance and provisioning of its ADSL products. It is a technical requirement of Telstra's OSS and BSS systems that ADSL services require an active PSTN service on the copper line. As such, a requirement to provide Naked ADSL services would require Telstra to undertake significant systems development and process changes.
 - c. Telstra does not provide Naked ADSL services to itself or wholesale customers. A requirement to provide Naked ADSL would require Telstra to significantly extend facilities not currently used in the supply of the declared service. For these reasons Telstra does not consider that the Commission has the power to require Telstra to provide Naked ADSL under the FAD. Further, if the Commission were to require Telstra to provide a "limited functionality" basic access service as part of a virtual "Naked ADSL bundle", this would require changes to the declared WLR service. Telstra does not consider that the Commission has the power to require such a change as part of the WDSL FAD process.
19. Further, it is unclear that access seekers (or end users) would benefit from the requirement to make such a service available. Telstra considers that the existing options available to access seekers through the provision of Telstra supplied WDSL services, as well as ULLS and LSS-based ADSL services (either self-supplied, or acquired from other WDSL suppliers) provide access seekers with a wide choice for the delivery of ADSL services to end users. It is unclear that a requirement for Telstra to develop a new service would significantly increase the competitive options available to access seekers, or end users.
20. Given these uncertain benefits, it is unreasonable to require Telstra to undertake the significant technical and process developments required to enable the provision of Naked ADSL services on its network.

Additional Points of Interconnect for WDSL

21. The provision of wholesale (and retail) ADSL services requires a number of network elements (in addition to DSLAM devices). Telstra has deployed extensive ADSL infrastructure to enable WDSL acquirers to provide ADSL services to end users located in more than 2,800 ESAs throughout Australia. Telstra's ADSL network (including the use of a centralised core network) represents an efficient deployment of ADSL technology on top of the PSTN.
22. A requirement to deploy additional points of interconnect would require Telstra to extensively reengineer its ADSL network, reducing the efficiencies currently achieved from aggregating traffic to a centralised core. Reengineering the network to provide a greater number of PoI locations would require moving core network devices (including Broadband Access Routers and Internet Gateway Routers) closer to the end user DSLAMs. This would require the deployment of a far greater number of these expensive and high capacity devices than currently required in the network and it would necessarily reduce the utilisation rate of these devices, meaning that Telstra would be required to install more BRAS and IGR devices to provide ADSL services to itself and wholesale customers. This would clearly represent an inefficient use of and investment in network infrastructure.
23. Deploying a greater number of PoIs would also require access seekers to deploy more extensive network infrastructure in order to interconnect to Telstra for the purposes of acquiring WDSL services.

Conclusion on Naked ADSL and additional PoIs

24. Overall, the Commission's proposals with respect to Naked ADSL and alternative PoI locations would represent significant departures from the way Telstra supplies ADSL services (either to itself or to wholesale customers), would impact on the delivery and assurance of other network services and would require significant redesign of Telstra's internal systems and network topology.
25. The proposals are particularly unreasonable given the context of ongoing declines in the demand for WDSL services, which continue to decline driven by the presence (and continuing growth and expansion) of ULLS and LSS alternative services. Added to this, the deployment of the NBN means that system and network changes would be required to be undertaken as Telstra is attempting to migrate services to the NBN and transition from the legacy copper network. The deployment of the NBN will also necessarily reduce the available payback period for any mandated investment requirements.
26. More importantly, if Telstra were required to divert operational resources, engineering funding and management oversight to develop new Naked ADSL services, or to reengineer the ADSL network, it may impair the management of the NBN migration and its progress on the development of NBN-based services.

Conclusion

27. The market structure, underlying service and network technology and the dynamic growth in traffic of ADSL services is quite unlike other regulated telecommunications services, such as the ULLS or PSTN voice service.

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28. In setting price and non-price terms for WDSL, the Commission must recognise these distinguishing features, and apply regulatory settings and approaches that are in accordance with the statutory criteria. This will not be easy; the complex and dynamic nature of the market for ADSL services means that there is a high risk of regulatory error and the consequences of such an error could be significant.
29. Within its submissions Telstra has sought to set out a comprehensive set of engineering facts, economic principles and regulatory approaches to assist the Commission in this task. Telstra would welcome the opportunity to provide further evidence to the Commission on any of the issues raised in these submissions.