TELSTRA CORPORATION LIMITED

ULLS Undertaking

Telstra's ULLS Undertaking is Reasonable

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Contents

A Introduction

1. Since the Unconditioned Local Loop Service ("**ULLS**") was first declared in July 1999 there has been significant regulatory uncertainty as to Telstra's network costs. Over this period the Australian Competition and Consumer Commission ("**the Commission**") and Telstra have built four cost models to estimate Telstra's network costs.[1] The Commission and its consultants are currently in the process of building another. The previous cost models were assumption-driven because detailed data on the topography of Australia, the location of roads, customer premises and obstacles to network deployment were not available. It was inevitable that those models were sensitive to changes in spatial assumptions and produced hypothetical networks that were infeasible in practice. This contributed to a wide disparity of cost estimates and led to considerable industry and regulatory debate (see Attachment 1).

2. Telstra seeks to achieve broad regulatory agreement with the Commission and industry stakeholders on an accurate estimate of the cost of supplying ULLS. When ULLS prices are based on such an estimate, the correct incentives will exist for Telstra and others to invest in new and efficient customer access network ("CAN") technologies and facilities-based competition will develop. Consistent with the Commission's access pricing principles[2] and ULLS pricing principles[3], Telstra has built a new generation of TSLRIC+ model – the Telstra Efficient Access (TEA) model – which is based on a detailed data set that describes the actual locations of customers, network structures and routes between structures. Because the TEA model relies much more on factual data than on assumption, it delivers far more accurate estimates of the efficient cost of supplying ULLS.

3. The use of detailed data (actual locations of customers, structure points, and cable routes) makes the TEA model uniquely positioned to model a realistic TSLRIC network focused on the most efficient manner of providing CAN services. Furthermore, the TEA model is based upon:

    - Actual and realistic, not hypothetical or idealistic, assumptions related to building and operating a reliable network;

    - Forward-looking technology and practices that are the best in current widespread use and are consistent with a real-world network architecture and actual conditions;

    - Input values that are consistent with the rules and purpose of the modelling exercise and with each other;

    - The inclusion of all costs that are incremental to providing copper CAN services (including ULLS) to as many customers as are capable of being supplied with these services; and

    - The addition of reasonable allocations of joint and common costs.

4. Telstra has lodged a ULLS Undertaking with the Commission for a ULLS price in Band 2 exchanges of $30 per month. As discussed in more detail below, a Band 2 ULLS price of $30 is reasonable for reasons that include that it is:

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[1] The ACCC/NERA cost model, Telstra's PIE cost model, Telstra's PIE II cost model, and Telstra's Top-Down TSLRIC model.
[2] ACCC (1997), *Access Pricing Principles – Telecommunications: a guide,* July 1997.
[3] ACCC (2007), *Unconditioned Local Loop Service (ULLS) - Final pricing principles*, November 2007

- Fully supported by the TEA model's estimates of TSLRIC+ given any reasonable set of inputs and, therefore, consistent with the statutory criteria to which the Commission must have regard;

- Consistent with the commercial price Telstra has been asking of access seekers and that Telstra has publicly announced on many occasions; and,

- Based on Band 2 costs and compliant with the Commission's requirement that ULLS prices be geographically de-averaged.[4]

5. Telstra looks forward to engaging in a constructive process of industry discussion, with a view to achieving clarity and certainty on network costs and ULLS pricing.

6. The following sections in this submission describe, in general, the terms of Telstra's ULLS undertaking (Section B) and explain why the price-related terms are reasonable (section C). Section D concludes.

B The Terms of Telstra's Undertaking

7. Telstra's ULLS undertaking sets out at least the following terms and conditions of access:

    a. The monthly price for access is $30 per SIO per month in Band 2 areas, excluding GST;

    b. The term of the undertaking begins at the time at which the undertaking is accepted; and,

    c. The term of the undertaking ends at 31 December 2010 if not terminated or withdrawn earlier.

C Telstra's Price is Reasonable

8. Telstra's proposed price for ULLS in Band 2 areas of $30 per SIO per month is reasonable for reasons that include the following:

    a. The TEA model is a TSLRIC+ model consistent with the Commission's access pricing principles.

    b. Prices based on TSLRIC+ are considered reasonable by the Commission.

    c. Under any set of reasonable assumptions the TEA model supports a ULLS price of $30.

9. These points are discussed in more detail below.

C.1 The TEA model is a TSLRIC+ model

10. Telstra's TEA model is a TSLRIC+ model as defined in the Commission's guide to pricing principles and as accepted in its ULLS pricing principles.[5] That is, it measures the incremental cost (including a contribution to indirect costs) of the total ULLS service, over

[4] ACCC (2007), *Unconditioned Local Loop Service, Final Pricing Principles*, November 2007, at page 11.
[5] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, from page 28; ACCC (2007), *Unconditioned Local Loop Service (ULLS) - Final Pricing Principles*, November 2007, at page 7.

the long run, assuming all other production activities remain unchanged. Furthermore, consistent with regulatory practice and the Commission's pricing principles, the TEA model estimates the forward-looking efficient costs of providing ULLS.

C.1.1 The service

11. The scope of the TEA model is set to estimate the band 2 costs of all elements of Telstra's CAN that are, or are able to be, acquired by access seekers when they purchase the declared ULL service from Telstra. The ULL service definition includes only the "copper-based wire" forming part of Telstra's public switched telecommunications network.[6] That is, it does not include optical fibre cabling, which is used in fibre to the node or fibre to the home networks. Indeed, it is not technically feasible to supply ULLS over optical fibre cables.

C.1.2 Long-run incremental cost

12. Telstra measures the incremental cost of providing the service by identifying all of the elements that are required for the supply of ULLS and measuring their cost. Some elements (for example, trenching for the installation of cables underground) are shared in some cases with other services or providers. For these elements the cost is shared between the assets' respective uses.

13. Consistent with the "long-run" aspect of TSLRIC, the model includes both fixed and variable costs of supply, including a contribution to indirect costs.

C.1.3 Forward-looking efficient costs

14. The TEA model is forward-looking. It is based on the ongoing costs of supplying ULLS using efficient means of supply and technologies that are currently in widespread commercial use. The model achieves this by:

    a. Determining efficient routes between network structure points;

    b. Applying best-practice, widely used, forward-looking engineering practices to determine the plant and equipment needed for ULLS and eliminating unnecessary legacy network structures;

    c. Using competitive market rates for valuing plant and equipment; and

    d. Adding operating and maintenance costs and indirect costs that are adjusted in proportion to efficiency savings in construction costs.

C.2 Prices based on TSLRIC+ are reasonable

15. It has been accepted on a number of occasions by the Commission and the Australian Competition Tribunal ("**the Tribunal**") that prices that are supported by a properly calculated estimate of TSLRIC+ satisfy the relevant legislative criteria that define the reasonableness of an undertaking.[7]

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[6] ACCC (2006), *Declaration of Unconditioned Local Loop Service*, July 2006.
[7] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, pages 29-30; ACCC (2002), Pricing of Unconditioned Local Loop Services (ULLS): Final Report, March 2002, page 15; Re Seven Network Ltd (No 2) [2004] ACompT 11 at 137.

16. Consistent with the Commission and the Tribunal's views, prices based on TSLRIC+ **promote competition**.[8] There is no discrimination against access seekers when ULLS prices are based on TSLRIC+, since the downstream operations of the access provider would face at least the same level of cost to supply downstream services to customers.[9] When TSLRIC+ prices reflect the cost of a new entrant providing the relevant service, they would promote efficient market entry and subsequent competition. Conversely, if prices are below the cost of a new entrant providing the relevant service, then entry will not occur, eliminating the prospect of genuine facilities-based competition.

17. As considered by the Commission, TSLRIC+ prices **encourage the economically efficient use of infrastructure** over the long run, since access seekers will not purchase the service unless the value they place on it is at least as high as the efficient costs incurred in relation to its supply over the long run.[10]

18. The Commission states that **economically efficient investment in infrastructure** is also likely to be encouraged when prices are set to TSLRIC+.[11] To achieve the objective of encouraging efficient investment, TSLRIC+ prices must be based on the costs of an efficient new entrant using practices and technology that are the best in current widespread use and include a return on investment that is sufficient to compensate investors for the risks they actually bear.[12] Prices that are lower than this threshold will not provide efficient build/buy incentives for access seekers and other potential investors. Such prices will also not provide sufficient incentive for the access provider to augment its own infrastructure.

19. The Commission considers that TSLRIC+ prices promote **Telstra's legitimate business interests** by allowing Telstra to fully recover the costs of producing the service.[13] While Telstra's undertaking price of $30 is below the TEA model's estimate of TSLRIC+, this is only for the term of the undertaking. Moreover, the proposed price is better aligned with costs than are current charges. After the term of the undertaking, ULLS prices can be increased to TSLRIC+ either through commercial negotiation, arbitration or Telstra lodging another undertaking.

20. When prices are based on TSLRIC+, the Commission considers that **the interests of access seekers** are protected.[14] Access seekers that are more efficient than Telstra are able to competitively displace Telstra's retail business units and vice versa. While some access seekers have been paying prices for ULLS below $15, this is not relevant to assessing their legitimate interests for the forthcoming undertaking period. The ability to obtain a service at a price below costs is not part of a party's legitimate interests, any more than the ability to sell a service at a price above costs is not part of a party's legitimate interests for the purposes of Part XIC. Although it is unfortunate if some parts of access seekers' investments in ULLS infrastructure were made on the expectation that ULLS prices might be significantly below cost for some period, this is not relevant to the consideration of Telstra's undertaking, as those expectations were based on historical error. Additionally, Telstra has on many occasions noted that it believes that a price of $30 would be more appropriate than current charges, and hence there are no grounds for such a price to come as a surprise. Finally, if ULLS prices are not increased to eventually

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[8] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, at page 29.
[9] The long-run costs faced by the downstream operations of the access provider might be higher than TSLRIC+ if historical investment decisions have turned out, to some extent, inefficient.
[10] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, at page 30.
[11] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, at page 29.
[12] Section 1.152AB(7A) of the *Trade Practices Act 1974* requires the Commission to have regard to the "risks involved in making the investment".
[13] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, at page 30.
[14] ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, at page 30.

allow the recovery of the TSLRIC+ of the service then this would simply compound the historical error and further delay efficient investment in the CAN.

21. Since TSLRIC+ based prices do not include any consequential or foregone profits in related markets, they are consistent with the principle that the price of the service should be set taking account of the **direct costs** of providing the service.[15]

22. When prices allow for the recovery of the TSLRIC+ of the network, then Telstra faces incentives to ensure the **safe, reliable and economically efficient operation** of its network.

23. Typically, a balancing of each of the legislative criteria is required when some criteria conflict. However, for the purposes of this undertaking, all the legislative criteria are satisfied by Telstra's proposed price.

C.3 The results of the TEA model support a ULLS price of $30

24. Version 1.0 of the TEA model produces an estimate of TSLRIC+ equal to $49.27 in Band 2 areas.

D Conclusion

25. While it is possible for a range of ULLS charges (including $30) to be reasonable, Telstra selected a charge of $30 for its undertaking. A $30 ULLS price, while at this stage below TSLRIC+, is a reasonable first step for industry to take toward TSLRIC+-based pricing and cost recovery.

26. Telstra's proposed charge of $30 is reasonable for a number of reasons, including the fact that it is fully supported by the results of the TEA model under any reasonable set of inputs. Since the TEA model is a TSLRIC+ model, the proposed charge is consistent with the statutory criteria. Additionally, the $30 undertaking price reflects the level persistently sought in commercial negotiations with access seekers as well as in previous regulatory proceedings. Therefore, it in no sense amounts to a "rate shock" for access seekers. It is open to the Commission to find, on our evidence, that a higher price would also be reasonable. However, this is not a reason to reject Telstra's undertaking as it does not mean that the $30 price charged over the term of Telstra's ULLS Undertaking is unreasonable.

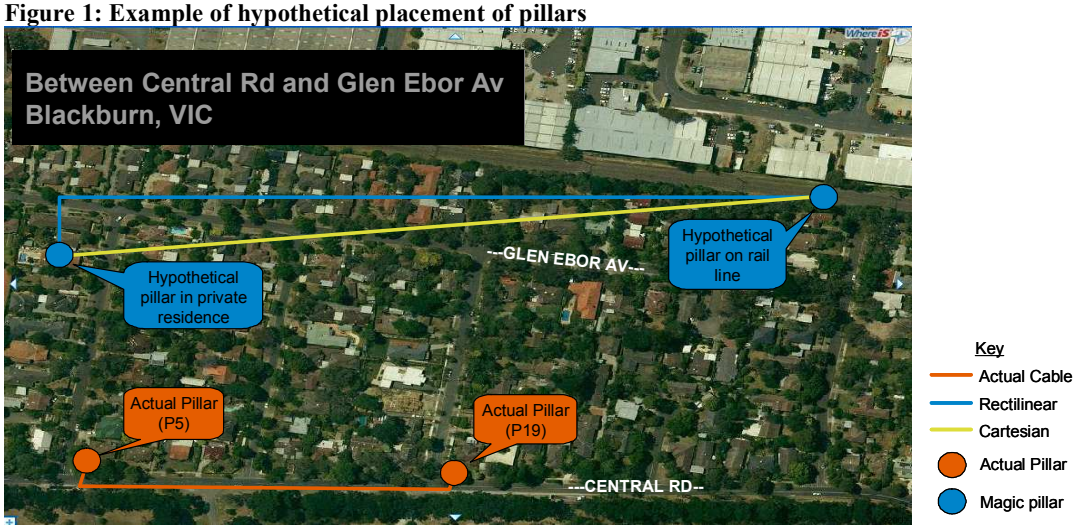
[15] *Trade Practices Amendment (Telecommunications) Bill 1996* Explanatory Memorandum, page 44; ACCC (1997), *Access Pricing Principles – Telecommunications: A Guide*, July 1997, page 10.

Attachment 1 Difficulties with the Previous Models

27. Because of the lack of data, the previous assumption-driven models relied upon unrealistic and arbitrary placement of network plant and equipment determined through the use of mathematical algorithms. However, there was no algorithm that had any regard to obstacles to network deployment such as buildings, rivers, parks, harbours and other topography etc. This meant that network equipment was inevitably, except by chance, placed in locations that were not feasible in reality or economically efficient.

28. This difficulty with the hypothetical models is illustrated in the case study presented in Figure 1. The figure shows that the PIE II model (Telstra's previous model, also utilised by the Commission to set ULLS prices in the past) located an imaginary pillar on top of a private residence and another on the Blackburn railway tracks.

Figure 1: Example of hypothetical placement of pillars



29. The methodology used in the previous models to calculate the cable trench lengths was also subject to a significant degree of error. The hypothetical models used either Cartesian or rectilinear distances for trenches and cables between imaginary pillars. The Cartesian distance is simply a straight line between the two pillars (i.e. "as-the-crow-flies"). The rectilinear distance calculation used two straight North-South and East-West lines to plot the imaginary trench path between the pillars (see Figure 2 for an example of both methodologies as applied to the PIE II hypothetical pillars). In practice, actual cables are typically placed along-side roads. In some cases the shortest ***feasible*** route (being the route that takes into account private property and geographic constraints) is longer than the rectilinear distance (in Figure 2, the actual trench between the two right-most pillars is longer than the alternative but infeasible rectilinear trench). In other cases it falls between the Cartesian and rectilinear distances (for example, the trenches between the two left-most pillars in Figure 2).

Figure 2: Example of Cartesian, Rectilinear and shortest feasible distances

30. The hypothetical models also contained other simplifying, but unrealistic, assumptions that further contributed to their inaccuracy. These assumptions included:

- Topographical simplification (the world was assumed to be flat);
- Ground surface assumed to have no rock;
- No driveways or concrete to reinstate after digging trenches;
- Immunity from private property rents; and,
- No lead-in cables to customer premises.