



Introduction

The CCC supports the Commission's draft decision to reject Telstra's ULLS undertaking. In particular, the CCC is generally in agreement with the Commission's clarification of its approach to TSLRIC.

Pricing principles

Under the Trade Practices Act (Part XIC) the Commission can only accept a price undertaking that it considers is reasonable. In assessing reasonableness the Commission must have regard to the following matters:

1. Whether the price promotes the long-term interests of end-users of carriage services or of services supplied by means of carriage services.
2. The legitimate business interests of the carrier or carriage service provider concerned, and the carrier's or provider's investment in facilities used to supply the declared service concerned.
3. The economically efficient investment in the infrastructure by which listed services are supplied.

The long-term interests of end-users is defined be in promoting competition in relevant markets, any-to-any connectivity, and in promoting efficient use and investment in new and existing infrastructure.

In economic terms the sum of the criteria mean that in regulating a monopoly network service such as the local loop (or the ULLS) the Commission must consider whether the price:

- Encourages allocatively efficient use of the network (in this case the local loop).

- Provides fair compensation to the access provider and an incentive to continue to invest in existing (and new) infrastructure.
- Promotes investment in competing local loops when it is efficient.

Promoting efficient use of the existing local loop infrastructure, which by its nature has high fixed costs and low marginal cost, suggests that prices should be set at short run marginal cost. However, such pricing will not allow the local loop owner to recover its fixed costs. As such, prices need to make an allowance for fixed costs. This has been commonly achieved by taking a “long-run” view as to costs and allowing a mark-up for common costs. In actuality, the approach adopted in access pricing amounts to “average cost pricing” with allocative efficiency being sacrificed in favour of the other pricing criteria – in particular to satisfy the legitimate business interests and to promote dynamic efficiency.

Satisfying the legitimate business interest of the local loop provider means that it must be allowed to recover its efficiently incurred costs and get a fair return on its upfront investment in the network. The question of what are its “efficiently incurred costs” creates debate in all access pricing matters and is what drives different cost modelling approaches. Depending on the approach, a model which ensures that the local loop provider recovers its prudently incurred past investments will provide it with incentives to continue to invest in the existing (and new) infrastructure. Creating such an incentive will also promote dynamic efficiency.

Potentially at odds with the first two economic considerations is the consideration of whether the price promotes efficient investment in competing local loops. This consideration is consistent with the legislative criteria to the extent they are interpreted as requiring a price that promotes *infrastructure* competition and promotes efficient investment in *duplicating* existing investment,¹ but it is potentially ‘at odds’ with the other economic criteria (and the very declaration of the local loop service) because it relies on a view that the local loop is not a natural monopoly - that it is efficient to duplicate and that the Commission should create incentives for it to be duplicated.

As noted by the Commission, the adoption of a total service long-run incremental cost (TSLRIC) as its pricing principle has generally been associated with an acceptance of forward-looking cost concepts, and in large part, forward-looking cost considerations have been given significant weight in the Commission’s past decision making. For example, in its Draft Decision, the Commission has noted that:

¹ Both of which are contentious interpretations of the criteria.

One key reason this pricing principle has been adopted in the past has been the ACCC's concern to promote efficient build/buy decisions - in particular, building by-pass infrastructure, where efficient. In some respects, TSLRIC+ has been a generous approach to pricing, and has probably overestimated the potential for infrastructure-based competition.

As discussed below, the CCC has significant concerns that the current application of TSLRIC (particularly as embodied in the TEA model) gives too much weight to the last criteria (promoting investment in competing local loops) when it is plainly obvious that the local loop is a natural monopoly network. The focus on build/buy incentives has meant that the other criteria have not been satisfied, in particular prices have unnecessarily diverged more significantly from marginal cost and the local loop owner has received more than fair compensation for access seeker's use of the local loop.

The use of forward-looking TSLRIC

Calculating a forward looking TSLRIC estimate has generally involved regular (sometimes annual) revaluations of the asset base used to provide the unconditioned local loop service (ULLS). As described by the Commission this has generally involved an:

... application of fully forward-looking costs would value all existing assets at the cost of a modern equivalent asset (MEA). A MEA is the lowest cost asset with the latest available and proven technology to provide the same service potential.

The CCC considers that the application of a forward-looking TSLRIC in the TEA model does not satisfy the economic criteria outlined above (and hence does not satisfy the legislative criteria and should be rejected). The reasons for this are outlined below.

Allocative inefficiency

Firstly, the access prices produced by the TEA model do not promote efficiency in resource use because prices diverge significantly from marginal cost. Given the large upfront fixed costs of laying the trenches in the local loop have been incurred many years ago, the marginal cost of using the ULLS is likely to be close to zero now the network is in place. Whilst the CCC accept that short-run marginal cost pricing may not allow for recovery of fixed costs, the Commission should be mindful that all increments above marginal cost in the access price distort consumption decisions.

We note that Telstra, as the local loop owner, does not pay itself the access price paid by access seekers. It therefore only takes into account the marginal cost of using the local loop in its business decision making and retail pricing. This means that for many customers and segments Telstra is able to ‘price squeeze’ competitors so long as the marginal (access) price of using the local loop is above the marginal cost of its use (which as noted above is close to zero). Whilst Telstra remains vertically integrated, this situation cannot be fully avoided, however the requirement on the Commission to set prices that promote competition should recognise that prices that are further above marginal cost increase the competitive advantage Telstra has as a vertically integrated operator.

Unfair compensation

Theoretically, it is conceivable that a well executed forward-looking TSLRIC could provide a measure of fair compensation for use of the local loop, but this is unlikely, and as outlined below, the forward-looking TSLRIC executed in the TEA model will guarantee more than fair compensation for use of the local loop.

Practically implementing a forward-looking TSLRIC model requires an extraordinary amount of subjective judgement regarding best-in-use technologies, replacement costs, asset lives, asset price trends, achievable efficiencies, cost allocations, and so on and so forth. This makes its use contentious and costly. In its Draft Decision, the Commission indicates that it is:

... aware of the limitations in the application of TSLRIC+ outside its original focus for PSTN assets in that the TSLRIC+ concept revalues the network assets in each regulatory period such that it does not take account of depreciation in the value of the assets. This limitation is particularly apparent in the case of enduring assets such as trenches which are likely to be less susceptible to bypass.

One of the primary difficulties in using a forward-looking TSLRIC model is time consistency. Even in the circumstances where best-in-use technologies and asset values are observable, if errors are made with asset lives or changes are made to depreciation profiles then the fair level of compensation will not be achieved. For example, in the Draft Decision the Commission notes that there is some contention regarding the asset life which should be allowed for copper cable in the TEA model. Telstra as the access provider says the average life is short (say 10 years) such that the calculated price assumes that the copper is replaced, on average, every 10 years even in the circumstance where the copper last longer than 10 years. Anecdotally, it is known that some copper in

the Telstra local loop is more than 30 years old and evidence has been provided to the Commission that the average life is at least 15 years. The effect of making an ‘error’ and using a figure of 10 years for all copper would therefore to compensate Telstra for costs it is not incurring or not truly expecting to occur.

Similarly, the Draft Decision recognises that there is some contention as to the appropriate depreciation profile for recovery of the assets which make up the local loop. Telstra is seeking a change in the past approach to depreciation – it is seeking a flat annuity when previously a tilted annuity has been used – which has the effect of increasing the price of the ULLS. In order for a forward-looking TSLRIC to achieve fair compensation the depreciation profile cannot easily be changed. That is, once a depreciation path has been set only adjustments to the depreciation path which ensure that the expected cash flows over the life of the asset equal the invested value of the network will achieve the same level of compensation. This is not easy to achieve. If we imagine we begin with a \$100 asset and started depreciating it over its 5 year life using straight line depreciation (equal to \$20 in each and every each year). Now imagine that in a subsequent year we decide to adopt an alternative profile such that the annual depreciation allowance increases. This will inevitably lead to a different level of compensation for the initial investment. The CCC notes that this is precisely the effect of Telstra’s proposed change – midstream Telstra is asking the Commission to accept an increase in annual depreciation allowance by moving from a tilted annuity to a flat annuity.

A price that gives fair compensation also plainly requires that an access provider does not get compensated for costs it does not incur. Compensation for costs not incurred can happen in at least two ways under a forward-looking TSLRIC approach. First, it will happen if a replacement cost is included in the asset valuation for costs that the access provider has not incurred. The classic example of this in the TEA model is the inclusion of costs of re-digging trenches that Telstra was given access to for free.

Second, over compensation will happen if the replacement asset values used in the model are not equal to the expected cost of replacing the asset. As above, this can occur if the asset life is mis-estimated, or if the asset price trends (the forecast of change in asset prices) assumed in the model are incorrect, or if the replacement cost of the asset does not accurately reflect the replacement cost of an asset with identical service potential.

Inefficient build/buy incentives

The primary objective of adopting a forward-looking TSLRIC approach to valuing the copper local loop is to promote efficient build/versus buy incentives. Telstra’s expert,

Professor Harris, endorses this view and argues that the TEA model provides the build/buy incentive. Professor Harris notes:

Given its intended use in pricing ULLS, it is necessary to ask what it would cost a new facilities-based entrant to replace the CAN when working through the theoretical TSLRIC+ construct. A new entrant would have to build its network in the environment as it exists today, with buildings, highways, streets, yards, rivers, mountains, and other man-made and natural obstacles in place. The entrant would have to use the construction techniques or placement methods that are needed to build around or under these obstacles and would not have the luxury of installing its network in unobstructed “green field conditions.” In addition, if the new entrant were building a loop network today designed to serve all of the existing premises (an assumption that is consistent with TSLRIC+), it would operate in a world with rights-of-way in their current positions and paths and face limited opportunity to share the costs of placing facilities with other network service providers.

The CCC notes that experts such as the Competition Economists Group (CEG) have taken a contrary view, noting that this rationale is of “dubious merit” because of the fact that the local loop is a natural monopoly and therefore is unlikely to be replicated by another copper local loop operator. In a submission for Optus in 2003, Dr Hird of CEG noted that:

... the justification for using TSLRIC (or TSLRIC+) is not related to setting efficient build/buy decisions but is best justified on the grounds of providing for dynamic efficiency in the incumbent’s future investments

The idea that a new entrant who has the option to build an optimised deployment would choose the same technology as used by Telstra is difficult to sustain in either a theoretical or practical sense. For this reason the CCC does not consider the TEA model to be credible method for estimating asset values and is not even likely to achieve the (build/buy) objective it purports as its basis.

The CCC considers that even in the event that an operator did decide to bypass the local loop it would not likely use copper. A new local loop operator might use wireless or cable network as the basis of its entry. In fact, if a new operator were to re-dig the trenches, as envisaged by Telstra and its experts, it would lay fibre to the home rather than copper. Such a network would provide a significantly higher quality of service than is provided by the existing copper loop but cost about the same given the vast majority of the cost of the network is in trenching and labour costs and the cost difference between

copper and optical fibre cabling is not significant (particularly given the lower operating costs of a fibre optic network).

As a result, the price a new entrant would be willing to pay for a “low quality” copper service would be much less than the cost of replacing the cables in existing trenches because if they had to pay that cost they, and their customers, would be better off building rather than buying and getting a “high quality” fibre service. Therefore, if the objective was to provide appropriate incentives for build versus buy, the unadjusted (for quality) price produced by the TEA model will over-estimate the price required to encourage efficient bypass of the local loop.

The Commission’s reasoning

In its Draft Decision the Commission proposes what it describes as a “pragmatic implementation of TSLRIC”. This is one that does not adopt a forward-looking cost concept in all aspects of its decision. In particular, the Commission points to “recognition of actual circumstances” as a reason to diverge from a purely forward-looking TSLRIC approach. It notes in particular its:

- Adoption of a scorched node approach to TSLRIC in which “key features” of the network (eg., pillars and exchange locations) are “kept constant”.
- Costing of technologies which are in common use in Australia rather than the best available technologies that would be selected by a new entrant.
- Assumption that many assets in the network are not “re-optimised”.

The CCC considers that the Commission’s pragmatic approach to TSLRIC is reasonable in the circumstances. However, we consider that it is important to recognise that each of these “pragmatic” decisions effectively protects Telstra’s investment decisions from any assessment as to the efficiency of that decision. What does this mean? It means that Commission is effectively ruling that Telstra’s past decisions were prudent and its assets should not be stranded – as a result Telstra is guaranteed a return on those past investments.

Whilst the decision to regard some of Telstra’s investments as prudent may be reasonable it is not reasonable to cost the parts of the network that are protected from optimisation on a forward-looking basis such that the price of those network elements ends up over-recovering what Telstra spent on them.

Such an outcome would be patently ridiculous and obviously inconsistent with the legislative criteria. By analogy, it would be equivalent to contracting with a builder to build you a house and them coming back to you five years after it is built and paid for and saying “that house would cost twice as much to build today, you have to pay me more”, or in Telstra’s language, “that trench would have cost twice as much to build today, you have to pay me more”. As a monopoly network owner Telstra is not exposed to a competitive market in which entry is likely - it does not face the downside risk of entry due to reducing input prices (or the upside risk that entry would be deterred by increasing input prices), it should therefore not be compensated for such risks.

In general, the CCC considers that the Commission has reasonably applied a pragmatic approach to assessing the TEA model. Following are some specific areas of agreement and disagreement with the Commission’s Draft Decision.

On **technology choice** the Draft Decision says that:

“The ACCC considers that, although it is unlikely that a hypothetical entrant today would build a copper network, there is still a need to determine a price for the ULLS. The ACCC’s view is that, while a pure implementation of TSLRIC would involve using technology such as wireless or optical fibre, a pragmatic implementation of TSLRIC methodology involves determining ULLS pricing based on a copper network”

The CCC disagrees with this position for the reasons outline above. It is not necessary for the ACCC to only consider the TSLRIC cost of copper technologies when others might deliver the same (or better) service potential than the copper network. By definition, to adopt a forward-looking costing is to mimic the decisions of a new entrant. In considering a build/buy decision the new entrant will not in any way restrict itself to copper, it will consider the range of technologies capable of delivering the same downstream services to it customers.

On **trench re-digging** costs the Draft Decision says that:

“the ACCC believes that the inclusion of trenching costs, where they have not been incurred by Telstra, will lead to access prices which discriminate between access seekers and access providers which is not in the LTIE. Access prices should be set so as to allow more efficient sources of supply to displace less efficient sources of supply in dependent markets. In this regard, if an incumbent is allowed to recoup surface barrier costs that it does not incur, it will have little incentive to efficiently invest in

infrastructure. Further, at an inflated access price, access seekers will look to build and not buy, when it may be more efficient to buy.”

The CCC agrees with this for the reasons outlined above.

On new estate trenching costs the Draft Decision says that:

The ACCC considers that, when applying the TSLRIC framework in a practical sense, forward looking network costs need to reflect the realities of network deployment and that it is not possible for the CAN to be constructed in one period (or instantaneously). The ACCC view is that network construction would generally be planned a significant time in advance and would most likely occur in conjunction with other operators and utility providers resulting in the use of open trenches in new estates at no cost to Telstra. The ACCC considers that based on a pragmatic application of TSLRIC, it is appropriate to maintain its position that the best available proxy for trench sharing in new estates is the cumulative (historic) trench sharing measure. In this regard the ACCC considers that a trenching sharing value of between 13-17 per cent approximates cumulative trench sharing potential in new estates

The CCC agrees with this conclusion but disagrees with the reasoning. Like the analysis for trench re-digging costs these are cost that Telstra ***has never incurred therefore it is not reasonable that it should be compensated for those costs.*** Moreover the CCC considers the Commission should go one (logical) step further and conclude that none of the trenches in the model should be valued on a forward-looking (current) cost basis as these are network elements which are being protected from optimisation.

On equity issuance costs the Draft Decision says:

“The ACCC accepts that equity issuance costs may be incurred by an entity when it raises equity capital. As such, when an entity incurs equity raising costs it may be appropriate for the entity to be able to recover these costs. However, the ACCC considers that equity raising costs should be recovered as a cash flow (operating cost) allowance and not in the WACC.

In addition, the ACCC notes that Telstra has not actually raised equity capital. The ACCC does not consider it is reasonable to compensate Telstra for costs that it did not incur. Therefore, the ACCC does not consider Telstra’s argument for an allowance for equity raising costs in the WACC will lead to fair estimate of Telstra’s vanilla and pre tax WACCs.”

The CCC agrees with this conclusion and the reasoning.

On **tilted annuities** the Draft Decision says that:

“The ACCC considers that the application of a tilt to regulated cash flows under the TSLRIC regime is appropriate for fair compensation because assets are re-valued periodically by the regulator to reflect a current hypothetically efficient network in each regulatory period. The ACCC considers that if a zero tilt is applied then Telstra may receive an abnormal return when its assets are re-valued upwards in future regulatory periods in response to price trends. In particular, Telstra will receive ex-ante over compensation due to the expectation of this revaluation. This view is consistent with ACCC's approach in developing ULLS indicative prices”

The CCC agrees with this conclusion and the reasoning and emphasises that the importance of time consistency is driven by the continued revaluations of the asset base.

International regulator’s approach

The CCC has conducted a brief survey of key economic regulators around the world (and in Australia) and notes that there is strong support for the Commission’s evolving position.

We note that Ofcom in the UK has now specifically ruled out adopting a hypothetical model for the following reasons:

“... basing the value of BT’s network on what somebody might spend if they were to build a brand new network today as opposed to simply replacing what BT has. Responses from those companies which do not have their own network were in favour of such an approach as it would lead to the result that might be expected if an effective competitor to BT were to build their own network. In contrast, those companies which do have their own network – BT and the cable companies – did not agree with this approach. Ofcom agrees that such an approach is not appropriate as there is a great deal of subjectivity in the modelling and it is important that the model is right if it is to be used. Also, the use of such a model could require Ofcom to become intrusively involved in BT’s internal network planning and investment decisions. It is Ofcom’s view that with the information available today it is

better to base costs on something real, i.e. BT's network, as a more objective way of determining what the replacement cost would be.”²

The view that a new entrant would not adopt the same technology as Telstra is consistent with the Australian Competition Tribunal's view of forward-looking (current) costing (we note that the TEA model is, in essence, just a somewhat sophisticated, current cost accounting calculation for the current Telstra network):³

“We do not consider that the current cost of building an existing CAN is necessarily likely to be an accurate guide to the forward-looking TSLRIC of providing the ULLS. It is not clear to us that an access provider building a network today would choose the same assets as it uses in its current network. We do not accept that Telstra's current cost estimate of providing the ULLS constitutes sufficient evidence as to the likely TSLRIC of providing the ULLS, nor, therefore, to the reasonableness of Telstra's ULLS access charge for the periods covered by the undertakings.”

The FCC has determined that a scorch node network provides an appropriate benchmark because a model of which satisfies both fair compensation and build/buy incentives without loading in cost that are not incurred by the network owner. The FCC notes that:⁴

“... forward looking cost and existing network design most closely represents the incremental costs that incumbents actually expect to incur in making network elements available to new entrants ... this approach encourages facilities-based competition to the extent that new entrants, by designing more efficient network configurations, are able to provide the service at a lower cost than”.

Alternatively other regulators have “done away with TSLRIC” or at least regular revaluation of the asset base, for example, Ofcom decided:

“... to create a regulatory asset value, or RAV, to represent the remaining value of the pre-1997 copper access network assets rather than continuing to value those assets at their current cost. The value of the RAV is set to equal the closing historical cost accounting value for the pre 1 August 1997 assets for the 2004/5 financial year and its value will be increased each year by the Retail Price Index to ensure it is not eroded by inflation. Over time

² Ofcom, Valuing copper access, Final Statement, 18 August 2005.

<http://www.ofcom.org.uk/consult/condocs/copper/value2/statement/statement.pdf>

³ Telstra Corporation Ltd (No 3) [2007] ACompT 3 (17 May 2007) at [380] and [382]

<http://www.austlii.edu.au/au/cases/cth/ACompT/2007/3.html>

⁴ FCC, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996* CC Docket No. 96-98, First Report and Order, 8 August 1996, paragraph 685.

the RAV will gradually disappear as the pre-1997 assets are gradually replaced with new ones.”⁵

That is Ofcom has decided to no longer value the copper local loop assets on a full current cost accounting basis. Instead it will establish an historic cost approach to assets valued prior to 1 August 19997 and to value all assets installed after this date on a current cost accounting basis. Ofcom indicate that this change reflects its view that it no longer considers there to be a prospect of entry in the local loop and hence the primary objective of the valuation is to protect consumers where it was previously to send appropriate build/buy signals to new entrants.

⁵ Ofcom, *Valuing copper access*, Final statement, 18 August 2005, page 2.
<http://www.ofcom.org.uk/consult/condocs/copper/value2/statement/statement.pdf>