TELSTRA CORPORATION LIMITED

PRICING PRINCIPLES FOR FIXED LINE SERVICES
RESPONSE TO THE ACCC’S DRAFT REPORT

October 2010
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1. **EXECUTIVE SUMMARY**

1. Telstra agrees with the ACCC and industry that use of TSLRIC+ to determine regulated wholesale access pricing, including the regular revaluations of Telstra’s asset base using complex and costly models, has resulted in regulatory uncertainty.

2. For some time now, there has been consensus supporting a move from TSLRIC+ to a more stable regulatory pricing framework. To solve the problems experienced with the TSLRIC+ regime, what is needed is a new regime that:

   (a) does not depend on further asset revaluations;

   (b) delivers price stability; and

   (c) provides a smooth transition to NBN.

3. Telstra supports the ACCC’s intent to move toward a building block model (“BBM”) with a locked in regulated asset base (“RAB”). This submission proposes a solution that delivers on the priorities above, aligns with the BBM regimes in other regulated industries and best promotes the relevant legislative criteria.

4. The ACCC’s draft pricing principles, however, do not deliver on these priorities.

1.1. **Problems with the ACCC’s Proposal**

5. The ACCC’s proposal has a number of significant problems, and if introduced would have a negative impact on regulatory certainty, create price instability, and would not be consistent with the statutory criteria.

6. The ACCC’s proposal would produce the following adverse market outcomes:

   (a) **Significant price instability** – The proposed indicative prices would result in 24% reductions to current LCS and WLR indicative prices and 10% increases to OTA, removing hundreds of millions of dollars of industry revenues.

   (b) **Uncertainty and instability** – The proposal does not establish a workable BBM and instead invites another unwelcome period of uncertainty and instability, at the very time when certainty and stability are crucial for transition to the NBN.

   • When the ACCC addresses the traditional elements of a BBM, its proposal leaves industry with more questions than answers – with key issues left for future development and consultation outside the proper process for development of pricing principles.

   • The ACCC itself concedes that important elements of its model are open to review at any time.

   • The proposed pricing period of 4 years will result in a great deal of uncertainty since, by any expectation, 3-4 year forecasts will turn out to be incorrect – undermining the validity of the indicative prices based on those forecasts. This will result in uncertainty, unpredictability and potentially further disputes. This outcome can be avoided by adopting a shorter, 2-year regulatory period.

   (c) **Threaten recovery of Telstra’s direct costs (by stranding deferred depreciation)** - Without any justification, the ACCC has proposed shifting from a current-dollar/real valuation to a nominal valuation of Telstra’s asset base, resulting in a $18.6B devaluation of Telstra’s assets.
This would give rise to perverse incentives for Telstra. For example, under the ACCC’s proposal, Telstra would earn just $6,000 per annum on the land purchased in 1901 for $64,000. Alternatively, Telstra could sell that land for at least $4.4m today (assuming the value of land has kept pace with inflation since 1901).

It will prevent Telstra from recovering its direct costs, since depreciation that was previously back loaded by the ACCC would become stranded. The depreciation that has been deferred by the ACCC’s previous decisions and yet to be recovered is $31.9B, yet the ACCC now proposes to value the same assets at $13.3B. The difference of $18.6B will become stranded by the ACCC’s proposal.¹

Putting the ACCC’s previous decisions aside, failure to consider the cost of inflation when using historic cost understates the value of Telstra’s assets by $15.1B. This error translates into the ACCC’s revenue requirement for Telstra in 2010/11 being understated by $685M.

The ACCC’s proposal to use nominal valuation (unindexed historic cost) is inconsistent with precedent from dozens of regulatory asset base valuations across a wide range of regulated industries in Australia.

7. The ACCC’s proposal also does not pay proper regard to government policy and the NBN:

(a) The rollout of the NBN is ignored – The ACCC assumes that the demand for legacy lines will remain relatively stable, and fails to acknowledge that lines will leave the copper network and transition to NBN. This means that the same costs need to be recovered over less demand for legacy services, but this has not been considered by the ACCC.

(b) Telstra and NBN Co’s financial heads of agreement have been misinterpreted – The ACCC has incorrectly attempted to derive a valuation of Telstra’s network from the agreement between Telstra and NBN Co.

8. There are errors in the ACCC’s model, which have a material impact on its results:

(a) 'Written down' asset values inappropriately taken from RAF accounts – RAF accounts are unsuitable for determining the true economic cost of assets because, amongst other things, some asset values are included at acquisition cost (and remain unindexed) while others have been revalued at “fair value” at one time or another. All assets are depreciated on an accounting basis, which does not reflect actual cost recovery through prices.

(b) Material cost categories have been excluded from the model – The model excludes indirect capital and has an insufficient amount of indirect operations and maintenance costs (O&M). These errors result in the revenue requirement for 2010/11 alone being understated by $168m and $1.5B respectively.

(c) Asset lives not truncated appropriately – The lives for some assets that will no longer be needed when NBN is available have not been truncated appropriately. For example, new copper cable assets are given a life of 30 years when in reality they can only be depreciated up until the point the relevant lines are migrated to NBN.² This has an impact on the accuracy of the ACCC’s proposed indicative prices. For example, Telstra estimates that the failure to appropriately truncate the lives of new copper

¹ This reflects the difference between the CAN, IEN and land values proposed by the ACCC in the Draft Report and the values of these assets implicit in the last indicative prices decision of the ACCC in 2008, based on a present value analysis.

² Precise migration timing will be subject to Telstra finalising the terms of its agreement under the non binding Financial Heads of Agreement (FHoA) with NBN Co in definitive agreements.
cables and pair gains systems results in the revenue requirement being understated by $17m in 2010/11 alone.

(d) **Incorrect depreciation and allocation of network land, building and support assets** – Land, buildings and network support assets are depreciated and allocated to services as if they were other assets such as ducts and pipes and copper cables. Those assets should be depreciated appropriately (land should not be depreciated at all) and an appropriate allocation rule should be used.

(e) **Inclusion of assets that should be excluded** – For instance, DSLAM costs are included in the cost of WLR.

(f) **Incorrect calculations** – there are many errors in the calculations of the model, including the way capital additions are entered and the calculation of the effective tax rate.

9. When these various problems are fixed, the ACCC’s model appears to produce price outputs that are broadly in line with price stability and would justify existing prices with some minor rebalancing. However, considerable doubts remain as to whether the ACCC’s proposal can provide regulatory predictability and stability in the future.

1.2. **A suggested way forward**

10. Telstra shares the concerns of the ACCC and access seekers about uncertainty arising from the operation of the current TSLRIC+ regime, and has therefore proposed an approach in this submission that it believes would resolve those problems.

11. This approach involves:

   (a) Setting an initial asset base to a value of depreciated optimised replacement cost ("DORC"), reflecting the current depreciated value of the regulated asset base. This would address calls for prices to be set on the basis of the depreciated value of the asset base, but without introducing an arbitrary devaluation or shock relative to the expectations that the ACCC has previously set in relation to the value of Telstra’s assets in its recent decisions.

   (b) However, if the ACCC is determined to move away from a replacement cost valuation to an historic cost valuation, it must use indexed historic costs. This is necessary in order to:

      • avoid stranding depreciation deferred by the ACCC, by virtue only of shifting from a current-dollar to nominal valuation and denying Telstra recovery of its direct costs;

      • value the assets fairly, again to ensure cost recovery, to prevent perverse disincentives to invest and to address Telstra’s legitimate business interests;

      • ensure consistency with the approach it and other regulators have taken in circumstances in which historic cost valuations of sunk assets have been used; and

      • deliver price stability.

   (c) Ahead of passage of the Telecommunications Legislation Amendment (Consumer and Competition Safeguards) Bill 2009 ("C&CS Bill"), Telstra proposes that the ACCC issues an access code under s.152BJ of the Trade Practices Act 1974 (Cth) ("TPA") that provides price stability relative to current prices. If it did this, Telstra would lodge
an access undertaking that adopts that access code, effectively ‘locking in’ key features such as the initial RAB value throughout the period of transition to NBN.

(d) Telstra has also provided, in Schedule 5, a working proposal (“BBM Working Proposal”) that would properly and effectively implement a BBM, drawn from the approaches adopted in other industries which use BBMs. This BBM Working Proposal provides for an initial RAB to be rolled forward and updated every 2 years. Telstra submits that this would provide the appropriate balance between achieving prices that reflect accurate forecasts, predictability and flexibility to account for future changes in market conditions, including NBN migration.

12. These benefits are summarised in the table below.

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<tr>
<th>WHICH APPROACH...</th>
<th>ACCC PROPOSAL</th>
<th>TELSTRA PROPOSAL</th>
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<tr>
<td>Better delivers the price stability and regulatory certainty that is needed at this time?</td>
<td>✗</td>
<td>✓</td>
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<td>Overcomes the problem of complex and costly revaluation and alleviates regulatory fatigue?</td>
<td>✗</td>
<td>✓</td>
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<td>Results in prices that provide zero real economic return to Telstra on upstream assets?</td>
<td>✗</td>
<td>✓</td>
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<td>Allows for up to date consideration of NBN impacts?</td>
<td>✗</td>
<td>✓</td>
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<td>Limits potential future disputes to a small subset of variables?</td>
<td>✗</td>
<td>✓</td>
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<td>Is consistent with the way regulated prices are set in other industries, by the ACCC, AER and other regulators?</td>
<td>✗</td>
<td>✓</td>
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<td>Best promotes the legislative criteria?</td>
<td>✗</td>
<td>✓</td>
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13. In Telstra’s view, this suggested way forward will promote the long term interests of end users (“LTIE”), by delivering price stability and substantially improved regulatory certainty.
1.3. A summary of the problems with the ACCC’s proposal

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<td>1.</td>
<td>The draft pricing principles do not give certainty or guidance to industry</td>
<td>The purpose of pricing principles under the TPA is to assist Telstra and access seekers during commercial negotiations by guiding them in relation to the factors and approach the ACCC will take into account if there is a dispute. To fulfill this role, the pricing principles need to provide meaningful principles that are capable of being applied by the parties prior to, and during, an arbitration. However, the draft pricing principles say only that prices should be set &quot;on the basis of a building block model&quot;. This does not offer any meaningful guidance and results in pricing principles that do not fulfill their core statutory function. The ACCC has either not developed or has not consulted upon key elements of the pricing principles, as required by s.152AQA(4).</td>
<td>Consistent with the approach adopted in other utility industries, a complete and internally consistent building block framework should be developed and consulted on – as a package. To assist in this process, Telstra has provided a BBM Working Proposal that could be used as a starting point for developing such a BBM framework. Telstra also submits that an Access Code could be used to implement the BBM. This would then achieve the maximum degree of regulatory certainty possible under the existing terms of Part XIC.</td>
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| 2.  | The ACCC has used a change in methodology to reduce the regulatory value of Telstra’s asset base - in the process, stranding $18.6B worth of depreciation | The Draft Report proposes a substantial de-valuation of the Copper Access Network ("CAN") and Inter-Exchange Network ("IEN"), from $31.9B to $13.3B, a total drop in value of $18.6B. It does this by moving from the existing pricing approach, which uses a current-dollar/real valuation of assets with regulatory depreciation set using a back-loaded profile to a nominal valuation (based on unindexed accounting costs taken from Telstra’s regulatory accounts) and which assumes depreciation had a front-loaded or flat profile in the past. Given that accounting (straight line) depreciation in the RAF accounts has been applied faster than the back-loaded regulatory depreciation allowed to date, this shift in approach results in a substantial amount of previously deferred depreciation becoming stranded. | This outcome could be addressed by adopting an appropriate current-dollar/real valuation of the initial RAB. DORC is the most appropriate and orthodox methodology to apply. It has been used in the majority of RAB valuations undertaken in other Australian utilities (including the electricity, gas, water and rail sectors) over the last 15 years. Use of the DORC methodology would address calls for the replacement cost of the assets to reflect depreciated value. However, if the ACCC is minded to move from replacement cost to historic cost valuation, based on data taken from the RAF accounts, the historic costs need
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<td>2.</td>
<td>For example, looking only at investments in the CAN and IEN since 1999/00, the amount of depreciation that has been deferred by the ACCC in previous pricing decisions but booked in Telstra’s accounts amounts to [c-i-c commences] [c-i-c] [c-i-c ends]. If the ACCC moves from the current pricing regime to using Telstra accounting costs for all previous investments, then depreciation amounting to much more than [c-i-c commences] [c-i-c] [c-i-c ends] will be stranded.</td>
<td>to be indexed.</td>
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<td>initial RAB.</td>
<td>Australian regulators have almost uniformly adopted replacement cost (DORC) methodologies when setting initial RAB values – because of the efficiency attributes of DORC. In well over 50 cases involving the setting of initial RAB values, no regulator has ever adopted the approach proposed by the ACCC in this case. As well as stranding a significant amount of past regulatory depreciation (discussed above), the ACCC’s proposed approach does not take advantage of readily available and fit for purpose replacement cost valuations (from the detailed Analysys and Telstra Efficient Access (&quot;TEA&quot;) cost models) which could be used to determine a suitable DORC value. Indeed, as recently as 7 October 2010, the Analysys cost model was updated to respond to earlier criticisms.</td>
<td>previous replacement cost valuations would ensure price stability and promote investor confidence in the regulatory framework.</td>
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<td>5.</td>
<td>The ACCC’s approach does not take account of the effects of inflation on the initial RAB value.</td>
<td>In setting its initial RAB value, the ACCC has not addressed the need to account for the effect of inflation. This means that the asset values taken from the RAF accounts do not reflect their ‘present day’ or real value. Not dealing with inflation in the initial RAB gives rise to inefficient and irrational incentives. For example, under the ACCC’s proposal, Telstra would earn just $6,000 per annum on $64,000 of land purchased in 1901. Alternatively, Telstra could sell that land for at least $4.4m today (assuming the value of land has more than kept pace with inflation since 1901). The Draft Report’s treatment of inflation is also internally inconsistent, in that while it ignores indexation of the initial RAB value, it nonetheless indexes future amounts of capital rolled into the RAB and ensures that indexed values are used for the purpose of deriving capital forecasts and disconnection/connection charges.</td>
<td>As noted above, Telstra considers that DORC is the most appropriate methodology to use in setting the initial RAB. However, if the ACCC is minded to adopt a historic cost approach to value the initial RAB, this value should be indexed.</td>
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<td>6.</td>
<td>The ACCC derives an incorrect CAN value</td>
<td>The ACCC has tried to reverse engineer a CAN valuation from the payment proposed to be made by NBN Co to Telstra in The FHoA is not a reasonable or appropriate basis for deriving (or supporting) an initial RAB</td>
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<td>1.</td>
<td>from the non-binding FHoA between Telstra and NBN Co.</td>
<td>order to support the ACCC’s proposed CAN value of $7.5B. The FHoA is not – and was never treated as – an asset purchase. The amount agreed under the FHoA is one element of the terms on which Telstra was prepared to “settle” a global and multifaceted deal with NBN Co and the Government. This incorporated a wide range of factors, including other valuable concessions from the Commonwealth, the value of the right to participate in the 4G spectrum auctions (and conversely the adverse impacts on Telstra’s wireless business if it could not), the avoided costs of more extensive regulation (such as functional separation) and the value of stability and predictability in prices for legacy regulated services in the transition period to the NBN. The amount in the FHoA was also a post tax amount – a factor not taken into account in the ACCC’s analysis, which adopted $7.5B and $5.8B as pre-tax values. When the full $11B amount agreed under the FHoA is scaled up to reflect this error, it alone increases the value of the non binding FHoA payment to approximately $16B. The amount in the FHoA also excludes pre-migration net cash flows, which add to the value of the CAN for the period over which the ACCC proposes to set indicative prices. Given these various factors, and the nature of the FHoA itself, it is simply not possible for the ACCC to backwardly derive from the FHoA a value for the CAN which is reasonable or robust.</td>
<td>valuation.</td>
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<td>7.</td>
<td>The ACCC takes an inconsistent approach to the NBN.</td>
<td>The ACCC either does not address, or is inconsistent in when and how it takes the NBN into account. So, while the ACCC relies heavily on the FHoA in support of its initial RAB valuation, it then omits to deal at all with the impact of the NBN on the following:</td>
<td>Given the significance of the NBN roll-out to the entire industry, and the amount of information about the NBN rollout and timing that is already available publicly, the pricing principles (and indicative prices) should take account of the NBN in a holistic and internally consistent valuation.</td>
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<td></td>
<td>demand for copper-based services;</td>
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<td>way.</td>
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<td>shortened asset lives of Telstra’s infrastructure;</td>
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<td>uncertainties surrounding the NBN rollout and its implication for the length of the regulatory period; and forecast capital expenditure and operational expenditure.</td>
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Material errors in the Ovum BBM Model

8. **The Ovum BBM incorrectly depreciates land.**
   Unlike other types of assets, land does not depreciate and, in fact, generally appreciates over time. This means that when depreciating assets in a BBM, it is necessary to separately identify and account for land/building assets.
   Most classes of assets in the RAF accounts include an allocation for shared network land, buildings and support assets – that is, they do not separately identify the cost of these assets.
   Because the ACCC has simply adopted these RAF account classes (and associated depreciation), without stripping out and dealing separately with land and building costs, the Ovum BBM adopted by the ACCC inappropriately depreciates land and buildings at the same rate as other equipment in the relevant asset class.
   This error could be addressed by separately identifying network building and support assets in the RAB. Those assets could then be depreciated in an appropriate way.

9. **The Ovum BBM does not account for the differences in asset lives between network building and support assets and other assets.**
   The ‘asset lives’ over which an asset is depreciated differs between land (which should not be depreciated) and other assets.
   By adopting asset classes in the RAF accounts that do not separately identify the land and buildings component, the Ovum BBM therefore applies incorrect asset lives to land, buildings and other support assets.
   Again, this problem could be addressed by separately identifying network building and support assets. These assets could then be given distinct, and appropriate, asset lives.

10. **The costs of network building and support**
    In the Ovum BBM, the costs of each asset class are allocated between the fixed services. The ACCC has applied allocation
    This could be addressed by appropriately allocating land, building and support costs.
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<td>9.</td>
<td>assets are incorrectly allocated between fixed services.</td>
<td>rules by each asset category, without separately identifying network land, building and support assets.</td>
<td>across fixed services, consistent the approach previously adopted by the ACCC in the Analysys model.</td>
</tr>
<tr>
<td>11.</td>
<td>The allowance made in the Draft Report for indirect operating and maintenance (O&amp;M) expenditure is wrong.</td>
<td>The ACCC has calculated indirect O&amp;M costs as a 10% mark-up on average direct O&amp;M costs. The Draft Report provides no explanation or evidence in support of this approach. This 10% allowance is substantially lower than the ratios of indirect O&amp;M to direct O&amp;M estimated by both the Analysys (60%) and TEA (104%) models, both of which were actual calculations derived from Telstra's RAF accounts.</td>
<td>This could be addressed by adopting the approach used in the TEA model to estimate indirect O&amp;M costs.</td>
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<td>12.</td>
<td>The ACCC has not made any allowance for indirect capital costs.</td>
<td>The capital forecasts set out in the Draft Report and used in the Ovum BBM do not make any allowance for indirect capital costs (such as administration costs or IT system costs used to deliver the services).</td>
<td>This could be addressed by adjusting the capital forecasts used in the Ovum BBM to include indirect capital costs, taken from Telstra's earlier estimate.</td>
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<td>13.</td>
<td>The Ovum BBM understates the effective tax rate.</td>
<td>The Ovum BBM understates tax effects in the years after the four year period of the determination. This results in the effective tax rate being understated.</td>
<td>This could be addressed by adopting the approach taken under the Post Tax Revenue Model (“PTRM”) (the pricing mechanism under the National Electricity Rules), to ensure the effective tax rate is correct.</td>
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<tr>
<td>14.</td>
<td>There are a number of calculation errors in the Ovum BBM.</td>
<td>One error results in capital net additions for 2009/2010 not being depreciated. Another error means that capital additions are carried forward into the opening RAB without consideration of the cost of capital. A third error is that asset disposals are not included in depreciation expenses.</td>
<td>These errors need to be fixed in the Ovum BBM.</td>
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<td>15.</td>
<td>The BBM does not make any allowance for the standard asset lives applicable to the relevant asset class.</td>
<td>New capital which is rolled into the RAB remains subject to the standard asset lives applicable to the relevant asset class.</td>
<td>This error could be addressed by modifying the asset lives in the Ovum BBM to ensure that the...</td>
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<td>DESCRIPTION AND IMPACT</td>
<td>TELSTRA PROPOSED FIX</td>
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<td>impact of the NBN on asset lives of new assets</td>
<td>This means that, while new copper and other assets will have their lives shortened as a result of the NBN roll-out, this is not reflected in the model.</td>
<td>lives given to new assets reflect truncation by NBN.</td>
</tr>
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2. WHY A CHANGE IN THE REGULATORY PRICING REGIME IS NEEDED

Outline

In the Draft Report, the ACCC identifies four perceived problems with TSLRIC+ that it says justify changing the regulatory pricing regime:

- The repeated revaluation of the CAN and IEN assets has led to continuing uncertainty about the level of access prices.
- By revaluing assets at optimised replacement cost, the current approach to TSLRIC+ may have led to past depreciation not being properly taken into account and therefore allowed over-recovery by Telstra.
- The task of calculating forward looking replacement costs based on a “modern equivalent asset” has proven contentious.
- The risk of bypass of the CAN by other technologies or networks is said to have lessened due to asset inflation, weakening the build-buy rationale that had originally been used to justify the use of TSLRIC+ methodology in telecommunications.

Only the first and third of these issues, both of which relate to the regulatory uncertainty associated with revaluation of the asset base, are supported by experience or evidence in the Draft Report.

The Draft Report does not offer evidence to support the view that TSLRIC+ pricing has led to past over-recovery of costs by Telstra. To the contrary, Telstra’s real economic returns have ranged from \( \text{c-i-c commences} \text{c-i-c} \text{c-i-c ends} \) for wholesale services over the period from 2007-08 to 2009-10 and between \( \text{c-i-c commences} \text{c-i-c} \text{c-i-c ends} \) for retail and wholesale services combined.\(^3\)

Even if the prospect of competitive bypass (and the need to provide efficient build/buy incentives) did underpin the original adoption of TSLRIC+ by the ACCC and it now considered that the prospect of bypass was less likely, while that may provide a basis to move away from TSLRIC+, it does not provide any reason to move away from a replacement cost asset valuation approach – which is the standard asset valuation methodology used across regulated infrastructure in Australia (for which there is no realistic prospect of competitive bypass).

Further, the ACCC has not established that the build/buy incentives have materially changed since the introduction of TSLRIC+. In any event, this rationale would not justify a shift from a current-dollar/real valuation to a nominal valuation, particularly when this results in a $18.6B devaluation of the CAN and IEN, with flow on detrimental impacts on price stability and industry transition to the NBN.

The objective of the current BBM process should therefore be targeted at the problem that has been established: i.e. ‘locking in’ a RAB value and roll forward mechanism that reduces the uncertainty caused by periodic revaluation of the CAN and IEN.

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\(^3\) Based on ADSL and PSTN voice service revenues. See section 5.1.3 of this Response for a full analysis of Telstra’s real and nominal economic returns for relevant services.
2.1. **What problems does the Draft Report say the change intended to solve?**

14. In framing the case for action in the Draft Report, the ACCC identifies the following four perceived ‘problems’ with TSLRIC+: ⁴

   (a) The repeated revaluation of the CAN and IEN assets has led to continuing uncertainty about the level of access prices.

   (b) By revaluing assets at optimised replacement cost, the current approach to TSLRIC+ may have led to past depreciation not being properly taken into account and therefore allowed over-recovery by Telstra.

   (c) The task of calculating forward looking replacement costs based on a “modern equivalent asset” has proven contentious.

   (d) The risk of bypass of the CAN by other technologies or networks is said to have lessened due to asset inflation, weakening the build-buy rationale that had originally been used to justify the use of TSLRIC+ methodology in telecommunications.

2.2. **Is there any evidence that these problems exist?**

15. Despite listing these as the problems to be addressed, the Draft Report does not go on to substantiate any of them or seek to establish or quantify them with reference to evidence. So, for example:

   (a) While the Draft Report tentatively suggests that the last decade of TSLRIC+ based pricing has led to Telstra over-recovering its costs, the ACCC does not provide any evidence in support of this claim. Indeed, Telstra’s real economic returns have ranged from [c-i-c commences] to [c-i-c ends] for wholesale equivalent voice and ADSL services over the period from 2007-08 to 2009-10 (see section 5.1.3). ⁵

   (b) While acknowledging that periodic revaluation of the asset base has created unwelcome price instability – the initial asset base valuation proposed in the Draft Report would itself constitute an approximate $18.6B downward re-valuation of Telstra’s asset base, and result in indicative prices for WLR that are 24% below current prices. As illustrated in Figure 1 below, this constitutes a major and unsettling price shock at the start of a NBN transition period during which price stability and regulatory consistency are crucial.

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⁵ The wholesale services included are ULLS, LSS, ADSL, WLR, PSTN OTA and LCS.
Although the ACCC has previously signaled its intention to shift from retail minus retail cost ("RMRC") to cost-based pricing for WLR, there has been no indication that there would be a sudden and dramatic downward shift in WLR prices. The ACCC has previously noted that it could not be certain as to whether WLR costs would be above or below RMRC-based prices, in the absence of a robust cost model.  To the contrary, despite the ACCC’s stated expectation of WLR costs being below RMRC-based prices, all available cost estimates produced by the ACCC to date have been well in excess of RMRC-based prices. This had suggested that current prices were, if anything, below appropriate cost measures and further reinforced reasonable expectations that there would not be a significant reduction in WLR prices in the context of any shift from RMRC to cost-based pricing.

(c) While criticising the use of forward looking costs as reliant on contentious debates over ‘modern equivalent assets’ – the Draft Report fails to acknowledge that by adopting an accounting cost methodology, the pricing principles depart from a decade of experience with purpose built and tested replacement cost models in favour of deriving asset values from regulatory accounts prepared for entirely different purposes, supplemented by headline figures from government media statements released in relation to the NBN project.

16. In this Section 2, Telstra will review each of the problems claimed by the ACCC in relation to the TSLRIC+ regime. This will highlight that the only problems identified in the Draft Report in relation to TSLRIC+ justified by experience or evidence are the regulatory uncertainty and contention which has resulted from the need to periodically revalue the entire asset base. Telstra shares this concern and, because it is real and
well-founded on recent experience, Telstra continues to strongly support the introduction of a BBM that ‘locks in’ an appropriate initial asset value and rolls this forward. Provided this mechanism is well designed, a BBM of this kind should reduce price shocks, uncertainty and disputes resulting from revaluations.

17. However, the ACCC has not established that any of the other problems exist with the operation of TSLRIC+. These purported problems therefore do not justify – and it would be inappropriate for the ACCC to use industry consensus surrounding introduction of a BBM to seek to implement – a substantial and arbitrary downward revaluation of Telstra’s CAN and IEN and resulting indicative prices for wholesale services.

18. Put simply, the Draft Report has not substantiated either that over-recovery has occurred or that the proposed initial asset valuation and indicative pricing is an appropriate, measured and targeted response.

2.2.1. **IS THERE EVIDENCE TO SUGGEST A PROBLEM WITH REGULATORY UNCERTAINTY AND PRICE INSTABILITY RESULTING FROM PERIODIC REVALUATION OF THE ASSET BASE?**

19. It is generally accepted that the task of revaluation has been the single most contentious aspect of the current TSLRIC+ regime. As the ACCC is aware, during 2009, there were no less than 29 active arbitrations related to pricing of declared services and the appropriate approach to revaluation of Telstra’s CAN. Similarly, litigation occurred before the Australian Competition Tribunal (“Tribunal”) in relation to pricing proposed in Telstra’s ordinary access undertaking (“OAU”) based on the TEA cost model, submitted in March 2008 and rejected by the ACCC in April 2009 – in a decision subsequently upheld on review by the Tribunal.

20. Given this recent experience, there is near universal support from Telstra and access seekers for the move towards a utility-style BBM that ‘locks in’ an initial asset base and then rolls that RAB value forward over time.

21. By removing the need for periodic revaluation of Telstra’s CAN and other network assets, it was expected that the BBM would deliver the following practical benefits:

(a) **Reduced ongoing costs associated with modeling Modern Equivalent Assets (MEA) costs and the associated debates around network optimisation and related issues.**

(b) **Narrow the scope of pricing-related disputes**, given that these would be limited to variables that were updated as part of rolling forward the RAB – such as depreciation, demand expectations and the amount of efficiently incurred capital or operating expenditure to be allowed over time.

(c) **Improve regulatory certainty**, by reducing scope for price volatility over time resulting from significant shifts in the regulatory value of network assets.

(d) **Bring a greater degree of alignment between the approaches adopted to asset valuation and regulated pricing in telecommunications with other**

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9 25 arbitrations related to pricing of ULLS and 4 related to WLR or LCS.
network industries, such as electricity, gas, transport and water. In doing so, the ACCC will be able to benefit from the considerable economic and legal precedent in those sectors. This is all the more so given the close similarity between the statutory objectives that apply in a number of those contexts and under Part XIC.\footnote{12}

(e) **Provide a flexible and robust pricing mechanism, which avoids undue administrative complexity.** Again, in looking at how a BBM is implemented, the ACCC has an opportunity to take advantage of the considerable experience which other Australian utility industries have with the design and operation of similar utility pricing frameworks.

22. Telstra continues to believe that a properly designed BBM can achieve these goals and eliminate much of the uncertainty and disputation that currently besets pricing under the TSLRIC+ framework.

2.2.2. **IS THERE EVIDENCE THAT THE APPLICATION OF TSLRIC+ IN THE PAST HAS LED TO OVER-RECOVERY OF COSTS BY TELSTRA?**

23. Until the Draft Report, the ACCC had not previously sought to justify the shift to a BBM on the basis that past asset valuations or pricing outcomes were too high. To the contrary, the ACCC and the Tribunal have repeatedly endorsed the efficiency properties of asset valuations and pricing based on a forward-looking replacement cost methodology.\footnote{13}

24. In the Draft Report itself, the ACCC does not squarely state that it now considers that Telstra has over-recovered its costs under previous regulatory determinations. At most, it alludes to this in a footnote reference to 59% product profitability for the PSTN recorded in Telstra’s financial results for 2010, which it suggests shows that regulatory valuations of the CAN were “significantly above the access provider’s actual cost of those investments”.\footnote{14}

25. This figure is an EBITDA figure that excludes the costs of debt, equity, depreciation and tax. It, therefore, provides no insight into the question of whether Telstra has recovered its investment costs. The ACCC provides no analysis of how accounting profitability reflects past cost recovery under the TSLRIC+ framework and regulated pricing. Similarly, there is no acknowledgement of the significant difficulties which exist with trying to identify cost recovery from a single, high level profitability figure listed in public financial accounts (a number of those problems are dealt with in more detail in section 4.3 of this Response).

26. The ACCC has also suggested that, as a matter of principle, revaluing assets as if they were new is likely to result in over-recovery.\footnote{15} This does not follow given that, consistent with standard accounting practices, the effect of increasing or decreasing values for assets (such as because of a revaluation at replacement cost) is offset by proportionate

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\footnote{12}{The National Electricity objective set out in s.7 of the National Electricity Law, is: The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to— (a) price, quality, safety, reliability and security of supply of electricity; and (b) the reliability, safety and security of the national electricity system. This objective evidently closely resembles the object of Part XIC set out in s.152AB.}


\footnote{14}{Draft Report, page 23 (footnote 21).}

\footnote{15}{Draft Report, page 15.}
adjustments to depreciation. That is to say, the expected present value of capital costs arising from replacement cost approaches recovers the initial investment cost (i.e. historic cost) of the asset, no more, no less.  

27. Revaluing assets to accounting cost part-way through an asset’s life when revenues have, up to that time, been determined by an upward sloping tilted annuity means investors will not recover initial investment costs. As a result, no rational investor, at the time of entering into a regulated investment, would accept that such a shift could occur as part of a fair and efficient regulatory contract, since even the possibility of this shift would undermine expectational capital maintenance. 

28. These facts notwithstanding, the ACCC seeks to justify making the shift by arguing that as a matter of commercial reality, the relevant income streams are returns on assets that were purchased in the distant past. 

29. This contention seems to be based on a misunderstanding of the TSLRIC/tilted annuity approach. The essence of the TSLRIC+ approach (or any replacement cost methodology) is that it determines a schedule of payment such that, in expectation, efficient costs are recovered, and the amount of the payments does not depend on the actual date at which assets are purchased. In that sense, the starting date of the approach is irrelevant. 

30. That said, even taking a practical and commercial view of cost recovery, the fact is that Telstra has been privatised in successive tranches over the last decade, and during the period in which TSLRIC+ pricing was in place. That means that shareholders bought into the company did so on the basis of expectations of cost recovery associated with the TSLRIC+ asset pricing methodology. Any earlier monopoly profits from the CAN, if they ever existed, would have gone to the initial owners (in this case, the Commonwealth government). Far from being monopoly profits, the revenue earning value of those assets at the time of privatisation (and therefore their economic value) was defined by the ACCC’s TSLRIC+ approach. A shift which now strands the recovery of depreciation implied under those earlier decisions would therefore expropriate the investment of those shareholders. 

31. The findings of the Supreme Court of Western Australia in Re Dr Ken Michael AM; ex parte Epic Energy (WA) Nominees Pty Ltd & Anor17 are relevant in this context. The Court found that Epic’s “legitimate business interests and investment”18 in the DBNGP (the investment being the full purchase price for the DBNGP of $2.407 billion) might properly extend to the recovery of that $2.407 billion, at least over the expected life or operation of the DBNGP, together with an appropriate return on investment. Specifically, the Court said that a tariff:19 

...which has no regard to the actual unrecovered capital investment in the pipeline, may well undermine the viability of the earlier investment decision. If future investment in significant infrastructure, such as a natural gas pipeline, is to be maintained and encouraged, as the public interest requires, regard seems to be required to the need for both existing and potential investors to have confidence that the very substantial long term investment decisions which are required, and which were sound when judged by the commercial circumstances existing at the time of the investment, are not rendered loss making, or do not result in liquidation, by virtue of future governmental intervention. 

32. Additionally, the fact that Telstra’s unindexed historic costs (which the ACCC proposes to use to set the initial RAB) are lower than current-dollar/real DORC valuations is not  

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16 This issue is addressed in more detail in Schedule 1. 
17 [2002] WASCA 231 
18 As referred to in section 2.24(a) of the then applicable National Third Party Access Code for Natural Gas Pipeline Systems. 
19 Re Dr Ken Michael AM; ex parte Epic Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231, at [149]
evidence of over-recovery. Comparing a nominal value to a real value for this purpose compares ‘apples’ and ‘oranges’. The nominal value of assets does not reflect its economic value, which must be the appropriate basis of any regulatory view of cost recovery.\(^{20}\) A more appropriate comparison, if one was needed, would be between the real value of accounting costs (that is, indexed historic costs) and a real replacement cost valuation, such as DORC.

33. Once adjusted for inflation, Telstra’s indexed historic cost of the CAN is $15.3B and the IEN is $9.1B. This is not substantially lower than the DORC values derived from the most recent ACCC TSLRIC+ estimates and certainly do not suggest that TSLRIC+ has produced systematic or substantial over-recovery of costs by Telstra. This point is discussed in greater detail in section 5.1.5 below.

34. Moreover, there is an inherent unfairness in the approach proposed by the ACCC. It suggests that, when asset values are falling, it will adopt a forward-looking replacement cost approach (with tilted depreciation profile) but will change this approach midway through the assets’ lives, if it later decides that asset values are increasing and a historic cost approach (with straight line depreciation) would produce lower prices. It is the regulatory equivalent of a ‘heads I win, tails you lose’ approach to asset valuation, which is necessarily arbitrary and inconsistent with capital maintenance ever being achieved over the life of the assets.

35. Telstra accepts that it is difficult to determine, with precision, the precise extent of cost recovery which it has been allowed through regulated pricing. However, the evidence which is available suggests that a combination of the use by the ACCC of an optimised replacement cost methodology for valuation and a back-loaded tilted annuity for setting prices (neither of which is reflected in the ‘accounting profit’ set out in Telstra’s financial results) has given rise, if anything, to a significant risk of under-recovery.

36. In an attempt to test the ACCC’s theory, Telstra has estimated its real economic return on wholesale equivalent voice and ADSL services, which revealed minimal, if any, excess returns. The economic return, after allowing for recovery of the ACCC’s WACC, range from \([c-i-c \text{ commences}] [c-i-c] [c-i-c \text{ ends}]\) for wholesale voice and ADSL services and \([c-i-c \text{ commences}] [c-i-c] [c-i-c \text{ ends}]\) on both retail and wholesale equivalent voice and ADSL services over the period from FY2007-08 to FY2009-10.\(^{21}\) This shows that, after paying the cost of debt and providing a return to shareholders commensurate with the amounts the ACCC has allowed in relation to PSTN services over recent years, Telstra has made no excess returns. There is certainly no evidence to support the claim that Telstra has enjoyed over-recovery on its fixed network assets.

37. Telstra submits that, given the above:

(a) The Draft Report has failed to establish that there has been any over-recovery of costs by Telstra.

(b) The Draft Report does not appear to reject the ACCC’s (and Tribunal’s) previous views regarding the efficiency or reasonableness of past TSLRIC+ price determinations, or otherwise provide any substantive reasons supporting such a large and unsettling shift in regulatory policy.

(c) Telstra has received little, if any, real economic return on CAN and IEN assets over recent times. Moreover, when the depreciated asset values proposed by the ACCC are adjusted for inflation, the relevant indexed historic cost of assets is broadly consistent with past replacement cost valuations.

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\(^{20}\) This issue is discussed in more detail at section 4.3.3 of this Response.

\(^{21}\) A more detailed analysis of Telstra’s real and nominal economic returns is set out in section 5.1.3.
38. There is therefore no evidence to support a finding of material or sustained over-
recovery of costs by Telstra under TSLRIC+ pricing.

2.2.3. **IS THERE EVIDENCE THAT AN UNINDEXED HISTORIC COST
VALUATION WOULD BE MORE CERTAIN AND LESS CONTENTIOUS
THAN A REPLACEMENT COST METHODOLOGY?**

39. The third reason that the ACCC gives for justifying a shift from TSLRIC+ to a BBM (using
a unindexed historic cost valuation) is that forward-looking replacement cost
methodologies such as TSLRIC+, as well as requiring revaluations, are also said to be
less objective than using accounting values. The Draft Report claims, in this regard: 22

   The ACCC considers that a cost based approach that uses actual, objectively verifiable
costs is more transparent and objective than a revenue-based approach.

40. Again, the ACCC provides no evidence to substantiate this conclusion. First, contrary to
this view, the use of unindexed historic cost is not widely accepted as a pricing
methodology. Indeed, Telstra is aware of only two other occasions in Australian
regulation where the unindexed historic cost methodology has been applied and, in both
cases, unindexed historic costs were used because of the peculiar nature of the relevant
markets. In one case, that of Foxtel’s special access undertaking in relation to the
digital set top box service, unindexed historic cost was adopted precisely because it
provided an outcome which most closely resembled forward looking replacement cost. 23

41. Instead, replacement cost methodologies such as DORC have been used, almost without
exception, for setting initial asset base valuations in Australia. The economic
advantages of DORC for this purpose are discussed in more detail in section 5.1 below.

42. Second, the unindexed historic cost methodology is not necessarily any more objective
or simpler to implement than DORC and other current-dollar/real valuation
methodologies. First, and fundamentally, the depreciated (‘written down’) values of
assets in Telstra’s financial accounts cannot reliably be used to determine their original
acquisition or ‘actual’ cost, for a number of reasons. This point is also discussed in more
detail in the Report of Bruce Porter. 24

43. As well as overstating the reliability of unindexed historic cost values drawn from
financial accounts, the Draft Report unfairly and inappropriately overlooks the benefit of
over a decade of experience with optimised replacement cost modelling of the CAN.
Indeed, since the ACCC commissioned the first NERA cost model in 1999, four separate
cost models of Telstra’s CAN have been developed and relied upon by Telstra and the
ACCC.

44. An overview of this long history of replacement cost modeling, and their resulting CAN
and IEN valuations, is set out in Table 1.

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23 ACCC, Assessment of Foxtel’s Special Access Undertaking in relation to the Digital Set Top Unit Service: Final
Decision, March 2007, pages 56-57, in which the ACCC stated:
“Foxtel commenced providing its digital retail pay TV service in March 2004. The roll out of digital services is
expected to occur over three years. Therefore, actual historic costs are costs that have been recently incurred. It
is likely that these recently incurred costs closely approximate the replacement costs of modern equivalent
assets. This satisfies a significant requirement of the TSLRIC methodology, which is the use of forward-looking,
efficient costs.”
24 Bruce Porter, Deloitte Touche Tohmatsu, Expert Advice re: use of written down accounting value of fixed network
assets, 21 October 2010 (“Bruce Porter Report”). Included as Schedule 2 to this response.
Table 1: Forward looking models used to value Telstra’s CAN and depreciation periods

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>PERIOD OF DEPRECIATION</th>
<th>MODEL BUILDER: VERSION; AND PROCEEDINGS.</th>
<th>CAN VALUATION ORC</th>
<th>IEN VALUATION ORC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIE II</td>
<td>2003</td>
<td>2003 to 2043</td>
<td>Telstra</td>
<td>$24B (ACCC inputs)</td>
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<td></td>
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<td>ACCC version of PIE II model; and,</td>
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<td>Pricing of ULLS: Final Report, March 2002</td>
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<tr>
<td>TEA* Model</td>
<td>2007</td>
<td>2007 to 2047</td>
<td>Telstra</td>
<td>$30B (Telstra inputs)</td>
<td>$18B (ACCC inputs)</td>
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<tr>
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<td>ACCC version of TEA model; and,</td>
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<td></td>
<td>Telstra’s 2007 Unconditioned Local Loop Service undertaking</td>
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<tr>
<td>Analysis Cost Model</td>
<td>2007</td>
<td>2007 to 2047</td>
<td>Analysys / ACCC</td>
<td>$27B</td>
<td>$15B</td>
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<td></td>
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<td>Version 2.0; and,</td>
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<td></td>
<td>Telstra’s 2007 Unconditioned Local Loop Service undertaking</td>
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</tbody>
</table>

Notes: * The TEA model calculates the cost of the CAN in Band 1, 2 and 3 ESAs. To determine a national asset value, it is assumed that the Band 4 unit cost is equal to the Band 3 unit cost.

45. Finally, Telstra notes that, while the decision of the Tribunal in Application by Telstra Corporation Limited [25] (“Telstra Corporation”) does encourage the ACCC to introduce a building block model – it does not address the appropriate approach to valuing the CAN or IEN for this purpose. Indeed, to the limited extent that the Tribunal reflected on this issue, it explicitly endorsed use of DORC as a potential valuation methodology. [26] A more detailed treatment of the Tribunal decision in Telstra Corporation and its limited implications for any shift to a BBM is set out Schedule 3.

46. There is a considerable body of regulatory and legal precedent which endorses replacement cost (and DORC in particular) as an appropriate and reasonable valuation approach for establishing initial asset values in regulated industries, including those (such as electricity transmission) with statutory objectives that are very similar to those in s152AA. [27]

47. For example, the Tribunal found in Re East Australian Pipeline Limited (“EAPL”). [28]

Our reading of the decisions of the ACCC in this case indicates that, if it were not for the issue caused by the claimed extended life, DORC would be the preferred method of fixing

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26 Application by Telstra Corporation Limited [2010] ACompT 1 at [239].
27 See: Review of methodologies adopted to calculate the value of the initial RAB (“Review of valuation methodologies”). Included as Schedule 4 this response.
28 Re East Australian Pipeline Limited [2004] ACompT 8 at [37].
the ICB in this case. This is not surprising as it has been used in other cases by the ACCC and has been recommended by the ACCC in the Draft Statement of Principles. It is generally acknowledged that in the normal case DORC is the methodology most in keeping with the recovery of the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service which the Overview describes (in our opinion correctly) as 'the over-arching requirement of the Tariff principles'...

48. The ACCC suggests in the Draft Report that these other regulated network industries in which DORC has been used (energy is mentioned specifically) can and should be distinguished from telecommunications, however the ACCC offers no explanation of why this should be the case. To the contrary, to the extent that the ACCC goes on to argue that the risk of competitive bypass has lessened over the last decade, the ACCC seems to concede that the structure of the telecommunications market is becoming more closely aligned with the structure in other true natural monopoly markets, such as electricity or gas transmission – and not less so.

49. For all of these reasons, the Draft Report has not established that a forward looking replacement value is more uncertain and contentious than the unindexed historic cost methodology it proposes to use instead or that there is any sound reason for departing from well over a decade of regulatory precedent in relation to initial RAB valuations.

50. Indeed, in adopting unindexed historic costs, the Draft Report fails to take into account the following:

   (a) The use of unindexed historic costs is not supported by the overwhelming weight of Australian regulatory and legal precedent, which favour replacement cost methodologies (notably DORC).

   (b) The approach used to derive the value of unindexed historic costs from accounting values is highly problematic and not supported in the Draft Report by any detailed analysis.

   (c) The ACCC had available to it detailed and road tested replacement cost models as a potential basis for determining a DORC value, which would have been consistent with legal precedent and which would avoid substantial and arbitrary shifts in the regulatory value of the CAN and IEN.

51. Far from being simple and objective, the unindexed historic cost valuation in the Draft Report is controversial and does not reflect over a decade of market experience, regulatory precedent, detailed modeling or investor expectations.

2.2.4. IS THERE EVIDENCE THAT THE BYPASS RATIONALE NO LONGER JUSTIFIES A REPLACEMENT COST (OR OTHER CURRENT-DOLLAR/REAL) VALUATION OF THE CAN?

52. The fourth problem identified with TSLRIC+ in the Draft Report reiterates a view expressed initially by the ACCC in its 2009 Discussion Paper – that the move from a replacement cost valuation to unindexed historic cost is justified on the basis that the ‘build-buy’ rationale for replacement cost has become less compelling. In the 2009 Discussion Paper, the ACCC noted that:

   ...whilst some infrastructure-based competition (in the form of Optus’ HFC network) and quasi infrastructure based competition (in the form of access seekers installing their own DSLAMs in Telstra exchanges) has developed in particular geographic areas, widespread

29 Draft Report at page 25.
end-to-end competing infrastructure, able to provide services of comparable price and quality to the incumbent’s network, does not appear to be emerging to the extent initially envisaged.

53. The point is made again in the Draft Report:\(^{32}\)

While the underlying rationale for the use of replacement cost approaches—that is, to promote efficient ‘build/buy’ signals remains valid, its continued application may be questioned in the current telecommunications environment.

In particular, it has become clear that Telstra’s copper CAN displays enduring bottleneck characteristics, rather than being a network likely to be bypassed through technological or market development. It is also unlikely that competitors will build alternate CAN infrastructure. The ACCC therefore considers that a replacement cost pricing approach, with its rationale of providing efficient ‘build/buy’ signals, is less applicable in the present environment.

54. This discussion suggests that the ACCC originally expected that more facilities-based competition would have emerged by 2010 then has been the case.

55. Even if it is accepted that the prospect of competitive bypass (and the need to provide efficient build/buy incentives) did in fact underpin the original adoption of TSLRIC+ by the ACCC and that it now considered that prospect of such bypass was materially less, that would be a basis to move away from the continual process of asset revaluation and optimization under TSLRIC+, but it does not provide any reason to move away from a replacement cost asset valuation. As noted below, this is the standard asset valuation methodology used across regulated infrastructure in Australia precisely in industries where there is no realistic prospect of competitive bypass. In short, the decision whether to use forward looking replacement costs as an asset valuation methodology is not based on a consideration of whether an asset may or may not be actually become subject to competitive bypass.

56. In any event, however, it is not clear from the ACCC’s reasoning what degree of competition was actually expected in 1997, or why the approach to regulated pricing should be revisited if the state of competition in 2010 falls short of this benchmark.

57. To the contrary, there is significant evidence to support the view that infrastructure investment and competition is increasing and not declining. As the market analyst, RBS, very recently observed:\(^{33}\)

There has been a 68% increase in revenue-generating fixed network carriers since 2004 to 148 in 2009, according to ACMA. Most of these are small with less than A$2m per annum in carrier revenue. However, most have grown quickly from a low base. In addition to ADSL2+ carriers, there are many fixed wireless and backhaul operators, many with multi-million dollar carrier (ie, not resale) revenue.

58. As Telstra previously stated, in responding to the ACCC’s last indicative pricing review, the CAN and IEN compete with a range of competing infrastructure platforms:\(^{34}\)

(a) The Telstra CAN in Band 1 has been substantially overbuilt by FTTP networks. In each of the four largest CBD areas there are at least 9-12 competitors with fibre networks and over [e-i-c commences] \[c-i-c\] [e-i-c ends] buildings connected by competing fibre networks.

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\(^{33}\) Telco Services, Fixed carrier revenue decline, Analyst Report, Royal Bank of Scotland, Ian Martin, Fraser McLeish and Alan Stuart, 4 October 2010.

\(^{34}\) Response to the ACCC’s draft pricing principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS, Telstra Corporation Limited, 9 October 2009, page 37.
(b) The Optus cable network passes 2.2 million homes in the Sydney, Melbourne and Brisbane metropolitan areas, mostly in Band 2 areas. As at June 2009, Optus reported 37% HFC penetration with 429,000 broadband customers and 521,000 telephony customers, with 86% taking bundles.

(c) Telstra also faces competition from other fixed and wireless networks, including TransACT’s fibre network in the ACT and Optus and VHA’s 3G networks.

(d) There is significant deployment of new access infrastructure in greenfields estates in both urban and regional areas, often put out to competitive tender by developers.

59. The growth in infrastructure-based investment and competition has been confirmed again recently by the commencement of exemptions for WLR and PSTN OTA granted under s.152AT by the ACCC in 2008 and upheld by the Federal Court and, ultimately, by the Tribunal.

60. Professor George Yarrow rightly warns therefore against any knee-jerk attempt to downplay the level of infrastructure competition in an attempt to use this as a justification for moving to a BBM:

Communications markets in general continue to become more, not less competitive. The local loop in its traditional form can be bypassed by fibre to the premises, and, for some (expanding) range of bandwidths, by wireless networks. Whilst NBN proposals will no doubt imply fundamental changes in the ways things operate, it is nevertheless likely that fixed-network access prices will continue to have implications for the decisions of other operators, including investment decisions. That is, these prices matter for both economic efficiency and (potentially) for competition. Since initial RAB valuation can be expected to affect access prices, it follows immediately that forward looking efficiency and competition effects are relevant factors to be taken into account in making that valuation.

Precisely how much these factors matter is a matter for empirical assessment, and is an exercise well beyond the scope of this short opinion. I do, however, think that there is a risk that the factors might be underweighted; particularly if notions that network competition is no longer a major consideration take hold – perhaps in response to a (false) view that, since the BB approach is typically taken where network competition is much less of an issue than it is in telecoms (e.g. in relation to the regulation of pipe and wire services in gas and electricity), it is somehow necessary for the ACCC to downplay the significance of network competition in telecoms.

61. It seems unlikely that the ACCC would have expected full network replication, and indeed many of the ACCC’s previous statements indicate this was not its expectation (Box 1). Rather, the ACCC (like many other regulators) adopted a forward-looking approach in recognition of the fact that full network replication was unlikely and with a view to deriving regulated prices which mimic competitive market outcomes.

62. The ACCC most recently confirmed this position in the various discussion papers that comprise the Strategic Review of the regulation of fixed network services. The ACCC’s position in those discussion papers suggests that the regulatory framework was never intended to encourage full replication of the CAN but instead sought to encourage access

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35 SingTel, Management Discussion and Analysis of Financial Condition, Results of Operations and Cash Flows for the First Quarter ended 30 June 2009, page 45.
36 Telstra, Telstra’s Ordinary Access Undertaking for the Unconditioned Local Loop Service: Response to the ACCC’s Draft Decision, 23 December 2008 (confidential version), Attachment 4, commencing page 123.
39 Professor George Yarrow, RAB valuation for reformed pricing principles in telecoms (“Yarrow Report”), pages 7-8.
seekers to replicate some network elements and progressively climb the ‘ladder of investment’.40

63. Even if the ACCC could point to a weakening of the build/buy rationale for TSLRIC+ in telecommunications, this would not justify a shift away from a replacement cost methodology for the setting of the initial RAB value or, more fundamentally, a move from a real asset value to a nominal value.

64. Indeed, replacement costs (in the form of DORC) are used as the asset valuation methodology in those sectors with far lesser build/buy incentives. More than that, DORC has been preferred by regulators precisely because it replicates the incentives of an efficient and competitive market, when this is not otherwise the case. The ACCC recognised this issue in its 1997 Access Pricing Principles and noted that:41

Specifically [access] prices should be consistent with the levels that would occur if the access provider faced the threat of being displaced as a supplier.

65. For these reasons, Telstra submits that:

(a) The ACCC has not shown that the build-buy rationale has weakened or failed in the Australian telecommunications context.

(b) Even if the ACCC had been able to show that the build-buy rationale justified a move to a BBM, this would not support or justify moving away from a replacement cost valuation for the initial RAB or from a real to nominal asset value. To the contrary, regulators in those sectors where monopoly/bottleneck characteristics are the strongest (e.g., water, electricity, gas) have uniformly adopted DORC valuations, precisely because replacement cost is intended to mimic the efficient investment signals of a competitive market, when this is not otherwise the case.

(c) The ACCC has not shown that there are any features of the telecommunications market that make it less suitable for the application of DORC than these many other and diverse utility industries.

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40 Indeed, regulation of the ULLS implicitly assumes that certain service elements are replicable by access seekers, while others are not – specifically, the unconditioned copper wire connecting the customer to the local exchange is deemed to be not replicable (hence access is regulated), while the exchange electronics and backhaul are considered replicable. It has become clear that certain service elements are replicable, as demonstrated by the widespread deployment of DSLAMs and uptake of the ULLS.

BOX 1. ACCC’S STATED POSITION ON THE LIKELIHOOD OF NETWORK BYPASS

Access Pricing Principles—Telecommunications: a guide

In July 1997, the ACCC outlined that its approach to guide it when "performing its access pricing functions under Part XIC [of the TPA] is to consider the constraints that would be placed on the pricing behaviour of access providers if they faced effective competition (given the characteristics of the market)".42 The ACCC explains that "[t]his does not imply that the Commission believes the market for declared services is or should be perfectly competitive. Nor does the Commission expect access prices to replicate the outcomes that would occur if the market was perfectly competitive."43

Strategic review of the regulation of fixed network services

In June 2006, the ACCC noted that, despite advocating a stepping stone approach to competition, it does not consider that full facilities-based competition is the end goal in all circumstances.44

In April 2007, the ACCC stated that it will only seek to promote facilities-based competition where it is likely to be economically efficient, and therefore in the LTIE.45

In July 2009, the ACCC noted that it was of the view that the ongoing presence of natural monopoly characteristics across certain elements of fixed networks means that full facilities based competition is unlikely to be efficient or commercially feasible in most scenarios.46

2.3. Conclusions

66. The ACCC in its Draft Report has identified four perceived problems with TSLRIC+:47:

(a) The repeated revaluation of the CAN and IEN assets has led to continuing uncertainty about the level of access prices.

(b) By revaluing assets at optimised replacement cost, the current approach to TSLRIC+ may have led to past depreciation not being properly taken into account and therefore allowing over-recovery by Telstra.

(c) The task of calculating forward looking replacement costs based on a “modern equivalent asset” has proven contentious.

(d) The risk of bypass of the CAN by other technologies or networks is said to have lessened due to asset inflation, weakening the build-buy rationale that had originally been used to justify the use of TSLRIC+ methodology in telecommunications.

67. The first and third of these are both symptoms of the regulatory fatigue which has resulted from repeatedly revaluing the entire asset base, using costly and complex cost models. Telstra shares this fatigue and agrees that it provides a sound reason for moving to a well constructed BBM.

68. However, a BBM can be achieved – and has almost unanimously been achieved elsewhere in Australian access regulation – by adopting a DORC valuation of assets, which reflects the current value of the regulated assets. Implementing a BBM (to reduce regulatory fatigue) does not require, or justify, a substantial devaluation of CAN and IEN assets by moving from a real to a nominal valuation of assets.

69. The ACCC has not provided any evidence in support of their proposed substantial devaluation of the CAN and IEN. Statements in the Draft Report suggesting over-recovery by Telstra are not supported by the available evidence, which shows Telstra has received very low, if any, real economic return (in addition to the WACC) on those assets.
3. **THE LEGISLATIVE AND OTHER RELEVANT CRITERIA**

Outline

The legislative framework (including the LTIE) require pricing principles and indicative prices to be predictable, fair, practical and to protect the legitimate business interests of stakeholders, including Telstra as the main access provider.

In Telstra’s view, these legal principles require the ACCC to have utmost regard to the importance of achieving a smooth transition when moving from one costing approach to another, including minimising disruption to market and investor expectations.

In particular, an approach which is consistent with the LTIE needs to:

- avoid price shocks by minimising unwarranted inconsistencies between the new and previous cost models and methodologies, including in particular not making sudden and arbitrary asset revaluations. The ACCC’s proposed approach (which shifts from a current-dollar/real valuation to a nominal valuation for the initial RAB) gives rise to an estimated **$18.6B in stranded depreciation** and a substantial price shock to indicative prices for WLR and PSTN OTA; and

- ensure the new pricing principles establish a complete, fair and predictable price mechanism (including over inputs such as demand, capital expenditure and the roll forward mechanism). The ACCC’s proposed model, is incomplete and inconsistent, particularly when compared with those BBMs adopted in other regulated network industries which apply similar statutory criteria to the LTIE.

3.1. The relevant legislative criteria

70. The pricing principles and indicative prices must be consistent with the object of Part XIC, being to promote the LTIE. While the LTIE, as the overarching object of Part XIC, must be given “fundamental weight”, the pricing principles, as they are to be applied in access determinations, also should be consistent with the other matters which the ACCC is required to take into account by s.152CQ and s.152CR.

71. Thus, any new access pricing model which replaces TSLRIC+ must:

(a) promote competition in the market for listed services;

(b) encourage the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied (or are likely to become capable of being supplied).

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48 The value of stranded depreciation may be calculated by identifying the difference between the ACCC’s proposed unindexed historic cost value ($13.3B) and DORC ($31.9B). Putting any contentious around replacement cost aside, if the ACCC were to shift from another current-dollar/real valuation (indexed historic cost) to unindexed historic cost, the value of stranded depreciation would be $15.1B ($28.4B – as determined in the manner set out in the Confidential DORC and DIHC tables attached to this Response, less $13.3B).

49 Trade Practices Act 1974 (Cth), s 154AB(1) and acknowledged in the Draft Report at page 12. The LTIE criteria are well known and require the ACCC to have regard to the promotion of competition in telecommunications markets, achieving any-to-any connectivity between end-users and the encouragement of economically efficient use of, and investment in, infrastructure. See Trade Practices Act 1974 (Cth), s 152AB(2).


51 Trade Practices Act 1974 (Cth), s 152AQA(6).

52 Trade Practices Act 1974 (Cth), ss 152CR(1)(a) and 152AB(2).

53 Trade Practices Act 1974 (Cth), ss 152CR(1)(a) and 152AB(2).
(c) take into account the legitimate business interests of Telstra, and its investment in the facilities used to provide the relevant declared services;\(^{54}\)

(d) take into account the direct costs of providing access to the relevant declared services;\(^ {55}\)

(e) take into account the economically efficient operation of Telstra’s network;\(^ {56}\)

(f) take into account the operational and technical requirements necessary for the safe and reliable operation of the network;\(^ {57}\) and

(g) not require Telstra to bear an unreasonable amount of the costs of extending or enhancing the capability of the network or maintaining such extensions or enhancements.\(^ {58}\)

72. As the Tribunal has noted, the LTIE criteria are open-textured and there is a considerable degree of overlap between the various elements.\(^ {59}\)

73. Telstra now makes the following observations about how the statutory criteria should be applied in the context of the pricing principles process (and, more generally, in relation to any transition from a TSLRIC+ to a BBM pricing approach).

3.2. The LTIE require intervention to be targeted and regulatory commitments that are credible

74. Both the LTIE and good regulatory practice require regulatory intervention (or the introduction of any changes in regulatory principle or practice) to be targeted and proportionate. This typically involves a two stage process:

(a) First, the regulatory problem must be carefully established and defined, on the basis of evidence.

(b) Second, intervention needs to be targeted at solving the identified problem, with minimal disruption or unwarranted side effects for the market.

75. In accepting a recommendation of the Regulation Taskforce in 2006\(^ {60}\), the Commonwealth Government noted, in this regard:\(^ {61}\)

| Governments should not act to address ‘problems’ until a case for action has been clearly established. This should include establishing the nature of the problem and why actions additional to existing measures are needed, recognising that not all ‘problems’ will justify (additional) government action. |

76. In Section 2 of this Response, Telstra has already explored the problems which the ACCC has said exist with the current TSLRIC+ regime and which, it says, justify the changes in

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\(^{54}\) Trade Practices Act 1974 (Cth), s 152CR(1)(b).

\(^{55}\) Trade Practices Act 1974 (Cth), s 152CR(1)(d).

\(^{56}\) Trade Practices Act 1974 (Cth), s 152CR(1)(g).

\(^{57}\) Trade Practices Act 1974 (Cth), s 152CR(1)(f).

\(^{58}\) Trade Practices Act 1974 (Cth), s 152CQ(1)(f).

\(^{59}\) Telstra Corporation Limited [2006] ACompT 4 at [89].


approach proposed in the Draft Report. As noted above, the problem that has been established relates to regulatory fatigue and uncertainty caused by regular revaluations of the asset base.

77. As well as being targeted, good regulation must be predictable, consistent and credible. These regulatory principles and objectives are not just theoretical – they are practical and go to the heart of the LTIE. That is, regulatory actions that are arbitrary, unpredictable or inconsistent are unlikely to promote efficient investment signals, downstream competition and cost recovery.

78. Similarly, Professor George Yarrow recently commented on the close relationship between the principles of efficiency, fairness to stakeholders and reasonableness required by the statutory criteria:

[F]or a regulatory regime to work it has to have credibility and it has to be legitimate and it has to be legitimate for all parties involved. ... a regime which loses legitimacy or is lacking or lacks credibility is going to operate inefficiently in the long run. In other words there's quite a close relationship in regulation between notions of fairness and reasonableness and also notions of efficiency (emphasis added).

79. The importance of consistency and stability in meeting the LTIE is even more acute at times, like the present, when the regulatory and commercial environment is already subject to considerable uncertainty. In this environment, when uncertainty may already be dampening investment incentives, it is even more important that the ACCC regulates with a steady, predictable and consistent hand.

80. The Government has also made clear that it will be looking for substantial private sector investment in fibre infrastructure (through privatisation of NBN Co.), over the course of the next decade. This underscores the importance of ensuring that regulatory signals are consistent and predictable. It also accentuates the risk that regulatory uncertainty will dampen investment incentives in relation to any future privatisation of NBN Co.

3.3. How the statutory criteria should apply to the transition between costing models

81. Unlike most other occasions when regulators have established a BBM, usually in the context of liberalisation or privatisation processes, the ACCC in this case is not starting with a ‘blank sheet’. Telstra’s fixed network assets have been subject to access regulation and regulated asset valuations for over a decade.

82. Importantly, that means that the end result is not the only decision which needs to satisfy, and take into account, the statutory criteria. It is equally important that the ACCC takes the LTIE and other statutory criteria into account in considering how its proposed approach transitions from the existing TSLRIC+ regime.

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62 Utility Regulators Forum, Best Practice utility regulation, Discussion Paper, July 1999, which provides amongst other things that regulatory mechanisms need to be flexible, consistent (across market participants and through time), predictable (in the sense that they facilitate planning by market participants), and accountable (in the sense that there is an appropriate process and rationale for decisions).


64 Professor George Yarrow, Input Methodologies Conference: Electricity Distribution Services, Conference Transcript, 17 September 2009, pages 351-352.

3.3.1. STABILITY AND EFFICIENT INVESTMENT

83. Achieving a smooth transition is critically important under the LTIE, given the well established link between regulatory and price stability and the promotion of competition and efficient investment. The relationship between regulatory stability and certainty and efficient investment is axiomatic, as the High Court has recognised.\(^6\)

The greater the degree of uncertainty and unpredictability in the regulatory process, the greater will be the perceived risk of investment. The greater the perceived risk of investment, the higher will be the returns sought. Various methodologies referred to in the Code must at least not be inconsistent with the principles stated by the legislature, which are directed to economic efficiency.

84. In discussing the important role of predictability in implementing regulatory change in utility industries, the Utility Regulators Forum stated:\(^7\)

The principle of predictability of regulation is an essential requirement for utilities to be able to confidently plan for the future and be assured that their investments will not be generally threatened by unexpected changes in the regulatory environment. The principle is particularly important in the utility sector, which is characterised by major infrastructure works with long investment time horizons.

Regulators need to appreciate the long-term nature of assets and related investment decisions in the utility sector. The implementation schedule of regulations that will affect the cost or price structure of market participants must therefore be taken into account. Similarly there should be predictability in respect to government policies on externalities that are likely to have an impact on utility pricing and investment, such as environment, technical, safety and social welfare policies.

In some circumstances predictability is not possible, that is where there is economic instability or rapid technological or political change, but these circumstances should, as far as possible, be made exceptions. The rule to which regulators should strive is a consistent and predictable regulatory environment.

85. Similarly, the ACCC stated earlier in the current process that it will consider the extent to which a framework creates sufficient certainty for both the access provider and access seekers to enable them to make efficient future investment decisions:\(^8\)

In reviewing whether a pricing approach or implementation of a pricing approach meets the legislative criteria, the ACCC is of the view that consideration needs to be given to whether it creates sufficient certainty for both the access provider and access seekers to enable them to make efficient decisions regarding their future investment patterns and general business plans. Industry has expressed the view that the current approach does not provide this degree of certainty and that more certainty is required during the transition to the NBN.

86. While these comments are made in the context of future ‘resets’ of access prices under the BBM once introduced (i.e. within the BBM), concerns about the disincentive effects of sharp, unpredictable changes in approach apply equally to shifting from one model to another.

87. The particular risk to efficient investment of unpredictable asset revaluations is an issue that has previously been dealt with in the Australian electricity market. In its Statement of Regulatory Principles ("SRP"), the ACCC noted the link between regulatory uncertainty, prices instability and investment incentives:\(^9\)

\(^6\) East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission (2007) 233 CLR 229 at [243].
\(^9\) ACCC, Statement of principles for the regulation of electricity transmission revenues – background paper, 8 December 2004, pages 40–41.
After considering submissions in response to the Draft SRP, the ACCC has decided to adopt an approach to asset valuation in which the RAB is locked in. In arriving at this decision, the ACCC notes the general support in submissions for this approach.

The ACCC considers that periodic revaluation could potentially lead to significant variations in the value of the asset base from one period to the next. This could result in the TNSP facing an unpredictable revenue stream and large and uncertain shocks to consumer prices. Further, the uncertainty created by such an approach could deter efficient investment.

88. These sentiments were echoed by the Australian Energy Markets Commission ("AEMC") when it was consulting on the new draft National Electricity Rules, to replace the Electricity Code. In its Draft Rule Proposal Report the AEMC stated:70

In relation to the determination of the RAB, the Commission agrees with the majority of submissions that a higher level of guidance should be included in the Rules in order to increase the level of investment certainty. The current provision in the Rules for periodic optimisation reduces the certainty of the regulatory regime, given the lock-in approach set out in the SRP.

The potential for periodic optimisation of assets raises uncertainty, which in turn is likely to dampen incentives to invest. The periodic optimisation approach is also information intensive and subjective. Arguments in favour of periodic optimisation of the RAB typically focus on the incentives for efficient investment provided under such an approach. However, the strength of incentives for efficiency depends on the extent of clarity around when/if assets will be optimised.

The Commission does not support periodic optimisation of the RAB, for the reasons given above. The Draft Rule therefore codifies the current lock-in approach in the SRP to determining the RAB, with additional guidance on the criteria to be adopted in undertaking any prudency review of actual expenditure.

89. What these various legal, regulatory and economic precedents establish is that regulatory certainty and consistency are critical to promoting efficient investment incentives. This therefore requires the ACCC to take transitional issues extremely seriously. In doing so, the ACCC should prefer an approach which delivers the required outcome (a BBM) while providing a stable transition from the existing TSLRIC+ regime in terms of asset values and prices.

3.3.2. STABILITY AND COST RECOVERY

90. As the result of the ACCC applying the same approach to cost modelling of Telstra’s network over the last 13 years, a ‘regulatory settlement’ of sorts has emerged in the market. Access seekers and Telstra and its investors have come to form expectations of in relation to cost recovery and asset values and have made major investment decisions on that basis.

91. Telstra and its investors expected that, while depreciation may be deferred to the future under the TSLRIC+/tilted depreciation approach, the ACCC would allow Telstra to recover the deferred asset value at some point in time. The ACCC’s change to the DAC approach would defeat this expectation. As Professor Yarrow comments, it is critical to the legitimacy of a regulatory regime that the transition from one cost model to another not involve - unintentionally or otherwise - a ‘mugging’ of investors along the way:71

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Regulatory certainty, or, more generally, regulatory reputation, is one of the factors that is relevant to initial RAB determination. Effective regulation requires the honouring of commitments and promises which, ex post, and considered in isolation or over-narrowly, it may appear preferable for a regulator not to keep. Given the scale and non-recoverability (sunkness) of assets in sectors such as telecoms, the chief concern for capital markets is usually the risk of partial expropriation of capital. Initial RAB valuation therefore needs to take account of this factor, not least because any initial under-valuation may, by damaging regulatory reputation/credibility, lead to higher costs of capital in the longer term, to the ultimate disadvantage of consumers.

92. This issue is thrown into contrast, in the current process, in relation to the substantial amount of regulatory depreciation which has been deferred under the existing TSLRIC+/tilted annuity approach, and which would become stranded by the shift proposed by the ACCC to a nominal asset valuation. Indeed, in the recent review proceedings before the Tribunal in relation to its ULLS undertaking, Telstra raised concerns about the heavily back-loaded nature of the depreciation profile. Telstra argued that such back loading of depreciation was not the common practice of Australian regulators in other industries, including those regulated by the ACCC and as such it created a substantial risk of regulatory opportunism.

93. The ACCC responded that Telstra could and should rely on the ACCC’s commitments because, all other things being equal, Telstra should be indifferent to the choice of depreciation profile given that the present value of expected payments was the same. That is, the ACCC relied on a reasonable continuation of the existing cost recovery path to support the reasonableness of its back loaded annuity under TSLRIC+. Obviously, that present value could not be the same if the back-loaded approach was likely to result in deferred depreciation charges never being paid out due to a later change in regulatory approach.

94. The risk of under-recovery of asset value as a result of a change in costing methodology is directly relevant to the statutory criteria requiring Telstra’s “legitimate business interests” to be considered. As Justice Goldberg stated in Telstra Corporation:

The expression “legitimate business interests” is a general expression and is somewhat open-textured. What is “legitimate” conduct or a “legitimate” interest in business may be open to a number of differing interpretations. We consider that a carrier’s “legitimate business interests” is a reference to what is regarded as allowable and appropriate in commercial or business terms. In the context of s.152AH(1)(b), the expression connotes something which is allowable and appropriate when negotiating access to the carrier’s infrastructure. When looked at through the prism of a charge term and condition of access and its relationship to a carrier’s cost structure, it is a reference to the interests of a carrier in recovering the costs of its infrastructure and its operating costs and obtaining a normal return on its capital. (emphasis added)

95. The Tribunal also has commented in the context of setting an initial RAB valuation for the Moomba to Sydney gas pipeline, that that RAB valuation decisions need to be
“practical”.\textsuperscript{76} In that same case the High Court also noted the risks of “idiosyncrasy” in asset valuation:\textsuperscript{77}

The reference to well recognised asset valuation methodologies emphasises that valuation, in this context, is a practical exercise. Idiosyncrasy in valuing an initial capital base is capable of distorting the proper calculation of a rate of return “commensurate with prevailing conditions in the market” for funds and the risk involved ... Specific factors mentioned in s 8.10 ... are to be referred to only after the range of values has been considered, and a provisional value has been established...

96. For these reasons, a change in costing methodology which amounts to a sharp variation to investor expectations created by the ACCC’s previously applied model, which expropriates shareholder investments or which is otherwise arbitrary or idiosyncratic, is not consistent with the LTIE.

3.4. How the statutory criteria apply to the design of the new model

97. In addition to the issues of transitioning from the previous costing model, the new model which the ACCC puts in place must, of course, comply on its own terms with the statutory criteria.

98. In our view, the plain meaning and intent of the “legitimate business interest” criterion and the other elements of the LTIE require that pricing determinations by the ACCC reflect a degree of substantive fairness. As Justice Rares has recognised, while Telstra is not entitled to retain monopoly profits, by the same measure, the LTIE does not require it to operate as a “charitable exercise or at a loss”:\textsuperscript{78}

In Telstra [2008] FCA 1436 at [122] Lindgren J held that s 152CR(1)(a) is the factor which should be given fundamental weight, namely, whether the determination will promote the long-term interests of end-users of services supplied by means of carriage services. This was because, he held, that factor reflected the sole object of Part XIC of the Act as expressed in s 152AB(1): see Telstra [2008] FCA 1436 at [17]. Of course, s 152AB(2)(e) supplements this concept by identifying an objective of encouraging the economically efficient use of, and economically efficient investment in, the infrastructure by which listed services are supplied. Often that objective may not be attained if an infrastructure investment is not economically feasible for the service provider to make or support. So, by dint of s 152AB(2)(e) the interests of end-users may well include that the service provider is not forced to act in a way which for it is economically unjustifiable. Possibly, a monopolist may be able to be forced to lower prices or make way for competition under s 152AB(2)(e), but not to run the business as a charitable exercise or at a loss.

99. Substantive fairness can be tested by asking the question whether an ordinary business person in a competitive market would accept the ‘price’ for the CAN and IEN that is being determined by the ACCC in the proposed pricing principles. The answer is clearly no. No rational firm would accept a price for assets that did not reflect either:

(a) the present value of their future income earning potential; or

(b) the amount it would cost to replace those assets today (i.e. their current cost).

100. The first of these likely investor responses presents a circularity problem in relation to regulated assets – given that the future income potential of the assets is the subject of

\textsuperscript{76} Re East Australian Pipeline Limited [2004] ACompT 8 at [243] – [244].

\textsuperscript{77} East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission (2007) 233 CLR 229 at [243] – [244].

\textsuperscript{78} Telstra Corporation Ltd v ACCC [2008] FCA 1758 at [111].
the access prices being determined. The second investor response amounts, in simplified terms, to a replacement cost valuation.

101. It is therefore for good reason that the Tribunal and the courts have consistently endorsed the use of forward-looking replacement costs in other access regimes as the best and most appropriate approach to promote competition and incentives for efficient investment.\textsuperscript{79} The statements which the Tribunal has made in Part XIC cases about the efficiency of the forward looking approach to asset valuation in a TSLRIC+ model are of equal relevance to other forward looking costs models, including DORC. In \textit{Seven Network Limited}, the Tribunal went as far as to state that a departure from a forward-looking cost methodology would be inconsistent with the legislative criteria.\textsuperscript{80}

102. Most recently, the Tribunal further reinforced the appropriateness of forward looking regulated approaches. In \textit{Telstra Corporation}, while the Tribunal called into question aspects of the network optimisation used for the TEA model in the context of TSLRIC+, it nonetheless endorsed the desirable properties of forward-looking costs in terms of the LTIE:\textsuperscript{81}

TSLRIC+ is a broad theoretical concept, which can be implemented in a number of different ways. TSLRIC+ can be based on forward-looking economic costs, although it does not have to be. There is nothing to prevent TSLRIC+ from being estimated on the basis of costs incurred in the past (historical cost) to provide the service. However, in order to create efficient pricing signals it is common ground that it is preferable to use estimates of cost that will be incurred in the future. Forward-looking economic costs are the costs of providing the service using the best available and commercially proven technology and efficient production practices. Such costs are derived using current asset prices.

103. Thus the ACCC’s proposed adoption of DAC stands well outside the mainstream of regulated access pricing decisions. At the same time, this is not a case of the ACCC “inventing” a new or previously unconsidered approach to asset valuation. Tellingly, the authorities endorsing forward looking valuation methods have explicitly and at the same time considered the limitations of historical cost valuations in achieving Part XIC and comparable statutory criteria – and rejected it on that basis.\textsuperscript{82}

104. Telstra submits that an approach which does not follow this precedent, is likely to fail to fully take into account the Part XIC criteria and/or will give rise to an idiosyncratic interpretation of them.\textsuperscript{83}

\textsuperscript{79} See, for example, \textit{Re Application by ElectraNet Pty Limited (No 3) [2008] ACompT 3} at [192]; \textit{Re Michael; ex parte Epic Energy (WA) Nominees Pty Ltd & Anor} [2002] WASCA 231.

\textsuperscript{80} \textit{Re Application by Seven Network Limited} [2004] ACompT 11. A full discussion of the benefits of TSLRIC+ is given at [135]-[136] before concluding at [137]: “This discussion should not be taken to suggest that TSLRIC pricing should be imposed at every opportunity. It will often be the case that regulation, including regulated pricing, is not appropriate in given circumstances. It does mean, however, that, in our view, it would generally not be in the LTIE to depart from TSLRIC pricing where access is regulated. Accordingly, where an access regime requires, or creates an unacceptable risk, of non-TSLRIC pricing, the Tribunal considers that such a regime is unlikely to encourage the efficient use of, and investment in, infrastructure.\textbackslash

The Tribunal in \textit{Re Application by Optus Mobile Pty Limited & Optus Networks Pty Limited} [2006] ACompT 8 at [96]-[99], stated: “Consistently with previous authority, we consider generally that the undertaking prices should reflect and not exceed forward-looking efficient economic costs.”

\textsuperscript{81} See, for example, \textit{Re East Asia Pipeline Limited} [2004] ACompT 8 at [17].

\textsuperscript{82} \textit{Re Application by Telstra Corporation Limited} [2010] ACompT 1 at [98].

\textsuperscript{83} See, for example, \textit{Re East Asia Pipeline Limited} [2004] ACompT 8 at [17].
3.5. Conclusions

105. The legislative criteria are open textured and take much of their meaning from the circumstances in which they are being applied.

106. In the current process, the legislative criteria require the ACCC to take fundamental account of the fact that any shift to a BBM is not occurring – as it has in other industries – at the start of access regulation in the sector. To the contrary, this change follows over a decade of experience with forward-looking TSLRIC+ pricing. Moreover, it is taking place at a time of unprecedented commercial and legislative upheaval, with the imminent rollout of the NBN.

107. In this context, the LTIE and other legislative criteria require the ACCC to:
   (a) promote regulatory consistency and certainty by avoiding unwarranted price shocks;
   (b) take into account the expectations built up over the last decade under the regulatory ‘settlement’ forged between the ACCC, Telstra and access seekers;
   (c) take a fair and practical approach to valuation which reflects how investors will make decisions about future recovery of their investment in Telstra; and
   (d) respond to the current state of market transition and the resulting need for a clear, predictable and stable transition to NBN.
4. PROBLEMS WITH THE ACCC’S PROPOSED APPROACH

Overview

The ACCC’s approach to the formulation of the draft Pricing Principle and Indicative Prices:

- it fails to establish a workable BBM while introducing a significant asset revaluation and price shocks, it does not achieve its objective of promoting regulatory certainty and price stability;
- fails to give any or any material consideration to important and relevant matters, such as the impact of the NBN, regulatory precedent, stranded depreciation and the appropriateness of an valuation methodology that provides consistency and stability in transitioning from TSLRIC+;
- reaches conclusions based on assumptions which are not grounded on objective evidence, such as use of the FHoA to derive an initial RAB valuation, assumptions regarding the use of RAF accounts and assumptions regarding capital expenditure and demand forecasts;
- does not meet the requirements of pricing principles under s.152AQA, in that it provides no meaningful guidance to industry; and
- the Ovum BBM and ACCC analysis, in the Draft Report, is subject to a number of material errors, such as those set out in the table in section 1.3.

In this Response, Telstra has proposed a number of steps which the ACCC could take to respond to and resolve these issues, including:

- submitting a detailed BBM Working Proposal, which is fully developed, internally consistent BBM framework, capable of being implemented through a pricing principle under s.152AQA which adopted it (see Schedule 5);
- RAB valuation approaches suitable for determining a DORC and indexed historic cost value for the initial RAB, which would promote regulatory predictability and price stability and would be consistent with the LTIE (Section 5.1); and
- overall price stability for the industry.

The ACCC is not required by s.152AQA to have indicative prices in the market. Given the significance of the above problems, and their knock on impact for the initial RAB value and indicative prices, Telstra submits that if the ACCC is not minded to adopt the alternatives proposed in this Response, it needs to hold off on issuing any final determination in relation to new indicative prices until it has otherwise fixed those material issues and errors and consulted further on its approach and a proper, fully developed BBM framework.

4.1. The draft pricing principles do not constitute proper pricing principles under s.152AQA

108. The role of pricing principles under s.152AQA is to provide clarity around determination of price-related disputes referred to the ACCC for arbitration under s.152CM. They are intended to help Telstra and access seekers during commercial negotiations, by informing them of the principles which the ACCC considers need to be taken into account and applied in any arbitration, in the event that agreement is not reached.
109. The ACCC is required to have regard to the pricing principles when arbitrating any price related dispute,\(^{84}\) as reflected in the Explanatory Memorandum, which states:\(^{85}\)

> Although not binding on the Commission or in any subsequent review, the methodology that will form the substance of the Pricing Principles will act as a guide to the market on the likely approach to be adopted in an arbitration conducted by the Commission. The more timely release of Pricing Principles will encourage commercial negotiation by providing increased certainty in regulatory outcomes.

110. The draft principle\(^{86}\) is that prices will be determined "on the basis of a building block model".\(^{87}\) While the ACCC has published a Draft Report which contains some analysis of what may be comprised in the BBM, there are a number of very significant considerations which are not resolved in the Draft Report and therefore not reflected in the draft principle. Indeed, no actual model is specified or adopted. No material parameters are specified in the draft principle and the process to be used for determining such parameters (including parameters for making changes to the model over time) is not set out.

111. As a consequence, the draft principle does not provide any guidance to Telstra as an access provider or access seekers as to the matters that will be taken into account by the ACCC in determining any arbitration in the event that agreement is not reached. In short, the draft principle fails to meet the statutory function of a pricing principle.

112. This is most obvious when the proposed pricing principle is compared to the BBM used in electricity and gas price regulation. The table in Schedule 6 highlights the significant structural differences between the BBM proposed in the Draft Report and the building block framework established under the National Electricity Law ("NEL"). The table also includes references to Telstra’s own BBM Working Proposal, discussed in section 6 below.

113. Further, even in the Draft Report critical issues associated with the BBM are either not addressed, uncertain or are unresolved and left for future and unrelated consultation processes (such as Record Keeping Rules ("RKRs")). Thus, the proposed approach set out in the Draft Report is inadequate and fails to provide the procedural transparency (through public consultation) which is required under s.152AQA(4) around the substance of the determination.

114. The above considerations are not just matters of legal form and process, they go to the fundamental reason the ACCC decided to formulate a new pricing principle, which was said to be to promote regulatory certainty and to avoid the process of constant regulatory revision inherent in the old TSLRIC pricing principle.

115. To meet the primary objective of its review of the Pricing Principles, the ACCC therefore needs to specify an actual BBM as is found in other regulated industries, such as under the National Electricity Rules ("NER") and National Gas Rules ("NGR"). Unless an actual BBM model is specified and adopted by the pricing principles then no certainty is provided and the prospect for persistent challenge and review of access prices remains.

116. Industry’s concern about regulatory uncertainty and instability is also not capable of being addressed by the mere publication of indicative prices.

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\(^{84}\) Trade Practices Act 1974 (Cth), s 152AQA(6).


\(^{86}\) For all services except LSS, which does not have a pricing principle related to the use of a BBM.

\(^{87}\) Schedule 1, Draft Pricing Principles for the Unconditioned Local Loop Service (ULLS) Determination 2010; Schedule 1, Draft Pricing Principles for the Wholesale Line Rental (WLR) Determination 2010; Schedule 1, Draft Pricing Principles for the Public Switched Telephone Network Originating Access and Terminating Access Service (PSTN OTA) Determination 2010; Schedule 1, Draft Pricing Principles for the Local Carriage Service (LCS) Determination 2010.
117. While indicative prices can be taken into account by the ACCC in a subsequent arbitration and are intended to provide some guidance to market participants, they cannot meet those objectives where they are based on an analysis that does not give material consideration to important and relevant matters; assumptions which are not grounded in objective evidence and a BBM model which contains material errors. The ACCC has itself acknowledged that the role of indicative prices is relatively limited, and all the more so in a dynamic environment.88

118. Furthermore, where the actual principle underpinning the indicative prices is so uncertain, the indicative prices are not replicable in any subsequent review. In short, a market participant cannot have any confidence that the indicative prices are in any way indicative of the prices that would follow from an application of the proposed generic principle in a subsequent arbitration.

119. As such, rather than provide meaningful and valuable guidance to industry, the draft pricing principle, indicative prices and Draft Report have the potential to undermine the achievement of agreement between Telstra and the various access seekers.

120. The issue of the substance of the pricing principle and consultation processes needs to be addressed by the ACCC before any new pricing principles or indicative prices are determined. Telstra submits that this requires:

(a) pricing principles which adopt a complete and internally consistent BBM. Telstra has developed and offers a BBM Working Proposal in Schedule 5 based on the NER and NGR, which it considers is consistent with the LTIE criteria and which could form the basis of such a BBM; and

(b) indicative prices that are based in objective evidence and reflect a proper consideration of relevant matters and are the output of a defined and clear BBM, without material errors.

4.2. The ACCC shift from a current-dollar/real value to a nominal value for the initial RAB will prevent Telstra from recovering its costs

121. As noted above in section 3, a shift in the approach to setting regulated prices from one accounting system to another should, in and of itself, not have a material impact on price and revenue outcomes and asset values. If an impact is intended, it needs to be explained and justified on the basis of evidence.

122. In the present case, the ACCC has made clear that it intends to shift from its earlier TSLRIC pricing principle, which was based on replacement cost valuation of assets and a certain depreciation profile (titled annuity) to a pricing methodology based on Telstra’s ‘actual’ costs, derived from the RAF. The CAN and IEN values proposed in the Draft Report constitute a reduction of approximately $18.6B from the replacement cost asset values implicit in the most recent TSLRIC+ pricing established by the ACCC in 2008 (and rolled over in 2009).

123. It is one thing to shift between valuation methodologies that otherwise use the same accounting/depreciation basis – such as from one current-dollar/real valuation to another. While this can give rise to changes in asset values, they are at least in principle consistent approaches. For example, moving between two real values in the form of a DORC (which is calculated to be the same depreciated value of assets as implied by the

88 Draft Report, pages 12 and 46.
ACCC’s most recent TSLRIC prices) to indexed historic cost, would reduce CAN and IEN asset values by approximately $3.5B.

124. However, shifting from the lesser of the real valuations to a nominal valuation, which is at the moment unjustified and unexplained by the ACCC, would result in a substantial downward revision in asset valuations. For instance, a shift from indexed historic cost to the nominal-based valuation that the ACCC proposes (unindexed historic costs) would reduce the CAN and IEN asset values by a total value of approximately $15.1B.

125. Each of the valuation approaches mentioned above (i.e. current-dollar/real or nominal valuation), with appropriate depreciation profiles, will provide for the expectation of cost recovery provided that they are used consistently throughout an asset’s life. However, switching from one to another, and in particular shifting from a current-dollar/real valuation to a nominal-based valuation, half way through the assets’ lives will not.

126. The reason for this is that when a real-based valuation is used depreciation is back-loaded. A back loaded depreciation profile means that there is less depreciation at the beginning of an asset’s life and more depreciation in later periods. This is in contrast to nominal historic (accounting) costs in which depreciation under the commonly applied straight line method is typically spread evenly over the asset’s life.

127. Figure 2 below highlights the difference in depreciation profiles over time.

**Figure 2: Straight line (nominal) and back loaded (current cost) depreciation profiles**

128. As Figure 2 above shows, while both models (nominal and current-dollar/real approaches) end up in the same place if applied consistently throughout an asset’s life, a change in approach midway through an asset’s life can lead to very significant problems – specifically, there is a significant risk that depreciation (i.e. capital cost recovery) that was previously back loaded under the replacement cost approach would not be recovered. Figure 3 below highlights, in another simplified form, how this risk of under-recovery is raised by any sudden and arbitrary shift in regulatory pricing practice during an asset’s life.
129. The Draft Report simply does not consider at all the question of transitioning from one regulatory price setting approach to another – or the likely stranding of depreciation.

130. The commercial reality is that for the period from 1997/98 on, the ACCC has set access charges on the basis of TSLRIC with a tilted annuity. As a result, substantial depreciation allowances that would otherwise have been recovered in access prices were deferred to subsequent periods.

131. During that period, Telstra was making significant outlays of its shareholders’ funds on the regulated assets. For example, since 1999/2000, \([c-i-c \text{ commences}] \[c-i-c \text{ ends}]\) of the total real cost of Telstra’s 30 June 2010 CAN and IEN assets have been added. It seems difficult to understand how the claim could now be made that those shareholders, faced with regulatory decisions that promised future depreciation payments, would not have relied on the expectation that those payments would at some point be made.

132. For example, during the ten-year period since 1999/00 in which the ACCC has applied TSLRIC+/tilted annuity for regulated pricing, Telstra has purchased \([c-i-c \text{ commences}] \[c-i-c \text{ ends}]\) of its CAN in nominal terms. Under TSLRIC+, the ACCC has allowed Telstra to recover \([c-i-c \text{ commences}] \[c-i-c \text{ ends}]\) of depreciation on those post 1999 assets. Over the same period, however, accounting depreciation booked against the value of the same assets in the RAF accounts was \([c-i-c \text{ commences}] \[c-i-c \text{ ends}]\). The difference between these two values, \([c-i-c \text{ commences}] \[c-i-c \text{ ends}]\), would be the amount of depreciation previously deferred on these assets by the ACCC under TSLRIC+ that would become stranded and unrecoverable if there was a shift to depreciated historic cost valuation, adopting written down asset values from the RAF accounts.

133. Figure 4 below highlights the difference between booked depreciation as reflected in Telstra’s financial accounts (and the RAF) and cost recovery in the form of regulatory depreciation allowed by the ACCC under previous pricing decisions since 1999-2000. The difference is very significant.
134. Indeed, in successive proceedings, the ACCC, in rebutting Telstra’s concerns about the heavily back-loaded nature of the depreciation profile, itself argued that reliance could reasonably be placed on its commitments. Telstra also noted that such back-loading, which created substantial risk of regulatory opportunism, was not the common practice of Australian regulators in other industries, including those regulated by the ACCC. In contrast, the ACCC contended that all other things being equal, Telstra should be indifferent to the choice of depreciation profile given that the present value of expected payments was the same. Obviously, that present value could not be the same if the back-loaded approach was likely to result in deferred depreciation charges never being paid out.

135. In short, the ACCC cannot properly disregard the fact that for a decade, it made an implied regulatory promise that certain depreciation amounts would ultimately be recovered. To do so would amount to taking from investors the benefit of a promise on which they should have been able to rely.

136. Economic analysis makes it clear that such takings are not costless. Rather, they increase the risk associated with investment, and hence are inconsistent with the long-term interests of end-users. Moreover, once a regulator has acted in a time-inconsistent manner, it becomes advantageous for it to do so again, making the resulting harm all the greater.

137. These costs and risks were emphasised by the High Court in a matter originating from an appeal to the Australian Competition Tribunal against an ACCC decision by the East Australian Pipeline Pty Ltd (the owners of the Moomba-Sydney pipeline). The ACCC, in determining access prices for that pipeline, had also adopted an approach to

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90 See for example, ACCC Submissions, ULLS Appeal, 2009, 132


depreciation which seemed designed and intended to reduce the recovery of depreciation charges. In overturning that determination, the High Court emphasised that:

> The greater the degree of uncertainty and unpredictability in the regulatory process, the greater will be the perceived risk of investment. The greater the perceived risk of investment, the higher will be the returns sought.

Various methodologies referred to in the [Gas] Code must at least not be inconsistent with the principles stated by the legislature, which are directed to economic efficiency.

138. Other regulators, when implementing a change in approach of this kind, routinely and appropriately give this issue detailed consideration. They also structure their reforms to ensure that they are targeted and proportionate and minimise unnecessary and destabilising side effects for asset values, wholesale prices and cost recovery.

139. The ACCC must consider and acknowledge any change in valuation methodology from a current-dollar/real to nominal approach in formulating its BBM and in deriving indicative prices. Further, it must ensure that the BBM has a mechanism to, and that prices are set so as to enable Telstra to, recover regulatory depreciation stranded by any such change in regulatory approach.

140. The transition from one regulatory approach (TSLRIC) to another (BBM) for the purpose of promoting regulatory certainty (by removing the need to continually revisit the underlying asset value), should not be taken as an opportunity for the ACCC to substantially reduce access prices, the revenues derived from those CAN and IEN assets and accordingly the value of those assets. Such a reduction in regulated prices, revenues and asset values requires clear evidence that prices, revenues and underlying asset values are too high and detailed consideration of whether the reduction will enable the access provider, Telstra, to recover its costs.

4.3. **The ACCC does not take into account significant limitations with use of the RAF accounts**

4.3.1. **ACCOUNTING DEPRECIATION AS MEASURED IN THE RAF ACCOUNTS DOES NOT REFLECT COSTS RECOVERED FROM EARLIER PRICING**

141. The ACCC’s rationale for adopting a nominal RAB valuation is based on an assumption that depreciation booked in the RAF reflects Telstra’s recovery of its costs, saying:

> The ACCC’s approach to depreciation when setting the initial RAB will be consistent with the future approach to depreciation and capital expenditure. This will minimise cost over-recovery or cost under-recovery over the long run by taking into account past depreciation as outlined in the Regulatory Accounting Framework (RAF) accounts provided by the access seeker.

142. The Draft Report does not provide any evidence in support of this assumption. In fact, this assumption is incorrect, as depreciation booked in financial accounts (including the RAF) is not intended to be, is not reflective of, and cannot be relied upon by the ACCC to draw conclusions about, past cost recovery.

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93 East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission [2007] HCA 44, [49-50], emphasis added.
95 Draft Report, page 23.
143. The accounting practices used to determine depreciation (and written down asset values) in the RAF are not designed or intended to reflect past cost recovery through prices. In this regard, Bruce Porter states:

\[\text{...the depreciation method used [straight line] does not require consideration of recovery through prices charged to customers or take into account the return to the entity.}\]

144. The path of cost recovery allowed through regulated prices has not been based on or linked to accounting depreciation allowed for financial reporting purposes in Telstra’s financial accounts and RAF. In establishing forward-looking replacement costs under the TSLRIC+ framework, the ACCC has not previously considered whether recovery through regulated wholesale prices aligns with the depreciation applied in Telstra’s financial accounts – and has certainly not required that prices reflect allowed depreciation in the RAF.

145. For these reasons, and contrary to the view expressed in the Draft Report, the RAF is not a simple or straightforward source of information in relation to the acquisition value of fixed network land and assets. On the contrary, Telstra considers that the use of RAF data to value the initial RAB is likely to be highly contentious and lead to incorrect values being adopted.

4.3.2. ASSET VALUES TAKEN FROM THE RAF ACCOUNTS DO NOT REFLECT THEIR (DEPRECIATED) HISTORIC ACQUISITION COST

146. The carrying value of assets in the RAF accounts is not intended to reflect their original acquisition cost, other than at initial recognition. Elsewhere in this Response, Telstra discusses the problems caused by adopting a concept like ‘actual cost’ and what, if anything, this might mean as a question of economics. Having said that, it appears that by this term, the ACCC has in mind something like historic cost.

147. However, it is not possible to derive an accurate view of the historic or acquisition cost of the CAN and IEN from their written down value in the RAF for a number of reasons, including:

(a) Only assets that have not been fully depreciated in Telstra’s accounts are included in the financial asset register. Telstra has some assets which have been fully depreciated for accounting purposes – and so are have been removed from the asset register – but that are still in active use. This means that the valuation in the RAF is likely to understate the true economic cost of Telstra’s CAN and IEN assets. That is to say, just because assets have been fully depreciated in the accounts does not mean that they have been fully depreciated from an economic perspective.

Bruce Porter notes two examples of this of which he has been made aware in relation to Telstra’s assets:

As outlined in the background section in Appendix B, I am advised that in the past some fully depreciated fixed assets, such as tunnels in Sydney and Melbourne, have been derecognised (removed from the financial statements) even although they are still in use (i.e. they have been derecognised before they have been retired from use). In addition I am advised that on the formation of Telstra certain assets were transferred from the Postmaster General to Telstra without costs and accumulated

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96 Bruce Porter Report, page 4. Included as Schedule 2 to this response.
97 The issue is addressed below at Section 5.1.5. See also Yarrow Report, page 10 which notes: One immediate puzzle that I had in reading the Draft Report was with the term depreciated ‘actual’ cost (DAC). This is not, so far as I aware, a term of art, and seems to have been invented for the current process.
98 Bruce Porter Report, page 7. Included as Schedule 2 to this response
book values being recognised, and certain of those assets are still in use. Accordingly, both groups of assets have economic value as they still provide future economic benefits to Telstra in the form of future cash flows, even although they are no longer included in the financial statements.

(b) **Some assets, which are not fully depreciated, may have been re-valued at fair value at a point in time after their acquisition date, in accordance with accounting standards.** This re-valued amount may then have been deemed under accounting standards to be the historic cost of the asset. Bruce Porter describe the issue in the following terms:

Accounting Standards allow a choice to subsequently [i.e. after the date of acquisition] measure property plant and equipment; one aligns with a historical cost basis and the other aligns with a fair value basis. Telstra currently measure property, plant and equipment at cost. Changes in Accounting Standards in 2000 and 2005 (refer Appendix C for details) allowed entities to deem the carrying values of such assets to be cost, where they elected to revert to a historical cost basis at the time. As at 30 June 2000, in accordance with Accounting Standards Telstra deemed all revalued property, plant and equipment carrying values to be cost. Accordingly, it is sometimes difficult to ascertain from the financial statements of an entity whether the amounts stated as cost of such assets are actually historical cost or deemed cost ....

Prior to 2000, Telstra had an accounting policy of revaluing certain property, plant and equipment. This policy was discontinued on adoption, and consistent with the allowed options, of AASB 10412 and the carrying value of such revalued property, plant and equipment as at 30 June 2000 were "deemed" to be their cost going forward. Accordingly, even if it were possible to determine economic value by reference to the cost (as opposed to accounting carrying value) of an asset, in my opinion, it is not possible to do so as in this instance cost, as described in Telstra’s financial statements, is a mix of historical and "deemed" cost.

(c) **Changes in accounting standards may affect the position or value of some assets.** For example, changes were made to Telstra’s financial accounts to de-recogise previously capitalised interest, when the Australian equivalent to International Financial Reporting Standards was adopted in 2005. Again, in July 2009, in accordance with an amendment to A-IFRS, interest was included in the measurement of the fixed cost of assets. These changes therefore affect asset values in the RAF in a way that is unrelated to the acquisition cost of assets.

148. All of these, in one way or another, have influenced the current written down value of CAN and IEN assets in the RAF accounts. For example, Bruce Porter’s expert report explains that the cost at which assets enter Telstra’s financial asset register, although allowed by Australian Accounting Standards to be referred to as acquisition cost, actually reflects a mix of acquisition cost for some vintages of some asset categories, and revalued amounts for other vintages and asset categories.

149. Telstra (and its predecessors) have revalued property, plant and equipment assets as set out below:

(a) In 1975, the Postmaster-General’s Department revalued the carrying value of property, plant and equipment. While many of these assets are now fully depreciated, this revaluation will still affect the pre-1975 land, buildings, duct and pipes, and local switching assets that remain on Telstra’s financial asset register.

(b) From 1989 to 1999, Telstra had a policy of allowing revaluation of fixed assets.

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99 Bruce Porter Report, page 3. Included as Schedule 2 to this response
100 Bruce Porter report, page 12. Included as Schedule 2 to this response
101 See Bruce Porter Report, Annexure B. Included as Schedule 2 to this response
(c) As at 30 June 2000, in accordance with Australian Accounting Standards, Telstra deemed all revalued property, plant and equipment values to be acquisition cost. Assets purchased after 30 June 2000 are likely to be recorded at acquisition cost.

150. As a result of these accounting policies:

(a) assets purchased prior to 1975 were revalued, probably in that year;

(b) Telstra’s last revaluation of assets relevant to fixed line prices was in 1991/92 and related to network land and building assets; and

(c) assets purchased after 30 June 2000 are valued at acquisition cost.

151. The Draft Report is therefore wrong when it assumes that the task of deriving ‘actual’ asset costs from financial accounts is “… relatively simple and objective. Values for actual gross historic costs for fixed network assets can be derived from regulatory and/or general ledger accounts. As this information comes from audited accounts prepared by the regulated entity, there is less scope for dispute over the cost information compared to hypothetical and subjective replacement costs.” 102

152. Quite to the contrary, as Bruce Porter concludes: 103

Accounting carrying values in financial statements are not intended to reflect acquisition cost other than at initial recognition. Aside from depreciation and impairment considerations, subsequent to the initial acquisition of an item of property, plant and equipment at cost, an asset value may be changed e.g. due to changes in Accounting Standards permitting the use of fair value as ‘deemed cost’. However, such items may still be described as being held ‘at cost’.

153. There are a range of factors that result in neither the undepreciated value nor the written down value of assets in the RAF accounts necessarily reflecting their ‘acquisition’ or ‘actual’ cost, in the sense intended and relied upon by the ACCC in the Draft Report.

4.3.3. ASSET VALUES TAKEN FROM THE RAF ACCOUNTS DO NOT REFLECT TRUE ECONOMIC COST

154. The question of whether or not the RAF accounts reflect ‘actual costs’ – and in fact what this concept of ‘actual costs’ means in an economic or practical sense – largely misses the point. The Draft Report does not address the more relevant question of whether asset values in the RAF accounts are appropriate asset values for the purpose of setting the regulatory asset value (ie, whether they reflect the economic value of the assets or the extent to which the cost of those assets has been recovered).

155. From an economic perspective, cost can only be defined by reference to a decision situation. That is to say, the ‘actual cost’ to a firm of a decision is best measured in opportunity cost terms, as the value that is foregone by having capital or other resources committed by that decision. While the price of an asset (or cost of acquisition) will form part of that cost, it is an incomplete measure of cost, in this economic sense.

156. When viewed in opportunity cost terms, both forward looking and historic cost approaches can reflect actual/economic cost, provided that they are applied consistently throughout the life of a project. The important thing is that a regulator respects the decision made by a firm at the time of investment about the income stream associated with an investment or asset – given that this has defined the opportunity or ‘actual’ cost to the investor of the decision to invest.

102 Draft Report, page 27.
103 Bruce Porter Report, page 5. Included as Schedule 2 to this response
157. Orthodox approaches to regulated pricing recognise the need to recover this ‘actual’ or economic value of underlying assets. Economic value, in this context, is essentially a forward looking concept that is designed to reflect the net present value of expected future cash flows generated by an asset. It most closely reflects the value of an asset (and therefore pricing levels) which would be sought to be recovered by a firm in a competitive market as well as the opportunity cost of foregone value.

158. In telecommunications, this approach to cost recovery has existed since regulation was first introduced into the sector. For example, as early as 1991, the then telecommunications regulator, Austel, noted in relation to a cost methodology for use in setting interconnection rates for newly corporatised Telecom/OTC:

> In the determination of Telecom/OTC’s cost of capital, the valuation of assets should not just reflect the written down historic cost, but the intrinsic economic value tied up in the asset. Such a value would reflect the effect of inflation, service potential, that is, the effect of technological change such as obsolescence, and other changes in the asset’s value over time. Such changes may not be captured adequately by traditional depreciation rates alone.

159. This rationale has been applied numerous times since in the context of regulatory asset base determinations. Again, very recently, the ACCC again reiterated the importance of regulated pricing reflecting the economic or ‘true’ cost of assets to access providers (typically through use of replacement cost, indexation or revaluation), stating:

> Corporatisation in the late 1980s and early 1990s typically involved adoption of some form of replacement cost method of asset valuation to determine the RAB, replacing the valuation of assets at their unindexed historical cost. Asset revaluation means that management is presented with the ‘true cost’ of the capital employed. An accurate asset valuation is essential to form the appropriate basis for a rate of return requirement.

160. However, the unindexed written down value of assets in the RAF accounts now relied upon by the ACCC do not reflect their true economic value. That is to say, the approach

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104 AUSTEL, Study of arrangements and charges for interconnection and equal access: economic and commercial considerations: final report to the Minister for Transport and Communications, 14 June 1991, page 145.

105 For example in electricity, regulators have rejected book valuations in favour of replacement cost approaches. The approach taken in electricity had its origins in the 1994 Guidelines for Valuation of Assets of Government Trading Enterprises, as set out by the Steering Committee on National Performance of Government Trading Enterprises. These Guidelines recommended a deprival value approach, which in most cases led to DORC valuations being adopted for electricity businesses, both by the ACCC and jurisdictional regulators. In relation to book values, the Steering Committee noted (at p32 of its Guidelines):

> “A major problem with a pure historic cost model is the impact of changing prices on the value of assets (and liabilities) of the entity and the difficulty in assessing performance including comparisons with other entities. The addition of historic costs of assets acquired during different reporting periods involves the addition of nominal amounts having different purchasing power and, therefore, differing economic significance. In addition, measurement of asset depreciation in historic dollar terms results in the comparison, in the operating statement, of items having differing economic significance. These aspects of historic cost valuation impede the reporting of clear messages to users about the meaning of the amounts attributed to assets and expenses, and detracts significantly from the comparability of general purpose financial reports prepared on an historic cost basis by different GTEs. A problem of particular concern with the application of historic cost values to public sector assets is that any assets donated to the entity or otherwise acquired without cost would not normally be recognised in the statement of financial position.”

The Steering Committee also noted that historic costs may also provide poor signals regarding the economic value of assets, stating:

> “The phenomena of changing prices and changing technology cause historic costs to become poor indicators of the remaining service potential of assets, and consumption thereof for the current reporting period. As such, historical costs are not particularly relevant to the disclosure of information about these key aspects of performance, whether for resource allocation decisions or the discharge of accountability. This is particularly so for GTEs, as a significant proportion of their assets have very long useful lives.”

adopted by the ACCC departs from two decades of orthodox regulator practice and experience in the sector.

161. In some cases, where assets have been revalued to fair value at a point during an assets life, that fair value may reflect economic value at the date of revaluation. However, after accounting depreciation has been applied to the revalued amounts, the carrying value is almost certain to no longer reflect economic value. As noted above, in the case of some network land and building assets, the last revaluation was 1991/92. In or around 2000, Telstra deemed the then carrying value of assets to be at ‘cost’ moving forward – which means that the current cost values in the RAF accounts are a mix of historical and deemed values. There has also obviously been depreciation, impairments and changes to accounting standards throughout this period.

162. All of these factors mean that the amounts in the RAF accounts almost certainly do not reflect the economic value of CAN and IEN assets. Bruce Porter makes it clear that, for these reasons, it is simply not possible to derive an accurate reflection of economic value from the RAF accounts:

In my opinion, based on the information provided to me as outlined in the background section of this letter (Appendix B), the definition of economic value as defined in Appendix D, the economic value of Telstra’s fixed network assets cannot be derived from Telstra’s financial statements.

163. In reaching this view, Porter is following well established economic precedent highlighting that accounting values and measures are unreliable indicators of true economic value, particularly in an environment where asset prices are changing:

...there is no way in which one can look at accounting rates of return and infer anything about relative economic profitability or, a fortiori, about the presence or absence of monopoly profits. ... [using] accounting rates of return to draw conclusions about monopoly profits is a totally misleading enterprise.

164. In short, therefore, the ACCC in the Draft Report has not taken into account:

(a) whether written down historic (accounting) values set out in the RAF accounts are an appropriate measure of cost, for the purpose of ensuring cost recovery and to promote efficient investment incentives; and

(b) the significant limitations of the RAF accounts (and accounting methods generally) as a basis for seeking to derive appropriate economic values, as the appropriate basis for setting an initial RAB valuation.

4.4. The ACCC’s proposal to adopt unindexed depreciated accounting cost goes against regulatory precedent

165. Contrary to a view expressed in the Draft Report, the ACCC’s proposed approach – of adopting an unindexed depreciated value for the RAB, based on written down asset values in the RAF - is without precedent in Australian regulation. The Draft Report provides no precedent for this approach and does not refer to, or address, any precedent approaches for setting regulatory asset values.

166. The overwhelming experience in Australian regulation favours replacement cost methodologies – because of their efficiency attributes and because they reflect a consideration, and a fair balance, of the legitimate interests of access providers (in

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recovering the economic value of their assets) and access seekers (in not being required to pay more than they would if they simply replaced the assets themselves).\footnote{109}

167. The table set out at Schedule 4 to this paper canvasses the leading RAB valuations undertaken across Australian utilities over the last 17 years. Of the 54 valuations reviewed, all but 15 adopted the DORC valuation methodology. Of the 15 which did not adopt DORC:

(a) three used other forms of replacement cost methodologies, either Gross Replacement Value ("GRV") or TSLRIC+;

(b) three used an optimised deprival value ("ODV") approach, which in many cases will result in a DORC valuation (ODV being the lesser of DORC and economic value, as represented by future cash flows);

(c) one used a "DORC-hybrid" approach under which DORC was used for all assets except perpetual (non-depreciating) assets. For perpetual assets (primarily land), an indexed historic cost approach was used;

(d) two valuations in the postal sector applied market valuations for some assets and book values for others, reflecting the unique characteristics of postal assets (particularly their non-sunk nature) as noted by the ACCC in those decisions;

(e) four valuations were forms of indexed historic cost, based on actual capital expenditure adjusted for inflation; and

(f) just two valuations (for FOXTEL’s digital STU undertaking, and the earlier pay TV carriage undertaking) were based on unindexed historic cost because, in those particular cases, unindexed historic cost was seen to closely approximate replacement costs as the relevant assets had been deployed shortly before the undertakings were lodged.

168. Thus, none of the 54 valuations reviewed provide any sort of precedent for an unindexed historic cost valuation of Telstra’s fixed network assets. In the very rare cases where such valuations have been used, regulators have noted the unique characteristics of the assets concerned which meant that such an approach may be permissible. The regulatory precedent indicates that unindexed historic cost may only be appropriate where either: (a) assets are non-specialised and non-sunk (as in the postal sector), meaning that book values would be expected to closely reflect remaining economic value;\footnote{110} or (b) assets have been deployed recently and therefore original deployment costs closely reflect replacement costs (as in the case of FOXTEL)\footnote{111}.

\footnote{109} This issue is discussed in more detail in section 2.2.3.

\footnote{110} In approving the use of written down book values for postal assets, the ACCC noted the unique nature of these assets, compared to those deployed in other network industries and concluded that, as a result, written down book values could be used in that particular case. The ACCC noted:

"The vast majority of other assets used by Australia Post are likely to have alternative uses. Much of the plant and equipment required to provide retail services, office equipment and other assorted assets could be expected to be used in a variety of industries. Accordingly, disposal values should be readily observable and hence depreciation rates are likely to result in asset valuations that closely reflect the remaining service potential of the assets."


\footnote{111} In approving the use of unindexed historic cost for FOXTEL’s assets the ACCC emphasised the importance of the timing of their deployment. The ACCC concluded:

"Foxtel commenced providing its digital retail pay TV service in March 2004. The roll out of digital services is expected to occur over three years. Therefore, actual historic costs are costs that have been recently incurred. It is likely that these recently incurred costs closely approximate the replacement costs of modern equivalent assets."
Clearly, neither of these conditions holds for Telstra’s fixed network assets and therefore an unindexed historic cost valuation would be inappropriate.

169. The Tribunal has also repeatedly endorsed the use of replacement cost methodologies for initial RAB valuation purposes.\textsuperscript{112}

170. While the Tribunal recently raised concerns over the degree of optimisation which is appropriate in the context of setting TSLRIC+ prices, this finding is not related to a RAB framework. To the contrary, the Tribunal explicitly acknowledged DORC as the appropriate and orthodox approach for setting initial RAB valuations.\textsuperscript{113}

171. The Draft Report conflates two distinct issues:

(a) the question of whether a forward looking optimised replacement cost based on a depreciated value reflecting the age (or second hand nature) of the access provider’s asset is an appropriate asset valuation methodology (which is widely accepted); and

(b) the difficulty associated with determining an objective DORC value.

172. In doing so, the Draft Report sets up a false choice, between what it suggests is an uncertain and contentious question around what the appropriate DORC value should be and the relative ease of adopting an unindexed historic cost value from the RAF.

173. However, the most important question for the ACCC is what is an appropriate asset valuation methodology – in the current context of a transition from over a decade of forward looking replacement cost accounting (and pricing based on that accounting) – not whether it is more convenient and less contentious to adopt a “certain” figure (where that figure does not reflect an appropriate asset valuation methodology).

174. Furthermore, it is not correct to say, as the Draft Report does, that optimised values in the “models” have been “criticised for their severely limited optimisation of the network”\textsuperscript{114} and, by implication, to conclude that the determination of an appropriate DORC value is not possible. While the question of the replacement value may be contentious, the objective of the shift from TSLRIC+ to BBM was to enable the determination of that asset value once and for all. It was not intended to avoid the issue, but rather deal with it conclusively on a forward looking basis.

175. Nor does the Tribunal’s decision in \textit{Telstra Corporation} support the approach in the Draft Report. In this regard, Telstra notes the following:

(a) The decision was in the context of TEA only and did not consider the operation of (and therefore the degree of optimisation in) the Analysys model which the ACCC commissioned.

(b) The decision does not reject DORC as a methodology for the purpose of setting an initial RAB value in a BBM. To the contrary, it reinforces the substantial body of other precedent that endorses DORC as the appropriate methodology for this purpose.


\textsuperscript{112} For example in Re East Australian Pipeline Limited [2004] ACompT 8, the Tribunal viewed DORC as a “well recognised asset valuation methodology” and accepted its use in that case over alternative methodologies such as DAC. The Tribunal similarly accepted the use of DORC in Re Epic Energy South Australia Pty Ltd [2003] ACompT 5.

\textsuperscript{113} Application by Telstra Corporation Limited [2010], ACompT 1, at [239].

\textsuperscript{114} Draft Report, page 26.
(c) The decision related to the use of a replacement model for the purpose of setting reasonable prices under a TSLRIC+ regime. It does not address, directly or indirectly, whether the TEA model would provide an appropriate basis for modelling replacement costs for the purpose of a DORC value, in a BBM context. In this regard, Telstra notes that the nature of a BBM is conceptually different to TSLRIC+ and implies a degree of optimisation which may be less substantial and more aligned with TEA and Analysys. In short, under a BBM, the orthodox approach is to consider the optimisation of the existing assets (brownfields optimisation), not the development of a wholly new asset (greenfields optimisation).

176. A detailed treatment of the Tribunal’s decision in *Telstra Corporation* is set out in Schedule 3 to this Response.

177. The ACCC has itself adopted a brownfields approach to optimisation in the past, in the context of setting DORC values for the purpose of initial RAB valuations. These precedents are not discussed or distinguished by the ACCC in the Draft Report.

178. Telstra submits that the ACCC has available to it replacement valuations based on both the TEA and Analysys cost models that would be suitable for the purpose of establishing an initial RAB value. These cost models generate asset values which are within a reasonable range and it would be open to the ACCC to determine a RAB valuation based on a consideration of their respective merits. The ACCC is familiar with these considerations, which is of particular relevance in this case given that it provides for a consistent and stable basis for determining prices under the transition from TSLRIC to a BBM.

179. The Draft Report even acknowledges the scrutiny which has been given to the current models and that a DORC value which was based on prices set from those models (in the form of the current set of indicative prices) would not be inappropriate:

> The ACCC does not consider that the circularity inherent in revenue-based valuation methods would prevent the use of this approach, because the current indicative prices have been subject to extensive regulatory scrutiny.

180. For these reasons, it can be said that DORC represents a valuation methodology for the initial RAB which is:

(a) orthodox – and almost uniformly applied in all other regulated utility industries for the same purpose;

(b) readily available – in the sense that fit for purpose replacement valuations (from the detailed Analysys and TEA cost models) have already been produced;

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115 For example, in its Draft Statement of Regulatory Principles for the Regulation of (Electricity) Transmission Revenues, the ACCC expressed a preference for a brownfields approach to DORC valuation, stating:

> "In practice, feasible reconstruction of infrastructure may depend on simultaneous development of otherwise unrelated infrastructure (e.g. roads and bridges). Generally, such fortuitous circumstances cannot be assumed and given the objective for the replacement cost valuation to reflect the current cost of establishing infrastructure the 'brownfields' assumption seems to be the more realistic assumption."


117 Indeed, a further refined version of the Analysys model – amended to take into account criticisms made by Telstra and Optus – was published as recently as 7 October 2010.
(c) economically robust – and has been repeatedly endorsed by the ACCC, other regulators, the Tribunal and Courts as providing efficient and appropriate investment incentives;

(d) consistent with current practice – and therefore one which avoids stranded depreciation, price instability or other significant problems arising from moving away from a current cost approach;

(e) a fair balance of the legitimate interests of Telstra and access seekers, in that it sets prices on a forward-looking basis reflecting:

• the economic value to Telstra of its fixed line network assets, that is the value of those assets if Telstra were to seek to replace them with modern equivalent assets, but at the same time reflecting the aged – or second hand - nature of Telstra’s actual assets; and

• the costs that access seekers would have to incur if they were to seek to provide those services themselves, i.e. the cost of replacing the Telstra network with a modern equivalent network, but reflecting the actual shorter remaining life of Telstra’s assets compared to new assets.

181. When compared to other regulatory precedent, the ACCC’s rejection of a forward looking replacement cost methodology in favour of a nominal historic cost asset value is idiosyncratic and results in arbitrary asset values and unnecessary price instability.

182. The unindexed historic cost valuation preferred by the ACCC does not reflect true economic depreciation because it is the residual “written down” accounting value of the relevant assets, and used only because it is said to be convenient and reliable as an audited figure. The end result is a massive and arbitrary devaluation of the CAN and IEN.

183. In adopting an unindexed historic valuation drawn from accounting values, the Draft Report has failed to properly consider a range of available and orthodox asset values, in particular indexed historic cost valuations (which is simply not considered at all) and DORC valuations (which are rejected without proper consideration).

4.5. The proposed shift to a depreciated accounting cost value does not pay regard to the effects of inflation

184. Even if the ACCC is not minded to follow orthodox regulatory practice and adopt a replacement value for the initial RAB, an alternative current-dollar /real valuation such as indexed historic cost should have been adopted.

185. There is precedent for the use of indexed historic cost in Australian regulation – typically in relation to unique assets such as easements, that do not lend themselves to a ’modern equivalent asset’ replacement analysis.118

186. Unless indexed, asset values in the RAF do not reflect their ‘current dollar’ or real value.119 A practical example, set out in Box 2 below, highlights the extent to which a

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118 See, for example, ACCC, Sydney Airports Corporation Ltd. Aeronautical Pricing Proposal: Decision, May 2001 (which used indexed historic cost to value land); ACCC, NSW and ACT Transmission Network Revenue Caps 1999/00-2003/04 – Decision, January 2000 (which used indexed historic cost to value easements); and QCA, Gladstone Area Water Board: Investigation of Pricing Practices – Final Report, September 2002 (which used indexed historic cost to value land).

119 As noted in section 4.3.2, while some asset classes associated with the CAN and IEN may have been re-valued at some point in history, this was not the case for all assets and no assets in the CAN or IEN have been re-valued for accounting purposes since that time.
failure to compensate for the effect of inflation on the value of land base gives rise to inefficient and perverse consequences.

187. The failure by the ACCC to take into account the effects of inflation on the appropriate value of the CAN and IEN means that the value in the Draft Report does not represent a consideration of the legitimate interests of Telstra in recovering at least the value of its depreciated investment in its network in current-dollar terms.

188. That is to say, the return which investors in Telstra receive has been based to date on regulated pricing that responds to inflation over time by increasing the value of the underlying asset base. By revaluing that asset base so that it no longer includes the value of past inflation – and without otherwise adjusting the return Telstra is entitled to receive – the ACCC would be failing to acknowledge the basic and reasonable expectation of investors’ that the value of Telstra’s assets (and therefore its returns) would be set in order to ‘keep up’ with inflation, at the very least.

189. The Draft Report’s treatment of inflation is also internally inconsistent, in that while it ignores indexation of the initial RAB value, it indexes future amounts of capital rolled into the RAB and ensures that indexed values are used for the purpose of deriving capital forecasts and disconnection/connection charges.\(^{120}\) Again, no explanation is given for these differences in methodology – such as compensating for the use of a nominal RAB value with an appropriate adjustment to the WACC.

190. In relation to the Draft Report’s inconsistent treatment of inflation, Professor Yarrow has observed:\(^{121}\)

Given that the proposed, new regulatory approach is, once the initial RAB has been set, to be based upon indexed historic costs (IHC), I would have expected to see an IHC approach also being adopted for any, backward-looking calculations used in determining the initial value of the RAB. As I understand matters, the ACCC proposes instead to use an unindexed approach, based on book valuations in regulatory accounts.

Given that an unindexed approach is likely to lead to a lower initial RAB, I would again expect there to be substantiated argumentation in favour of lack of inflation indexation in calculations leading to the initial RAB value. This is because of what should be a legitimate sensitivity that the decision might be interpreted as a signal of the emergence of a propensity toward regulatory opportunism (which could be costly, for the various reasons noted above).\(^{122}\) Valuations were based upon replacement cost approach under the old regime, and updating of asset valuation is to be based on an indexed historic cost approach under the new regime, so it can be asked: why, precisely, is an unindexed historic cost approach appropriate at the switch-over point?

\(^{120}\) See Draft Report, page 42 for a discussion of the roll forward model. Draft Report, page 64 for a discussion of indexation of capital expenditure to ensure that appropriate real values are used for forecasting. Draft Report, page 64 proposing connection and disconnection charges that incorporate indexation.

\(^{121}\) Yarrow Report, page 12.

\(^{122}\) This is not just an abstract, theoretical point. Utility investors in the USA suffered badly from the effects of unindexed regulatory accounting coupled with (unanticipated) high levels of inflation in the 1970s. (Footnote from original).
191. Telstra submits that the failure to account for the effects of inflation (by adopting either a replacement or other current cost value for the initial RAB), means that the initial RAB value adopted by the ACCC in the Draft Report is unreasonable, arbitrary and promotes inefficient investment incentives.

4.6. The ACCC derives an incorrect “valuation” of Telstra’s CAN from the non binding FHoA

192. The ACCC relies on a CAN valuation it has reverse engineered from the payment to be made by NBN Co to Telstra as confirmation of its unindexed historic cost valuation of the CAN:

The $9 billion payment could be viewed as a good indication of Telstra’s valuation of its copper network...

However, it should be noted that the $9 billion will generally comprise...lease payments [which] will include recovery of operating and capital expenditures incurred by Telstra before lines are de-commissioned. Therefore the payments under the FHoA reflect recovery of operating expenditure and a return on capital, as well as the return of capital.

The $9 billion payment also includes backhaul infrastructure and exchange buildings, which are not included in the CAN. If the value of these assets is deducted from the $9 billion payment, the ACCC is of the view that Telstra’s own valuation of its CAN assets implied from the FHoA would be close to the $7.5 billion DAC valuation for CAN assets calculated by the ACCC.

The ACCC considers that the valuation of the CAN assets implied by the FHoA supports a conclusion that a DAC valuation of $7.5 billion is likely to satisfy Telstra’s commercial interests.

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193. The ACCC’ effort to reverse engineer a CAN value from the $9B which the FHOA provides NBN Co is to pay Telstra is misconceived for two reasons:

(a) the total value Telstra will receive in return for the obligations it assumed under the FHOA, including decommissioning of the CAN, is substantially larger than the $9B cash component payable by NBN Co. Therefore, the ACCC seeks to derive a CAN value from only a slice of the value Telstra will actually receive from giving up the CAN; and

(b) that total value reflects a wide array of rights, obligations, avoided costs, changes in Telstra’s cost base, new revenue opportunities and mitigated risks and it is simply impossible to attempt to forensically back out a value for the CAN.

194. The FHOA represents part of an overall “settlement” between the Government, NBN Co and Telstra. Telstra was presented with a choice between two starkly different worlds. Telstra could retain and supply services on its own fixed copper and cable networks and compete against NBN Co at the infrastructure level, but be excluded from 4G and face some form of functional separation (the “compete option”). Or, Telstra could co-operate with NBN Co, ‘swap’ reliance on its own fixed network for access services acquired from NBN Co, and be allowed to participate in 4G spectrum and gain more regulatory certainty (the “co-operate option”). The FHOA and the associated Government commitments represents the value Telstra considered was needed to make the co-operate option more favourable than the compete option. The $9B payable under the FHOA does not, therefore, present a de facto asset purchase of the CAN and other infrastructure, but the acceptable offsetting ‘delta’ value between these two worlds.

195. The ACCC understates the value Telstra receives in two ways. First, the ‘monetary’ value of the deal not only includes the $9B in payments from NBN Co, but also the additional $2.0B in value provided by the Commonwealth to Telstra through the new USO arrangements, migration payments for voice-only services and retraining of Telstra staff to support fibre deployment by NBN Co. For instance, USO Co will assist in the development of technology solutions to migrate some of the ‘hard case’ services, such as alarms and traffic lights, currently connected to the Telstra copper CAN to the NBN.

196. The $11.2B consideration across the FHOA and the agreement with the Government is also a net of tax valuation. The RAB asset base methodology is designed to be a ‘replacement cost’ input which is by definition ‘pre-tax’. This is emphasised by the fact that tax is a component of the ‘revenue requirement’ under the RAB model. Accordingly, the $11B consideration must be ‘scaled up’ for tax, which would suggest $15.7B.

197. Second, the $11.2B (or the before-tax $15.7B) is itself only part of the value equation which Telstra considered in deciding whether to compete or co-operate with NBN Co. As well, Telstra considered the following benefits of choosing co-operation which must be regarded as forming part of the overall value Telstra receives in ‘giving up’ its CAN:

(a) the value of the cashflows Telstra retains from the copper network over the NBN rollout. Analysts have estimated this revenue to have an average net present value of $6.8B124 (which also needs to be scaled up for tax treatment);

(b) the value of the right to participate in the 4G spectrum auctions (and conversely in the alternative compete world, the adverse impacts on Telstra’s wireless business if it could not);

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124 Based on an average of broker reports on 21 June 2010 (following the FHOA announcement) from UBS, RBS, Credit Suisse, and Macquarie Research Equities of $6.1bn, $10.5bn, $7.0bn and $3.6bn respectively.
the avoided costs of more extensive regulation, including the costs of functional separation which could have been $1B or more;

d) the avoided costs of Telstra, as the USO provider, meeting the costs of new network infrastructure in Greenfields estates, with NBN Co to assume responsibility for these estates from 1 January 2011 and engage Telstra under commercial arrangements to deploy this infrastructure;

e) the prospect of reduced access regulation given that Telstra was no longer vertically integrated;

f) the value of stability and predictability in prices for legacy regulated services in the transition period to the NBN; and

g) the revenue opportunities in providing network design and construction services to NBN Co, which would be unlikely if NBN Co and Telstra were in a more contested relationship at the infrastructure level.

198. Finally, the agreed terms are also, obviously, a negotiated outcome between the very different opening positions of NBN Co and Telstra. Telstra had to take into account, in addition to the factors above, the impact on shareholder value and the management of the rest of Telstra’s business of the continuing delay and uncertainty over Telstra’s future direction.

199. For all of these reasons, it is simply not possible, or appropriate, for the ACCC to seek to derive an estimate of the value for the CAN from the global payment agreed between NBN Co and Telstra under the non binding FHoA.

4.7. The ACCC fails to have regard to NBN impacts

200. The NBN is the single most significant development in the Australian telecommunications market since deregulation, with the potential to impact every aspect of the industry.

201. While there are certainly still significant uncertainties surrounding the NBN, a number of issues have been clearly and publicly announced by the Government or NBN Co, including:

(a) The Government has committed to a timeframe of 8 years (from 2010) for completion of the fibre roll-out.

(b) The NBN will comprise a fibre roll-out to 90% of approximately 12m premises.125

(c) NBN Co.’s approach to network topology will include approximately 800 Fibre Serving Areas (“FSAs”), which will provide points of interconnect for access seekers – and which will use Telstra exchanges.126

(d) NBN Co. will lease some, but not all, of Telstra’s duct space in the CAN for the purpose of expediting the NBN fibre roll-out.

(e) There is likely to be progressive decommissioning of the CAN as end users are connected to the NBN.

125 Presentation by Mike Quigley (CEO, NBN Co) to CommsDay Summit, 20 April 2010; Australian Government Department of Broadband, Communications and the Digital Economy, National Broadband Network Implementation Study, page 19.

126 Presentation by Mike Quickley (CEO, NBN Co) to Infrastructure Partnerships Australia, 28 April 2010, page 10.
Retail prices paid by consumers will not increase following roll-out of the NBN and, if anything, are intended to fall.\textsuperscript{127}

NBN Co. will be fully privatised within 5 years from completion of the roll-out.\textsuperscript{128}

202. The ACCC either does not address these critical factors in the Draft Report, or is inconsistent in when and how it takes the NBN into account. So, while attempting to use the value announced by NBN Co. and Telstra under the FHoA to justify its devaluation of the CAN, the ACCC then ignores the NBN in other very significant contexts.

203. These omissions include:

\begin{itemize}
  \item [(a)] the impact which the NBN roll-out will have on demand for retail and wholesale services supplied view Telstra’s copper network;\textsuperscript{129}
  \item [(b)] the shortened asset life of Telstra’s CAN (and possibly some IEN) infrastructure, and hence the need for accelerated depreciation of those assets as a result of the NBN roll-out;\textsuperscript{130}
  \item [(c)] the relevance of the uncertainties surrounding the NBN – including whether a deal will be concluded with Telstra, the pace and direction of the NBN roll-out, the location of NBN points of interconnection (“\textit{PoIs}”) and the level of NBN wholesale pricing – to the appropriate length of the regulatory period;\textsuperscript{131} and
  \item [(d)] the potential impact of the ACCC’s devaluation of the CAN and IEN and resulting price instability, on investor sentiment towards the future privatisation of NBN Co.
\end{itemize}

204. Given its significance, the ACCC must take into account and address the NBN in a considered, holistic and internally consistent way.

4.8. The ACCC’s prices incorrectly include land depreciation costs

205. The ACCC has set the initial asset base using the particular asset classes from Telstra’s RAF reports, as listed in section 5.3 of the ACCC’s Draft Report. The values attributed to each asset class conflate (a) the values of the network equipment relating to the asset class; and (b) an allocation of network land, building and support assets to that asset class. That is, the RAF accounts do not separately identify network land, building and support assets from other types of assets.\textsuperscript{132}

206. The ACCC depreciates the total initial asset base attributed to each asset class by the RAF. However, because land and buildings are not separately identified, they are also depreciated at the same rate as equipment in the relevant asset class. Given land values typically appreciate and land does not suffer from deterioration in the same way as other assets, it should not be depreciated in the Ovum BBM.


\textsuperscript{129} This omission is dealt with in more detail in section 5.5.5 of this Response.

\textsuperscript{130} This omission is dealt with in more detail in section 5.4.6 of this Response.

\textsuperscript{131} This omission is dealt with in more detail in section 5.7.3 of this Response.

\textsuperscript{132} For the avoidance of doubt, the RAF does not separately identify non-network land and builds under the “Non-Communications Plan & Equipment” and “Other Non-Current Assets” categories.
207. This problem could be addressed by separately identifying network land assets and not depreciating them in the Ovum BBM.

4.9. **Network land, building and support assets are depreciated over incorrect asset lives**

208. The other consequence of the ACCC not separately identifying network land, building and support assets from network equipment assets is that depreciation of network buildings and support assets is undertaken over the lives attributed to equipment.

209. For example, the value of assets in the “Pair Gain Systems” asset class is depreciated over 12 years. However, the “Pair Gain Systems” asset class will include an allocation of network buildings and support assets, which have different lives to the pair gain systems. The ACCC’s approach results in these network buildings and support assets being depreciated over incorrect lives.

210. The correct approach is to separately identify network building and support assets and depreciate them over more appropriate lives.

4.10. **The costs of network land, buildings and support assets are also incorrectly allocated between fixed services**

211. When allocating asset costs to each of the individual declared services, the ACCC has used the Analysys allocators inconsistently, which has led to an error in relation to land, buildings and network support assets.

212. Under the Ovum BBM, the costs for each asset class from the RAF accounts are allocated to ULLS, WLR, OTA and LCS. In doing this, the ACCC has applied allocation rules for each asset category in the RAF accounts based on the same rules previously used for this purpose in the Analysys model.

213. However, unlike the Ovum BBM (which does not separately deal with land and buildings) the Analysys model has specific allocators in relation to network land, building and support assets. The Analysys model took 50% of network land, building and support assets and allocated them to CAN services in the first instance, and then proportionally to each individual CAN service. The remaining 50% was allocated to Core services in the first instance, and 40% of that to the PSTN platform. The 20% of total costs allocated to services supplied using the PSTN platform (50% x 40%) was allocated to each of those services in proportion to the minutes of use demanded (21% of the PSTN platform allocation was allocated to OTA and 6% was allocated to LCS).

214. However, probably because the Ovum BBM has not followed Analysys in separately identifying (and dealing with) land, buildings and support assets, these allocation principles have not been applied. Instead, land, buildings and network assets are allocated incorrectly as part of the other asset classes to which they have been applied.

4.11. **The indirect operating and maintenance (O&M) allowance is incorrect**

215. The ACCC has calculated indirect O&M costs as a 10 per cent mark-up on average direct O&M costs.\(^\text{134}\)

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\(^{133}\) These include PSTN End User Access, ISDN-BRI, ISDN-PRI, ULLS, WLR, and other CAN Lines.

\(^{134}\) Draft Report, page 81.
To estimate total operating expenditure forecasts, the ACCC has increased the average RAF values by 10 per cent to reflect an allocation of corporate overheads.

216. Aside from the above statement, there is no explanation or evidence supporting or explaining how the 10 per cent contribution to indirect O&M was arrived at. The 10 per cent calculation appears to be entirely arbitrary.

217. Moreover, this 10 per cent allowance is substantially lower than the 60 per cent ratio of indirect O&M to direct O&M estimated by the Analysys model. It is also significantly lower than the Telstra estimate for the purpose of the TEA model, which was 108 per cent. Both of these figures were actual calculations derived from Telstra’s RAF accounts.

218. Table 2 below shows the actual figures for indirect and direct O&M from the TEA model and the Analysys model, and compares the effect of the actual ratios from these models to the 10 per cent ratio used in the Ovum BBM. The 10 per cent ratio is applied to the amounts in the ACCC Draft Report to derive the indirect O&M figure for the comparison.

**Table 2: ACCC estimates of indirect O&M relating to CAN and Core services**

<table>
<thead>
<tr>
<th>RAF YEAR</th>
<th>TEA MODEL</th>
<th>ANALYSYS</th>
<th>OVUM BBM</th>
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</thead>
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<td>[c-i-c]</td>
<td>[c-i-c]</td>
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</tr>
<tr>
<td>2009/10</td>
<td>[c-i-c]</td>
<td>[c-i-c]</td>
<td>[c-i-c ends]</td>
</tr>
</tbody>
</table>

**Table 3: ACCC estimates of indirect O&M ($m at 1 July 2009)**

<table>
<thead>
<tr>
<th>ALLOCATED TO</th>
<th>INDIRECT O&amp;M</th>
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</thead>
<tbody>
<tr>
<td>All services</td>
<td>[c-i-c commences] [c-i-c]</td>
</tr>
<tr>
<td>ULLS</td>
<td>[c-i-c]</td>
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</tbody>
</table>

Notes: *Analysys allocate Indirect O&M to Direct O&M and other non-network costs, so the calculation cannot be derived directly from this table. **Derived by applying the 10% ratio to the amounts in Table A4.1 of the ACCC’s Draft Report and Table 3.2 in the Ovum BBM.

219. The ACCC allocates the indirect O&M costs to each of the relevant fixed line services, using the methodology described in section 7.1 of the ACCC Draft Report. Table 3 breaks down the amounts of indirect O&M that would be recovered from each of the relevant fixed line services as a result of the ACCC’s allocation, resulting in a total figure of [c-i-c commences] [c-i-c] [c-i-c ends] for ULLS, WLR, OTA and LCS for 2009-10.

**Table 3: ACCC estimates of indirect O&M ($m at 1 July 2009)**

220. Telstra has calculated the indirect O&M allowance that would result from the application of the same direct/indirect ratios used in the TEA and Analysys models. To do this, Telstra applied a number of equi-proportional allocation rules to the Telstra and Analysys indirect O&M estimates, as shown in Table 4 below.

221. Table 4 demonstrates the extent to which the ACCC’s departure from its previous practice results in under-recovery of Telstra’s indirect O&M costs — by an amount ranging from \[ \text{c-i-c commences} \] \[ \text{c-i-c} \] \[ \text{c-i-c ends} \] per annum, depending on which equi-proportional allocation rule used.

**Table 4: Estimates of indirect O&M allocated to ULLS, WLR, OTA and LCS under different equi-proportional allocation rules**

<table>
<thead>
<tr>
<th>ALLOCATED TO</th>
<th>INDIRECT O&amp;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLR</td>
<td>[c-i-c]</td>
</tr>
<tr>
<td>OTA</td>
<td>[c-i-c]</td>
</tr>
<tr>
<td>LCS</td>
<td>[c-i-c]</td>
</tr>
<tr>
<td>ULLS, WLR, OTA, LCS</td>
<td>[c-i-c] [ \text{c-i-c ends} ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telstra’s [ \text{c-i-c} ] indirect O&amp;M estimate</th>
<th>Analysys’ [ \text{c-i-c} ] indirect O&amp;M estimate</th>
<th>ACCC’s estimate of indirect O&amp;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue allocation rule*</td>
<td>[c-i-c]</td>
<td>[c-i-c]</td>
</tr>
<tr>
<td>Network depreciation and O&amp;M allocation rule**</td>
<td>[c-i-c]</td>
<td>[c-i-c]</td>
</tr>
<tr>
<td>Network capital book value allocation rule***</td>
<td>[c-i-c]</td>
<td>[c-i-c]</td>
</tr>
</tbody>
</table>

Note: * Indirect costs are allocated on the basis of the proportion of revenues earned from the service relative to total revenue. ** Indirect costs are allocated on the basis of the proportion of network depreciation and expenses allocated to the service relative to total network depreciation and expenses. *** Indirect costs are allocated on the basis of the proportion of network asset book values allocated to the service relative to total network asset book value.

**4.12. Exclusion of indirect capital costs**

222. The ACCC’s capital forecasts (and the Ovum BBM) do not make any allowance for indirect capital costs. Telstra has estimated its indirect capital costs to be approximately \[ \text{c-i-c commences} \] \[ \text{c-i-c} \] \[ \text{c-i-c ends} \]. The Analysys model estimated Telstra’s indirect capital costs to be \[ \text{c-i-c commences} \] \[ \text{c-i-c} \] \[ \text{c-i-c ends} \], however this did not include software assets.
223. Telstra estimates that, the exclusion of indirect capital costs from the ACCC’s capital forecasts, results in the revenue requirement being understated by $168m or 4% in 2010/11. This clearly shows the material impact this error will have on the accuracy of indicative prices produced by the Ovum BBM.

4.13. The effective tax rate is wrong

224. The Ovum-BBM model calculates the effective tax rate ("ETR") by reference to the rate of return of post-tax and pre-tax cash flows respectively. So, for example, if a business obtains pre-tax returns of 10% and post-tax returns of 7%, then its ETR will be 30%. Clearly, the higher the post-tax returns are relative to pre-tax returns, the lower will be the ETR.

225. The Ovum-BBM model significantly understates the ETR, because the way in which the model is constructed leads to an overstatement of post-tax returns. The relatively short time horizon of the Ovum-BBM and the use of terminal values for post-tax cash flows mean that these are overstated in the model, which in turn leads to an underestimation of the ETR.

226. The Ovum-BBM model does not calculate the cash flows for each year of the remaining asset life. The model is limited to a 12 year life and the default is five years. For values beyond the set life of the model, a terminal value is used in the final year of the output term. This terminal value is calculated based on 60% (the equity value) of the residual value of the assets in the final model year (default; year five). This value when applied to the post tax cash flows does not take into account the tax effects in future years and therefore overstates post-tax returns in these years. When these overstated post-tax returns are used to calculate the ETR, this leads to an under-estimation of this parameter.

227. If a model with a longer time horizon is used, the impact on the ETR is significant. This can be done using the Australian Energy Regulator’s ("AER") PTRM framework, which uses a time horizon extending beyond the life of the relevant assets. Using the AER’s PTRM framework combined with the input and parameter values used in the Ovum-BBM, we obtain an ETR of 25.85%, rather than 22.08% as calculated in the Ovum-BBM.

228. The ACCC has assumed that the tax value of Telstra’s assets are broadly the same as their accounting value. However, in accordance with the ATO’s taxation depreciation rules, Telstra’s tax depreciation has been more accelerated than its accounting depreciation. The result of this is that the tax written down value of Telstra’s CAN and IEN assets are between [c-i-c commences] [c-i-c] [c-i-c ends] lower than the accounting written down value of the assets. In these circumstances, the ACCC’s failure to differentiate between the tax and accounting value of Telstra’s assets will result in Telstra being inadequately compensated for its tax expenses. The materiality of this error is currently being calculated by Telstra.

4.14. Capital net additions for 2009/10 are not depreciated

229. The opening and closing book values for 2009/10 capital net additions is set to the starting value, even for later years (I524:R543 and H572:R591 in “10. RAB Roll-Forward”). While depreciation is calculated and included in the revenue requirement, the opening and closing values do not net off the capital additions.

136 These ratios are calculated excluding assets that were improperly included by the ACCC (eg, DSLAMs).
230. This error can be fixed by changing the formula in cells (I524:R543 and H572:R591 in “10. RAB Roll-Forward”) to the same formula as applied in the model for capital net additions made in later years.

4.15. **Capital additions are carried forward into the opening RAB without consideration of the cost of capital**

231. For the purpose of calculating depreciation on net capital additions, the model carries the capital addition forward by half a year and considers the cost of capital associated with doing so. This is the appropriate treatment of capital additions. However, when the capital additions are added to the opening RAB they are carried forward half a year, but without consideration of the cost of capital (G219:R238 and G241:R260 in “10. RAB Roll-Forward”).

232. This is demonstrated as an error by setting the opening asset values to zero, and assume just one capital addition in one year for one asset class. After doing this, it can be seen that in years after the asset’s life, the opening asset base is negative. This error can begin to be fixed by changing the formula in those cells so that the capital net addition in any year is the net addition in the last year multiplied by \((1 + \text{WACC})^{0.5}\). However, this would require other parts of the roll-forward to change as well.

4.16. **Depreciation expenses do not include disposals**

233. There is a table in the model that allows for disposals of assets from the asset base, outside of normal depreciation. In accordance with standard accounting practices, depreciation of assets outside the standard depreciation profile needs to be accounted for as an expense. However, this is not done in the model. Thus, if disposals were positive, this would result in assets being simply taken out of the asset base and effectively stranded.

234. To fix this error, when calculating the revenue requirement, depreciation expenses need to be the sum of regulatory depreciation and disposals.

4.17. **New capital expenditure rolled into the RAB does not reflect the NBN’s effect on asset lives**

235. New capital which is rolled into the RAB remains subject to the standard asset lives applicable to the relevant class of asset. In practice, this means that new assets that have their lives truncated by the NBN roll-out are not being accurately reflected in the model. For example, based on the asset lives used in the Analysys cost model, the ACCC has assumed that the average asset life of new copper cables is 20 years. However, the majority of Telstra’s copper cables will be decommissioned following the completion of the NBN roll-out. Therefore, with the exception of a small proportion of cables retained to meet the universal service obligation, new copper cables will have a maximum asset life of 8 years.  

236. The failure to appropriately account for the impact of the NBN roll-out on the lives of new assets will have a significant impact on the accuracy of indicative prices. Telstra estimates that, the failure to truncate new copper cable and pair gains in the same way as existing assets, results in the revenue requirement being understated by $17m or 0.4% in 2010/10, relative to the ACCC’s default result.

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137 This issue is discussed in greater detail in section 5.4 below.
4.18. Conclusions

237. In this section 4, Telstra has identified a number of errors in, and problems with, the ACCC’s proposal and Ovum BBM. The most significant errors and problems, and their likely revenue impacts are set out in Table 5 below.

Table 5: The impact of key problems in the ACCC’s proposal

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>REVENUE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal vs. real (excluding network land, building and support assets)</td>
<td>Adopting a nominal valuation (unindexed historic cost) instead of a current-dollar/real valuation (indexed historic cost) results in the revenue requirement being understated by -$2.7b or -37% in 2010/11, relative to the ACCC’s default result. This sensitivity excludes network land, building and support assets, and assets that should not be included such as DSLAMs.</td>
</tr>
<tr>
<td>Nominal vs. real (including proper depreciation of network land, building and support assets)</td>
<td>Adding properly depreciated network land, building and support assets into indexed historic cost increases the revenue requirement by $685m or +9% in 2010/11. The separate impact of depreciating land cannot be separately identified, however, it is expected that on its own, this means the ACCC has overstated costs by a small amount.</td>
</tr>
<tr>
<td>Incorrect allowance for indirect O&amp;M</td>
<td>Adopting an indirect O&amp;M expense of 10% (of direct O&amp;M) rather than 104.29% (which is the ratio of indirect to direct O&amp;M calculated from Telstra’s RAF), results in the revenue requirement being understated by -$1.5B or -24% in 2010/11, relative to the ACCC’s default result.</td>
</tr>
<tr>
<td>Excluding indirect capital</td>
<td>Excluding indirect capital rather than 4.6% (which is the ratio of indirect to direct capital calculated from Telstra’s RAF), results in the revenue requirement being understated by -$168M or -4% in 2010/11, relative to the ACCC’s default result.</td>
</tr>
<tr>
<td>Capital net additions for 2009/10 are not depreciated</td>
<td>Fixing this mathematical error appears to have no effect on the results, which is unexpected and unusual.</td>
</tr>
<tr>
<td>Capital additions carried forward without consideration of the cost of capital</td>
<td>This mathematical error results in the revenue requirement being understated by -$4M or -0.1% in 2010/11, relative to the ACCC’s default result.</td>
</tr>
<tr>
<td>Truncating new copper cable and pair gain systems asset lives due to NBN</td>
<td>By not truncating new copper cable and pair gain systems in the same way as existing assets, results in the revenue requirement being understated by -$17M or -0.4% in 2010/11, relative to the ACCC’s default result.</td>
</tr>
<tr>
<td>Calculus errors in the effective tax rate</td>
<td>The calculus errors in the effective tax rate would increase the effective tax rate from 22% to....</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>REVENUE IMPACT</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>approximately 26%. The effect on the revenue requirement has not been estimated, but it would be substantial.</td>
<td></td>
</tr>
<tr>
<td>Incorrect tax book value in the calculation of the tax expense</td>
<td>Using Telstra’s accounting written down value of assets rather than Telstra’s tax written down value of assets for the tax expense calculation, will result in inadequate compensation for Telstra’s tax expenses. Telstra is currently calculating the impact of this.</td>
</tr>
</tbody>
</table>
5. OTHER COMMENTS AND ISSUES RELATING TO THE ACCC’S PROPOSAL

5.1. Setting the initial RAB value

5.1.1. THE IMPORTANCE OF ADOPTING AN INITIAL RAB VALUE THAT IS CONSISTENT WITH PREVIOUS ASSET VALUATIONS

238. Unlike many other industries where RAB values are set for the first time as part of a process of privatisation or liberalisation, in this case the ACCC is setting an initial RAB value in the context of a transition from one form of regulated pricing to another.

239. An important way in which the ACCC can promote stability and predictability is for it to adopt an initial depreciated RAB value for Telstra’s assets which reflects the current depreciated value of those same assets under the current TSLRIC+ regime (that is, consistent with the most recent ACCC price determinations).

240. To revisit, and in effect change, past ACCC decisions would damage the credibility of both past and future ACCC decisions. It undermines investor confidence to know that current decisions are not final, but that their effects on the returns from new investments can be reversed in the future. Partly as a result of this, it will substantially reduce the probability of industry commitment to the new regulatory pricing regime.

241. In the words of Professor Yarrow:138

As a matter of principle, a change in the approach to setting regulated prices should not by and of itself have any material effect on economic outcomes. If it does, the likelihood is that what is happening is an economic ‘mugging’ of one economic interest by another (i.e. a form of opportunism); and that would arguably be an ill-starred opening to a new, and otherwise promising, regulatory chapter.

242. Telstra submits that setting an initial RAB valuation that arbitrarily upset the existing and longstanding ACCC valuations of Telstra’s assets would not be consistent with the statutory criteria. Amongst other things, it would:

(a) erode confidence in the regulatory process, with an obvious detrimental effect on investment incentives;

(b) be inconsistent with the legitimate business interests of one side or the other – each of whom had entered into commercial negotiations and investments on the basis that the regulatory settlement, while open to some change, could generally be trusted to continue in the absence of any significant change in circumstances;

(c) in extreme cases, threaten the ability of Telstra to recover its direct costs of providing the declared services; and

(d) not promote the LTIE.

243. Figure 5 below illustrates the prices for and annual costs of the CAN that arise from extension of the ACCC’s tilted annuity depreciation profiles. The upward trajectory of the

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price and annual capital cost paths in Figure 5 are due to the ACCC’s use of the tilted annuity and the back loading of depreciation that resulted.

**Figure 5: CAN price expectations arising from past and current ACCC pricing decisions (metropolitan areas)**

244. What is clear from Figure 5 is that throughout the history of using TSLRIC+, the ACCC has set prices on the basis that they would increase in nominal terms (in real terms, the increase is dampened considerably).

245. There have also been shifts in the level of prices (illustrated by the different lines in Figure 5) from 2000 when the NERA model was first used to 2006 when the PIE II model was used. There is another shift in 2009 when the ACCC used the TEA and Analysys models. The shifts are due to the use of different models with better algorithms to calculate cost and taking account of new and updated information, particularly with respect to demand.

246. Despite these shifts, which illustrate some of the uncertainty arising from the current regime, the reasonable expectation of industry at any point in time has been that the depreciation schedule underlying the most recent ACCC decision would apply into the future.

247. It is also noticeable that despite prices changing with the introduction of a new price determination, the future expected capital costs allowed by the regulator (net cash flows\(^{139}\) arising from each of the price determinations, except those based on the early NERA model, were broadly consistent (see the lower three lines in Figure 5).

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\(^{139}\) In an economic valuation, net cash flows are typically revenue less operating costs. In the case of previous ACCC decisions, regulated revenue is set equal to operating costs plus capital costs. Hence, the expected net cash flows arising from the ACCC’s decisions are equal to the expected capital costs to be allowed by the regulator. These are derived from the ACCC’s tilted annuity depreciation schedule.
5.1.2. **THE ACCC SHOULD THEREFORE SET THE INITIAL RAB AS A DORC VALUE CONSISTENT WITH A DECADE OF ASSET VALUE (AND PRICING) EXPECTATIONS UNDER TSLRIC+**

248. The best way to avoid unwelcome instability is therefore to align the initial RAB value for the BBM with the current depreciated value of the CAN and IEN under the existing TSLRIC+ regime.

249. The current depreciated values of Telstra’s assets, consistent with the ACCC’s most recent decisions, are set out in Table 6 below.

**Table 6: Current depreciated value of Telstra’s assets (all areas, as at 30 June 2010)**

<table>
<thead>
<tr>
<th>CAN ASSETS</th>
<th>IEN ASSETS</th>
<th>NETWORK LAND, BUILDING, SUPPORT ASSETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$17B</td>
<td>$14B</td>
<td>$1B</td>
</tr>
</tbody>
</table>

250. These values have been calculated by measuring the present value of the future expected net cash flows arising from the ACCC’s most recent pricing decisions over the remaining lives of the relevant assets. This is in fact one orthodox method of calculating a DORC value for those assets.

251. Starting the calculation by reference to a $1 asset helps explain the method of calculating the DORC value proposed by Telstra and based on asset values implicit in the most recent TSLRIC+ pricing/tilted annuity. For the purpose of the calculation, the historic cost of an asset purchased on 1 July 2000 (assumed for now to be $1) is denoted C. Assume that this asset has an economic life of 20 years, denoted L. Also assume that the depreciation profile of that asset was set using the replacement cost/tilted annuity approach and that the replacement cost of the asset was expected to increase from $1 in 2000 at a rate of +2.5% per annum over its life. The WACC is assumed to be 10%.

252. The tilted annuity function that is used to determine the capital costs (depreciation plus cost of capital) in any year of the asset’s life, as set out in Formula 1 below.

\[
A_t = I_0 \frac{(1 + \rho)^{-t} (r - \rho)}{1 - \left(\frac{1 + \rho}{1 + r}\right)^L}
\]

(1)

Where:

- \(I_0\) is the purchase cost of the asset at time \(t=0\), which in this example is the year 2000
- \(\rho\) is the price trend
- \(r\) is the WACC
- \(L\) is the asset life in years

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\[140\] In calculating the current depreciated values of Telstra’s assets, Telstra applied the remaining asset lives calculated by RBB Economics and discussed in Section 5.4 below. See also RBB Economics, *Service Lives for Telstra’s Fixed Network Assets*, October 2010 (“RBB Economics Report”). Included as Schedule 7 to this response.
253. In practice, however, the ACCC assumes that the expected change in the replacement cost of the asset in future determinations will equal \( \rho \). This assumption means that 
\[
I_t = I_{t=0}(1 + \rho)^{-1},
\]
where \( I_t \) is the replacement cost of the assets at time \( t \). Substituting this equality into Formula 1 produces the standard tilted annuity formula applied by the ACCC, as shown in Formula 2 below.
\[
A_t = I_t \left( \frac{(r - \rho)}{1 - \left( \frac{1 + \rho}{1 + r} \right)^t} \right)
\]
(2)

254. In any year, the depreciated value of this asset is equal to the present value of the future expected capital costs arising from the replacement cost/tilted annuity approach, from the present to the end of the asset’s life (2019). The algebraic representation of the calculation is set out in Formula 3 below.
\[
DepreciatedValue = PV_{RemainingLife} \left[ I_t \left( \frac{(r - \rho)}{1 - \left( \frac{1 + \rho}{1 + r} \right)^{T}} \right) \right]
\]
(3)

Where:

\( PV_{RemainingLife} \) denotes the present value function from time \( s \) for the remaining life of the asset.

255. Figure 6 below illustrates the depreciated value of the $1 asset over time, under the assumptions set out above. As can be seen, applying the replacement cost/tilted annuity approach, the depreciated value of the $1 asset at 1 July 2010 is $0.86. This is compared to the depreciated value of the asset assuming a straight line depreciation profile. If the asset had been depreciated using a straight line depreciation profile, the depreciated asset value at 1 July 2010 would have been $0.50.

**Figure 6: A comparison of $1 depreciated using straight line depreciation and a back loaded tilted annuity**
256. Importantly, the difference in depreciated value does not arise because the asset is assumed to have different purchase costs. Indeed, in this example the asset is purchased on 1 July 2000 for $1 regardless of whether a replacement cost/tilted annuity approach or straight line depreciation approach is used. The difference in depreciated value arises solely because a different depreciation schedule is used. Where the replacement cost is increasing over time, depreciation is deferred when using the replacement cost/tilted annuity approach, so the depreciated value of the asset will be higher than it would have been had straight line depreciation been used.

257. Switching from one depreciation profile to another in 2010 would result in the under-recovery of the historic cost of the $1 asset over its life. The depreciated value of the asset would change from $0.86 to $0.50 and the difference, $0.36, is equal to the amount of under-recovery that would result.

258. It is relatively easy to extend this simple DORC example to multiple assets and multiple asset types. It involves the same calculation as for the $1 asset, but multiple times for each vintage and each type of asset. As was the case for the $1 asset, in order to determine a DORC value in this way, it is only necessary to know from the most recent ACCC pricing determination:

(a) the replacement cost of each asset type;

(b) the asset life and price trend for each asset type and the WACC, which are used to define the depreciation profile; and

(c) the remaining lives of assets.

259. While the ACCC has used the replacement cost/tilted annuity approach to determine the depreciation profile for CAN and IEN asset since the 1997 pricing principles, it has used different inputs. The ACCC’s most recent view of these inputs should be used for the purpose of determining the initial RAB, and the calculation is undertaken on this basis. This is because it is most likely to reflect the most recent and accurate information and opinions relied upon by the ACCC and the most contemporary expectations of industry. For comparative purposes, Telstra has also calculated the depreciated value of assets using alternative inputs used by the ACCC in earlier determinations.

260. All results are illustrated in Table 7 below and the calculations underlying these results are set out in Confidential Schedule Error! Reference source not found..

Table 7: DORC valuations based on TSLRIC+ cost models

<table>
<thead>
<tr>
<th></th>
<th>CAN ASSETS</th>
<th>IEN ASSETS</th>
<th>NETWORK LAND, BUILDING, SUPPORT ASSETS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum of most recent ACCC determinations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCC’s inputs</td>
<td>$16B</td>
<td>$14B</td>
<td>$1B</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysys model</td>
<td>$23B</td>
<td>$14B</td>
<td>$1B</td>
</tr>
<tr>
<td>TEA model** (Telstra inputs)</td>
<td>$27B</td>
<td></td>
<td>$4B</td>
</tr>
</tbody>
</table>
5.1.3. THE TSLRIC+ REGIME HAS MEANT TELSTRA RECEIVED NO MORE THAN A ZERO REAL ECONOMIC RETURN

261. Telstra’s financial performance from the supply of fixed line services can be properly measured by its real economic returns.

262. Real economic returns subtract from revenue all the resource costs of providing the relevant services. Thus, in any particular year, the real economic return equals:

(a) revenue;
(b) less O&M expenses;
(c) less depreciation (which is depreciation of the nominal value of assets, less/plus any increase/decrease in the written down value of assets from one year to the next);
(d) less the nominal pre-tax cost of capital applied to the real value of assets.\(^\text{141}\)

263. It is a real economic return, since the values of assets are in real/current-dollar terms. In comparison, the nominal economic return would equal:

(a) revenue;
(b) less O&M expenses;
(c) less depreciation of the nominal value of assets;
(d) less the nominal pre-tax cost of capital applied to the nominal value of assets.

264. Up to this point, the ACCC has set indicative prices for fixed line services so that Telstra’s real economic return from CAN and IEN services is zero. Under this methodology, real economic costs are determined by a replacement cost valuation of assets and depreciation is determined by a tilted annuity such that changes in the values of assets are accounted for as part of depreciation. Put simply, this means that the ACCC has set prices to allow Telstra to receive a return on capital (WACC) and return of capital (depreciation) in real terms (replacement cost).

265. The Senate Select Committee on Statutory Authority Financing ("Senate Select Committee") measured Telstra’s and other Government Trading Enterprises on the basis of real rather than nominal returns. The Senate Select Committee drew from prior work undertaken by the Institute of Applied Economic and Social Research ("IAESR"), stating:\(^\text{142}\)

The IAESR dismiss the relevance of historical cost accounting in inflationary periods for estimating both wealth at the end of each accounting period and the rate of increase in

\(^\text{141}\) This calculation is equivalent to an EVA calculation based on real and/or nominal asset valuations

asset prices on the grounds that, this system was designed for conditions of stable prices, and can in no way be regarded as an adequate response to the problem of inflation.

266. The Select Senate Committee concluded:143

As argued throughout this report, it is important that the assets used by these authorities [Government Trading Enterprises] achieve a satisfactory real rate of return, and that those who provide the funds for these assets also achieve a satisfactory real rate of return. The Question of ‘satisfactory’ is, of course, open to a wide degree of interpretation… (emphasis existed).

267. The Industry Commission (now Productivity Commission) developed a framework for the assessment of the performance of Government Trading Enterprises (“GTEs”) that involved the measurement of real economic rates of return. The Industry Commission stated:144

If correct decisions regarding the performance of GTEs are to be made, asset valuations need to be based on a market measure of current value. As explained by the Steering Committee (1994b, p. 30): While SAC 2 does not specify that current value information is required, there is a strong and growing body of opinion that information which does not measure current values cannot provide an adequate basis for the assessment of performance in the use of resources.

268. It makes little sense in this context to now seek to measure Telstra’s performance based on nominal economic returns. This is because, in the presence of inflation and holding all else the same, nominal economic returns would be negative early in assets’ lives and positive later in assets’ lives. Thus, the observation of a positive nominal economic return may, at any point in time, be misleading, as this could just be efficient and proper compensation for negative nominal economic returns in earlier periods.

269. Telstra’s real economic returns from ADSL and Voice services are summarised in Table 8 below. While Telstra’s real economic returns are approximately zero for the sum of wholesale and retail, it is clear that the returns from wholesale are negative and are mostly offset by positive returns from retail services.

270. Table 8 also compares these results to nominal economic returns. While the nominal returns are generally higher, wholesale nominal economic returns are approximately zero and retail returns are higher. The returns are calculated for the aggregate of Telstra’s retail and wholesale equivalent voice and ADSL services.145

<table>
<thead>
<tr>
<th>Year</th>
<th>REAL ECONOMIC RETURN</th>
<th>NOMINAL ECONOMIC RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08-1H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WHOLESALE + RETAIL</td>
<td>RETAIL</td>
</tr>
<tr>
<td>2007/08-2H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WHOLESALE + RETAIL</td>
<td>RETAIL</td>
</tr>
</tbody>
</table>


145 The wholesale services included are ULLS, LSS, ADSL, WLR, OTA and LCS. The retail services included are end user access, local calls, national long distance calls, international calls, F2M calls, other calls (including operator assisted calls, etc) and ADSL.
### REAL ECONOMIC RETURN

<table>
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<th>WHOLESALE</th>
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<tr>
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<td>[ C-i-C ]</td>
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<td>[ C-i-C ]</td>
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<tr>
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<td>2009/10-1H</td>
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### NOMINAL ECONOMIC RETURN

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<th>RETAIL</th>
<th>WHOLESALE</th>
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<tbody>
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<td>[ C-i-C ]</td>
<td>[ C-i-C ]</td>
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<td>2008/09-2H</td>
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<td>[ C-i-C ]</td>
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<tr>
<td>2009/10-1H</td>
<td>[ C-i-C ]</td>
<td>[ C-i-C ]</td>
<td>[ C-i-C ]</td>
</tr>
</tbody>
</table>

Notes: (1) These returns are calculated for the aggregate of Telstra’s retail and wholesale equivalent voice and ADSL services. (2) Real economic return is equal to revenue, less O&M, less depreciation of the nominal value of assets, less/plus any increase/decrease in the written down value of assets from one year to the next, less the ACCC’s 2009/10 nominal pre-tax WACC of 10.77% applied to the real value of assets. (3) Nominal economic return is equal to revenue, less O&M, less depreciation of the nominal value of assets, less the ACCC’s 2009/10 nominal pre-tax WACC of 10.77% applied to the nominal value of assets. (4) The real value of assets change from one year to the next and are taken from Telstra’s historic cost accounts. (5) The real value of assets change from one year to the next and are taken from Telstra’s current cost accounts.

271. What this analysis highlights is that, when current Telstra returns on wholesale services over recent years are adjusted for inflation (ie, depreciation of the real value is used) and an allowance is made for the ACCC’s proposed return on capital (WACC), Telstra has not made a real economic return.

272. Another way of describing this result is that once O&M costs, depreciation and inflation are accounted for, Telstra does not quite earn the regulated WACC allowed by the ACCC on its asset costs for the relevant wholesale services. In this environment, there is no legitimate economic basis for reducing either the asset valuation used for the CAN and IEN or wholesale prices for declared services.

### 5.1.4. A DORC VALUATION SHOULD NOT INVOLVE ANY FIBRE-BASED SERVICE POTENTIAL ADJUSTMENT

273. In its very brief consideration of DORC in the Draft Report, the ACCC appears to have accepted the submission that any MEA modelling should involve fibre services and that a resulting DORC valuation should include a substantial discount for service quality differences between fibre and copper services, stating:147

> Issues will arise which allow significant scope for disputation – for example, what is the MEA of the copper network? Is it another copper network or a fibre network? Significant adjustments would also be required for the difference in service potential – for example, a new copper network would outperform the existing copper network, since the existing network has deteriorated over time. Similarly, a new fibre network would perform more effectively than the existing copper network.

274. The question of whether a fibre network should be used as a MEA for the copper network was one of the issues specifically dealt with by the Tribunal in *Telstra Corporation*148, and which has specific precedent value for the current process. In this regard, the Tribunal noted, that there was widespread agreement that if the estimates of costs of providing the relevant service(s) are to be genuinely forward-looking then the technology assumed to be embodied in the assets used to provide them by a hypothetical new entrant must

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146 The wholesale services included are ULLS, LSS, ADSL, WLR, PSTN OTA and LCS. The retail services included are end user access, local calls, national long distance calls, international calls, F2M calls, other calls (including operator assisted calls, etc) and ADSL.

147 This was the primary basis of the arbitrarily low DORC valuation arrived at by Optus in its submission to the ACCC in relation to the 2009 consultation process.

also be MEAs, capable of providing at least the same service potential as the incumbent’s existing assets.\textsuperscript{149}

275. The Tribunal concluded that since the ULLS cannot be provided except through copper pairs, it would be inappropriate to estimate the costs of an alternative access technology such as fibre.\textsuperscript{150} This finding is equally relevant to an MEA used in relation to TSLRIC+ as it would be where used to determine a DORC value.

276. The Tribunal placed great importance on the requirement of the ULLS to be ‘unconditioned’ and found no evidence to suggest that other technologies (including fibre) could provide an equivalent unconditioned service. It was agreed by all parties that having unconditioned access was a key element of the ULLS since it provided scope for innovation by access seekers and more robust competition. The Tribunal found:\textsuperscript{151}

None of the parties offered evidence that technologies other than copper wires could provide unconditioned access to the CAN by access-seekers. Telstra asserted that none could do so. No other part affirmatively disputed its claim.

It could be said to be strange therefore, that the non-Telstra parties are now inviting the Tribunal to conclude that alternative technologies that do not provide the same functionality to access seekers and menus of choices to end-users could be said to be appropriate alternative technologies for the purpose of setting access charges.

277. The Tribunal also found no evidence to support claims made by the ACCC that the cost of a fibre access network would necessarily be lower or that a hypothetical new entrant would necessarily make this technology choice.\textsuperscript{152} It was further noted that even if the cost of fibre deployment could be quantified, this may be of little relevance as it would need to be adjusted in some way to reflect the different attributes of fibre. It was emphasised by the Tribunal that the relevant inquiry is the cost of service and not ‘quality-adjusted cost’.\textsuperscript{153}

The Tribunal is also mindful of the fact that it has been offered no solid evidence that the cost of providing access even to a conditioned loop would, in fact, be lower and it is costs, not “quality-adjusted” costs, that are at issue.

278. These comments by the Tribunal clearly do not support a cost estimate for Telstra’s fixed network based on fibre and, in addition, the Tribunal has squarely rejected any “quality-adjusted” discount for fibre used in relation to an MEA analysis.

5.1.5. IF THE ACCC DOES SHIFT FROM TSLRIC, IT MUST ADOPT ANOTHER REAL AND NOT A NOMINAL ASSET VALUE

279. The ACCC has indicated in the Draft Report that it is attracted to a historic cost approach, in large part because it involves use of data from Telstra’s RAF accounts, which the ACCC says avoids much of the contention and subjectivity that has surrounded replacement cost models, in the context of TSLRIC+.\textsuperscript{154}

280. Elsewhere in this Response, Telstra has disputed the ACCC’s claim that use of the RAF is necessarily simpler or more objective than using the TEA or Analysys replacement cost models.\textsuperscript{155}

\textsuperscript{149} Application by Telstra Corporation Limited [2010] ACompT 1 at [200].
\textsuperscript{150} Application by Telstra Corporation Limited [2010] ACompT 1 at [227].
\textsuperscript{151} Application by Telstra Corporation Limited [2010] ACompT 1 at [225] – [226].
\textsuperscript{152} Application by Telstra Corporation Limited [2010] ACompT 1 at [222].
\textsuperscript{153} Application by Telstra Corporation Limited [2010] ACompT 1 at [226].
\textsuperscript{154} Draft Report, page 27, which states: “Replacement cost approaches have a higher level of subjectivity involved relative to actual cost approaches.”
\textsuperscript{155} See discussion in sections 2.2.3 and 4.3 of this Response.
281. However, even if the ACCC adopts an approach that moves to a historic cost valuation, that approach nonetheless needs to provide a current-dollar/real valuation of Telstra’s asset in order to account for the effect of inflation.

282. In the current TSLRIC+ pricing regime the ACCC determined the amount of allowed costs by calculating replacement cost, applying a nominal WACC to that replacement cost, and calculating depreciation using the tilted annuity depreciation profile. The effect of this was that the cost of inflation was capitalised into the regulatory asset base.

283. That is to say, shifting from a replacement cost to a historic cost methodology does not justify moving from a real to a nominal asset valuation.

284. One orthodox way of achieving this outcome is to adopt indexed historic cost, which represents the real depreciated value of Telstra’s historic asset costs recorded in its asset register. Telstra’s indexed historic costs are set out in Table 9 below.

Table 9: Real depreciated value of Telstra’s historic asset cost (all areas, as at 30 June 2010)

<table>
<thead>
<tr>
<th>CAN ASSETS</th>
<th>IEN ASSETS</th>
<th>NETWORK LAND, BUILDING, SUPPORT ASSETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15B</td>
<td>$9B</td>
<td>$4B</td>
</tr>
</tbody>
</table>

285. The methodology used by Telstra to determine these values is set out in section 5.1.6 below.

286. Valuing Telstra’s CAN and IEN at indexed historic cost would enable the ACCC to use the RAF data for the purpose of providing inputs, which it indicated was the primary attraction of a historic cost approach, but would remain consistent with orthodox economic principles – by ensuring that the initial RAB value was based on a current-dollar/real value. It would also avoid arbitrarily shifting from a real to nominal valuation midway through asset lives, with the resulting perverse outcomes, such as:

(a) The depreciation that has been deferred by the ACCC’s previous decisions and which is yet to be recovered is $31.9B, yet the ACCC now proposes to value the same assets at $13.3B. The difference of $18.6B will become stranded by the ACCC’s proposal.\(^\text{156}\)

(b) Putting the ACCC’s previous decisions aside, failure to consider the cost of inflation when using historic cost understates the value of Telstra’s assets by $15.1B. This error translates into Telstra’s revenue requirement in 2010/11 alone being understated by $685m.

(c) Perverse commercial outcomes in terms of investment incentives and the effect on the legitimate commercial interests and expectations of an asset owner, as discussed in Box 2 set out in section 4.5.

287. Finally, the ACCC and other Australian regulators have previously converted historic asset costs into their real values through indexation for the purpose of establishing RAB values. For instance, this has been done in the following:

\(^{156}\) This reflects the difference between the CAN, IEN and land values proposed by the ACCC in the Draft Report and the values of these assets implicit in the last indicative prices decision of the ACCC in 2008, based on a present value analysis.
(a) **Sydney Airport assets** – assets were valued by the ACCC using DORC, but land and easements are valued at historic costs indexed with CPI;\(^{157}\)

(b) **Easements used in electricity transmission and distribution** – easement assets were valued by the ACCC at historic cost indexed by CPI for NSW and ACT transmission, South Australian Transmission, and by the QCA for Queensland’s distribution businesses (Ergon and Energex);\(^{158}\)

(c) **Water** – the QCA used indexed historic costs to value assets owned by the Gladstone Area Water Board.\(^{159}\)

### 5.1.6. TELSTRA’S PROPOSED METHODOLOGY FOR DETERMINING THE DEPRECIATED VALUE OF TELSTRA’S INDEXED HISTORIC COSTS

288. The ACCC has invited stakeholders to propose alternative methodologies, where they disagree with the approach adopted by the ACCC.\(^{160}\)

289. Given the concerns which Telstra has expressed above in relation to the ACCC’s proposed unindexed historic cost approach, Telstra sets out here an orthodox approach to determining an indexed historic cost asset value. This alternative methodology satisfies the ACCC’s stated preference for using input values taken from the RAF accounts, while at the same time ensuring that the resulting initial RAB value is a real (not a nominal) value.

290. Telstra’s financial asset register records Telstra’s historic cost and accumulated depreciation of assets that have not been fully depreciated from its accounts. As at 30 June 2009, the asset register records only assets that have a remaining value at that time (referred to as “30 June 2009 assets”). It also groups the historic cost and accumulated depreciation of assets into the financial year in which they were purchased (i.e., their vintage).

291. This allows the indexed historic cost of 30 June 2009 assets to be calculated using a roll-forward model (similar to the roll-forward model proposed by the ACCC in the Ovum BBM), but where the initial asset value is zero, the roll-forward begins in the year of the first vintage in Telstra’s asset register. As the roll-forward progresses, the historic cost of the relevant vintage of capital is added as capex. For example, in 2002, the roll-forward would add the historic cost of the 2002 vintage of 30 June 2009 assets as capex. This formula is set out in the box below.

#### BOX 3: CALCULATION OF INDEXED HISTORIC COST

\[
\text{Closing value of the asset vintages purchased prior to time } t = \text{closing value of asset vintages purchased prior to time } t-1 + \text{historic cost of vintage } t - \text{Depreciation of asset vintages prior to time } t + \text{Inflation of asset vintages purchased prior to time } t
\]


\(^{160}\) Draft Report at page 57.
292. To determine depreciation in each year, the accumulated depreciation for each vintage is averaged over the age of that vintage. For example, if the accumulated depreciation of the vintage of 30 June 2009 assets that was purchased on 30 June 2003 was $6, then the depreciation in each year from 2003 to 2009 is assumed to be $1 ($6/6 years).

293. Inflation for any year is calculated by applying the CPI to the opening value of the asset base and capital expenditure in the same year. The CPI that Telstra uses is a weighted average CPI for all capital cities published by the Australian Bureau of Statistics.

294. As noted above, Telstra’s financial asset register records some asset vintages and categories at a re-valued amount. In particular:

(a) pre-1975 communications plant was revalued in 1975; and

(b) some pre-1991/92 land and building assets were revalued in 1991/92.

295. The values for these specific assets are in currency as at the date of revaluation, not the date of acquisition. To account for this, the effect of inflation on these assets is only counted after the date of revaluation.

296. Applying this methodology, the real depreciated value of the CAN is $15B, the real depreciated value of the IEN is $9B, and the real depreciated value of network land, building and support assets is $4B.

297. The more detailed working in support of these depreciated indexed historic cost values is set out in Confidential Schedule Error! Reference source not found. to this response.

5.1.7. **RESPONDING TO CRITICISMS THAT REPLACEMENT COST VALUATIONS ARE WRONG**

298. Various parties have criticised the current replacement cost valuation of Telstra’s assets. Their criticisms are typically a form of one of the following:

(a) all of Telstra’s assets have been fully depreciated – so only new capital expenditure should be allowed to be recovered;

(b) TSLRIC+, which is subject to periodic revaluations, allows owners to recover the cost of assets over and over; and

(c) replacement cost is greater than the original purchase cost of the asset, particularly in an inflationary environment, such that Telstra would recover money that it never spent in the first place.

299. However each of the above criticisms is factually and conceptually incorrect and, in any event, does not have any impact on the appropriateness of a DORC or indexed historic cost value of assets.

5.1.7.1. **HAVE ALL OF TELSTRA’S ASSETS BEEN FULLY DEPRECIATED?**

300. Telstra has made substantial and ongoing capital investment in CAN and IEN assets throughout the period during which the ACCC has applied a replacement cost/tilted annuity approach (ie, since 1999).

301. Figure 7 below illustrates the additions to Telstra’s asset register each year, including only assets that remain in Telstra’s asset register as at 30 June 2010 (ie, only those that have not been fully depreciated, on an accounting basis). Assets that have been fully
depreciated as at 30 June 2009 do not appear in Telstra’s asset register and have therefore been excluded from this figure.

**Figure 7: Vintage of undepreciated CAN and IEN assets**

![c-i-c commences]

![c-i-c ends]

302. As Figure 7 highlights, and as has been noted above at section 4.2, Telstra has made substantial investments in both the CAN and IEN over recent years. For example, in each of the three financial years from 2006/07 to 2008/09, Telstra added on average ![c-i-c commences] ![c-i-c ends] of CAN and IEN assets to its asset register. Since the ACCC began to use the replacement cost/tilted annuity approach in 1999/2000, ![c-i-c commences] ![c-i-c ends] of the total real cost of Telstra’s 30 June 2010 CAN and IEN assets have been added.161 Over this same period, depreciation allowances were set by the ACCC using the replacement cost/tilted annuity approach. This approach substantially deferred depreciation into the future, given the relatively large positive tilt used in the tilted annuity. The majority of these assets have therefore not been allowed to be depreciated by the current regulatory pricing regime.

303. In relation to all assets in Telstra’s asset register, accumulated depreciation amounts to ![c-i-c commences] ![c-i-c ends] of the real value of all CAN assets and ![c-i-c commences] ![c-i-c ends] of the real value of all IEN assets.

304. It simply cannot be said, in any sense, based on evidence that Telstra’s CAN and IEN assets have been fully depreciated.

5.1.7.2. **DOES REPLACEMENT COST ALLOW RECOVERY OF THE COST OF ASSETS OVER AND OVER?**

305. The ACCC’s use of the replacement cost/tilted annuity approach has not resulted in Telstra recovering the replacement cost of its assets over and over.

306. The replacement cost/tilted annuity approach as applied by the ACCC is used to set a depreciation path (typically back-loaded) throughout an assets’ life. While such an approach relies on revaluing the relevant assets each time it is applied, this revaluation is then used to set the depreciation profile until the end of that asset’s life, and does not increase/decrease the amount of depreciation recovered above or below the original purchase cost of the asset.

307. Indeed, in expectation, the present value of the depreciation amounts determined under the replacement cost/tilted annuity approach amounts to the original purchase cost of the asset – no more, no less.162

308. For instance, in the last year of an asset’s life, the asset is re-valued and tilted annuity applied to determine the annual depreciation and capital cost for that last year. The

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161 In nominal terms, ![c-i-c commences] ![c-i-c ends] of Telstra’s capex in CAN and IEN assets still in its books was purchased during or after 1999/00.

162 See Asset Valuation, Depreciation, and Cost Recovery, pages 8 - 9. Included as Schedule 1 to this response.
asset owner does not get the re-valued cost of the asset, just the last depreciation
payment for the last year of the asset’s life. After the asset’s end of life, the asset is
either (a) no longer needed or (b) replaced.

309. If an asset is no longer needed, then it would fall out of the asset base the next time the
replacement cost is calculated, as the replacement cost calculation captures only the
efficient, best in use assets needed to supply the relevant services.163 If a replacement
asset is needed (that is a new vintage to replace the old vintage), then the replacement
cost calculation will include it at its replacement cost and will start to depreciate the new
asset.

310. In neither case does the replacement cost/tilted annuity approach allow the recovery of
an asset over and over.164

5.1.7.3. IS REPLACEMENT COST GREATER THAN THE ORIGINAL ACQUISITION COST
OF AN ASSET?

311. Under the replacement cost/tilted annuity approach, replacement cost will be greater
than the original purchase cost when the asset price is increasing and vice versa when
the asset price is decreasing.

312. However, this does not mean that costs are over or under recovered. This is because the
asset is re-valued at replacement cost to determine the depreciation path, not the
amount to be recovered over the life of the asset.

313. As discussed above, in expectation, the present value of the depreciation amounts for an
asset will always amount to the original purchase cost of the asset, despite whether the
asset price trend is increasing or decreasing.

314. For this reason, arguments that revaluing Telstra’s assets on the basis of TSLRIC+ has
allowed it to recover costs that Telstra did not incur and more than the costs actually
incurred are factually and conceptually wrong and cannot reasonably be accorded any
weight by the ACCC. Even if, at a point in an assets’ life, the replacement value of that
asset was greater than the historic value, this does not result in the asset owner
recovering more depreciation over the life of the actual asset than that asset’s original
cost.

5.1.8. CONCLUSIONS

315. The initial RAB value is the single most significant factor in determining prices under a
BBM. This makes the choice of valuation methodology fundamental to achieving
reasonable and stable price outcomes.

316. The ACCC has adopted a valuation approach which produces an arbitrarily low value for
the relevant fixed network assets ($7.5B for the CAN and $5.8B for the IEN). It does
this by moving from a real asset value (based on replacement costs) to a nominal value
(based on depreciated accounting cost).

317. The ACCC provides no justification for this shift in methodology, or any evidence that the
resulting and substantial de-valuation of the asset base is justified. Indeed, the ACCC’s

163 This has, in practice, resulted in a considerable proportion of assets being excluded from the replacement cost
calculation. For instance, the TEA model excluded 34.5% of trench kilometres and 56.8% of cable sheath
kilometres from the asset base due to optimisation in band 2 areas. See Telstra, Measure of TEA Model Efficiency,
164 For a numerical demonstration of this see Asset Valuation, Depreciation, and Cost Recovery. Included as
schedule 1 to this response.
approach is subject to a number of significant errors, described in more detail in section 4.2 of this Response.

318. Telstra submits that the valuation methodology which would ensure stability with respect to the regulatory valuation of assets and which aligns best with the LTIE and the overwhelming weight of regulatory precedent is a replacement cost valuation, such as DORC. Based on the minimum of the recent indicative prices set by the ACCC, an appropriate DORC calculation yields initial RAB values of:

(a) $17B for the CAN;
(b) $14B for the IEN; and
(c) $1B for land and buildings.

319. However, if the ACCC is minded to move from a replacement cost methodology to a historic cost valuation, then it must adopt another real valuation of assets.

320. If the ACCC is committed to use of the RAF for its cost data – supposedly on the basis that this provides a more transparent and objective source of audited cost data – those costs must be converted into indexed historic costs. When an appropriate calculation is done, the relevant depreciated historic cost values are:

(a) $15B for the CAN;
(b) $9B for the IEN; and
(c) $4B for land and buildings.

321. It will be immediately apparent that all of these values are a long way from the initial RAB values proposed in the Draft Report – which is entirely the result of the arbitrary shift proposed from a real to nominal valuation, without any justification or credible evidence.

322. Telstra submits that, as a priority, the ACCC must revert to using an appropriate real depreciated value for the fixed network assets.
5.2. Weighted Average Cost of Capital (WACC)

5.2.1. THE REGULATED COST OF CAPITAL AND THE LONG TERM INTERESTS OF END USERS

323. Firms require capital in order to undertake investments. Capital may be raised using debt and equity. The Weighted Average Cost of Capital ("WACC") measures the costs associated with financing a business. It represents the opportunity cost of funds in the market and reflects the relative proportions of debt and equity used by a firm.

324. In this regulatory context, the WACC is estimated having regard to the long-term interests of end users. In the regulatory context it plays a dual role as the regulator estimates the WACC to constrain the access provider from exercising its market power over a bottleneck asset to earn excess returns, whilst still ensuring an access provider has an expectation of being appropriately compensated for its efficiently incurred capital investments.

325. In telecommunications, when estimating the WACC, the ACCC has consistently applied the capital asset pricing model ("CAPM") to determine the cost of equity and estimated the cost of debt using government bond rate and implied values for the debt premium.

5.2.2. RISK FREE RATE

326. Telstra has consistently applied a 10-year government bond rate as a proxy for the risk-free rate. This is the same approach adopted by the ACCC in the Draft Report. The 10-year Commonwealth government bond yield is appropriate as it:

(a) approximately matches the useful life of the assets with the term of the risk-free investment;
(b) matches the term of the risk-free investment with the investment horizon which is generally long-term;
(c) reflects the consistent practice of Australian regulatory bodies, including the ACCC;\(^\text{165}\) and
(d) is consistent with the funding approach actually employed by Telstra, as Telstra typically raises debt over a 10-year period or longer.

327. The ACCC’s averaging period of 10 days does not adequately mitigate the potential for daily volatility in markets for government bond yields, which can produce an unrepresentative measure of the risk free rate.

328. The ACCC’s practice can be compared to the approach applied by the AER and which is supported by the Tribunal.\(^\text{166}\) Under this approach the NSW electricity distributors nominate:

(a) the length of the averaging period (usually 20 to 40 day trailing average);


\(^{166}\) Application by EnergyAustralia and Others [2009] ACompT 8.
(b) the point in time over which the nominated averaging period should be taken; and
(c) to have that average then apply from the beginning of the regulatory control period.

329. The approach is balanced by affording the AER the ability to reasonably exercise its discretion, but not unreasonably withhold its discretion, in not accepting the nominated length and point in time of averaging.

330. Telstra proposes that this approach be adopted by the ACCC in the RAB framework. An access provider ought to be in a position to know the approach of the ACCC in determining the risk free rate in advance. Telstra notes that the beginning of the next regulatory period is a factor to be considered but not an overriding consideration of the choice of averaging length and point in time.

331. Telstra submits that a 20-trading day trailing average be applied (while proposing to apply the AER approach of a range between 20 to 40 trading days going forward as outlined earlier). A 20-trading day average:

(a) is the less conservative end of the trading day trailing average range; and
(b) is closer to the current ACCC 10 trading day average.

332. It should also be noted that for potentially volatile market dynamic parameters such as the risk-free rate (and debt-risk premium), it is important to ensure that - as noted by the Tribunal - the parameter values chosen do not lead to an estimate of the WACC that is unrepresentative of the rate of return required over the whole of the regulatory period. This will be challenging during any times of intense market uncertainty or turbulence, such as that which occurred under the global financial crisis ("GFC"), and particularly with a long regulatory period. On such occasions, even with the 20-day trailing average, the point in time over which the averaging takes place may matter.

333. Ofcom has dealt with this potential issue, by taking a pragmatic approach where greater weight was given to longer-term averaging periods than short-term averaging periods during the GFC. The New Zealand Commerce Commission ("NZCC") adopted the Ofcom approach of using long-term averages in relation to its sub-loop Standard Terms Determination made in 2009.

5.2.3. DEBT RISK PREMIUM

334. Telstra considers that the ACCC’s estimate of 3.07% for the debt risk premium ("DRP") currently broadly reflects the likely DRP of wholesale fixed line service provider. In addition, Telstra wishes to identify a number of methodological issues in relation to the estimation of the DRP.

335. The DRP is the margin above the risk-free rate that a particular entity must offer to attract debt funding. The DRP will reflect the risk that the relevant business may default, plus an allowance for the inferior liquidity of corporate bonds relative to government bonds. Although the DRP is not observable at that level of abstraction, the

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167 Application by Telstra Corporation Limited [2010], ACompT 1 at [419]–[422].
169 NZCC, Standard Terms Determination for the designated services of Telecom’s unbundled copper local loop network service (Sub-loop UCLL), Telecom’s unbundled copper local loop network collocation service (Sub-loop Co-location) and Telecom’s unbundled copper local loop network backhaul service (Sub-loop Backhaul), Decisions 672, June 2009, pages 90-91.
336. To enable internal consistency across the WACC parameters the DRP needs to match the maturity to that of the risk-free proxy investment (i.e. 10 years) and with the same extent of averaging.

337. The ACCC has advocated the application of a benchmark DRP for an A-rated benchmark bond using Bloomberg data. The ACCC analysis is deficient in that it:

(a) does not establish the relevance of the benchmark bond rating to a wholesale fixed line service provider; and

(b) provides no detail as to the range of companies sampled in the A rated benchmark.

338. Telstra submits that these companies used to construct the benchmark will invariably differ to the wholesale fixed line service provider given the differences in:

(a) industry structure or competitive dynamics;

(b) company specific growth or life-cycle dynamics;

(c) perspective of ratings agencies (eg, whether on credit watch negative/positive or not); and

(d) liquidity, coverage and/or gearing.

339. The ACCC’s methodology only indirectly estimates the 10 year yield on a benchmark A-rated bond. This is because Bloomberg only publishes information on A-rated bonds up to 7 years. To derive a 10 year DRP the ACCC has to backfill the estimate by deriving a term premium from an entirely different set of bonds. This can be contrasted with the more direct approach of using a Telstra DRP based on actual 10 year data.

340. A range of issues around how to construct reliable estimates of the relevant DRP from averaged bond indices have become apparent in various state-based regulatory reviews. Problematic issues include:

(a) identifying reasonable representative companies amongst a limited sample of Australian-listed firms;

(b) identifying outliers using econometric tests;

(c) applying data on the implied DRP at various maturities to determine an estimate at the appropriate maturity; and

(d) lack of consistent published data.

341. Given the ongoing difficulties in applying index based approaches to quantifying the DRP, Telstra suggests that, for greater simplicity and transparency, the Telstra-wide DRP be considered also for the fixed line services assets, while using Bloomberg data as a reasonableness check. This approach would be simpler and more transparent.

5.2.4. MARKET RISK PREMIUM

342. The market risk premium ("MRP") relevant in the CAPM is the premium that investors in a fully diversified portfolio expect to earn above the relevant risk-free rate. As the MRP
is a forward-looking or ex ante concept that is based on expectations, it is not directly observable. Estimation of the MRP has therefore often relied upon historical returns.

343. Experts and regulators have used long-term historical averages as the basis for their estimates of the MRP. One conceptual justification for this is that investors base expectations of the MRP on past experience. Telstra has also relied upon the historical estimates of returns as the likely best guide to the MRP. Premiums based on backward-looking techniques can however be a poor predictor of future premiums. This was recently highlighted during the GFC.

344. The ACCC previously applied an MRP of 6.5 per cent in assessing Telstra’s 2008 ULLS undertaking. This figure was based on consideration of the long term average of the MRP and the general level of uncertainty in financial markets as a result of the GFC.

345. The Draft Report adopts an MRP of 6 per cent with no evidence of significant improvements in financial markets. The effect of this decision is to suggest that market conditions have improved so dramatically over the last year that the GFC does not need to be taken into account at all.

346. The ACCC has provided no evidence that conditions have improved so markedly since the GFC. Instead it has relied upon the decisions in the Hunter Valley Coal Network Access Undertaking (“Hunter Valley”) and the Australian Postal Corporation 2010 Price Notification (“Australia Post”).

347. In Hunter Valley the ACCC stated that “financial market conditions are beginning to recover substantially from the global financial crisis”. Beginning to recover is not the same as evidence of actual recovery. It certainly does not mean that conditions have improved to such an extent that the ACCC should approach the estimation of MRP as if the GFC was irrelevant. These decisions do not refer to any evidence that MRP has returned to pre-GFC levels other than speculation by the ACCC or the AER.

348. The reasoning and principles in the Hunter Valley and Australia Post cannot simply be transplanted to the regulation of telecommunications. A key justification outlined in the Australia Post for adopting 6% rather than the MRP of 6.5% consistently used in energy decisions, was that unlike the energy sector, a regular regulatory reset period did not apply for Australia Post:

> The ACCC is also of the view, consistent with the draft decision on the Hunter Valley rail network, that a longer-term view of the market risk premium is appropriate in this situation given that the consistent regulatory resetting that occurs in electricity regulation will not necessarily occur here.

349. Given the reset period currently proposed for fixed line services is four years, using the ACCC reasoning from Australia Post, it would be more appropriate to apply the MRP of 6.5% used in the previous energy decisions. Also while over a longer regulatory period the MRP may be more likely to return to the ACCC measured historical average, it is incorrect to apply the same reasoning here, especially when there is no evidence provided to suggest that financial markets have improved to such an extent that the MRP has returned to pre-GFC levels.

350. Further Telstra notes that the MRP of 6% used in Australia Post and Hunter Valley was based on an imputation credit factor (gamma) of 0.5, rather than the gamma estimate of

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171 ACCC, Australian Rail Track Corporation Hunter Valley Coal Network Access Undertaking Draft Decision, 5 March 2010, page 569.
172 ACCC, Australian Postal Corporation 2010 Price Notification (May 2010), page 80.
0.65 used here. All other things being equal, when using historical data to estimate the MRP, a higher gamma should mean a higher MRP estimate.

5.2.5. ASSET AND ASSOCIATED EQUITY BETA

351. The asset beta reflects and is a measure of both:

(a) the level of non-diversifiable risk associated with a particular asset – measured relative to a fully diversified portfolio of assets; and

(b) the underlying extent of systematic business risk on an ungeared basis (ie, with no debt).

352. From an equity provider’s perspective, the adoption of debt (gearing) increases the riskiness of equity returns which are provided after the debt servicing burden. The effect of gearing is therefore to increase the systematic riskiness of returns to equity providers and this effect is incorporated into the equity beta via the gearing ratio.

353. The asset beta required is one narrowly related to a stand-alone provider of the fixed line-related assets. Telstra is not aware of a listed entity that uniquely only provides services such as those provided over those assets. However, Telstra is aware of several instances in which a regulator, such as Ofcom and the NZCC, has estimated an asset beta for specific segments of a larger business.

354. Notwithstanding, some judgement is required in determining a robust estimate of an asset beta for the CAN-related assets. Given the subjective nature of estimating asset beta for unlisted entities, information from a range of sources might be informative in this process.

355. To estimate the asset beta and equity betas for Telstra the ACCC has considered a sample of benchmark estimates of five-year monthly and weekly equity and asset betas of fixed line telecommunications operators (which includes Telstra) in 23 OECD countries, and referred to previous regulatory decisions by the ACCC and AER. Telstra’s view is that the ACCC has only taken into account and considered some of the relevant information available when coming to its current position on Telstra’s equity and asset beta.

356. In contrast to the approach taken by the ACCC, Telstra is of the view, and in line with the starting point of Ofcom and the NZCC,173 that Telstra-wide information will often be a useful starting point for quantifying fixed line-specific values for many of the WACC parameters. Data estimates of the Telstra-wide beta can be obtained from various sources, the most common of which is Bloomberg Financial Services. Telstra is of the view that estimates should be based on different frequencies (daily, weekly, monthly) so as to remain broadly consistent with the approach suggested in Telstra Corporation.174

357. Additionally Telstra-specific equity betas should, as applied by the ACCC in the discussion paper, be de-levered to estimate the Telstra-wide level asset beta using the converse of the typical Monkhouse re-levering equation for an equity beta. This calculates the estimated asset betas.

358. It is noteworthy that any estimates covering periods over the last 5 years will capture periods of strong trends in the Australian stock market driven by Australia’s resources

173 Ofcom, A New Pricing Framework for Openreach, 30 May 2008; New Zealand Commerce Commission, Standard Terms Determination for the designated services of Telecom’s unbundled copper local loop network service (Sub-loop UCLL), Telecom’s unbundled copper local loop network collocation service (Sub-loop Co-location) and Telecom’s unbundled copper local loop network backhaul service (Sub-loop Backhaul) Decisions 672, June 2009.

174 See Application by Telstra Corporation Limited [2010], ACompT 1.
boom. As a direct result, market estimated betas for Telstra and telcos in general which were not positively impacted by the resources boom, and many businesses outside the resource sector are currently significantly downward biased. Telstra considers that one way for the ACCC to assess whether there are upward biases in the time varying estimates for the asset betas, is to take a plot or estimate of the rolling five-year asset betas over five years. This should reveal any short-term anomalies in the data, which the ACCC could then make adjustments for. This approach to estimating asset betas has also been recommended by Myers and Lally.175

359. Telstra also considers that a benchmarking approach, which excludes the Telstra estimate from the sample set, can provide some meaningful information to assist in estimating betas and to (all else equal) somewhat objectively take into consideration any downward biases present in Telstra’s beta estimate. Benchmarking is a commonly applied technique for estimating asset betas used by practitioners and by regulators, especially when the target entity for which the WACC is to be estimated is not listed. As with the Telstra-specific approach benchmark data estimates over different historical periods and different frequency of returns (daily, weekly and monthly) should be used, so as to make use of all available information and allow for any appropriate adjustments to equity betas for any inherent downward bias. Similarly, consideration should also be given to taking a plot or estimate of the rolling five-year asset betas over five years so that it can account for any short-term anomalies in the data.

360. If the analogues can be shown to be reasonably close to the target entity in terms of business operations and exposure to systematic risk then the information obtained from this approach is indicative of the likely beta relevant for the target entity. Notwithstanding, because Telstra and the various analogues presented by the ACCC in benchmarking betas provide products and services other than just those equivalents to the CAN-only provider, some subjective adjustments are still required to the various telco-wide estimates to determine a beta for a fixed line only provider.

361. Further, Telstra notes that, as our approach to estimating the beta compares the reasonableness of the benchmarks to the Telstra-specific beta’s estimated, unlike the ACCC approach, the benchmark sample used by Telstra would not include the Telstra estimates. To include Telstra in the averaging process which would then be compared, as a reasonableness check to Telstra-specific or betas that would apply for Telstra, would be to bias the analysis and results.

362. In Telstra’s view the ACCC has not provided a methodology to sufficiently take into account the required adjustments to estimate the asset and equity betas for a fixed line only provider, and as such the ACCC’s analysis of Telstra’s betas is insufficient.

5.2.6. IMPUTATION

363. The market value of tax credits, or gamma, is estimated as the product of the dividend payout ratio (F) and the value of distributed imputation credits as a proportion of their face value (θ).

364. In the past the ACCC, and the majority of Australian regulators, have applied a gamma of 0.50.176 Telstra also notes that the AER has recently applied a gamma of 0.65.177 For

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The Australian Competition Tribunal found the AER to be in error in its treatment of each the payout ratio and theta in deriving a gamma of 0.65. See Application by Energex Limited (No 2) [2010] ACompT 7 at [145].
entirely separate reasons to the AER, the ACCC has also applied a gamma of 0.65 in the Draft Report.\textsuperscript{178}

\subsection*{5.2.6.1. PAYOUT RATIO}

365. The ACCC has incorrectly applied a payout ratio of one on the basis of Telstra specific data from Bloomberg.\textsuperscript{179} Over the period 2000-2010 Bloomberg estimates the payout ratio to be 100.3 per cent. This estimate overstates Telstra’s actual payout ratio for the following reasons:

(a) Telstra’s publicly available financial reports indicate that the payout ratio over the last 10 years is approximately 91%;\textsuperscript{180}

(b) estimates from Commsec over the same 10 year period confirm that Telstra’s payout ratio was 91%;

(c) there is a declining trend in Telstra’s payout ratio, Telstra and Commsec data report the payout ratio was 89% using the last three years of data.

366. Therefore, if the ACCC considers a Telstra specific payout ratio is appropriate, there is clear evidence that the payout ratio is not one.

367. Telstra considers that a payout ratio of 90\% or less is consistent with the likely forward looking payout ratio and with historical practice. Telstra also notes that the economy wide distribution rate has consistently been estimated at around 70\%.\textsuperscript{181}

\subsection*{5.2.6.2. THETA}

368. To arrive at an estimate of theta of 0.65 the ACCC has not relied upon any evidence, it has instead made an incorrect theoretical assumption that resident investors will fully value franking credits at 100 per cent of their face value.

369. The ACCC’s analysis starts from the premise that as a matter of law no more than 35 per cent of Telstra’s shares may be owned by foreign shareholders, implying that 65 per cent of Telstra’s shares are held by local investors. The ACCC then simply assumes that because franking credits are fully redeemable for cash that local investors fully value franking credits.

370. Telstra considers that an empirical, rather than theoretical, approach is to be preferred and the best way to estimate theta is by reference to market based measures – after all the ultimate aim is, as the ACCC describes, to determine “\textit{the market value of tax credits}”.\textsuperscript{182}

371. Market based measures of theta may be made using dividend drop-off analysis. These studies measure relative price changes in share prices when a share trades with and without a franked dividend. The relative price change is then examined and a value to the cash and franking credit component of the dividend is ascribed.

\textsuperscript{178} Draft Report, pages 76-78.
\textsuperscript{179} Draft Report, page 78.
\textsuperscript{180} The payout ratio is defined as “Total dividend paid (inclusive of special dividends) divided by Net profits after tax available to equity”.
\textsuperscript{181} See, for example, N Hathaway and R Officer, \textit{The Valuation of Imputation Tax Credits: Update 2004}, November 2004; Australian Energy Regulator, \textit{Electricity transmission distribution network service providers - Review of the weighted average cost of capital (WACC) parameters}, May 2009, page 415.
\textsuperscript{182} Draft Report, page 76.
372. Telstra acknowledges that dividend drop-off studies have some limitations, however, they remain the most relevant source of information in regard to theta. Given that the results of these studies have been contentious at times, regard should be had to a number of these studies to determine an appropriate value of theta.

373. Telstra considers that an appropriate estimate of theta would be 0.4. This is the simple average of the leading Beggs and Skeels (2008) and SFG (2010) estimates (0.572 and 0.23 respectively).

374. Taxation statistics do not measure the value of imputation credits, only their redemption. Nonetheless, taxation statistics may be a useful cross-check against the results of dividend drop-off studies.

375. By their nature, taxation statistics will provide a maximum upper bound of what theta could be. Handley and Maheswaran (2008) report a redemption rate of 0.81. The utility of taxation statistics is that they can be used as a cross-check to ensure that the value of theta is not too high; it would be illogical to adopt a value of theta above 0.81.

376. Telstra notes that caution should be used in relation to the Handley and Maheswaran study, there are a number of embedded assumptions in the result which are not based on any evidence (such as the assumption that local resident investors fully value imputation credits).

5.2.6.3. GAMMA

377. Telstra submits that based on the estimates of the payout ratio and the value of distributed imputation credits as a proportion of their face value, even taking a conservative view, a value of 0.65 for gamma is simply too high.

<table>
<thead>
<tr>
<th>GAMMA ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>F = 1</td>
</tr>
<tr>
<td>F= 0.9</td>
</tr>
<tr>
<td>F=0.7</td>
</tr>
</tbody>
</table>

378. Using the dividend payout ratio specific to Telstra of 0.9, and the SFG and Beggs and Skeels estimates for the value of distributed imputation credits as a proportion of their face value, Telstra considers that an appropriate range for gamma is 0.21 to 0.51. Based

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184 SFG Consulting, Response to AER Draft Determination in relation to gamma (13 January 2010); SFG Consulting Further analysis to AER Draft Determination in relation to gamma (4 February 2010).
186 This assumption was made during the period 2001-2004.
upon these estimates Telstra considers that a reasonable approach for estimating the gamma would be to take the average of 0.36.

5.2.7. DEBT GEARING

379. Telstra accepts the ACCC’s use of a 40 per cent debt gearing ratio.

5.2.8. CORPORATE TAX RATE

380. The ACCC has applied an effective tax rate of 22.05 per cent which is based on an incorrect approach to modelling in the Ovum BBM, discussed above at section 4.13. The effect of this approach is to understate the effective tax rate.

381. The statutory tax rate of 30 per cent is appropriate and consistent with other assumptions in the BBM model. For example, the application of the corporate tax rate in the de-levering and re-levering process in estimating the equity beta.

382. To estimate an appropriate equity beta (βₐ) observed equity betas of comparables entities are de-levered to remove the effect of financial gearing. This derives the asset beta (βₐ), that is the beta of the particular asset without financial risk. Once the asset beta has been estimated it is ‘levered’ to take into account the effect of the level of gearing adopted by the entity whose equity beta is trying to be estimated. This levering process provides an estimate of the equity beta inclusive of financial risk.

383. The de-levering and re-levering process is commonly done using the ‘Monkhouse’ formulation, an approach generally accepted by the ACCC. The levering process using the ‘Monkhouse’ methodology involves the application of the formula below:

$$\beta_e = \beta_a + (\beta_a - \beta_d) \left(1 - \frac{R_d}{1 + R_d} (1 - \gamma)T \right) \left(\frac{D}{E}\right)$$

Where:
- $\beta_d$ = debt beta
- $R_d$ = Cost of debt
- $\gamma$ = value of imputation credits
- $T$ = statutory tax rate
- $D/E$ = proportion of debt to equity held by the firm

384. Typically when de-levering observed equity betas the statutory tax rate is used. Telstra is not aware of any estimates of the asset beta that do not apply the statutory corporate tax rate in the de-levering process. To ensure internal consistency across beta estimation it is imperative that the statutory corporate tax rate is also used in the re-levering process.

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188 See, eg, ACCC, Assessment of Telstra’s Unconditioned Local Loop Service Band 2 monthly charge undertaking Final Decision Public Version (April 2009), page 228.
189 Note de-levering of betas is done with the converse application of the formula above by making the asset beta the dependent variable.
5.2.9. **EQUITY ISSUANCE COSTS**

385. Equity issuance costs are legitimately incurred expenses that need to be recouped through some mechanism, either via explicit recognition in the cost of equity component of WACC or as a cash flow expense in both cases reflecting the annualised extent of these predominantly once-off costs.

386. In its Final Decision on GasNet\(^{190}\) the ACCC decided to include an allowance for equity issuance costs but as a cost cash flow. If appropriately quantified Telstra is indifferent between recovering these costs as a specific cash flow or as a margin on the WACC, so long as they are recovered. In Telstra’s view the legitimate costs involved with equity issuance should be estimated, converted to an annualised rate of return and included in the cost of equity capital. This mimics the approach recommended for debt issuance costs (which Telstra recommends should be incorporated into the cost of debt).

387. Recent information on the costs associated with raising equity capital specifically in the context of Telstra were revealed by the Auditor-General’s examination of the costs involved in the disposal of the Commonwealth Government’s three partial privatisations of Telstra.\(^{191}\) The findings showed equity issuance costs represented 1.9% of gross proceeds in the first tranche sale (1997); 1.1% of gross proceeds in the second tranche sale (around 1999); and 1.3% of gross proceeds in the third tranche sale (2006). Telstra considers that these estimates reflect a contemporary, Australian-specific estimate of the costs involved in equity issuance for a major telecommunications company.

388. Telstra advocates annualisation of these costs over a forward period matching the useful life of the CAN-related assets — 35 years. This gives an equity issuance cost of approximately 11 basis points.

5.2.10. **DEBT ISSUANCE COSTS**

389. Telstra accepts the ACCC’s estimate of debt issuance costs of 0.085 per cent.

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\(^{190}\) ACCC, *Revised access arrangement by GasNet Australia (Operations) Pty Ltd and GasNet (NSW) Pty Ltd for the Principal Transmission System* (30 April 2008), page 88.

5.3. Capital Expenditure

Outline

Telstra agrees with the ACCC that the best and most reliable source of information in relation to capital expenditure planning would take the form of forecasts submitted by Telstra for the purpose of the BBM. Telstra also supports the ACCC’s finding that RAF data is not a reliable basis for seeking to derive annual capital expenditure information.

However, unlike other sectors where BBMs have been used, capital expenditure on the CAN and IEN has is highly variable from year to year and comprises a large number of smaller projects (approximately 30,000 in FY 2009-10). This reflects the dynamic nature of the market and the current high degree of regulatory uncertainty surrounding the future of the CAN.

Given these factors, Telstra only maintains detailed forward capital expenditure business plans for the current budgetary year (ie, 2010-11). Telstra doubts it is possible for the ACCC to accurately forecast capital expenditure out for 4-years for the same reasons.

The ACCC’s proposed approach also fails to make any allowance for indirect capital costs. In this way, the proposed approach differs from the Analysys model which estimated Telstra’s indirect capital costs at [c-i-c commences] [c-i-c ] [c-i-c ends] (excluding software assets).

Telstra submits that the BBM should adopt the approach of the NER in relation to capital forecasts, which provides that the ACCC must accept capital forecasts unless it is satisfied that the total forecast expenditure due not reflect the efficient and prudently incurred costs of meeting defined network objectives.

As noted at 5.7.3, the difficulties associated with forecasting capital expenditure are another reason why the regulatory period should be shortened to 2-years in the way proposed by Telstra in its BBM Working Proposal.

5.3.1. USE OF TELSTRA’S CAPITAL EXPENDITURE FORECASTS

390. Telstra agrees with the ACCC’s proposal to adopt capital expenditure forecasts provided by the access provider, based on those forecasts used for its own business purposes.

391. The pace of technology and market changes in the telecommunications industry means that, as the ACCC has noted, “past investment trends may not be an accurate reflection of future capital investment requirements”. Telstra also notes the finding of the Draft Report that Telstra’s capital expenditure program in relation to the CAN has been highly unpredictable, further underlining how difficult it would be to use historical data alone to reach reasonable views about future expenditure.

392. Figure 8 below highlights the unpredictable nature of Telstra’s CAN and IEN expenditure over recent years:

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193 Draft Report, page 64.
Additionally, it is not possible to assess the very significant impact of the NBN on Telstra’s capital expenditure in the CAN and the IEN in the absence of more information about NBN Co’s plans, including its detailed network architecture and topology (including the proposed locations of its Points of Interconnect), its roll out plan, migration arrangements and timing.

5.3.2. CAPITAL FORECAST FOR THE FIRST REGULATORY PERIOD

Despite its general conclusion that historical data is unreliable, the ACCC nonetheless attempts to derive a capital forecast for the first regulatory period from the capital expenditure recorded in Telstra’s annual reports since 2005-2006.\(^ {194}\)

The ACCC says it has to take this approach because “the ACCC approached Telstra for its forecast of future capital expenditure but Telstra advised that suitable forecasts are not available.”\(^ {195}\) However Telstra was only unable to do so because the regulatory period chosen by the ACCC – 4 years – is longer than that over which Telstra currently forecasts capital expenditure.

The reason that Telstra keeps a short planning cycle for committed capital expenditure is that it shares the view of the ACCC that it “needs to be satisfied that any new capital expenditure is prudent and efficient and that the costs estimates are based on reasonable assumptions about the efficient costs likely to be incurred over the regulatory period.”\(^ {196}\) Telstra’s experience in managing one of Australia’s largest private sector capital budgets is that this level of robustness in capital forecasts simply cannot be achieved more than 1 financial year out, given the highly dynamic nature of the telecommunications industry and the very high degree of regulatory uncertainty.

\(^{194}\) Telstra does agree with the ACCC that the inherent drawbacks of using historical data to derive forecast capital expenditure would be compounded if RAF data had been used.

\(^{195}\) Draft Report, page 63.

\(^{196}\) Draft Report, page 38.
397. Telstra’s capital management program, which is described in more detail below, involves a rigorous and detailed business case analysis of capital expenditure proposals undertaken at a project specific level. Planning is done on a financial year basis. While high level capital projections are undertaken beyond 1 financial year, the detailed design, vendor sourcing, costing and demand analysis for potential projects which are ‘pencilled in’ over a 2-3 year horizon is not sufficiently developed for those projects to be considered under Telstra’s capital management process.

398. This marks a significant difference between telecommunications and other utilities which adopt a BBM and have longer regulatory periods (eg, 5-years for electricity transmission and distribution). In those other sectors, most network investment is ‘lumpy’ and involves a handful of very significant capital projects which can be identified and for which detailed planning commences several years in advance – such as investment in a new interconnector. This means long term capital forecasts can be provided by network providers with a reasonable degree of accuracy several years in advance.

399. The nature of the telecommunications market is different. Instead of a few very large and capital intensive projects which are planned over many years, Telstra’s capital spend on the CAN and IEN during FY2009-10 was diffused across over 30,000 individual projects, the great majority of which were relatively low cost. A breakdown of the capital program in terms of project size and volume is set out in Table 10 below.

### Table 10: Breakdown of Telstra capital expenditure FY2009-10 for CAN and IEN

<table>
<thead>
<tr>
<th>FY2009-10</th>
<th>“INTEGRATED ACCESS” PROJECTS – WHICH INCLUDES MANY CAN ASSETS</th>
<th>IEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects</td>
<td>30,000+</td>
<td>1000+</td>
</tr>
<tr>
<td>Biggest single project</td>
<td>less than $5m</td>
<td>less than $5m</td>
</tr>
<tr>
<td>Number of projects required to get 80% of value</td>
<td>3,000+</td>
<td>100+</td>
</tr>
<tr>
<td>Top 10 projects account for</td>
<td>less than 10% of total</td>
<td>less than 25% of total</td>
</tr>
</tbody>
</table>

400. The Draft Report has acknowledged this feature of Telstra’s capital expenditure, but does not appear to have taken it into account in deciding upon any of:

   (a) the length of its proposed initial regulatory period (4-years);

   (b) the approach adopted to the initial capital forecasts, which are derived by the ACCC based on historical data over this longer 4-year period; or

   (c) the practicality of its efficiency and prudency review options.

401. If, as Telstra proposes, the ACCC adopted a shorter regulatory period to reflect the dynamic nature of the telecommunications market and the additional uncertainty of the NBN (see discussion in section 5.7), Telstra could certainly provide rigorous, substantiated capital forecasts for that period. The ACCC then could implement the BBM for the first regulatory period consistently with its conclusion about the unreliability of historical data in predicting future capex.
5.3.3. FUTURE ASSESSMENT OF CAPITAL FORECASTS

402. As noted in section 5.7.7 below, Telstra submits that the process for obtaining capital expenditure forecasts needs to form an integrated part of the BBM/Pricing Principles and that it is unnecessary and inappropriate to do this separately through an RKR.

403. However future forecasts are obtained, the ACCC proposes that it will need to be satisfied any capital forecasts are prudent and efficient but that, given the volume of projects involved, it "cannot examine expenditure on an individual project or proportion of expenditure basis". Instead, the ACCC will look to the rigorousness of the process by which individual projects are planned and assessed in Telstra’s capital planning process, such as the extent of competitive tension between suppliers through tendering processes.

404. While Telstra acknowledges the ACCC’s intention to initiate a separate process to examine the forecasting inputs, at this stage, the ACCC’s proposed approach lacks the clarity, certainty and incentive effects of the comparable process for reviewing capital forecasts by electricity distribution and transmission network operators under the NER. Clause 6.5.7(c) of the NER provides that:

(c) The AER must accept the forecast of required capital expenditure of a Distribution Network Service Provider that is included in a building block proposal if the AER is satisfied that the total of the forecast capital expenditure for the regulatory control period reasonably reflects:

(1) the efficient cost of achieving the capital expenditure objectives; and

(2) the costs that a prudent operator in the circumstances of the relevant Distribution network Service provider would require to achieve the capital expenditure objectives; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the capital expenditure objectives,

(the capital expenditure criteria)

405. Telstra notes that a similar process (using capital expenditure criteria modelled on this clause) forms part of Telstra’s suggested way forward, at clause 5.

406. By contrast with the NER:

(a) The Draft Report provides very little, if any, clarity about how capital forecasts will be assessed, the criteria that will apply or the timeframes and process involved.

(b) The ACCC seems to require that capital forecasts lodged by Telstra will need to be affirmatively approved by the ACCC. The reverse applies in electricity: the electricity operator’s capital forecast is to be input into the BBM unless the AER can satisfy itself that the forecast is not prudent or efficient. This difference in approach goes to one of the primary advantages of the BBM approach over TSLRIC+. The BBM involves the use of pre-set rules so that the model can be applied and periodically readjusted in a more predictable, less controversial and less discretionary manner. Some regulatory discretion is, of course, necessary, but framing discretions as a power to disallow rather than a requirement to positively adopt is more consistent with the BBM approach.

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197 Draft Report, page 38.
While the ACCC acknowledges that it will usually look to the overall capital forecast, the ACCC seems to leave open the option to review individual projects. If this is the case, it would allow the ACCC to either reject the entire forecast because a small number of projects were considered not to meet the prudency and efficiency test or to adjust the total forecast downwards by excluding those projects.

However, in the case of an electricity operator’s forecast, the AER can only reject the forecast as a whole and only on the basis that, viewed in totality, the forecast is not efficient or prudent. It is the total capital forecast which is of the most significance in the BBM to the calculation of the access charges because costs are allocated on an aggregated basis. The access provider should have the flexibility and incentive to manage expenditure and projects within the overall capital forecast envelope – to recognise the practical limits of forecasting, the realities of variance from forecasts when building projects and as an acknowledgment that this freedom for the network provider to manage within the revenue cap provides the primary efficiency mechanism in a traditional BBM approach.

407. In these circumstances, Telstra submits that the BBM should include a transparent mechanism providing for ex-ante review and approval of its capital expenditure. In Telstra’s view, this process should involve:

(a) submission by Telstra of its high level capital expenditure projections; and
(b) if necessary, approval of specific capital forecast envelopes during the regulatory period.

408. In Telstra’s view, ex-post review of its capital expenditure is neither warranted nor justified. There is no reason to believe that Telstra’s capital management processes are any less reliable than those of the electricity operators and therefore, that the ACCC should accord them less weight than the AER is required to give capital forecasts.

409. Telstra operates a sophisticated company-wide, centralised process to plan, approve and monitor capital expenditure, as follows:

(a) Telstra has established an Investment Management team with the Finance and Administration division to plan and co-ordinate capital planning across the Telstra group. Capital plans must be approved by the Investment Management Committee (“IMC”) (comprising the CFO (as Chair), the COO and the GMD Corporate Strategy and Consumer Experience) at the business unit and program level. Detailed projects (within programs) are approved by Business Unit Planners, Group Financial Controllers and GMDs. The exceptions are capital projects in excess of $250m, which the Board must approve. This system ensures prudency by combining high level coordination with Business Unit level accountability for expenditure.

(b) Proposed projects are divided into two categories: baseline projects which involve network investment which maintains, expands, upgrades, enhances, or modernises existing network in response to current or forecast customer demand; and discretionary projects which are all other capital projects.

(c) To secure approval, baseline projects must be designed in accordance with Telstra’s technical Network Deployment Standards which define, based on Telstra’s extensive experience, the best way in which to maintain, expand or upgrade network facilities – there are Network Deployment Standards covering every individual component within the Telstra network. Projects are evaluated individually – and against other baseline projects competing for capital resources –
based on the forecast demand, the lead-time minimally required to have the project in place to meet the demand, the network capacity headroom available and required to prudently cushion demand loads on the network, and unit costs.

(d) For discretionary projects, a standard Telstra Investment Evaluation Model (using a discounted cash flow methodology) is used. Discretionary projects are ranked taking into account NPV, discounted payback period, IRR and their consistency with Telstra’s strategic objectives – although, over recent years, there have been very few discretionary capital projects involving the CAN.

(e) Once approved, the TPPI monitors implementation of the project and if there is a variation of the lesser of 10% or $20m against the approved capital budget for the project, re-approval must be sought.

(f) Telstra has implemented a tendering process designed to ensure competitive tension between its suppliers and secure lower cost outcomes for Telstra. For work in the access network, Telstra has divided Australia into 18 geographic “patches”. Every two years, suppliers retender for work in patches by lodging a detailed, fixed rate card. If Telstra assigns projects to a supplier in a patch, it must perform the work in accordance with its rate card. This tendering model ensures that there is competitive tension between Telstra suppliers while also providing certainty for capital planning purposes (reflecting the 2-3 year capital planning cycle discussed above).

(g) Telstra’s capital management processes are ISO9000 certified quality management programs. They are also periodically audited and reviewed by external management consultants as part of Telstra’s continuing efforts to drive costs out of the business.

410. Telstra’s integrated planning arrangements provide for three different planning processes, depending upon the complexity of the project:

Table 11: Telstra’s capital planning work processes

<table>
<thead>
<tr>
<th>PLANNING PROJECT</th>
<th>WHICH PROCESS TO USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple or low complexity infrastructure planning project eg, high volume, low cost. Typically &lt;$50k but in cases of simple to install high cost material items (eg, plug in cards) higher costs are allowed.</td>
<td>PBR Lite process</td>
</tr>
<tr>
<td>Discrete single or multi site planning project – specific site or natural project requirements with a high degree of detail provided eg, new start CMUX AU or haul large size cable to relieve multiple CCPs.</td>
<td>Normal Planning Brief process</td>
</tr>
<tr>
<td>Bulk planning project - used for recurring activities where the approximate volume, scope and timing are known and unit rates calculate the value of the work eg, new estate lots, re-development LU/BU or Exchange port or Network port augmentations.</td>
<td>Normal Planning Brief process</td>
</tr>
<tr>
<td>High complexity infrastructure planning</td>
<td>High Complexity Planning Brief</td>
</tr>
<tr>
<td>PLANNING PROJECT</td>
<td>WHICH PROCESS TO USE</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>project</strong> eg, novel or complex planning projects</td>
<td>process</td>
</tr>
<tr>
<td>This process is used on an as required basis.</td>
<td></td>
</tr>
</tbody>
</table>

411. A flowchart setting out the end to end processes applied to each of these types of project is set out in Figure 9, Figure 10 and Figure 11 below.

412. The ACCC can take confidence from the fact that Telstra has had to manage its new capital expenditure in a TSLRIC+ based regulatory environment for the last 13 years. TSLRIC has disciplined Telstra’s actual capital expenditure in fixed line network infrastructure because Telstra is only able to recoup through access fees new investment which an efficient hypothetical operator would make.

413. In effect, this means that Telstra has faced the same regulatory incentives over the last 13 years which operates under the building block approaches in other sectors (which disconnects actual expenditure from approved revenues, to incentivise efficiency when managing within the revenue cap).

5.3.4. **CONCLUSIONS**

414. For the reasons set out above, Telstra submits that:

(a) Given the highly uncertain environment, unlike other sectors that adopt BBMs, it is not possible for the ACCC (or Telstra) to reliably forecast capital planning requirements in relation to the CAN and IEN over a period of 4 years.

(b) There is substantial evidence that Telstra’s capital planning processes in relation to the CAN and IEN are efficient and prudent and certainly do not justify the administratively complex and costly combination of ex ante, ex post and process-based prudency reviews proposed in the Draft Report.

(c) The same formulation for review of capital forecasts should by adopted as that which applies in the electricity BBM, which provides that the ACCC must accept capital forecasts unless it is satisfied that the total forecast expenditure does not reflect the efficient and prudently incurred costs of meeting defined network objectives.
Figure 9: Telstra High Complexity Planning Brief capital planning process (2010)

1. Create Planning Brief

2. Obtain Delegate approval

3. Issue Planning Brief

4. Review Planning Brief

5. Accept Brief?

6. Resolve Issues

7. Scope change required?

8. Change in customer requirement

9. Planning Brief scope review

10. Resolve Planning Brief issue/s

11. Proceed?

12. Cancel project

13. Commence Detailed Design

14. Plan / Design OK?

15. Resolve issues

16. Scope change required?

17. Design approved?

18. Order materials

19. Design finalised

20. Work moved to Construction phase

21. Variation requested?

22. Resolve issues

23. Scope change required?

24. Project completed

Finish

Legend Key
- Integrated Network Planning (INP) responsibility
- Network Construction (NC) responsibility
- Joint responsibility between INP and NC
Figure 10: Telstra Normal Complexity Planning Brief capital planning process (2010)

1. Create Planning Brief
   - Planner creates Planning Brief in PBR
   - PBR Status is PLAN

2. Obtain Delegate approval
   - YES
   - NO

3. Issue Planning Brief
   - Planning Brief issued to NC via PBR. PBR status ‘Constructor Evaluation’
   - Issued to NC for ‘constructor evaluation’. Initial evaluation completed within 7 days – Doability, Dollars and Dates.

4. Review Planning Brief
   - Initial acceptance given by LPO. PBR status updated to ‘IN DESIGN’

5. Accept Brief?
   - YES
   - NO

6. Resolve Issues
   - Initial issues/risks identified
   - INP advises NC of a change in customer’s requirement
   - Planner to review issues identified by NC. PBR status ‘Constructor evaluation’

7. Scope change required?
   - YES
   - NO

8. Change in customer requirement
   - INP delegate approval sought. PBR status updated to ‘Awaiting delegate approval’

9. Planning Brief scope review
   - Planner to review issues identified by NC. PBR status ‘Constructor evaluation’

10. Resolve Planning Brief issue/s
    - YES
    - NO

11. Proceed?
    - YES
    - NO

12. Cancel project

13. Commence Detailed Design
    - Detailed design developed by NC

14. Plan / Design OK?
   - YES
   - NO

15. Resolve Issues
    - PBR status updated to ‘Under review’

16. Scope change required?
    - YES
    - NO

17. Order materials
    - PBR status updated to ‘Construction Variation Requested’

18. Design finalised
    - “Refer back process” to INP. Issues raised of Cost, Scope or Timing ‘PBR status updated to Design check’

19. Work moved to Construction phase
    - PBR status updated to ‘Under review’

20. Variation requested?
    - YES
    - NO

21. Resolve Issues
    - “Refer back process” to INP. Issues raised of Cost, Scope or Timing ‘PBR status updated to Design check’

22. Scope change required?
    - YES
    - NO

23. Project completed

LEGEND KEY
- Integrated Network Planning (INP) responsibility
- Network Construction (NC) responsibility
- Joint responsibility between INP and NC

Finish
Figure 11: Telstra’s Low Complexity Planning Brief capital planning process (2010)

Start

1. Create Planning Brief

Planner creates Planning Brief in PBR

INP delegate approval sought. PBR status updated to ‘Awaiting delegate approval’

2. Obtain Delegate approval

YES

14. Resolve Planning Brief issue/s

NO

15. Proceed?

16. Cancel project

3. Issue Planning Brief

PBR status updated to ‘Constructor Evaluation’

4. Accept Planning Brief

PBR status updated to ‘IN DESIGN’. Automatic flowthrough to Design and Construction

5. Develop Design

Design developed by NC

6. Plan / Design OK?

YES

7. Order materials

NO

8. Design and issue Work Order

LPO moves brief to PBR status ‘Under construction’. Materials ordered & Work order generated

9. Variation requested?

NO

PBR status updated to ‘Construction Variation Requested’

10. Resolve Issues

YES

NO

11. Scope change required?

12. Change in customer requirement

PBR status updated to ‘Under review’

“Refer back process” to INP: Issues raised of Cost, Scope or Timing PBR status updated to Design check

13. Planning brief scope review

17. Project completed

All Projects/work orders issued for the brief have been completed. PBR status ‘Complete’.

LEGEND KEY

Integrated Network Planning (INP) responsibility
Network Construction (NC) responsibility
Joint responsibility between INP and NC
5.4. Depreciation and asset lives

5.4.1. THE ROLE OF ASSET LIVES IN THE BBM

415. The asset lives used in any BBM govern the time period over which large sunk capital costs are recovered, and therefore have a direct and fundamental influence on prices.

416. Given its preference for use of written down asset values taken from the RAF, the ACCC proposes to calculate the return of capital using straight line depreciation under which the upfront cost of the asset is divided by the asset life. As a result, the asset lives used to calculate depreciation will directly affect the extent to which Telstra is able to recover its historical capital expenditure and its incentives to undertake future investment. If the period used to calculate depreciation is shorter than the economic life of Telstra's assets, Telstra may be over compensated for the expenses it incurred in purchasing the asset. In this regard, the ACCC's Discussion Paper noted that:

If the asset life assumed for cost allocation purposes (the asset's book life) is shorter than the useful life of the asset, an asset that has been fully depreciated in an accounting sense is still able to be used...this raises the potential for end users to be charged more than once for assets where the full costs of investment have already been passed on to them.

417. Conversely, if the period used to calculate depreciation is longer than the economic life of Telstra's assets, Telstra may be unable to recover the full amount of its capital expenditure. This will, in turn, affect its incentives to replace existing assets and invest in new technologies. In this regard, RBB Economics has stated that:

...long service lives can mean that there is a greater risk that those assets can become “stranded” if a change – such as a technological or regulatory change – means that new assets can be introduced to produce the same services more efficiently. Access providers may then find it difficult to recover the cost of their investment which could affect their incentive to invest in this industry. It may also affect the timing of any migration to new technologies (as the access provider may choose to wait until they recovered all of their costs over the long life of the asset based on the old technology).

5.4.2. DEPRECIATION SHOULD BE BASED ON ECONOMIC LIVES

418. Telstra submits that depreciation should be calculated by reference to each asset’s economic life (ie, the length of time over which the asset will, in practice, be used to provide services) rather than its technical life (ie, the length of time that the asset could, in theory, operate). This approach:

(a) is most consistent with economic and regulatory precedent; and

(b) best promotes the LTIE, as it will ensure that Telstra has appropriate incentives to undertake economically efficient investment in, and ensure the economically efficient use of, its assets.

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199 Draft Report, page 78.
200 Discussion paper, pages 41-42.
201 RBB Economics Report, page 5. Included as Schedule 7 to this response. The ITU make a similar observation in their ITU Regulation Toolkit, at Section 6.6 (Depreciation):

"In order to provide incentives for expansion investment, efficient depreciation must allow a firm to recoup the costs of investment during the economic life of an asset.”

International Telecommunications Unit, ICT Regulation Toolkit, Section 6.6 (Depreciation). Available at: http://www.ictregulationtoolkit.org/en/Section.3496.html
419. The importance of using economic lives for depreciation was recognised by the International Telecommunications Union in its ICT Regulation Toolkit, which notes 202

Depreciation is an important component of costs in any capital intensive industry, such as telecommunications. The appropriate concept of depreciation for use in an economic cost study is “economic depreciation”... Concerning the duration of depreciation, the economic lifetime of the asset should be taken into account in a forward looking long run approach.

420. Similarly, RBB Economics has stated that:203

...service lives should be set as close as possible to economic lives. This way, by the time new technology is developed and perfected, older assets have been fully depreciated and there is no need for future consumers to bear any of the costs of the older assets.

421. This is also the approach adopted in other BBM regimes. Under the NER, for example, the depreciation schedule used to calculate the return of capital: 204

...must depreciate using a profile that reflects the nature of the asset or category of asset over the economic life of that asset or category of asset (emphasis added).

5.4.3. WHAT MIGHT CAUSE THE ECONOMIC LIFE AND TECHNICAL LIFE OF AN ASSET TO DIFFER?

422. All assets have a “technical life” which reflects the period of time over which, under normal operating conditions, the asset could be used to provide services. This technical life is generally based on engineering assumptions and expectations as to the likely operation of the asset and the state of the industry more generally.

423. In some circumstances, an asset’s technical life may be the same as its economic life.205 This is most often the case where technological change is gradual and highly predictable. However, in dynamic environments or markets, the technical life of an asset will often differ (in some cases, significantly) from its economic life. In this regard, the ACCC has itself noted that:206

...the useful economic life of an asset may have very little to do with the feasible technical life of the equipment.

424. In Telstra’s view, several characteristics of the telecommunications sector, including the rapid pace of technological and regulatory change, are likely to result in differences between the economic and technical lives of its assets.

425. RBB Economics has noted that technological change, commercial uncertainty and changes in public policy may cause an asset’s economic life to differ from its technical life.207 Similarly, although in the context of a different industry, NERA Economic Consulting’s 2008 Report to the AER on behalf of TransGrid noted that, the economic life of an asset may differ from its technical life where, among other things:

(a) technological advancement results in the obsolescence of the asset; and/or

202 International Telecommunications Unit, ICT Regulation Toolkit, Section 6.6 (Depreciation). Available at: http://www.ictregulationtoolkit.org/en/Section.3496.html
203 RBB Economics Report, page 6. Included as Schedule 7 to this response.
204 Clauses 6.5.5(b)(1) and 6A.6.3(b)(1), National Electricity Rules.
205 For example, RBB Economics has indicated that, in the rail industry: “...regulators tend to argue that the absence of unanticipated technological change typically means that "economic" lives are the same as "technical" lives.” See RBB Economics Report, page 6. Included as Schedule 7 to this response.
207 RBB Economics Report, page 7. Included as Schedule 7 to this response.
(b) changes in demand require the asset to be upgraded before the end of its technical life.\textsuperscript{208}

426. Given the dynamic and uncertain technological and regulatory environment currently existing in the telecommunications sector, it is relatively clear that economic lives cannot be assumed to be equivalent to technical lives for the purpose of the BBM. Amongst other things, the imminent rollout of the NBN will almost certainly truncate the economic lives of a considerable proportion of Telstra’s CAN and Core assets.

5.4.4. THE ACCC’S APPROACH TO DETERMINING ASSET LIVES

427. In the Draft Report, the ACCC proposes to use information sourced from the Analysys cost model to determine the average asset life of Telstra’s CAN and Core assets, except ducts and pipes.\textsuperscript{209} In relation to the ducts and pipes, the Draft Report states that:\textsuperscript{210}

\[\text{for the purpose of estimating the draft prices included in this report, the ACCC has used a more conservative average asset life for ducts and pipes of 30 years rather than the 35 years assumed in the Analysys model. The ACCC’s adoption of a conservative assumption recognises industry controversy about the appropriate asset life assumption for ducts and pipes.}\]

428. The ACCC will then determine the remaining life of the asset by “applying the estimated undepreciated percentage of each asset class (derived from RAF data) multiplied by the average asset life for that class”.\textsuperscript{211}

429. The Draft Report indicates that the average asset lives set out in the Analysys cost model were calculated from international benchmarking studies. Telstra notes that care needs to be taken with benchmarking in relation to asset lives, given the unique geographic, technical, economic and regulatory factors at work in different jurisdictions. In this regard, RBB Economics has noted that:\textsuperscript{212}

\[\text{...relying on international benchmarking is useful when the international environment is similar to the situation you are assessing. If not, then the benchmark is not applicable and conclusions can be misleading.}\]

\[\text{International benchmarking is less useful when trying to estimate the economic life for assets that will be affected by the NBN roll-out either directly or indirectly. This is because, the pace, extent and nature of technological change will differ across countries.}\]

430. The ACCC has itself acknowledged that the average asset lives derived from the Analysys model may be inaccurate, stating:\textsuperscript{213}

\[\text{The ACCC notes that the asset lives used in the Analysys cost model relate to optimised new assets as at 2007. These asset lives were calculated from international benchmarking studies. They are not necessarily consistent with the average asset lives of existing, generally older and un-optimised equipment actually in use.}\]

431. Telstra shares the ACCC’s concerns about the ability of international benchmarking to fully and properly reflect the unique network and conditions which exist in Australian in relation to the CAN and Core assets.

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{208} NERA Economic Consulting, \textit{Depreciation of Replacement Assets: A Report to the AER on behalf of TransGrid}, 22 December 2008, page 7.
\item \textsuperscript{209} See Draft Report, pages 79-80.
\item \textsuperscript{210} Draft Report, page 79.
\item \textsuperscript{211} Draft Report, pages 79-80.
\item \textsuperscript{212} RBB Economics Report, page 12. Included as Schedule 7 to this response.
\item \textsuperscript{213} Draft Report, page 79.
\end{enumerate}
\end{footnotesize}
432. For this reason, Telstra submits that asset lives used in any BBM should be based on the service lives used by Telstra itself (as modified below to take into account the likely impact of the NBN). These service lives most accurately and appropriately reflect the relevant network conditions and environment, as well as being tested against international benchmarks. In that sense, they offer the best of both worlds: providing benchmarked asset lives, which nonetheless reflect the unique Australian network and conditions.

5.4.5. TELSTRA SERVICE LIVES ARE ROBUST AND REFLECT THE UNIQUE AUSTRALIAN NETWORK AND CONDITIONS

433. Telstra has a robust and effective process for estimating the service lives of its assets. The process is overseen by the Capex and Asset Accounting Team within Telstra’s Finance and Administration Business Unit and involves an annual review of asset lives (the “Asset Service Life Review”). As part of this review, the Capex and Asset Accounting Team estimates the average service lives of the assets in each Telstra asset class based on factors such as asset usage rates and the rate of technological development and commercial obsolescence. The service lives produced through the annual Asset Service Life Review process are then checked against the service lives recorded in Ernst & Young’s benchmark survey on the management of fixed assets by global telecommunications operators to ensure they are consistent with international trends.

434. For the purpose of preparing this Response, Telstra engaged RBB Economics to review its approach to calculating remaining asset lives. Based on its review of Telstra’s internal processes for estimating service lives, RBB Economics concluded that:

Telstra’s internal processes would be an adequate source of service lives as they attempt to estimate economic life and use international benchmarking as a “reasonableness check”.

435. As discussed in section 5.4.7 below, in so doing, RBB Economics has estimated the average and remaining life of Telstra’s CAN and Core assets using the asset life estimates prepared by Telstra, adjusted to reflect the likely impact of the NBN roll-out.

5.4.6. THE IMPACT OF TECHNOLOGICAL CHANGE ON REMAINING ASSET LIVES

436. As discussed above, a key factor affecting the economic life of assets used in the telecommunications sector is the likelihood of future technological change. However, at this stage, there is no indication in the Draft Report that the ACCC has taken into account known and reasonably anticipated technological changes expected to occur during the regulatory period in calculating the remaining lives of Telstra’s CAN and Core assets. Because of this, there is a high likelihood that the remaining asset lives adopted by the ACCC in the Ovum BBM do not reflect the appropriate economic lives of its assets.

437. Undoubtedly the most significant technological change due to take place during the regulatory period is the roll-out of the NBN. In May 2010, the government released the National Broadband Network Implementation Study (“NBN Implementation Study”). The study, amongst other things, concluded that: “[t]he advent of the NBN is likely to hasten the retirement of the copper network.”

438. While many of the details surrounding the NBN roll-out remain uncertain, a number of the more significant ‘headline’ factors, which are the most important for determination of

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214 RBB Economics Report, page 12. Included as Schedule 7 to this response.
asset lives, are clear from public statements by the Government and/or NBN Co. For example, there is clarity around:

(a) the total timeframe for the rollout (8 years);
(b) the total proportion of premises to be covered (90%);
(c) that there is likely to be progressive decommissioning of the copper network as Telstra migrates its voice and broadband traffic from its’ copper and broadband networks to the NBN,216 and
(d) that a portion of CAN assets may continue to be used by NBN Co under long term lease or similar arrangements with Telstra.217

439. In light of what is known about the NBN rollout, Telstra submits that these issues need to be reflected in the economic lives of assets. RBB Economics agrees, noting that:218

NBN rollout will like have a significant impact on future demand for Telstra’s fixed network services.

440. Accordingly, RBB Economics carefully takes account of the impact of the NBN roll-out when making recommendations regarding Telstra’s asset lives.

5.4.7. DETERMINING THE LIKELY IMPACT OF THE NBN ON REMAINING ASSET LIVES

441. Telstra engaged expert economists RBB Economics to provide independent advice on the appropriate approach to determining the impact of the NBN on the initial and remaining lives of its fixed network assets.

442. In assessing the likely impact of the NBN, RBB Economics divided Telstra’s CAN and core assets into three broad categories. These categories are outlined in Table 12 below.

Table 12: Likely impact of the NBN on Telstra’s CAN and Core Assets

<table>
<thead>
<tr>
<th>ASSET CLASSES</th>
<th>LIKELY IMPACT OF THE NBN ON ECONOMIC LIFE OF ASSET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECTLY AFFECTED</strong></td>
<td><strong>Copper cables, Pair Gains systems, Local switching, PDH transmission</strong></td>
</tr>
<tr>
<td><strong>INDIRECTLY AFFECTED</strong></td>
<td><strong>Ducts and pipes, Radio bearer equipment, Network owned buildings, Network huts and shelters, Network</strong></td>
</tr>
</tbody>
</table>

218 RBB Economics Report, page 13. Included as Schedule 7 to this response.
219 See RBB Economics Report, pages 16-18. Included as Schedule 7 to this response.
220 RBB Economics Report, page 19-22. Included as Schedule 7 to this response.
<table>
<thead>
<tr>
<th>ASSET CLASSES</th>
<th>LIKELY IMPACT OF THE NBN ON ECONOMIC LIFE OF ASSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>powers</td>
<td></td>
</tr>
<tr>
<td>OTHER ASSETS</td>
<td>CAN radio, International submarine cable systems, Building SDH transmission, Support Structures, Leasehold buildings</td>
</tr>
</tbody>
</table>

443. RBB Economics developed a detailed methodology (outlined in Box 4 below, and described in detail in their Report at Schedule 7) for assessing the likely impact of the NBN on each category of Fixed Network Assets.222

**BOX 4: RBB ECONOMICS REPORT ON SERVICE LIVES FOR TELSTRA’S FIXED NETWORK ASSETS**

As part of its review, RBB Economics calculated the remaining economic lives of Telstra's assets based on the following approach and NBN assumptions:

- For assets that will be affected by the NBN roll-out, RBB Economics used the service life estimates calculated as part of Telstra’s Asset Service Life Review process as a starting point and made a number of adjustments, based on publicly available information, to account for the likely impact of the NBN roll-out. For example, RBB Economics noted that, as the copper network is to be decommissioned (with the exception of a small proportion retained to meet the USO), the service life of Telstra’s copper cable should be capped at a maximum of 8 years (ie, the timeframe for the roll-out of the NBN). RBB Economics then assumed that approximately 50% of Telstra’s copper cables would be decommissioned after 4 years and the remaining 50% after 8 years. On this basis, RBB Economics estimated the remaining service life of Telstra’s copper cables at 6 years.

  RBB Economics noted that, in practice, not all copper cables will be decommissioned as some will be required to meet the USO obligations. For those assets that are required to meet the USO, RBB Economics adopted the service life estimates in Telstra’s Service Life Review (ie, a service life of \[c-i-c\text{ commences}\] \[c-i-c\text{ commences}\] \[c-i-c\text{ ends}\] years and a remaining service life of \[c-i-c\text{ commences}\] \[c-i-c\text{ commences}\] \[c-i-c\text{ ends}\] years).

  RBB Economics then determined the weighted service life and remaining service life of Telstra’s copper cables by applying the assumption (based on publicly available data) that 7% of the relevant assets will be required to meet the USO obligations.

- For assets that will not be affected by the NBN roll-out, RBB Economics adopted the service life estimated derived from Telstra’s Asset Service Life Review.

444. Applying this methodology, RBB Economics calculated has calculated appropriate lives for Telstra’s fixed line assets, taking into account the likely impact of the NBN. Table 13 below shows the asset lives produced by RBB Economics. It also shows the asset lives proposed by the ACCC for use in the Ovum BBM (where available).

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221 See RBB Economics Report, page [22-24]. Included as Schedule 7 to this response.
222 This methodology is outlined in RBB Economics’ Report. Included as Schedule 7 to this response.
Table 13: Asset life (in years) for Telstra's fixed network assets

<table>
<thead>
<tr>
<th>ASSET</th>
<th>RBB ECONOMICS ESTIMATES</th>
<th>ACCC ESTIMATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASSET LIFE APPLIED TO NEW ASSETS ADDED TO THE RAB</td>
<td>REMAINING ASSET LIFE APPLIED TO THE INITIAL ASSET BASE</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Assets directly affected by the roll-out of the NBN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper cables (main)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooper Cables (distribution)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair Gains Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local switching</td>
<td></td>
<td></td>
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<tr>
<td>PDH transmission</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assets indirectly affected by the roll-out of the NBN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ducts and pipes (main)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ducts and pipes (distribution)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio bearer equipment</td>
<td></td>
<td></td>
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<tr>
<td>Network owned buildings</td>
<td></td>
<td></td>
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<tr>
<td>Network huts and shelters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network power</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAN radio (radio systems – customer concentrator)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optical fibre cable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International submarine cable systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDH transmission</td>
<td></td>
<td></td>
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<tr>
<td>Support structures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- [c-i-c commences]
- [c-i-c]
<table>
<thead>
<tr>
<th>ASSET</th>
<th>RBB ECONOMICS ESTIMATES</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASSET LIFE APPLIED TO NEW ASSETS ADDED TO THE RAB</td>
<td>REMAINING ASSET LIFE APPLIED TO THE INITIAL ASSET BASE</td>
</tr>
<tr>
<td>General purpose buildings</td>
<td>[c-1-c]</td>
<td>[c-1-c]</td>
</tr>
<tr>
<td>Leaseholder buildings</td>
<td>[c-1-c]</td>
<td>[c-1-c]</td>
</tr>
</tbody>
</table>

*Source: RBB Economics, Service Lives for Telstra’s Fixed Network Assets, October 2010, page 4

445. While admittedly still subject to a degree of uncertainty – and reliant on a number of assumptions – Telstra submits that the remaining asset lives determined by RBB Economics (as set out in Table 13) reflect a reasonable view of the economic lives of its assets taking into account the NBN. These lives are certainly likely to be a better reflection of the economic lives of Telstra’s assets than those used in the Analysys cost model and Ovum BBM, which do not take any account of the imminent and significant effect of the NBN.
5.5. Demand

Overview

The ACCC says that it intends to undertake a separate consultation process in relation to demand forecasts to be used in the BBM. Nonetheless, prior to that consultation process, the ACCC has published aggregate 4-year demand forecasts as part of the Ovum BBM. Telstra only recently received a copy of the Ovum BBM model. As a result, Telstra is not yet in a position to provide a comprehensive response to the demand forecasts for retail and wholesale services used to calculate the indicative prices.

However, based on its review of the limited information published in the Draft Report, Telstra considers that the ACCC’s demand forecasts will almost certainly be incorrect, amongst other things, because the ACCC (or Ovum) has not accounted for the possible effects of the roll-out of the NBN on demand for fixed line services supplied over the CAN. In Telstra’s view, given the highly uncertain nature of the telecommunications sector, including the likely impacts of the roll-out of the NBN on demand for fixed line services, it is unlikely to be possible to produce highly robust demand forecasts beyond FY2011/12.

The Draft Report recognises that the pricing outcomes generated by the Ovum BBM are highly sensitive to the accuracy of demand forecasts. As such, the use of unreliable forecasts will have a significant effect on the accuracy of indicative prices and therefore the extent to which they are consistent with the LTIE. For example, if the fourth year demand forecasts used in the BBM differ from actual demand by 20% (eg, because the impact of the NBN roll-out has not been accurately accounted for), the indicative prices produced by the BBM would likely be 20% above or below the appropriate level.

Telstra supports the ACCC’s view that Telstra and access seekers are best placed to provide demand inputs for the BBM. Telstra’s demand forecasting process is highly robust and based on sound forecasting principles and assumptions.

However, for the reasons set out below at 5.7.7, Telstra does not agree that it is appropriate or necessary to use an RKR to obtain demand inputs from Telstra and access seekers. Telstra believes that a flexible and pragmatic approach to obtaining the inputs required for the BBM (including demand forecasts) should be used.

5.5.1. The ACCC’s Proposed Approach to Forecasting Demand for Declared Services

The ACCC has indicated that it will undertake a separate consultation process to examine demand forecasts to be used as inputs in the BBM. However, prior to the completion of this process, the ACCC has nonetheless published as part of the Ovum BBM aggregate demand forecasts to be used in setting indicative prices for the first 4-year regulatory period.

The Draft Report indicates that:

...the ACCC has developed its own forecasts, taking into account recent trends in demand for each service and the demand forecasts in the Analysys Cost Model.
448. Telstra was only recently given access to the Ovum BBM and, as a result, is still analysing the model and demand forecasts and may provide further comments on the forecasts in the future.

449. That being said, Telstra supports the ACCC’s proposed approach of using Telstra’s and access seekers’ demand forecasts and agrees with the ACCC that “…the access provider and access seekers are best placed to provide the most accurate demand forecasts.”

As discussed below, Telstra’s demand forecasting process is highly robust, uses the most accurate data available and applies reliable and appropriate forecasting principles and assumptions.

450. However, given the highly uncertain nature of the Australian telecommunications sector, Telstra considers that neither it, nor access seekers, nor the ACCC, is in a position to accurately forecast demand for declared services over the proposed 4-year regulatory period. Factors contributing to the high degree of uncertainty currently existing in the telecommunications sector include:

(a) the likelihood of future legal and regulatory change;

(b) the uneven rate of PSTN decline in Australia compared with international experiences;

(c) the timing and extent of mobile saturation and its impact on continued fixed to mobile substitution; and

(d) the timing and effects of the roll-out of the NBN on demand for services supplied via the CAN.

5.5.2. TELSTRA’S DEMAND FORECASTING METHODOLOGY

451. Telstra adopts a ‘driver’ focused approach to demand forecasting. Under this approach, demand forecasts for each telecommunications product and service are prepared by Telstra’s business units applying well-grounded and tested assumptions about the key factors or drivers likely to affect future demand.

452. Each year, Telstra’s customer facing business units (ie, the Consumer, Business, Enterprise and Wholesale business units) prepare a 3 year plan, including demand forecasts for the products and services they supply for the following 3 years. These forecasts are prepared by the finance team within the relevant business unit, drawing on the knowledge and experience of sales, marketing and product experts within that unit and other Telstra business units, including the strategy, operations and marketing groups. In the case of Telstra Wholesale forecasts, these also take into account forecast information provided to Telstra by wholesale customers.

453. For individual products such as basic access, local calls and fixed to mobile calls, the forecasts are produced using “driver based models”. The first step in this process involves the collection and analysis of actual monthly data for previous years. This analysis allows the forecaster to identify the key factors affecting demand and understand the interdependencies between product groups (eg, the impact of increasing use of broadband and mobile technologies on demand for fixed voice services and the volume of fixed voice minutes).

454. Based on this analysis, each finance group produces a set of assumptions about the factors that will impact demand for each product or service. These assumptions are

Draft Report, page 45
reviewed by Telstra’s Corporate Financing Group to ensure they are reasonable and that a consistent approach has been adopted throughout the business.

455. Table 14 below identifies a number of the key factors about which assumptions are made in Telstra’s forecasting process.

Table 14: Factors affecting future demand for services

<table>
<thead>
<tr>
<th>EXTERNAL FACTOR</th>
<th>SOURCES OF INFORMATION OR DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated technological changes</td>
<td>Industry publications, internal Telstra expertise and materials.</td>
</tr>
<tr>
<td>Planned network developments / infrastructure roll-outs</td>
<td>Internal Telstra expertise and materials, industry publications.</td>
</tr>
<tr>
<td>Anticipated changes in the competitive or regulatory environment (eg, mergers,</td>
<td>ACMA and ACCC reports, industry publications, newspaper articles, access seeker annual reports.</td>
</tr>
<tr>
<td>changes in access prices)</td>
<td></td>
</tr>
<tr>
<td>Telstra’s commercial and marketing strategies</td>
<td>Internal Telstra expertise and materials.</td>
</tr>
<tr>
<td>Access seeker commercial and marketing strategies</td>
<td>Access seeker websites, annual reports and other publications, analysts reports, internal Telstra documents and meetings, wholesale customer forecasts.</td>
</tr>
<tr>
<td>Forecast population growth</td>
<td>Australian Bureau of Statistics (&quot;ABS&quot;) data.</td>
</tr>
<tr>
<td>Forecast housing growth</td>
<td>ABS data.</td>
</tr>
<tr>
<td>Forecast economic growth</td>
<td>ABS data.</td>
</tr>
<tr>
<td>General trends (eg, fixed to mobile substitution)</td>
<td>International trends, analyst and government forecasts, internal Telstra expertise and materials.</td>
</tr>
</tbody>
</table>

456. Applying these assumptions, the finance team in each business unit forecast demand for each product or service supplied by the business unit. When producing these forecasts, the finance team also has regard to the overall size of the market and Telstra’s market share. For example, in forecasting demand for broadband services, the finance team will consider demand for retail and wholesale broadband, ULLS, LSS and wireless broadband to ensure that the forecasts for each ‘sub-product’ are consistent and appropriate given the likely rate of growth in the market as a whole and Telstra’s market share.

457. For ULLS and LSS, the forecasts include data provided by individual wholesale customers. The demand data provided by wholesale customers covers relatively short periods of time. Therefore, to produce 3 year demand forecasts, the Wholesale business unit uses industry trends and an assumption/driver based process similar to that described above.

458. Once finalised, the individual forecasts are ‘built up’ into an aggregate view using the Telstra Forecasting System ("Foretel"). Foretel is the centralised intranet based system used for Telstra’s forecasting process. The system uses the aggregate retail and wholesale product forecasts to produce a view of Telstra revenue and an aligned Physical
Target Package ("PTP"). The PTP covers a range of products and metrics, including services in operation ("SIOs"), number of connections and disconnections, number of calls, minutes of use associated with particular call types, bandwidth for various data services and a range of other metrics.

459. The various product/service-specific forecasts are also reviewed by Telstra’s Corporate Planning Group. The Corporate Planning Group reviews the data used and the assumptions applied by each business unit to ensure that a consistent approach has been adopted and that the data and assumptions are accurate and reasonable. The Corporate Planning Group also prepares a set of “Business as Usual” statistical forecasts for the 3 year period based on historic revenue and physicals (ie, SIOs and traffic volumes) for each service. These forecasts are then compared to the forecasts prepared by each business unit to ensure they are consistent with historical trends and that any variance can be explained by applying reasonable and appropriate assumptions.

460. There are also rigorous review processes, including by Telstra’s senior management team and board of directors, before the 3 year plans are approved.

461. Even after the 3 year plan is approved, the forecasts are regularly reviewed. The forecasts are compared to actual data for each month and quarter (as it becomes available) and any material differences are analysed.

462. Telstra submits that this demand forecasting methodology is appropriate and produces accurate and reliable demand forecasts as:

(a) the forecasts are produced by experts with a detailed knowledge of the key drivers of demand for specific products in specific customer segments;

(b) the historical data used is the best available to any market participant, being detailed, accurate and up-to-date;

(c) the methodologies used to forecast from that historic data are based on clearly documented, reviewed and agreed assumptions;

(d) the process of reviewing and compiling the individual service forecasts ensures that the aggregate forecast is robust and internally consistent;

(e) the forecasts are regularly compared with actuals as they become available and the models and assumptions are updated as required; and

(f) the Foretel system ensures that the forecasts are stored, documented and analysed in a controlled and secure environment.

5.5.3. USE OF AN RKR TO OBTAIN TELSTRA’S DEMAND FORECASTS

463. The Draft Report indicates that the ACCC intends to consult separately on the possibility of issuing an RKR to require Telstra to provide demand forecasts (and supporting documentation) for each declared service. For the reasons set out in section 5.7.7 below, Telstra submits that it is unnecessary and inappropriate for the ACCC to use an RKR to obtain demand forecasts from Telstra.

464. Telstra is committed to working constructively with the ACCC (and the telecommunications industry more generally) to identify and produce the information

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230 This statistical forecast is prepared using the statistical capabilities of the ForeTel system, based on SAS software.
231 Draft Report, page 45.
required by the ACCC. As noted below at 5.7.7, forecasting and information processes could take a number of forms, depending upon the approach to implementation adopted by the ACCC. The important priorities, from Telstra’s perspective, are that:

(a) the consultation on information process forms an integral part of consultation around the BBM itself – given how inter-related and critical forecasts are to the operation of any BBM; and

(b) the forecasting process is designed to be flexible and is not made subject to rigid RKR requirements that limit scope for development and ‘learning’ as the BBM evolves.

5.5.4. NON-NBN SOURCES OF DEMAND VOLATILITY

465. The Draft Report recognises that there is currently a “high level of uncertainty around the communications environment and the legislative framework for telecommunications.”

466. Outside of the NBN, other key drivers of this uncertainty include:

(a) possible legal and regulatory changes (including the proposed changes to Part XIC of the TPA) and the effect of the ACCC’s proposed new pricing structure;

(b) the timing and rate of fixed to mobile substitution;

(c) the introduction and continued take-up of other new technologies (eg, VoIP and wireless broadband); and

(d) future demographic changes (including population and housing growth).

467. Each of these factors will have a significant effect on future demand for declared services. However, there is no indication that the ACCC (or Ovum) had regard to these factors in preparing demand forecasts for use in the BBM.

468. The Draft Report states that the ACCC’s forecasts were prepared: 233

...taking into account recent trends in demand for each service and the demand forecasts in the Analysys Cost Model. The Analysys model forecasts were calculated in 2007 and used a range of data sources, including the CAN RKR, the RAF and Telstra’s annual reports. The ACCC has taken into account the latest actual demand data available for each service.

469. However, it is not clear what “recent trends” the ACCC is referring to or how those trends have been accounted for. In addition, it is not clear how (if at all) the ACCC has accounted for future events which are likely to affect demand for the declared services, including anticipated legal and regulatory changes, market and technological developments and demographic changes.

470. Put simply, the ACCC has not provided any meaningful detail around the approach which it has adopted in its forecasts to a range of substantial uncertainties, such as the impact of technological development over the next few years (particularly in relation to issues such as mobile broadband), wholesale product demand trends and uncertainties around the likely pace of PSTN decline. This is not to mention the direct NBN impact.

232 Draft report, page 52.
5.5.5. IT APPEARS THAT THE ACCC HAS NOT HAD REGARD TO THE IMPACT OF THE NBN ON DEMAND FOR FIXED LINE SERVICES

471. It is widely accepted that the NBN will transform the Australian telecommunications sector, improving broadband service quality and data speeds. These improvements are expected to change the way consumers use telecommunications services and significantly increase demand for new technologies, such as VoIP and IPTV. In this regard, ACCC Chairman Graeme Samuel has predicted that:\textsuperscript{234}

The NBN will spark a new wave of infrastructure investment, technological change and product innovation in the [telecommunications] sector.

472. Similarly, the ACCC’s Final Decision on the Fixed Services Review Declaration Inquiry for ULLS, LSS, PSTN OA, PSTA TA, LCS and WLR stated:\textsuperscript{235}

The ACCC notes that the Government’s proposed NBN is likely to have a substantial impact on the manner in which fixed-line services are provided in the future.

473. However, notwithstanding the widespread recognition (including by the ACCC) that the NBN will have a profound impact on the supply of traditional fixed line services, there is no indication that the ACCC (or Ovum) had regard to the NBN in forecasting demand for the declared services or calculating the indicative prices. Telstra submits that, as a result of this failure, there is a high likelihood that the ACCC’s demand forecasts overstate future demand for fixed line services.

474. Telstra notes that, at the time of issuing its Final Decision on the Fixed Services Review Declaration Inquiry for ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR, the ACCC expressed the view that:\textsuperscript{236}

...there is little information currently available on many important matters that are central to determining the impact of the NBN. These matters include the intended design of the NBN, the available services, pricing and non-pricing issues, rollout timing and expected take-up, which are yet to be determined. The lack of information on these matters prevents the ACCC from forming a considered view as to the actual or likely future substitutability of NBN services for the declared services subject to this review.

475. However, since the release of the ACCC’s Final Decision in July 2009, a number of developments have occurred in the NBN planning process, including:

- the release of a Product Consultation Paper, outlining the product plans that will be offered by NBN Co, in December 2009;
- the announcement of the locations that will be included in the first and second phases of the NBN roll-out; and
- the release of the NBN Implementation Study, outlining options for the delivery and pricing of services over the NBN, in May 2010.

476. These studies and reports provide significant information regarding the roll-out of the NBN and the anticipated service offerings and pricing arrangements. As such, they can be used to asset the impact of the NBN rollout on demand forecasts.


477. Telstra has undertaken some analysis of the materiality of the NBN, below, based on the NBN Implementation Study assumptions.

5.5.5.1. FORECASTING THE RATE OF NBN TAKE-UP

478. The NBN Implementation Study notes that: 237

There is no single method to predict how end-users take-up of fibre services will progress in Australia – the best method is to triangulate from different sets of data.

479. One relevant factor identified in the Implementation Study is the rate of fibre take-up experienced in other developed countries. Table 15 below shows the average annual rate of fibre take-up experienced in a number of countries between 2006 and 2009.238

Table 15: Fibre take-up rates internationally

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>TYPE OF NETWORK</th>
<th>HOMES PASSED AS AT 2009 (AS % OF TOTAL)</th>
<th>AVERAGE ANNUAL TAKE-UP RATE BETWEEN 2006/09 (AS % OF TOTAL HOMES PASSED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>FTTH</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>South Korea</td>
<td>FTTB/N</td>
<td>92%</td>
<td>8%</td>
</tr>
<tr>
<td>Sweden</td>
<td>FTTH</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Denmark</td>
<td>FTTH</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>France</td>
<td>FTTH</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>USA</td>
<td>FTTH</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Norway</td>
<td>FTTH</td>
<td>13%</td>
<td>28%</td>
</tr>
<tr>
<td>Italy</td>
<td>FTTB</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>FTTH</td>
<td>8%</td>
<td>13%</td>
</tr>
</tbody>
</table>

480. As Table 15 shows, the average annual rate of fibre take-up has varied between countries, ranging from just 2% in Italy to 28% in Norway. However, interestingly, these (outlier) countries have the least developed fibre networks, with just 10% of homes passed in Italy and 28% in Norway. Take-up rates have been more consistent in countries with well-established fibre networks (eg, Japan, South Korea, Sweden and Denmark), averaging 6-8% per annum. This was recognised in the NBN Implementation Study which noted that: 239

The more well established or widespread roll-outs show a more consistent picture. Japan, South Korea and the US had average annual take-up rates of 7-12 percent of homes passed over the last four years.


238 The information recorded in this table is based on data in provided in the NBN Implementation Study. See: Australian Government, Department of Broadband, Communications and the Digital Economy, National Broadband Network Implementation Study, pages 239-240.

481. Consistent with the experience of these countries, the NBN Implementation Study forecasts that annual take-up rates in Australia will average approximately 6-12% of homes passed in the early years of the NBN roll-out.\textsuperscript{240} However, the rate of take-up is expected to slow in later years.\textsuperscript{241}

482. Based on this forecast, the NBN Implementation Study estimates the total number of Australian premises that will be connected to the NBN by 2015, 2020 and 2035. These estimates are summarised in Table 16 below and are based on the following assumptions:\textsuperscript{242}

(a) Telstra’s CAN will continue to operate in competition with the NBN;
(b) the fibre footprint will cover 93% of Australian premises;
(c) 50% of premises in the fibre footprint will be covered by 30 June 2015;
(d) 100% of premises in the fibre footprint will be covered by 30 June 2020; and
(e) the total number of premises in Australia will grow at a rate of 1.25% (of existing premises) per annum.

\textsuperscript{240} Australian Government, Department of Broadband, Communications and the Digital Economy, \textit{National Broadband Network Implementation Study}, pages 174 and 252.

\textsuperscript{241} The NBN Implementation Study notes that:

“...take-up in the early years after an area is covered [by the NBN] is modelled to be at the higher end of the 6 to 12 per cent range observed in other fibre deployments. This slows, however, once penetration exceeds approximately 60 percent of the cohort.”


\textsuperscript{240} Australian Government, Department of Broadband, Communications and the Digital Economy, \textit{National Broadband Network Implementation Study}, Exhibit 4-40, page 252.
**Table 16: Estimated number of premises connected to the NBN**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER OF PREMISES (MIL)</th>
<th>% OF PREMISES IN FIBRE FOOTPRINT</th>
<th>NUMBER OF PREMISES IN FIBRE FOOTPRINT (MIL)</th>
<th>MINIMUM % OF PREMISES ACTIVATED</th>
<th>MINIMUM NUMBER OF PREMISES ACTIVATED (MIL)</th>
<th>MAXIMUM % OF PREMISES ACTIVATED</th>
<th>MAXIMUM NUMBER OF PREMISES ACTIVATED (MIL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>11.5</td>
<td>47%</td>
<td>5.4</td>
<td>31%</td>
<td>1.7</td>
<td>35%</td>
<td>1.9</td>
</tr>
<tr>
<td>2020</td>
<td>12.2</td>
<td>93%</td>
<td>11.4</td>
<td>54%</td>
<td>6.1</td>
<td>63%</td>
<td>7.2</td>
</tr>
<tr>
<td>2035</td>
<td>14.0</td>
<td>93%</td>
<td>13.0</td>
<td>75%</td>
<td>9.9</td>
<td>90%</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Source: Exhibit 4-40, NBN Implementation Study

243 The coverage and take-up rates set out in Table 16 above are expected to be achieved by 30 June in the relevant year.
483. As indicated in Table 16 above, the NBN Implementation Study forecasts that between 1.67m and 1.87m premises will be connected to the NBN by 2015. This represents 14 - 16% of all Australian premises and 31 – 35% of premises within the fibre footprint.

484. This means that, based on the most recent publicly available analysis of the NBN rollout, during the 4 year regulatory period, up to 16% of Australian premises would be disconnected from the CAN. This is likely to have a significant effect on demand for Telstra’s existing services, including dial-up internet, DSL and ADSL. In this regard, Access Economics has stated that: 244

The NBN will act to accelerate the substitution that is already occurring, from first wave fixed broadband services, such as ADSL, to faster second wave and, eventually, third wave solutions...

485. As noted above, the forecasts in the NBN Implementation Study are based on the assumption that Telstra’s CAN will continue to operate in competition with the NBN. The NBN Implementation Study recognises that, if the CAN is decommissioned, the rate of NBN take-up is likely to increase. The study notes that: 245

Existing services will be less affected by the roll-out of the NBN so long as Telstra continues to operate the copper CAN. However, if Telstra elects to deactivate the copper service – either because it becomes uneconomic to operate or it strikes a deal with NBN Co to migrate its traffic to fibre – then the NBN will become the only fixed-line communications infrastructure available to deliver those services (including to non-premises).

486. This would result in a significant increase in the number of premises activated in the early years of the NBN roll-out. 246

487. The analysis set out above indicates that, even on conservative assumptions (such as Telstra not progressing with its deal with the NBN, leading to slower migration), the impact on demand over the next 4 years would be significant, potentially in the order of 14-15% of total demand. In these circumstances, Telstra submits that any reasonable forecast of demand for the declared services must take into account (and reflect) reasonable assumptions about NBN migration and its impact on the use of Telstra’s CAN.

488. Telstra is currently undertaking detailed analysis of the likely impact of the NBN roll-out on its own demand forecasts for fixed line services.

5.5.6. THE SIGNIFICANT AND DETRIMENTAL IMPACT OF INACCURATE LONG TERM FORECASTS

489. Demand forecasts play a vital role in the BBM, being used to calculate unit prices for each declared service. That is to say, adopting an appropriate approach to demand forecasting is critical to ensuring the BBM complies with the statutory criteria governing pricing principles – including the legitimate business interests of Telstra and recovery of the direct costs of providing access to services.

490. Moreover, if incorrect demand forecasts are used, indicative prices will not reflect the efficient costs of providing the service and Telstra will not have the appropriate incentives to invest in new infrastructure. In this regard, the ACCC has itself recognised that: 247

Demand forecasts that overestimate demand may result in the access provider obtaining less than the required revenue. This may create a disincentive for the access provider to invest in

244 Access Economics, Telecommunications Spend and Demand in Victoria, June 2010, pages i-ii.
efficient infrastructure as the access provider is not assured that it will earn sufficient revenue to receive a reasonable commercial return.

491. Conversely, demand forecasts that underestimate demand may result in prices for individual services that exceed the access provider’s cost of providing those services.
5.6. The structure of prices

Outline

Telstra supports the proposed nationally-averaged structure of WLR, LCS and LSS (although it suggests that LSS should be dealt with inside the BBM/RAB process).

Telstra also agrees that the current two-part and geographically de-averaged pricing for PSTN OA and TA should be retained as these reflect the underlying cost structure (including IEN costs that vary by distance) and downstream retail pricing.

However the Draft Report maintains a different structure between WLR (averaged) and ULLS (de-averaged) which is inappropriate and not justified.

By maintaining a different price structure for WLR and ULLS, at the same time as proposing a substantial drop in the indicative price for WLR, the Draft Report and pricing principles would:

• give rise to substantial regulatory distortion, in the form of acute ‘cherry picking’ by access seekers taking advantage of the arbitrage opportunity between both prices, based on geography;

• result in significant under-recovery of costs by Telstra; and

• both highlight the continued underfunding of, and put at risk future funding of, USO obligations.

The only way to address these concerns is for the ACCC to implement a single, nationally-averaged ULLS price.

Recognising the importance of price stability and rebalancing in any transition, Telstra proposes a glide path to internally-consistent averaged pricing for ULLS over the next 4 years.

5.6.1. IMPORTANCE OF PRICE STRUCTURE

492. Price structure is a critical component of setting access prices. If prices are poorly structured, the prices arrived at will give the wrong signals, leading to allocative inefficiencies and distorted outcomes, while costs may not be properly recovered. Even if the prior stages of access price-setting were executed perfectly – including assessing the capital base and other costs, and allocating those costs – the value of this would be sacrificed by poor price structuring.

493. Similarly, price structures must take account of policy issues. Critically, today’s policy environment includes the rollout of the NBN with nationally averaged prices for wholesale services, and a focus on early rollout in regional areas.

(a) Prime Minister Gillard has said: "...we will ensure that every region – city and country – will pay the same uniform wholesale price."248

(b) Senator Nick Sherry has said: "The National Broadband Network will offer the benefit of uniform wholesale prices to end the difficulties with telecommunications and difference in price for regional Australia. Priority will be given to regional Australia as the NBN is built.”249

248 Prime Minister, Light on the Hill Address, 18 September 2010, Bathurst. See: http://www.pm.gov.au/node/6914
494. While regulation targets the achievement of both competition policy and social policy goals, there will be the possibility of conflict between these objectives. Such conflicts must be resolved in a way that meets statutory tests of the LTIE.

5.6.2. PRICE STRUCTURE FOR WLR AND LCS

495. The ACCC’s proposed structure of geographically averaged WLR and LCS are appropriate given averaged retail price regulation and the policy direction of NBN Co for uniform wholesale prices across the country. Telstra’s concerns regarding the contrasting treatment of WLR and LCS compared with ULLS are set out in detail in section 5.6.4 below.

5.6.3. PRICE STRUCTURE FOR LSS

496. While Telstra believes that LSS prices should not be calculated using a different cost methodology to that used for other PSTN services, the price structure proposed by the ACCC (i.e. nationally averaged pricing) is appropriate given averaged retail price regulation and the policy direction of NBN Co for uniform wholesale prices.

5.6.4. PRICE STRUCTURE FOR ULLS

497. Telstra submits that the ACCC has fundamentally erred in its Draft Report by proposing to continue to geographically de-average ULLS prices. Rather, it should have adopted averaged pricing nationally and indicated a glide path to that end over the next four years, rather than delay the commencement of a glide path.

498. There are four key reasons why nationally averaged ULLS pricing would be in the LTIE, and de-averaged prices would not be.

5.6.4.1. WHY ULLS PRICES SHOULD BE NATIONALLY AVERAGED

Nationally averaged WLR/LSS with de-averaged ULLS leads to cherry-picking

499. The “cherry picking” problem caused by a different approach to the structure of prices for ULLS (de-averaged) and WLR (averaged) has been pointed out by Telstra in previous regulatory processes. In the context of nationally averaged WLR and LSS prices, de-averaged ULLS prices create cherry-picking opportunities which skew the uptake of access in favour of ULLS in CBD and metro areas, and WLR/LSS in regional and rural areas.

(a) Access seekers would acquire ULLS in the areas where that is the cheapest option, largely being Bands 1 and 2 where the price is set well below the nationally averaged cost of $28.42 (as estimated by the Ovum BBM).

(b) Outside these areas, where the ULLS price is above the nationally averaged cost, access seekers would instead choose to compete via WLR/LSS, which the ACCC proposes to price on a nationally averaged basis, totalling $22.50.

(c) Thus, access seekers would continue to cherry-pick between the two, a distorted market outcome entirely induced by regulation.

500. The Draft Report makes the problem more acute and, at the same time, removes the primary justification for differentiating between ULLS and WLR/LSS.

250 See, for example, Telstra submission Response to ACCC’s draft pricing principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS dated 9 October 2010; Telstra’s Submission in Response to the ACCC’s Discussion paper in respect of ULLS, dated January 2006 at section E; and Telstra’s Submission in Support of the ULLS Monthly Charges Undertakings dated 23 December 2005 at section G.

251 Draft Report, page 102
501. The problem becomes more acute because the ACCC is proposing a substantial drop in the indicative price for WLR (to $20) which will magnify both the cherry picking and cost under-recovery effects of its inconsistent approaches to averaging.

502. At the same time, one of the primary justifications relied upon by the ACCC in the past for retaining a different structure between ULLS and WLR was that the pricing methodology used for WLR had been ‘retail minus retail cost’ ("RMRC"). Given that retail prices were subject to nationally averaged price controls, this was said to necessitate a similar nationally-averaged structure for WLR.

503. However, in the Draft Report the ACCC has argued that its draft indicative price for WLR is now cost based. While pricing for both WLR and ULLS are said to be based on underlying costs, which Telstra disputes, the ACCC has nonetheless kept different price structures in place. There is little attempt in the Draft Report to justify maintaining this very significant distinction, with the ACCC concluding only that, in relation to WLR:

Since retail prices are set on a nationally averaged basis, WLR prices were also set on a nationally averaged basis. In the absence of reliable geographically disaggregated cost data, the ACCC is unable to estimate cost-based de-averaged prices for WLR services. It does not have any existing de-averaged prices from which to determine relativities for de-averaging prices.

504. If the ACCC does not feel it has sufficient disaggregated cost information to de-average WLR prices, this should provide an even greater incentive for it to align the products by introducing averaged ULLS pricing and thus avoiding the systemic inconsistencies created by the proposed approach.

505. Further, the inconsistent averaging treatment of ULLS and WLR/LSS is exacerbated by the effect of exemptions that will apply from 1 January 2011. From this date, WLR lines across 146 CBD and metro ESAs will be exempt from the standard access obligations. These exempt areas reflect the lowest cost areas to serve, leaving the balance of regulated WLR lines in the higher cost outer suburban and regional/rural areas. As a result, the price that the ACCC proposes to apply to these lines does not reflect the average cost of serving those lines - even if all other aspects of the proposed cost methodology were accepted. Yet in parallel the ACCC proposes to apply de-averaged ULLS prices in those areas, resulting in an even greater misalignment between the averaged and de-averaged prices, exacerbating distortions and cost under-recovery (explained below).

**Cherry picking will lead to under-recovery of costs by Telstra**

506. Second, because of the consequential and inevitable distortion, it is not possible for Telstra to achieve overall cost recovery, contrary to its legitimate business interests.

(a) The under-recovery of costs in Bands 3 and 4, exacerbated by skewed uptake of WLR/LSS in those areas, is not offset by uptake in urban areas where the nationally averaged price exceeds cost, because uptake of WLR in such areas is displaced by ULLS uptake at de-averaged prices that fall well below average cost.

(b) As noted above, this effect is even greater if, as the ACCC proposes, WLR prices are reduced to $20, because the level of cost recovery overall is further compromised.

(c) Cost recovery is yet further compromised by the price constraints arising from low retail prices set downstream of low-priced ULLS in bands 1 and 2. Even where WLR

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252 See Draft Report, page 103.
254 Draft Repoort, page 53.
255 In any event, there are good reasons to maintain averaged pricing for WLR; see Telstra, *Response to ACCC’s draft pricing principles and indicative prices for LCS, WLR, PSTN OTA, ULLS, LSS* dated 9 October 2010 at section F.1.
and LCS exemptions are (or are soon to be) effective in those areas, Telstra is unable to 'make up' any cost recovery because the market price of WLR is constrained by the availability of a cheap substitute in ULLS and ongoing declines in WLR usage due to de-averaged ULLS pricing in those areas means that cost recovery across all PSTN lines in those areas is compromised.

5.6.4.2. THE ACCC’S REASONS FOR DE-AVERAGING

507. In proposing geographically de-averaged ULLS prices, the ACCC has put forward the following reasons:

(a) That averaged prices departs from underlying cost, distorting allocative efficiency, especially because cost differences across areas are large; and

(b) That ULLS viability would be harmed in urban areas, likely leading to inefficient bypass.

508. These reasons are misconceived and do not constitute a proper basis for a decision to geographically de-average ULLS prices.

Efficiency will not be harmed by averaging

509. While averaged prices inevitably depart from disaggregated underlying costs, it is not correct to conclude that overall efficiency will be harmed as a result. In fact, efficiency (including allocative efficiency) is more harmed by the ACCC’s proposed prices, which skew the uptake of ULLS services relative to WLR/LSS/LCS services and create the distortions outlined above which prevent total cost recovery.

ULLS viability will not be harmed by averaging, nor will inefficient bypass result

510. The ACCC asserts that averaged ULLS pricing would harm ULLS viability in urban areas, and is likely to lead to inefficient bypass. However, there is no evidence before the ACCC to suggest that at a nationally averaged ULLS price of $28.42256 ULLS-based provision of services in urban areas would become unviable – or that it would encourage inefficient alternative investment.

511. To the contrary, the evidence suggests that urban ULLS generates healthy margins and would be robust enough to withstand nationally averaged pricing. Telstra has previously submitted extensive evidence of the profitability of ULLS acquirers at a $30 price point for Band 2, showing EBIT margins of over 40%.

512. The finding that an averaged ULLS price would risk bypass is inconsistent with the earlier proposition in the Draft Report: that the low likelihood of network bypass is a factor supporting the move from TSRIC+ to a BBM.

(a) Moreover, there is no evidence cited by the ACCC to support the assertion that averaged ULLS prices would result in the rollout of alternative networks in urban areas. On the contrary, the ACCC is aware of at least the following matters which suggest quite the opposite. The Government has announced the rollout of the NBN to pass 90% of Australian homes and businesses with fibre-to-the-premises, effectively

257 See Telstra’s Ordinary Access Undertaking for the Unconditioned Local Loop Service: Response to the ACCC’s Draft Decision, 23 December 2008 at Attachments 1 and 2; Telstra’s Ordinary Access Undertaking for the Unconditioned Local Loop Service: (Band 2): Response to Optus and iiNet Submissions on Profitability Analysis, 11 March 2009; and Telstra’s Ordinary Access Undertaking for the Unconditioned Local Loop Service: Response to Access Seeker Submissions on the ACCC’s Draft Decision, 1 April 2009 at section D.1.
heralding a new customer access network monopoly. To the extent that any participant may have contemplated network bypass, the NBN announcement makes such investment less likely than ever.

(b) Significant ULLS-based investment in urban areas has already occurred. Much of that investment is likely to have already been fully depreciated.

(c) Urban areas are already served by competing infrastructure capable of offering telephony, broadband and video services. In addition to Telstra’s copper network, three or more high-speed wireless networks, and the impending NBN, over 2.5 million urban homes are also passed by one or more HFC cable networks. Given this, it implausible that any operator would expend the standalone cost of a bypass network for the reason that urban ULLS prices were increased to national average cost.

5.6.4.3. GLIDE PATH ARRANGEMENTS

513. Telstra submits that the above arguments make a strong case for nationally averaged ULLS pricing. Given that prices are presently de-averaged, Telstra further submits that it would be appropriate for the ACCC to put in place glide path arrangements to transition to averaged pricing within four years.

5.6.4.4. SUMMARY – ULLS PRICE STRUCTURE

514. In short, the current and proposed ULLS price structure fails to correct harmful distortions. It does not consider the impact of the ULLS price structure alongside the price structures for potential substitutes, such as WLR/LCS/LSS, and take into account the likely effect of the combination of prices it has proposed. One such effect is that Telstra’s legitimate business interests are not properly taken into account, since the prices as structured represent a systemic failure to allow cost recovery.

515. Had the ACCC properly taken these relevant considerations into account it would have arrived at an averaged price.

5.6.5. PRICE STRUCTURE FOR PSTN OA AND TA

516. Telstra agrees with the ACCC’s approach in relation to PSTN OA and TA (“PSTN OTA”) pricing, that is, it agrees that the current two-part and geographically de-averaged pricing should be retained as these reflect the underlying cost structure (including IEN costs that vary by distance) and downstream retail pricing.

517. A two-part price should be maintained because it gives stability, having been a feature of the commercial and regulatory landscape since competition was introduced. It enables prices to mirror cost structures by recovering fixed costs (by flagfall) and variable costs (by per minute charges) accordingly.

518. In particular, three types of fixed costs of PSTN OTA are recovered through a flagfall:

(a) fixed IEN costs such as trenching, conduits, buildings and cables;
(b) a proportion of per-call costs that are incurred regardless of whether the call is successful or its duration. These include call set up and call ring out time; and
(c) a proportion of per-call costs that are fixed and insensitive to call duration such as call tear down costs.

519. Recovery of these costs via a flagfall encourages wholesale customers to efficiently utilise the network. In an environment of declining PSTN traffic values, it is more efficient to incent
users to grow traffic minutes through lower variable charges. A two part tariff approach is generally recognised as international best practice and is supported by the OECD. 259

520. Geographic de-averaging is also appropriate because:

(a) IEN costs vary demonstrably by distance due to density, terrain and network topology; and

(b) retail services downstream of PSTN OTA (other than local calls) are not necessarily priced on a nationally averaged basis but can be based on charges that are more reflective of geographic differences.

521. It is therefore appropriate to retain de-averaged prices in line with cost structures, which vary between different geographic areas. In particular, the costs between urban and rural areas differ for the following reasons:

(a) switching stages –switching costs increase with the number of exchanges included in a route and the costs of switching equipment. 260 The best proxy for switching costs is the number of network elements required to provide the PSTN OA and TA service to and from the interconnection points. The call charging areas (“CCA”) structure cannot be relied on to average out PSTN OA and TA costs. Included as Confidential Schedule 11 is a table which describes the geographic make up of each of the 66 CCAs in Australia. It shows that a majority of the CCAs are made up entirely of rural and remote exchanges. Just 15 CCAs have exchanges in all four bands. The CCA structure therefore cannot be relied on to smooth out PSTN OA and TA cost differences between regions. PSTN OA and TA calls originating or terminating in those CCAs with regional only exchanges will be required to pass through a greater number of switching stages to reach the point of interconnection – with the consequent increase in costs;

(b) line lengths – the second key costs driver is transmission costs, made up of trenching costs and transmission equipment costs.261 Distance between customers and exchanges (line lengths) is the most significant factor influencing transmission costs. There are large differences in population and density across Australia. As Confidential Schedule 11 shows, there are almost 42,000 times more SIOs per square kilometre in Band 1 than there and in Band 4 and more than 3000 times more SIOs per square kilometre in Band 2 than there are in band 4.262 Line lengths are therefore much longer in rural areas than urban areas, making rural costs higher; and

(c) less traffic demand – there is less traffic volume in rural areas, with a significant effect on unit costs (traffic demand is in effect, the cost denominator). Table 17 below demonstrates that the CBD and metropolitan charging zones have a significantly higher volume of traffic per SIO than do the provincial and rural charging zones.

259 See OECD, Working Party on Telecommunication and Information Service Policies., Interconnection and Local Competition 7 February 2001 at page 22 and see also OPTA, Consultation document, Tariff regulation for interconnection and special access services, The introduction of a new regulatory concept, 21 December 2000, at pages 28 – 29. An alternative approach to a two part tariff, adopted in New Zealand to achieve a similar effect, is a minimum chargeable call duration, which clearly promotes the recovering of fixed costs. NZCC, Determination on TelstraClear Application for Determination for Designated Access Service, Decision 477, 5 November 2002, p 21-22.


262 Telstra’s SIOs per square kilometre in each band is set out in Confidential Schedule 11.
Table 17: Traffic minutes per SIO in each band as at October 2010

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>METRO</th>
<th>PROVINCIAL</th>
<th>RURAL</th>
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<tbody>
<tr>
<td>Average traffic</td>
<td>175%</td>
<td>100%</td>
<td>60%</td>
<td>57%</td>
</tr>
<tr>
<td>per SIO relative to</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>metropolitan</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>charging zone</td>
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(d) network topology - costs will further vary due to differences in the efficient network topography between regions. For example, due to the greater distances calls must transit between the end user and a PoI in rural/regional areas, different network designs (such as the use of SDH transmission rings) are used to ensure network integrity. As a result, impact of distance on cost is higher in rural areas than urban areas where rings are shorter.

522. The extent of these regional cost differences is demonstrated by the data in Table 18, which is based on TSLRIC+ costs analysis undertaken for the PIE II model. It shows that remote and rural areas account for more than the costs but these areas account for only just over of total PSTN OA and TA minutes.

Table 18: Traffic and cost distribution

<table>
<thead>
<tr>
<th>CHARGING BANDS</th>
<th>PSTN OA AND TA TRAFFIC DISTRIBUTION (ACTUAL FOR 2009 / 10)</th>
<th>ESTIMATE OF THE COST DISTRIBUTION FROM PIE II</th>
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<tbody>
<tr>
<td>CBD</td>
<td>5%</td>
<td>[c-i-c commences]</td>
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<tr>
<td></td>
<td></td>
<td>[c-i-c]</td>
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<tr>
<td>Metro</td>
<td>73%</td>
<td>[c-i-c commences]</td>
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<tr>
<td></td>
<td></td>
<td>[c-i-c]</td>
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<tr>
<td>Provincial</td>
<td>13%</td>
<td>[c-i-c commences]</td>
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<tr>
<td></td>
<td></td>
<td>[c-i-c]</td>
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<tr>
<td>Rural</td>
<td>9%</td>
<td>[c-i-c commences]</td>
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<td></td>
<td>[c-i-c ends]</td>
</tr>
</tbody>
</table>

5.6.5.1. ADVERSE IMPACTS OF AVERAGING

523. Averaged PSTN OA and TA prices would have adverse impacts on the LTIE.

524. Such interconnection prices will send incorrect signals about the costs of PSTN OA and TA, especially in non-metro areas as calls that transit longer than the average distances (typically rural) are subsidised by calls over shorter transit links than the average (typically metro).

525. Further, wholesale customers will obtain a windfall gain in respect of calls terminating in rural areas, which will be exacerbated by adopting deaveraged prices for ULLS. This is because wholesale customers can bypass Telstra’s network by cherry picking cheap ULLS costs in urban areas whilst acquiring PSTN TA in rural areas (to provide long distance rural services to metro end-customers) at averaged prices that are lower than the true costs of providing those services, in essence achieving a double benefit. Further, Telstra will be impacted at...
the retail level because as rural origination prices fall, corresponding long distance retail prices will fall and Telstra will be required to lower its retail costs further, eroding its ability to recover costs.

5.6.5.2. A 1.1CPM HEADLINE RATE FOR THE PSTN OA AND TA SERVICES SHOULD BE ADOPTED

526. A 1.1cpm headline rate (with the current pricing structure) should be adopted for the following reasons:

(a) it would be consistent with current pricing and the long held structure of prices in the market; and

(b) it would appropriately recognise the decline in traffic volumes which has an upward pressure on prices.

5.6.5.3. OPTUS’ LETTER TO THE ACCC IS MISCONCEIVED

527. The concerns raised by Optus in its letter to the ACCC of 23 September 2010 regarding the PSTN OTA rate structure are unfounded.

528. First, it is not that case that the traffic mix by band has altered significantly since 2003-04. The overall mix of total PSTN OA and TA traffic has remained remarkably stable over time, notwithstanding the overall decline in PSTN minutes.

Table 19: PSTN OA and TA traffic distribution across bands 2002-03 to 2010-11

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<th>02/03</th>
<th>03/04</th>
<th>04/05</th>
<th>05/06</th>
<th>06/07</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
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<td>CBD</td>
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<td>Metro</td>
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<td>Provincial</td>
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529. Optus’ own traffic mix will, of course, be the product of its business model (in particular its skewed uptake of ULLS in urban areas). But this should not be confused with the industry mix. Nor is Optus’ traffic mix relevant to Telstra’s overall network cost recovery.

530. Neither has the shift from fixed to mobile altered the overall mix of PSTN OA and TA traffic by band. It has obviously led to a decline in overall volumes of PSTN traffic, but that reduction in volume serves to increase the unit cost (all other things being equal).

531. Optus is also incorrect in its assertion that average call holding times for traffic originating and terminating on Telstra’s PSTN have fallen with increasing migration to mobile. We note that Optus does not proffer any call time data on this point, nor attest to any of the particular scenarios it posits, but merely asserts that holding times are “closer to or below” 3 minutes not 4 minutes.
532. This is not representative of the PSTN OA and TA overall, however. In keeping with the ACCC’s stated approach, Telstra has calculated the average call holding time across local calls, STD, fixed-to-mobile and external wholesale minutes (but excluding ISDN and dial-up internet minutes). Based on total PSTN calls and minutes in the year ending June 2010, Telstra’s average call duration across these traffic classes, as recorded in RAF data, was 4 minutes, in line with the ACCC’s assumptions.

533. Accordingly, in terms of both traffic mix across the bands and average call holding times, Optus’ assertions of fact are demonstrably incorrect. As a result, the ACCC has no basis or reason to adjust the rate table structure as proposed by Optus for PSTN OTA. On the contrary, given that the key metrics have remained relatively consistent since 2003-04 the ACCC can have considerable confidence in setting de-averaged PSTN OTA prices based on these assumptions for the regulatory period.

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263 The call classes to be included are in line with the ACCC’s approach: see ACCC letter to Telstra dated 7 October 2010, which notes at the Attachment that for PSTN OTA “actual traffic volumes were obtained from the RAF. They include retail call, domestic and international long distance, fixed to mobile minutes and external wholesale minutes, but exclude ISDN and dial-up minutes.” Note also that in ACCC, Assessment of Telstra’s undertakings for PSTN, ULLS and LCS, Final decision, December 2004 at page 31 the ACCC took an incusive view by including capped local calls in the traffic profile.
5.7. Building a BBM – implementation issues and alternatives

Overview

- The Draft Report appears to Telstra to proceed on an assumption that indicative prices set over a longer (4-year) “regulatory period” will provide regulatory certainty and price stability.
- Telstra is concerned that, given the high degree of uncertainty surrounding the operation of the BBM and the manner in which key inputs (including demand forecasts, capital and operating expenditure and WACC variables) will be determined, trying to set indicative prices for such a long period will lead to an increase in the number of access disputes.
- Telstra therefore encourages the ACCC to use the opportunity offered by industry consensus around a BBM, to do more than just set indicative prices. The scheme of s.152AQA and recent practical experience show that pricing principles, and not indicative prices themselves, are the best means of providing certainty and stability for industry. This is even more so in an environment, like the present, that is highly uncertain and dynamic.
- Currently, the draft Pricing Principles Determinations set out in the Draft Report do not provide guidance to Telstra or the rest of the industry about the operation of, or what is meant by, a BBM.
- While the Ovum BBM published with the Draft Report is useful, it is essentially a cost allocation and price setting macro that remains dependent on the quality of inputs and a number of significant assumptions.
- The Draft Report has no formal role to play under s.152AQA and, in any event, does not establish principles around a range of key issues, other issues are not discussed or are left for later consultation processes (such as demand forecasts, efficiency mechanisms and capital and operating expenditure) and on other issues, the Draft Report is subject to material errors and inconsistencies (discussed in Section 4 of this Response).
- As a practical matter, Telstra is concerned that the proposed use of Record Keeping Rules to compel provision of demand and expenditure forecasts is unnecessary and impractical and will result in information arrangements that are inflexible over time.
- To avoid these issues, Telstra recommends that the ACCC adopt an approach to implementation of a BBM that involves the following elements:
  - **Re-framing the Pricing Principles so that they adopt a fully developed BBM framework** which offers a clearly defined, predictable and flexible mechanism for periodically updating indicative prices over time.
  - **Setting out the initial RAB value and other key elements of the BBM in an access code under s.152BJ.** Provided that the ACCC’s approach promoted price stability, Telstra would commit to adopting the code in an OAU, which would then ‘lock in’ the BBM features and mechanism for the entire period of transition to NBN (or until it was transitioned to an Access Determination, if the C&CS Bill is enacted).

To highlight what is meant by this, Telstra has developed a fully worked BBM Working Proposal which borrows from the building block arrangements used for electricity transmission and distribution networks under the NEL. Telstra offers this as a starting point for establishing a BBM framework which is capable of being adopted by Pricing Principles under s.152AQA and which would potentially transition well to an Access Determination with fixed principle provisions if the C&CS Bill is enacted.

An Access Code/OAU approach would achieve the maximum degree of regulatory certainty possible under the existing Part XIC provisions.
5.7.1. TELSTRA SUPPORTS THE HIGH LEVEL BBM STRUCTURE

534. Telstra agrees with the ACCC and industry that a properly functioning BBM would achieve the objective of greater regulatory certainty around the value of the CAN and IEN and would reduce price instability.

535. Telstra also agrees with the high level BBM/pricing approach adopted in the Draft Report, to the extent that it proposes the following:264

(a) an opening RAB value is ‘locked in’ and rolled forward from year to year (to reflect capital expenditure, depreciation and asset disposals/impairments during the year);
(b) the aggregate revenue requirement for the regulatory period is determined by applying a return on capital to the RAB value and making allowances for depreciation, operational expenditure and tax during the period;
(c) this aggregate amount is then allocated across individual fixed line services using agreed cost allocation factors; and
(d) the amounts for each service are then divided by total demand for the service to generate an average unit price of the service.

536. Telstra’s concern is that the draft Pricing Principles and Ovum BBM do not effectively implement this vision. As a result, while the various elements above are discussed in the Draft Report (and included in some form in the Ovum BBM), the Pricing Principles do not establish a BBM framework capable of achieving the objective of certainty, predictability and price stability.

5.7.2. THE ACCC’S APPROACH TO IMPLEMENTING A BBM

537. The ACCC’s approach to implementation of a BBM as set out in the Draft Report comprises the following elements:

(a) the Draft Report – which, while it has no formal or binding role in relation to the pricing principles under s.152AQA, provides high level commentary and justification for input values, approach and pricing outcomes in the Ovum BBM.

Amongst other things, the role and purpose of the Draft Report is ambiguous. Is the Draft Report intended only as a means of explaining the draft pricing principles and indicative prices or is a final version of the report still intended to replace Access Pricing Principles – Telecommunications: a guide, which has been used by the ACCC in guiding its approach to pricing principles since 1997? Telstra notes that this seemed to be the intention behind the discussion document released in December 2009, but it is no longer clear from the Draft Report whether this is still the case.

(b) a draft Pricing Principles Determination for each declared service – this is the draft determination to be made under s.152AQA and, to the extent that it deals with the BBM, it offers only a single sentence:265

“the price for [ULLS/WLR/OTA/LCS] should be determined on the basis of a building block model.”

The term ‘building block model’ is not defined with reference to the Ovum BBM or any other specific model.

(c) Ovum BBM – this is a combined roll-forward, cost allocation and pricing macro (in the form of an Excel spreadsheet) which the ACCC has published alongside the Draft Report. It includes a number of allocators, price structures and is based on a range of

265 Telstra notes that this reference is not included in the Pricing Principle Determination for LSS, given that the ACCC proposes that it not be included in the RAB or building block approach.
assumptions, but remains entirely dependent on the input data (i.e. initial RAB, forecasts etc). It does not include any explanation or justification of the approaches or assumptions adopted.

(d) Record Keeping Rules ("RKRs") – the ACCC has indicated in the Draft Report that it intends to consult separately on RKRs to be used to compel Telstra to submit relevant forecasts of demand, capital expenditure and operating expenditure for use in the BBM in subsequent periods.

538. These elements are primarily directed towards calculating (and justifying) certain indicative prices to apply for the period from 1 January 2011 to 31 December 2014. However, Telstra submits that the setting of indicative prices will not, of itself, promote regulatory certainty and price stability. Rather, a more important issue is whether the proposed Pricing Principles (and associated BBM) provide:

(a) a transparent, predictable and well understood mechanism for rolling forward the RAB and allocating and determining allowable revenues and prices; and

(b) for prices and/or revenues to be updated at regular, consistent and defined intervals (ie, regulatory periods), without reliance on access disputes and asset revaluations.

539. For the reasons set out below, Telstra is concerned that the draft Pricing Principles (and Ovum BBM) do not satisfy these requirements and will therefore not achieve regulatory certainty or price stability in the medium to long term.

5.7.3. THE PROPOSED IMPLEMENTATION APPROACH INCREASES THE RISK OF ACCESS DISPUTES

540. The ACCC has proposed that indicative prices be set for an initial period of four years from 1 January 2011 to 31 December 2014, on the apparent view that this will provide regulatory certainty and price stability over this period.\(^{266}\)

541. However, as the ACCC will appreciate, indicative prices of themselves do not provide any degree of regulatory certainty. At most, they provide a view of how the ACCC thinks its Pricing Principles should be applied at a particular point in time. In the current environment, there are some significant problems caused by seeking to implement a BBM in this way:

(a) As noted in sections 5.3 and 5.5, Telstra does not produce robust internal expenditure or demand forecasts over four year periods. In addition, given the highly uncertain and volatile nature of the telecommunications sector, Telstra considers that it is not possible for the ACCC (or access seekers) to provide reliable forecasts beyond 2011-12. In the Draft Report, the ACCC itself recognised that, there is currently a “high level of uncertainty around the telecommunications environment and the legislative framework for telecommunications.”\(^{267}\) The ACCC further noted that, as a result of this uncertainty, there is a risk that forecasts set at the start of the four year regulatory period “will be incorrect and distort prices throughout the regulatory period”.\(^{268}\) Telstra agrees with this concern.

Notwithstanding its stated concerns in relation to the accuracy of forecasts prepared 4 years in advance, the ACCC has, nonetheless, prepared forecasts for the full regulatory period. Telstra is concerned that these forecasts are likely to prove unreliable over the regulatory period as, among other things, they do not account for the likely impact of the NBN roll-out on Telstra’s CAN and IEN.\(^{269}\)

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\(^{266}\) Draft Report, page 50.

\(^{267}\) Draft Report, page 52.

\(^{268}\) Draft Report, page 46.

\(^{269}\) This issue is dealt with in more detail in sections 5.3.1 and 5.5.4 of this Response.
(b) The Draft Report makes clear that pricing outcomes generated by the Ovum BBM are “highly sensitive” to the inputs used, including forecast operating expenditure, forecast demand, the WACC variables and allocators.\(^{270}\) As a result, the reliability of the forecasts used in the BBM will have a direct impact on the accuracy of indicative prices.

(c) Faced with outdated indicative prices, the industry would have little choice but to resort to a further cycle of multiple price arbitrations in order to determine regulated pricing for declared services.\(^{271}\)

(d) The Draft Report acknowledges that, in arbitrating an access dispute, the ACCC could not simply adopt the indicative prices set at the start of the regulatory period. Rather, the ACCC would have to re-assess the assumptions and data underpinning the indicative prices, including taking into account the then current state of expenditure, demand and other factors (such as the appropriate cost of capital etc).\(^{272}\)

However, it is not clear from the Draft Report how any pricing determinations made in the context of an access dispute would affect the indicative prices determined at the start of the regulatory period. In particular, the Draft Report does not indicate whether the ACCC proposes to use pricing determinations made in the context of access disputes during the regulatory period to update the indicative prices and, if so, whether these would apply only for the remainder of the regulatory period or for a further, as yet undefined, timeframe.

542. Put plainly, for the reasons set out above, Telstra considers that the indicative prices proposed by the ACCC will become out-of-date well before the expiry of the four year regulatory period. As a result, the ACCC’s proposed approach risks the industry becoming mired again in years of arbitration and regulatory uncertainty, without any clear or predictable mechanism for understanding how indicative pricing should change through time.

543. This would defeat the purpose of both the indicative prices themselves and, more fundamentally, the objective behind introducing a BBM. In a very real sense, despite the high hopes invested in this approach over the last 12 months or more, the approach to implementation proposed by the ACCC would mean that the unsatisfactory state of Australian price regulation for fixed line services would be back where it had started.

5.7.4. **THE LENGTH OF THE REGULATORY PERIOD IS UNCERTAIN**

544. Even in the absence of access disputes, there is a high likelihood that the indicative prices will not last the distance. The ACCC has recognised that it may be necessary to review the indicative prices during the initial four year regulatory period, stating:\(^{273}\)

> The ACCC is of the view that there should be scope for a review of the Pricing Principles Determination within a regulatory period.

545. To this end, the access provider and access seekers may also request a review of the indicative prices “at any time” during the initial regulatory period.\(^{274}\) According to the Draft Report:\(^{275}\)

> There is no proposed limitation as to the nature of the events that could give rise to a review of the Pricing Principles Determinations, although the events should be exceptional and unanticipated.

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\(^{270}\) Draft Report, page 56.

\(^{271}\) Under s.152CM of the *Trade Practices Act 1974* (Cth), an access seeker or Telstra may notify an access dispute to the ACCC at any time.

\(^{272}\) Draft Report, page 12.

\(^{273}\) Draft Report, page 49.

\(^{274}\) Draft Report, page 50.

\(^{275}\) Draft Report, page 50.
546. The ACCC has identified a range of events or factors which, in its view, are likely to justify review of the pricing principles determinations during the regulatory period. These include unexpected changes in capital expenditure, operating expenditure or demand forecasts, legislative or regulatory reforms and natural disasters or other events that were not taken into account in setting indicative prices.

547. However, although the Draft Report identifies the grounds on which a review may be sought, it provides little detail as to how such a review will be conducted and/or how it will affect current and future indicative prices. In addition, it is not immediately clear what aspect of the determination would be reviewed. For example, will the ACCC review all, or only some, components of the Ovum BBM and the approach set out in the Draft Report? Will the ACCC issue new indicative prices? If so, will these indicative prices apply for the remainder of the initial regulatory period or some other undefined period?

548. The ACCC has also indicated that it may of its own motion periodically review specific elements of the BBM, such as demand forecasts. In this regard, the Draft Report states:276

   The ACCC may also consider implementing a regular review of the forecast demand. This would ensure that prices could be adjusted if forecast demand were to differ significant from actual demand. Forecasts could be revised annually if there is a significant difference between actual and forecast demand in the previous year. Indicative prices may then be adjusted according to the revised forecasts.

549. Again, there is no detail around how the ACCC sees this process working. The Draft Report does not indicate whether (and, if so, how) the revised demand forecasts will be reflected in indicative prices or what threshold would need to be met before it could be said that there was a ‘significant difference’ between actual and forecast demand.

550. Taken together, these various references highlight that not only is there no real certainty provided in relation to the operation of the BBM itself, there is also no certainty around the period that indicative prices will remain in place and how regulatory periods will operate moving forward.

5.7.5. THE DRAFT PRICING PRINCIPLES DO NOT ESTABLISH A BBM

551. Leaving aside uncertainties associated with the regulatory period, Telstra is equally concerned that the substance of the ACCC’s proposed BBM itself remains incomplete and extremely uncertain.

552. By its own admission, the Ovum BBM is not a BBM framework but a cost allocation and pricing mechanism, entirely dependent upon the principles and assumptions that underlie the input data. The operations handbook prepared by Ovum and published with the BBM makes the following observations:277

   The model has a building-block design to allocate capital charges and operating costs and overheads to services and hence calculate prices for declared wholesale services. The ACCC’s 2010 access pricing principles for fixed line telecommunications services describes the way the building block model is to be implemented. Sources of the data used in the model will also be discussed by the ACCC.

   ... The user must provide a complete dataset in order for the model to provide correct results.

553. The draft Pricing Principles Determinations themselves merely state that prices should be set by reference to a “building block model” – a term which is not defined. This expression is so general that it allows for very significant changes in the framework to take place over time.

276 Draft Report, page 46
Indeed, it would allow the ACCC scope to substitute an entirely new BBM for the Ovum BBM through which it has calculated the indicative prices. In short, a Pricing Principle Determination in this form gives the ACCC nothing of substance to have regard to when determining an arbitration.278

554. The ACCC itself acknowledges the limitations of the Pricing Principles Determinations, stating:279

The ACCC must have regard to a Pricing Principles Determination if it is required to arbitrate an access dispute in relation to a relevant declared service. However, the pricing principles are not binding on the ACCC, and parties to arbitrations are still able to address the ACCC on the relevance and applicability of the relevant Pricing Principles Determination, having regard to their particular circumstances. The ACCC considers that, although a party may argue against the relevant Pricing Principles Determination being applied to its particular case, it may help guide the commercial negotiation of access by providing greater certainty about the ACCC’s views on reasonable access prices.

555. Moreover, the Draft Report does not provide certainty around the methodology or principles that would be applied by the ACCC in an access pricing dispute, in that:

(a) **The Draft Report is silent on a number of crucial issues, or leaves them for later consultation processes.** It is not possible for stakeholders to properly assess the merits of the BBM unless it is consulted upon as a single and unified package. The fact that significant issues such as the nature of demand or expenditure forecasting have been left to later consultation processes undermines the ability of Telstra and other stakeholders to respond to the approach proposed in the Draft Report – given how reliant the Ovum BBM is on the validity of input data.280

Indeed, to the extent that the ACCC’s proposed approaches to demand, capital expenditure and operating expenditure are central to understanding what the ACCC means by ‘building block model’, and therefore the fundamental element of the Pricing Principles Determinations, Telstra submits that the ACCC is in fact required by s.152AQA to consult on these aspects prior to finalising its principles.281

(b) **On other important issues raised in the Draft Report, no clear principles are offered.** There are a number of issues where it is not clear what is being proposed or the ACCC intends to apply the principles in the context of a BBM. For example:

- The ACCC acknowledges that forecast data will be obtained from Telstra (through an RKR or otherwise) at a later time, but does not make clear whether or not the indicative prices will then be updated to reflect this improved data.

- The Draft Report suggests that a mixture of ex ante, ex post, pass through and process mechanisms will all be used in combination to assess the efficiency and prudence of Telstra’s CAN and IEN capital programs. However, there is no indication how any of these efficiency mechanisms will be designed, will interrelate with each other or be applied over the proposed 4-year period.

- The Draft Report acknowledges that the NBN will impact numerous parts of the BBM fundamentally, but then does not provide any guidance on the principles that the ACCC intends to use to update the BBM or indicative prices to reflect NBN outcomes.

278 Under s 152AQA(6) of the *Trade Practices Act 1974* (Cth), the ACCC must, in arbitrating an access dispute in relation to a declared service, have regard to any pricing principle determination applying to that service.


280 In this regard, Telstra notes again that the Draft Report acknowledges that the model is highly sensitive to both operational expenditure and demand forecasts. See Draft Report, page 56.

281 Telstra notes the obligation to consult on the determination. See *Trade Practices Act 1974* (Cth), s 152AQA(4).
- The Draft Report indicates that the ACCC may review the indicative prices and/or specific elements of the BBM during the regulatory period, but does not explain how this review will be conducted.

(c) **On a number of issues, those principles that are set out in the Draft Report and Ovum BBM are internally inconsistent or based on factual errors.** See Section 4 above.

556. At most, the Draft Report indicates that the ACCC intends to undertake further consultation in the future in relation to RKRs that the ACCC proposes to use in order to obtain demand forecasts and capital and operating expenditure forecasts from Telstra, and the assumptions underlying those forecasts.282 However Telstra doubts that the terms or outputs of an RKR (or related process) are matters which the ACCC would be bound to consider in determining any future access dispute.

557. All of this means that, while the Ovum BBM contains a number of the same essential components as price setting mechanisms in other industries, neither the draft Pricing Principle Determinations establish a building block model, as that concept is understood and applied in those sectors.

558. A comparison of the ACCC approach and the NEL building block framework highlights the number and significance of the shortcomings with the proposed BBM. For example, in the energy sector, the NER establish a detailed framework for determining the amount of revenue that may be earned by an electricity distribution or transmission service provider in any year (Annual Revenue Requirement or “ARR”).283

559. Under this framework, a building block model is used to determine the ARR for each year of the regulatory period, applying the same elements identified by the ACCC in the Draft Report, namely:284

(a) the value of the RAB;
(b) a return on capital;
(c) an allowance for depreciation;
(d) an estimate of the cost of corporate income tax; and
(e) a forecast of operating expenditure.

560. These building blocks are then aggregated and used as inputs in the PTRM to determine an ARR for each year of the regulatory period. The PTRM was developed by the AER in June 2008 and consists of:285

...a set of Microsoft Excel spreadsheets that perform iterative calculations to derive an ARR and X factors for each regulatory year of the regulatory control period from a given set of inputs. The PTRM allows the user to vary the inputs to assess their impact on revenues, X factors and other derived parameters.

561. However, unlike the Ovum BBM, the PTRM is only one part of a complete building block framework which governs how inputs are calculated and assessed and what information requirements and processes apply.

562. Telstra also notes that the Ovum BBM appears to be considerably more complex than the PTRM used by the AER in the energy sector. The Ovum BBM appears to comprise

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282 Draft Report, pages 39 and 41 (capital and operating expenditure) and 45 (demand).
283 National Electricity Rules, Chapters 6 and 6A
284 National Electricity Rules, Clauses 6.4.3 and 6A.5.4
approximately 5,000 lines of code, compared with the approximately 500 used for the the PTRM and it does not appear that the PTRM was used, in any meaningful sense, as the basis for the Ovum BBM. In this regard, KPMG have noted:286

Within its Draft Report, the ACCC commented that in designing the Ovum-BBM model, “Ovum was also required to have regard to the AER’s PTRM and to ensure the model is tailored to the telecommunications industry”. Based on our preliminary examination of the Ovum-BBM model, although the model does implement a “post-tax approach”, it is in no way a replication of the PTRM code. Following several years of usage and industry consultation, the PTRM is now a widely understood and accepted model. The Ovum-BBM model code and structure is significantly different to the PTRM, and as such the level of robustness and reliability attributed to the PTRM should not automatically be attributed to this model.

563. Telstra has set out in Schedule 6, a high level comparison of the BBM implementation approach proposed in the Draft Report, alongside the provisions of the NER and Telstra’s own BBM Working Proposal. As that schedule illustrates, the approach to BBM implementation in the Draft Report is incomplete, lacks specificity and does not reflect what Telstra (or presumably the rest of industry) had in mind when they supported the prospect of a comprehensive BBM framework, of a similar kind to that established and operating in electricity and gas markets.

5.7.6. IS AMENDMENT OF PART XIC REQUIRED TO ESTABLISH A BBM?

564. Telstra is confident that the ACCC does not require legislative amendment of Part XIC in order to establish a BBM framework that delivers improved regulatory certainty around the issues set out above.

565. That said, it would be appropriate and sensible for the BBM principles to be in a form that transitions well to an Access Determination, in the event that the proposed Telecommunications Legislation Amendment (Consumer and Competition Safeguards) Bill 2009 (“C&CS Bill”) is enacted. Indeed, Telstra notes that the ease of transition to the C&CS Bill is a relevant factor that, at this stage, does not appear to have been taken into account by the ACCC in developing its approach to implementation.

566. Telstra acknowledges that the C&CS Bill, drawing on similar mechanisms in Australian gas and electricity regimes, provides powers for the ACCC to establish Access Determinations containing “fixed principle provisions”.287 Fixed principle provisions would not be subject to change or removal during the term of the fixed principle provision, except in very limited circumstances.

567. Telstra shares the ACCC’s view that fixed principle provisions could – if appropriately applied – deliver improved long term regulatory certainty over important elements of a BBM methodology. In particular, Telstra accepts that there is a benefit in having a pricing principles mechanism that formally locks the initial RAB value in place for a longer period – and which is then not able to be opened at a later date by Telstra or an access seeker through an arbitration or by the ACCC under any new or revised Access Determination.

568. However, in Telstra’s view, the passage of the C&CS Bill is not a prerequisite to implementing a BBM that meets the objective of improved regulatory certainty around the process by which prices are updated over time. Telstra considers that, the Pricing Principles should establish a detailed and fully worked-through BBM framework which addresses what data is required from Telstra, how these inputs are determined and assessed and the process by which the roll-forward, pricing and efficiency mechanisms, if any, are to be applied.

286 Craig Mickle, KPMG, Primilary assessment of the Ovum BBM cost model – calculation of the effective tax rate, 21 October 2010, page 3. Included as schedule 8 to this response.

287 Trade Practices Act 1974 (Cth), proposed ss 152BC and s 152BCD.
569. Telstra considers that, in the absence of fixed principle provisions, the Pricing Principles can still substantially improve certainty and provide pricing stability if they are used to provide clear guidance in relation to, at least, the following BBM elements and processes:

(a) the methodological basis used to determine the initial RAB value together with the value itself;

(b) how the roll forward mechanism operates (a clear definition is required);

(c) how capital expenditure forecasts will be assessed for efficiency/prudency and the objectives that should apply in the preparation and approval of those forecasts;

(d) the WACC approach (and calculation) to be adopted as well as the value of WACC parameters to be applied during the period of the Pricing Principles and which, if any, of them will be updated over time and, if so, on what basis;

(e) how depreciation will be calculated and applied as part of the roll forward (including how impairments will be dealt with);

(f) the objectives for operating expenditure;

(g) the information requirements associated with capital expenditure, operating expenditure and demand forecasts; and

(h) the mechanism for updating capital expenditure, operating expenditure and demand forecasts and other key inputs in the BBM and the indicative prices produced by it.

570. Moreover, if these issues were addressed and implemented in an access code (discussed below in section 5.7.9), much of the 'heavy lifting' would have been done and the BBM should transition well to take the form of an Access Determination, with fixed principle provisions around key elements of the model.

5.7.7. USE OF RECORD KEEPING RULES

571. The ACCC proposes to use RKRs to compel Telstra to provide the ACCC with the following information:

(a) forecast capital and operating expenditure data, including any underlying assumptions; and

(b) demand forecasts.

572. The ACCC does not explain in the Draft Report why they consider it is necessary to use RKR powers to obtain demand and expenditure forecasts from Telstra. At most, the ACCC indicates that Telstra has previously indicated that there are difficulties in accurately forecasting demand over a long, five-year period.

573. Telstra has not previously declined to provide forecast data to the ACCC as part of a BBM framework. To the contrary, Telstra readily acknowledges the need for this data and information, but has explained to the ACCC that it would need to work with the ACCC (and industry) to identify what information was required and over what period, given that the internal forecast periods used in relation to expenditure and demand for management purposes are considerably shorter than the period being proposed by the ACCC.

574. Telstra is disappointed that the ACCC felt it was necessary to use RKRs or similar coercive statutory powers to compel Telstra to provide this data. There are also a number of practical
difficulties with the use of RKRs that Telstra submits make them unsuitable in the context of a BBM:

(a) The consultation process around the terms of an RKR cannot deal adequately with the uncertainties which surround the ACCC’s use and assessment of forecasts – which is as important, if not more so, than the description of the data and timing for reports. To take one example, as discussed in section 5.3 below, the approach which the ACCC intends to adopt to implementing an efficiency mechanism is extremely unclear (it is currently said to be likely to involve both ex ante, ex post reviews and a carry forward and pass through mechanism\textsuperscript{288}). These issues need to be dealt with and debated in the context of the BBM and Pricing Principles. An RKR consultation, which is designed to consider the terms of the RKR (and not its use by the ACCC), is not an appropriate forum for this purpose.

(b) By their nature, RKRs do not have a formal role to play in the arbitration process. That is, the terms of an RKR are not a matter which the ACCC is required to have regarded when determining an access dispute under s.152AQA, s.152CQ or s.152CR. This makes them of considerably less value in providing regulatory certainty than including information provisions as part of a BBM framework adopted in Pricing Principles themselves (and an access code/OAU) – which then have a direct role in guiding Telstra, access seekers and the ACCC.

(c) More importantly, however, the ACCC is able to provide a far greater degree of flexibility in relation to information processes under a BBM framework under Pricing Principles than an RKR – which would enable data collection to evolve over time, as the BBM beds down. By contrast, the scope for RKRs to be varied is uncertain and any replacement with new RKRs requires formal consultation processes – and is subject to potential referral for review by the Tribunal\textsuperscript{289}.

(d) Failure to comply with an RKR would constitute a potentially serious breach by Telstra of its statutory obligations – and is subject to pecuniary penalties under Part XIB (s.151BX). It is questionable whether this heavy handed solution is necessary or appropriate in the context of a Pricing Principles/Indicative Pricing regime.

575. For all of these reasons, Telstra submits that RKRs are unnecessary and impractical for the purpose of obtaining demand and expenditure forecasts for use as part of a BBM. Rather, the ACCC should consider adopting a more flexible information scheme, which would still set out (in the BBM framework itself) the detailed data requirements to which Telstra was required to respond.

576. Alternatively, if the ACCC is minded to implement the BBM under an Access Code (as discussed below at 5.7.9) then information processes could be implemented as part of the Access Code and/or under the OAU.

5.7.8. AN ALTERNATIVE IMPLEMENTATION APPROACH – TELSTRA’S DRAFT BBM WORKING PROPOSAL

577. Despite the challenges discussed above, Telstra remains optimistic that a workable BBM can be developed and implemented under Pricing Principles Determinations that adopt an appropriately comprehensive framework.

578. With this in mind, Telstra has developed a BBM Working Proposal which addresses the various issues which it considers need to be reflected in the Pricing Principles to provide increased certainty around the determination of prices moving forward. In designing the

\textsuperscript{288} Draft Report, page 40.
\textsuperscript{289} Trade Practices Act 1974 (Cth), s 152.
BBM Working Proposal, Telstra borrowed heavily from the NER and the principles and approach used to establish the BBM in electricity transmission and distribution.

579. The BBM Working Proposal is set out in Schedule 5. Telstra suggests that the BBM framework set out in the BBM Working Proposal is in a form which provides a predictable and transparent revenue and pricing mechanism which is consistent with the objectives of BBM reform and is substantially capable of being adopted in a Pricing Principle Determination. The BBM Working Proposal has also been developed with a view to transitioning smoothly to implementation under an Access Determination with fixed principle provisions.

580. The essential elements of the BBM in the BBM Working Proposal are:

(a) a clear statement of the methodology which should be used for determining the initial RAB: which would provide certainty in the event of any need to apply the principles to future access disputes;

(b) a Roll Forward Calculation (including both the model itself and a statement set out in the BBM Working Proposal of the principles underlying the RFM);

(c) the objectives governing capital expenditure and principles guiding how capital expenditure forecasts are to be submitted and assessed (including provision for investment processes to be approved on an ex ante basis by the ACCC);

(d) principles for determining an Aggregate Service Cost (which is similar to the aggregate revenue requirement calculated as part of the Ovum BBM) – including a statement of the WACC calculation and description of the principles to apply in relation to relevant WACC parameters;

(e) principles guiding the calculation of depreciation, including how impairments should be dealt with;

(f) objectives for operating expenditure and a methodology for determining expenditure from the application of allocators to underlying asset classes;

(g) clear principles governing cost allocation and demand forecasting;

(h) a Pricing Model that allocates costs across services and determines unit prices;

(i) a clearly defined process (based on the approach adopted under the NER) for reviewing the inputs used in the BBM and updating the indicative prices. This process would take place every 2 years and include the following key steps:

- Telstra submits a “regulatory proposal” setting out capital and operating expenditure forecasts (and sufficient information to justify the efficiency and prudence of those forecasts), demand forecast for the following 2 years, the value of any asset impairments during the last period, an update of relevant WACC parameters, and an update of the BBM Pricing Model to include this data and the new indicative prices for the following regulatory period.

- The ACCC assesses the regulatory proposal against the transparent objectives and criteria set out for the BBM and relevant components in the BBM Working Proposal and consults on it publicly.

- If the ACCC has any concerns with the proposal, Telstra is able to submit a further amended proposal responding to those concerns (or any other material errors which have been identified).

- The ACCC decides whether to accept or reject the regulatory proposal and amended indicative prices, again applying transparent and objective criteria.
• If the ACCC rejects an element of Telstra’s regulatory proposal, it may substitute with its own data and update the indicative prices accordingly.

581. While Telstra has modelled much of the BBM Working Proposal on existing precedent under the NEL, it readily accepts that the ACCC and access seekers may hold different views on individual points of principle within the BBM Working Proposal. However, Telstra offers the BBM Working Proposal as an example of the kind of holistic, integrated BBM which can:

(a) take legal effect under s.152AQA by being in a form capable of being adopted in the Pricing Principle Determination for each relevant service;

(b) transition well to any Access Determination with fixed principle provisions introduced if the C&CS Bill is enacted;

(c) provide regulatory consistency between the approach and mechanism adopted in telecommunications and other regulated industries, notably electricity and gas;

(d) remain flexible enough to respond to the substantial regulatory, technological and market uncertainties which prevent an effective “one off” settlement of long term indicative prices; and

(e) given this uncertainty, provide substantially improved certainty to Telstra and access seekers about the way that indicative approaches will evolve over time and what approach the ACCC would take to determining prices in the event of an access dispute.

582. Telstra submits that the BBM Working Proposal, or something of a similar nature, is needed to refocus the current BBM process on its primary objective: to define principles (capable of operating as required under s.152AQA) that establish a predictable and transparent BBM pricing mechanism.

5.7.9. USE OF AN ACCESS CODE TO PROVIDE EVEN GREATER LONGER-TERM CERTAINTY

583. Telstra is confident that much improved certainty could be achieved if the ACCC adopted a full and coherent BBM framework, along the lines of the framework set out in the BBM Working Proposal above.

584. However, if the ACCC was also able to achieve industry consensus around the initial RAB value and indicative prices, then Telstra suggests that the ACCC could go even further and ‘lock in’ both the initial RAB and the relevant BBM framework for an extended period (such as the full period of any agreed migration to an NBN). This would provide considerably greater certainty and predictability than are capable of being achieved only under pricing principles and indicative prices adopted under s.152AQA.

585. Telstra believes that there is scope to establish a form of ‘locked in’ process through an Access Code established by the ACCC under s.152BJ and adopted by Telstra in an undertaking (under s.152BS(4)). This legislative mechanism would approximate the level of certainty achieved under an Access Determination with fixed principles provisions – and would, in Telstra’s view, achieve the maximum degree of regulatory certainty which is possible under the existing Part XIC provisions.

586. The use of an Access Code to establish a BBM would involve the following:

(a) The ACCC makes an Access Code (under s.152BJ) setting out a BBM framework, including the methodology used to calculate the opening asset base and the revenue and pricing model(s) (“RPM”) to roll forward the RAB, allocate costs across regulated
products and determine prices for each regulatory period – along the lines of the framework set out in the BBM Working Proposal.

(b) Telstra would then lodge an OAU which “adopts the model terms and conditions set out in the access code” (s.152BS(4)) – in doing so, it would specify the initial access prices to apply for the first regulatory period calculated by applying the methodology set out in the Access Code.

(c) As a "safety net", the ACCC would also establish indicative prices and pricing principles (section 152AQA) in the same terms as the Access Code.

587. This proposed approach has a considerable number of practical and legal advantages, including:

(a) An Access Code can comfortably accommodate a BBM, given that the terms of an Access Code are explicitly defined as being able to address “price or a method of ascertaining price” (s.152BK(3)).

(b) Unlike other OAUs, which have 3 year maximum term, an OAU that adopts the terms of an Access Code continues as long as the set of terms adopted by the code remain current (s.152BX(2)(b)(ii)). Crucially, this means that an Access Code/OAU offers an effective means of ‘fixing’ elements of the BBM framework in place over a much longer period, for eg, 7-10 years.

(c) The combination of an Access Code and OAU comes closest in legal effect to the making of an access determination under the C&CS Bill and potentially transitions well to the new regime, if the C&CS Bill is later enacted. While the Access Code itself would not survive commencement of the C&CS amendments, any Access Code-based OAU would continue in force until replaced by an Access Determination (s.153(4) and (5) of the C&CS Bill). This has the added benefit of enabling the ACCC to roll both the Access Code and OAU terms into any new Access Determinations and therefore “wind-up” OAU in one stroke. Transitioning from a BBM implemented only through pricing principles and individual arbitrations would potentially prove more difficult and complex.

(d) The Access Code and OAU are “co-joined” – which is to say that Telstra cannot include in its OAU any terms that are not in the Access Code (section 152BS(5)) and the ACCC must accept an OAU which “adopts” the code (section 152BW). As a result, the process for lodging any follow-on OAU (which remains consistent with the terms of the original access code) should not re-open the essential BBM elements defined in the Access Code – avoiding the extended decision making process and appeals encountered with previous undertakings.

(e) The use of a combination of a regulated code and undertaking is consistent in principle with precedents from other sectors which have adopted RAB pricing models (eg, gas and electricity regimes). In that sense, it has proven to be an orthodox and effective way to establish such regulatory frameworks.

588. Telstra submits that, given these benefits, the implementation of a BBM framework using an Access Code is the best and most complete solution available under the current terms of Part XIC for achieving the objectives of the new Pricing Principles: regulatory certainty.

589. Telstra accepts that, for this option to work, it requires a degree of consensus between the ACCC and Telstra about key elements of the BBM – most importantly price. Far from being a problem, Telstra considers that this should be both an achievable and appropriate goal for the BBM, in any event. The ACCC achieved this type of consensus in the last indicative pricing process when its final decision was focussed on price stability. Telstra sees no reason why, if price stability was achieved from a BBM, the ACCC could not achieve consensus again.
590. Telstra also has real incentives to cooperate with and participate in an Access Code/OAU approach, including because:

(a) while Telstra is not required to lodge an OAU adopting the Access Code and can withdraw an OAU, it has incentives to lodge/keep on foot an OAU because this provides Telstra certainty about the RAB value and other principles remaining locked in place;

(b) in any event, if ACCC also makes pricing principles and core services model terms in same terms as access code, ACCC will be able to apply RAB in arbitrations if Telstra fails to lodge OAU or withdraws OAU (hence the “safety net”).

591. At the same time, using an Access Code to implement a BBM does not irrevocably commit the ACCC to the approach:

(a) ACCC can withdraw part or all of the Access Code if it proves not to work as anticipated; and

(b) while this does mean a lower level of certainty for access providers and access seekers compared to the C&CS fixed principles approach, it still provides a higher certainty than pricing principles or core services model terms.

592. Telstra encourages the ACCC to examine the use of an Access Code/OAU approach as the best of the available means under Part XIC for establishing a BBM framework.

5.7.10. CONCLUSIONS

593. Telstra is disappointed that the ACCC appears not to have taken the approach provided by industry consensus around the development of a BBM to establish a meaningful and workable BBM framework. Instead, the Draft Report focuses on achieving particular price outcomes, in the form of the draft indicative prices.

594. The statutory framework (under s.152AQA) places significant limits on the function of indicative prices and which substantially limits their usefulness in providing longer term certainty and stability, something acknowledged in the Draft Report. This is especially the case in a highly unpredictable environment, such as the present, where assumptions on which indicative prices are initially based are themselves uncertain and, in any event, subject to rapid and substantial change.

595. Within this context, regulatory certainty requires clear, predictable and transparent pricing principles governing how prices will be updated over time to take into account key developments. To deliver these, Telstra submits that the ACCC consult on a fully worked and detailed BBM framework, which enables pricing to evolve in response to changes in a way that is transparent and predictable for industry.
5.8. **Other Issues**

5.8.1. **CONNECTION AND DISCONNECTION COSTS**

5.8.1.1. **APPROACH TO SETTING PRICES**

Telstra is broadly supportive of the ACCC’s approach of setting different prices for ULLS and LSS connection and disconnection for different financial years, reflecting average rates of change in labour rates.

597. In the Draft Report, the ACCC has developed indicative prices for ULLS and LSS connection and disconnection by indexing the existing indicative prices (which apply until 31 December 2010) by actual and forecast CPI inflation. This results in a 3.0% increase in calendar 2011 and 2.5% increases in each of 2012, 2013 and 2014.

598. This approach to indexation is a change from the ACCC’s practice to date of using trends based on the ABS Labour Price Index. Telstra has identified a number of weaknesses in the ACCC’s justification for its approach.

599. First, the ACCC states that over the period 2003 to 2009 “the CPI approximated wage growth in the communications sector”. The ACCC does not set out its analysis in support of this statement, and Telstra’s analysis of the ABS data shows that average CPI growth over that period (from June 2003 to June 2009) was 2.84%, which is somewhat below the 3.04% average growth in the Labour Price Index covering communications. In view of this, Telstra considers that indexing connection and disconnection charges at CPI may be inadequate.

600. Second, the ACCC states that it has applied both the RBA’s inflation forecasts and the mid-point of the RBA’s inflation target. Again the ACCC does not set out its analysis, and Telstra’s analysis, based on the most recent RBA Statement on Monetary Policy, suggests that the ACCC has under-indexed connection and disconnection charges. The RBA forecasts for CPI headline inflation are 3.25% for calendar 2010, 2.75% for calendar 2011 and 3.0% for calendar 2012. If the ACCC persists with indexing connection and disconnection charges using forecast CPI inflation, then it should use the RBA forecasts out to 2012, and only apply the mid-point of the RBA’s inflation target beyond that point.

5.8.1.2. **ISSUES WITH HOW THE INDICATIVE PRICES ARE SPECIFIED TO APPLY**

**Issue 1 – averaging of ULLS connection charges**

601. For the reasons set out in section 5.6 of this Response, Telstra considers that averaged indicative prices for ULLS connection and disconnection charges should be adopted. However, in relation to contractor rates, Telstra holds the same concerns as for other capital projections over the likelihood that the rates relied upon in the Draft Report will remain valid for the full period of the indicative prices.

**Issue 2 – LSS disconnection charges**

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291 ABS 6401.1, Consumer Price Index, All groups, Australia
292 ABS 6345.0, Labour Price Index June 2009, Financial Year Index; Ordinary time hourly rates of pay excluding bonuses, Australia; Communication services; Private; All occupations. Note that from the September quarter 2009, the Labour Price Index is presented using the ANZSIC 2006 classification and only at the division level.
602. In the Draft Report, the ACCC proposes that a LSS single disconnection charge is not payable for:

(a) A disconnection made pursuant to a Telstra churn process by which services can be transferred between LSS, and between LSS and DSL services; or

(b) Any period in which the access seeker was participating in the Telstra LSS churn process and Telstra (BigPond) was not participating in the Telstra LSS churn process.

603. In Telstra’s view, the indicative prices for LSS disconnection should be expressed to apply to all disconnections that take place outside of an existing churn process. Telstra does not accept that, in circumstances where Telstra has implemented appropriate churn processes, such as the DSL/LSS churn process, it should be prevented from levying disconnection charges for services that are disconnected outside those churn processes.

**Issue 3 – definition of MNM**

604. The Draft Report proposes that the indicative prices for MNMs should apply to project managed transfers of services from one access seeker to another (Transfer MNMs), and could arguably also apply to MNMs conducted outside of business hours. Telstra considers that both such applications would be inappropriate.

605. In relation to the first issue, Transfer MNMs are not provided for under Telstra’s standard access agreements and are not supported by Telstra’s existing MNM systems and processes. The changes required to enable Telstra to offer Transfer MNMs would include modifications to a number of Telstra’s IT systems and would involve significant implementation costs. Those costs would not be recovered via the ACCC’s proposed ULLS and LSS indicative prices.

606. As to the second issue, the ACCC’s indicative prices for ULLS and LSS MNMs should be expressed to apply only to MNMs that take place during standard business hours for the reason that Telstra incurs significant additional costs associated with performing MNMs after hours. These costs are primarily associated with certain systems changes that would be required to enable LSS after hours MNMs and the additional expenses of engaging third party contractors to undertake jumpering tasks outside their standard hours of work for both LSS and ULLS MNMs. Those costs would clearly not be recovered via the ACCC proposed ULLS and LSS indicative prices.

607. Telstra considers that the ACCC should expressly exclude Transfer and after hours MNMs from the application of its indicative prices for two principal reasons: the proposed MNM indicative prices are substantially below the efficient costs of provisioning Transfer MNMs and after hours MNMs, due to the implementation and ongoing costs described above; and there has been a substantial decline in demand for MNMs in recent years. The object of Part XIC, namely the promotion of the long-term interests of end-users, encompasses considerations of both the incentives for investment in infrastructure (s 152AB(6)(c)), and the legitimate commercial interests of the supplier of a service (s 152AB(6)(b)). In Telstra’s view, these objectives will not be promoted by determining indicative prices for particular services that are substantially lower than the cost of providing them. Moreover, it is unlikely that competition would be promoted (s 152AB(2)(c)), given the continuing decline in demand for MNMs generally.

**Issue 4 – Cancellation charges for LSS MNMs are not specified**

608. The Draft Report proposes indicative cancellation charges for ULLS MNMs but not for LSS MNMs. No explanation for the difference has been provided. Telstra considers that the same principles should apply to both ULLS and LSS MNMs. If the ACCC takes a different view, Telstra would request an opportunity to be heard on this matter after an explanation for the difference is provided.
5.8.2. RECOVERY OF THE ACT UTILITIES TAX

609. On 21 December 2006, the Australian Capital Territory ("ACT") Government enacted the Utilities (Network Facilities Tax) Act 2006 (ACT). The Act requires the owner of any network facility located on land in the ACT to pay an amount of tax determined by reference to length of the facility (the "Utilities Tax").294 A “network facility” is defined to include any part of the infrastructure of a telecommunications network as defined in the Telecommunications Act 1997 (Cth)).295 As a result, Telstra is liable to pay tax on that part of its CAN and IEN that is located in the ACT.

610. The Draft Report does not expressly provide for the recovery of the amount Telstra pays in Utilities Tax from access seekers. Telstra submits that, as the Utilities Tax only applies in the ACT, the amount paid in Utilities Tax should not simply included in the total revenue requirement and recovered through an increase in Australia-wide prices. Instead, Telstra submits that the amount paid in Utilities Tax should be recovered by way of a surcharge levied on services supplied in the ACT and Jervis Bay areas.

611. Consistent with this approach, the Pricing Principles Determination should expressly provide that the indicative prices for ULLS and WLR are exclusive of taxes payable under the Utilities (Network Facilities Tax) Act 2006 (ACT) and GST.

295 Utilities (Network Facilities Tax) Act 2006 (ACT), ss 6 and 7
6. **A SUGGESTED WAY FORWARD**

612. In section 4 above, Telstra documented many of the problems it has identified with the ACCC’s proposal. Telstra plans to make further submissions on the more recent information and data the ACCC has provided. Telstra considers that these problems are significant, but solvable.

613. This is all the more so given that Telstra, the ACCC and access seekers still appear to share a common vision of what the BBM is intended to achieve – greater regulatory certainty and price stability through locking in the initial RAB value and establishing a transparent and predictable roll forward mechanism to update prices over time.

614. Given this shared commitment, Telstra has proposed three key measures which, if adopted by the ACCC, would enable it to satisfy this objective in a way that ensures price stability, respects past pricing decisions and is consistent with the legislative requirements.

615. The three elements of Telstra’s suggested approach are:

   a) adoption of a current-dollar / real value for the initial RAB (preferably using DORC value based on the most recent indicative prices or alternatively indexed historic costs);

   b) if the ACCC made an Access Code under s.152BJ with an initial RAB value and indicative prices that provided for price stability, then Telstra would adopt the Access Code in an OAU – effectively locking in price stability over the period of transition to an NBN; and

   c) Telstra also submits, for further industry discussion and refinement, a worked BBM that could be used for such an Access Code, modelled on those used in the electricity and gas markets. Telstra considers that this BBM Working Proposal provides the necessary degree of detail and process to ensure predictability and transparency around indicative pricing in the future.

6.1. **An initial RAB value based on the current-dollar/real value of Telstra’s assets**

616. In line with the overwhelming weight of regulatory precedent, and to ensure price stability through consistency with past decisions, the initial RAB should be a DORC value calculated on the basis of the most recent indicative prices set by the ACCC.

617. A DORC calculation on this basis (as set out in Confidential Schedule Error! Reference source not found.) yields initial RAB values of:

   a) $17B for the CAN;

   b) $14B for the IEN; and

   c) $1B for land and buildings.

618. If the ACCC is nonetheless committed to use of the RAF for its cost data, those values must be in current-dollar/real terms (ie, indexed historic cost). When an appropriate calculation is done, the relevant indexed historic cost values are:
(a) $15B for the CAN;
(b) $9B for the IEN; and
(c) $4B for land and buildings.

619. By taking these steps to shift back to a real depreciated value for the initial RAB, the ACCC would be:

(a) ensuring internal consistency in its approach (which explicitly endorses the use of current-dollar/real values and requires this for all future capital costs);
(b) consistent with appropriate economic and legal principles governing cost recovery and pricing in regulated industries;
(c) aligning its BBM with orthodox regulatory practice in other industries;
(d) providing a basis for ensuring price stability and certainty, including during the transition to NBN.

6.2. **BBM pricing principles that adopt a fully developed and working BBM framework**

620. The pricing principles should adopt a fully operational BBM framework, along the lines of the BBMs established under the NEL and NGL.

621. The essential elements which Telstra submits need to be included in a BBM (and adopted under the pricing principle) if it is to provide the required degree of certainty and predictability are:

(a) a clear statement of the methodology which should be used for determining the initial RAB – and the initial RAB value itself;
(b) a robust roll forward mechanism;
(c) objectives governing capital expenditure and principles guiding how capital expenditure forecasts are to be submitted and assessed;
(d) principles for determining the aggregate revenue requirement – including a statement of the WACC calculation and description of the principles to apply in relation to relevant WACC parameters;
(e) principles guiding the calculation of depreciation, including how impairments should be dealt with;
(f) objectives for operating expenditure and a methodology for determining expenditure from the application of allocators to underlying asset classes;
(g) clear principles governing cost allocation and demand forecasting;
(h) a pricing model that allocates costs across services and determines unit prices; and
(i) a clearly defined process for Telstra to submit Access Pricing Proposals, including specific provisions dealing with information requirements, consultation processes, timing and approval by the ACCC and the process for formal updating of prices.

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296 Draft Report, page 60.
Telstra has set out a BBM Working Proposal in Schedule 5, modelled on various elements of the NEL, and which has been designed to address each of the above requirements. Telstra submits the BBM Working Proposal, acknowledging that it provides a starting point for further development and refinement by the ACCC, in consultation with industry.

However, a framework of this kind would:

(a) offer industry a predictable and transparent pricing mechanism and roll forward process – with the inbuilt flexibility to adapt to issues such as NBN and technological change;
(b) adopt important elements, and therefore valuable learning, from existing BBM regimes used for some time in the energy sector; and
(c) be capable of being adopted by pricing principles in a form that meets their statutory objective.

6.3. Implement the BBM regime through an Access Code

Finally, the most valuable way to establish certainty under the BBM is to find a means of effectively ‘locking in’ the initial RAB value, to avoid future revaluations in the context of access disputes.

Given the high degree of consensus around the shift to a BBM, Telstra has looked at fresh ways of achieving a degree of certainty around pricing arrangements, during the transition to the NBN. Within this context, it proposes implementation of the BBM based on use of an Access Code established by the ACCC under s.152BJ.

The use of an Access Code to establish a BBM would involve the following:

(a) The ACCC makes an Access Code (under s.152BJ) setting out the BBM framework – along the lines of the framework set out in the BBM Working Proposal above.
(b) If the access code delivers pricing stability, then Telstra would lodge an OAU to adopt the model terms and conditions.
(c) As a “safety net”, the ACCC would also establish indicative prices and pricing principles in the same terms as the Access Code. These would then apply in the event that the Code or OAU were withdrawn.

Unlike other ordinary access undertakings, which have a 3-year maximum term, an OAU which adopts an Access Code can continue as long as required. This would give the mechanism scope to lock in the RAB value (and other aspects of the BBM framework) for the entire term of any transition to NBN.

If it can be achieved, this approach has numerous practical benefits, including:

(a) maximum regulatory certainty and price stability – while at the same time offering a flexible mechanism to allow prices to evolve over time (avoiding them becoming quickly outdated and leading to further access disputes);
(b) consistency with approaches adopted in other sectors that have established similar BBM mechanisms (including both electricity and gas);
(c) as a practical matter, providing an instrument which is sufficient to confer functions on the ACCC in relation to the practical operation and oversight of the BBM.
629. Indeed, this implementation approach would approximate the level of certainty achievable under an Access Determination with fixed principles provisions (if the current amendments to Part XIC are passed) – and would, in Telstra’s view, achieve the maximum degree of regulatory certainty which is possible under the existing Part XIC provisions.
7. **SCHEDULES**

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