Implementing the regulatory values approach

A REPORT PREPARED FOR THOMSON GEER

December 2014

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Summary

Frontier Economics (Frontier) has been engaged by Thomson Geer on behalf of iiNet to provide an opinion on three questions relating to the Australian Competition and Consumer Commission's (ACCC's) regulatory approach to the arrangements between Telstra and NBN Co.

The ACCC's approach to these arrangements was set out in an October 2014 position statement entitled: *Public Inquiry into final access determinations for fixed line services – primary price terms, Position statement on the treatment of the Telstra-NBN Co arrangements for regulated pricing* (the Position Statement).

This report has been prepared for Frontier Economics by Warwick Davis. I provide a summary of my responses to the three questions below.

1. Is it correct to say, as the ACCC does in the Position Statement, that the use of regulatory values as a basis for valuing transactions impacting regulated assets is standard practice by economic regulators?

   Answer: No. There are numerous examples where economic regulators in Australia and overseas have preferred the disposal proceeds or sale values to value transactions rather than the regulatory values. In fact, the AER has recently released a decision taking this approach. The ACCC has not presented any evidence that it is following standard regulatory practice in using regulatory values.

2. Is it correct to say, as the ACCC does in the Position Statement, that regulators consider only the costs attributable to regulated services and do not factor in the revenue a regulated business receives from other sources?

   Answer: No. Regulators – including the ACCC and AER – have taken account of revenues earned from other sources in setting the price for services that use shared assets. This is for the good reason that the issue of cost recovery for shared assets which are used to produce regulated services is more complex than the ACCC suggests.

3. Can the ACCC's current partially allocated cost allocation approach be reconciled with a regulatory values approach to dealing with the NBN Co payments to Telstra, and if so, what are the advantages of doing so?

   Answer: Yes. There are three classes of affected assets: asset disposals, assets leased to NBN Co, and de-commissioned or under-utilised assets. It is straightforward to take account of *asset disposals* under any cost allocation approach. It would be more difficult to directly take account of changes in *asset usage* under the ACCC's partial allocation approach. However, it may not be critical to take account of these changes. Taking

account of *de-commissioned or under-utilised* assets will be equally complex under either cost allocation approach.

I also find that there will be several advantages in using the partial allocation approach, including that it contributes to regulatory predictability, maintains the existing allocation of demand risk, and avoids complex issues around the setting of the initial RAB in 2011 which will inevitably arise from changing cost allocation methodologies.

1 Background and task

1.1 Background

The Australian Competition and Consumer Commission (ACCC) is currently conducting a public inquiry into making a final access determination (FAD) for each of the following fixed line services:

- the Unconditioned Local Loop Service (ULLS)
- the Line Sharing Service (LSS)
- the Wholesale Line Rental Service (WLR)
- the Local Carriage Service (LCS)
- the Fixed Originating Access Service (FOAS)
- the Fixed Terminating Access Service (FTAS), and
- Wholesale ADSL Service (WADSL).

(the Declared Services).

The FADs will include the primary price terms for each of the Declared Services for the next regulatory period.

The Position Statement sets out the ACCC's view on how the impacts of the arrangements between Telstra and NBN Co should be quantified for the purpose of setting prices for declared services. The ACCC's view is that the impacts of the arrangements between Telstra and NBN Co should be quantified using a regulatory values approach. This approach is described in more detail in chapter 3 of the Position Statement.

1.2 The ACCC's position statement

The ACCC's position statement says that:

> The Definitive Agreements, in their current form, reflect a predominantly fibre-to-the-premises (FTTP) network design for the NBN and provide for the following key elements:
>
> - customers will be migrated from Telstra's fixed line network as the NBN is rolled out
> - NBN Co will lease certain infrastructure from Telstra
> - certain assets will be transferred from Telstra to NBN Co.
>
> The Definitive Agreements also provide for migration payments and infrastructure payments to be made by NBN Co to Telstra:

> NBN Co will pay Telstra a one-off migration payment for each end-user disconnected from its copper network when they are migrated to the NBN in areas covered by NBN Co's fibre network.
>
> NBN Co will pay Telstra ongoing infrastructure payments for the lease of certain infrastructure. NBN Co will lease ducts, rack space in exchange buildings, and dark fibre (optical fibre with no active electronics attached) from Telstra. NBN Co will also pay Telstra a one-off payment for each lead-in conduit (that is, the pipe leading into a customer premise that houses the lead-in copper cable) that is transferred to NBN Co as customers are migrated to the NBN.[1]

The ACCC determined that it should adopt a 'regulatory values' approach to quantifying the impacts of the Telstra-NBN Co arrangements. The ACCC explains that it means:

> ...any adjustments to account for the arrangements between Telstra and NBN Co should be based on the values assigned to affected assets in the RAB (as reflected in the FLSM) and not based on the value of payments received from NBN Co.[2]

The ACCC's reasoning for adopting this approach was that:

> Use of regulatory values maintains the current cost based approach to setting prices for Telstra's declared fixed line services, and is consistent with the common practice in regulated sectors of relying on regulatory asset valuations for price setting purposes....
>
> Further, when a regulated business—or regulated assets as a going concern—change hands the regulator does not allow a revaluation of the assets for regulatory purposes. To do so would result in regulated charges changing for no reason other than the change in ownership of the regulated assets. Moreover, if such a revaluation were allowed—and, for example, amounts in excess of regulatory asset values were deducted from the asset base—it could potentially result in a scenario where the regulatory value of an asset becomes negative.
>
> Further, regulators consider only the costs attributable to regulated services and do not factor in revenue a regulated business receives from other sources, as such revenue does not affect the underlying cost of providing those regulated services. In line with this standard practice, when assessing price notifications from Australia Post and Sydney Airports Corporation, the ACCC does not consider revenue received by these businesses from other sources.
>
> To use for regulatory purposes the values established in the Definitive Agreements through commercial negotiations, rather than regulatory values determined in the FLSM, would result in prices of declared fixed line services changing for reasons other than changes in the cost of supplying those services.[fn] In taking the position

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[1] ACCC, Public Inquiry into final access determinations for fixed line services—primary price terms: Position statement on the treatment of the Telstra-NBN Co arrangements for regulated pricing, October 2014 (ACCC Position paper), p. 4

[2] Ibid., p. 10.

> to use regulatory values when accounting for the impacts of the Telstra-NBN Co arrangements, the ACCC is adopting common regulatory practice.[3]

The ACCC then considered how this approach might be applied to three kinds of assets:

- Assets sold to NBN Co
- Assets leased to NBN Co
- Assets affected by the migration of customers to NBN Co

In relation to assets **sold to NBN Co**, the ACCC says:

> assets sold to NBN Co should be treated as asset disposals and removed from the RAB, and...the amounts to be removed from the RAB to reflect the sale of assets to NBN Co should be based on the regulatory value of those assets[4]

For assets **leased** to NBN Co, the ACCC says:

> The ACCC's position on leased assets is that, to the extent that NBN Co uses assets that are also used to provide declared services, this should be accounted for in the cost allocation framework of the FLSM.[5]

For assets affected by the **migration** of customers to NBN Co, the ACCC says:

> a consequence of migration is that certain assets will be either decommissioned or utilised to a lesser extent...assets decommissioned, and an appropriate share of assets utilised to a lesser extent, as a result of NBN migration should be removed from the regulated cost base.[6]

1.3 The revised NBN Co – Telstra agreements

On 15 December 2014, Telstra announced the details of its revised agreements with NBN Co to facilitate the new "MTM" roll out model.[7] On the whole, the changes appear relatively minor in terms of their total financial impact, although there are substantial changes to the treatment of different assets. The key changes are that:

- The ownership of relevant copper and HFC assets is transferred to NBN Co, such that it owns the assets as at the "Ready for Service" date

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3 Ibid., p. 10.

4 Ibid., p. 11

5 Ibid.

6 Ibid.

7 http://www.telstra.com.au/aboutus/media/media-releases/telstra-signs-revised-nbn-definitive-agreements-1.xml

- The structure of the agreements relating to duct access is changed, with less reliance on 'take or pay', and these are now linked to progress of the NBN Rollout
- Telstra's responsibility for duct and pit remediation is transferred to NBN Co in FTTN and HFC regions, although Telstra provides what it describes as a 'credit' to NBN Co. Remediation obligations within FTTP areas have been capped.

An area of uncertainty that remains from my reading of the revised agreements is whether NBN Co takes ownership of the copper network in all areas where it rolls out. My interpretation of the Infrastructure Services Agreement is that:

- NBN Co takes ownership of all Telstra copper and HFC network in a rollout region
- NBN Co will lease back to Telstra the copper network assets so Telstra can continue to provide services until they migrate to the NBN or are disconnected at the end of the migration period.

1.4 Questions

Lawyers acting for iiNet, Thomson Geer, have sought Frontier Economics expert opinion on three matters:

1. Is it correct to say, as the ACCC does in the Position Statement, that the use of regulatory values as a basis for valuing transactions impacting regulated assets is standard practice by economic regulators?
2. Is it correct to say, as the ACCC does in the Position Statement, that regulators consider only the costs attributable to regulated services and do not factor in the revenue a regulated business receives from other sources?
3. Can the ACCC's current partially allocated cost allocation approach be reconciled with a regulatory values approach to dealing with the NBN Co payments to Telstra, and if so, what are the advantages of doing so?

The full instructions are incorporated as Annexure A.

Although this report has not been prepared directly for use in Court proceedings, Thomson Geer has also asked that in preparing our report, we have regard to a copy of the Guidelines for Expert Witness in the Federal Court of Australia (Practice Note CM 7, 4 June 2013).

1.4.1 Authorship

This report has been authored by Warwick Davis. I have 17 years of experience as an industry economist, and have advised firms on competition and regulatory

issues for eight years at Frontier Economics. My particular expertise lies in the areas of regulatory pricing, costing and market analysis in network industries. Before joining Frontier Economics, I was employed by the ACCC, Ofcom (United Kingdom) and KPMG. I have a B Ec (Hons) from Monash University and an M Comm (Hons) from the University of Melbourne. My CV is Annexure B to this Report.

I acknowledge that:

- Any conclusions in the report are based on my knowledge and experience as an economist.
- I have read, understood and complied with the Practice Note.

2 The first question: is the ACCC following standard regulatory practice by using regulatory values?

As I note above, the ACCC states that use of regulatory values as a basis for valuing transactions impacting regulated assets is "standard practice" by economic regulators.

In making this claim, the ACCC does not to cite a single instance of a regulator that deducts asset disposals from a RAB using book or regulatory values.

My research has turned up numerous examples of regulators who do take account of the actual disposal value (the sale price) and not the regulatory value of assets.

The Victorian Essential Services Commission provided the following guidance to Victorian water businesses when proposing water prices in the 2013 price reviews:

> "The Commission must include estimates of disposals when calculating each business's RAB. As for previous regulatory periods, we will adjust the regulatory value of assets to reflect the proceeds of disposals, rather than some form of regulatory book or written down value.
>
> This is consistent with the financial capital maintenance concept of the RAB. It treats the proceeds of asset disposal at the end of its useful life as an alternative means for investors to receive a return of their funds that are tied up in the regulated assets."[8]

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[8] ESC, 2013 Water Price Review Guidance On Water Plans, October 2011, http://www.esc.vic.gov.au/getattachment/3306f0d8-9c21-4574-ac3b-25002c88d9b8/Guidance-Paper-Water-Plan-guidance-for-water-price.pdf. I note that the ACCC's approach of using the regulatory asset values is not consistent with the concept of *ex ante* financial capital maintenance, unless the disposal value of assets is expected to be equal to their RAB value.

The UK Competition Commission (now Competition & Markets Authority), when rolling forward Stansted Airport's RAB, noted the following on asset disposals for the 5th regulatory period (Q5):

> "The alternative ways to account for disposals in Q4 when rolling forward the RAB are to subtract either the net book value (NBV) or the proceeds.... I considered the arguments for the different treatment of disposals. I concluded that the existing policy should continue, ie using the value of the proceeds rather than the NBV. I believed that airport users should be entitled to the gains arising from the sale of airport assets."[9]

Ofgem, the UK regulator of gas and electricity networks, also takes an approach that takes into account sale proceeds from disposals rather than RAB (RAV) values:

> 1.7. The following items are not included in the costs added to the RAV or totex but are directly netted off additions to the relevant cost categories in carrying out the RAV roll forward calculation:
>
> - cash proceeds of sale (or market value of intra-group transfer) of operational assets – by netting off the proceeds from the calculated additions to RAV
> - cash proceeds of sale of assets as scrap – by netting off the proceeds from the calculated additions to RAV
> - amounts recovered from third parties in respect of damage to the network – by netting off the proceeds from the calculated additions to RAV.[10]

Aside from these three examples, I also note that the AER's 2008 guidance on implementing roll forward models contains the following statements, which suggests that it will consider the valuation of disposals on a 'case by case' basis:

> Clause S6.2.1(e)(6) requires the RAB to be reduced by the 'disposal value' of assets which is not defined in the NER. For the purposes of the RFM, the AER accordingly considers that using the sale or depreciated value as the disposal value of an asset may be acceptable. The AER will assess the appropriateness of either of these approaches as proposed by a DNSP on a case-by-case basis. In either case the AER also notes that the approach adopted in the RFM must be consistent with that applied on a forecast basis in the PTRM.[11]

Indeed, I further note that a November 2014 decision of the AER in fact ***prefers*** the use of "gross proceeds" to the use of written down asset values in rolling the RAB forward:

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9 *Competition Commission report: Stansted Airport Ltd - Q5 price control review - presented to the CAA*, 23 October 2008. The Competition Commission's report is available on the Civil Aviation Authority's website, http://www.caa.co.uk/docs/5/ergdocs/ccstanstedd.pdf

10 Ofgem, *Strategy decision for the RIIO-ED1 electricity distribution price control: Financial issues*, March 2013, available at: https://www.ofgem.gov.uk/ofgem-publications/47071/riioed1decfinancialissues.pdf

11 AER, *Electricity distribution network service providers: Roll forward model*, June 2008, p. 7.

> ...we have amended Endeavour Energy's proposed disposal values from 2008–13 in the RFM [roll forward model] **to reflect the gross proceeds from the disposal** of standard control service assets. Endeavour Energy's proposed disposal values included some asset values not allocated to standard control services as well as some written down asset values. In reviewing this matter, we asked questions of Endeavour Energy and took account of its responses in forming our view on the appropriate disposal values for RAB roll forward purposes.[fn] We consider that the revised disposal values satisfy the requirements of the NER.[12][fn]

So, in contrast to the ACCC's claim, there are at least three regulators that have preferred the sale proceeds approach – including the AER.

The evidence provided by the ACCC of "standard practice" are references to whole-of-business sales. The ACCC says that whole-of-business sales do not take account of sale values. This is a poor analogy. The extension of the ACCC's analogy is that businesses which are sold should have the asset base reduced by the regulatory asset values – i.e. down to zero. But, in fact, when businesses are sold as a going concern, there is no change to the regulatory asset value. This suggests that the sale of a business is an entirely different matter. The situation being contemplated by the ACCC with respect to Telstra is disposals of particular network assets, not the sale of the entire business as a going concern.[13]

In conclusion, although I do not claim that the use of the actual disposal values (sale price) is 'standard practice', the ACCC has not presented any evidence that it is following standard regulatory practice in using regulatory values. In my opinion, this casts considerable doubt over the accuracy of the ACCC's claim.

3 The second question: Do regulators only consider costs attributable to regulated services?

The ACCC further states that "regulators consider only the costs attributable to regulated services and do not factor in revenue a regulated business receives from other sources, as such revenue does not affect the underlying cost of providing those regulated services."[14]

I find that this claim is problematic for two reasons.

---

12 AER, Draft decision, Endeavour Energy distribution determination 2015–16 to 2018–19, Attachment 2: Regulatory asset base, November 2014, p. 2-13.

13 Nor is it obvious that a scenario where the disposal value exceeded the regulatory asset value would be problematic. The regulatory asset base could simply be bounded at zero.

14 ACCC, Position Statement, p. 10.

The first is that it appears factually incorrect. Although the ACCC is not specific about who 'regulators' are, in the context of electricity distribution network regulation, the AER has already clearly signalled its intention to consider revenues from 'other sources' in its Shared Assets guideline:

> In some circumstances, it is possible for an electricity network service provider to invest in an asset and require electricity consumers to pay for the asset in full and also use that asset **to earn additional revenues** from other consumers. This creates the problem of potential cost over recovery.[15] [emphasis added]

The AER notes that the National Electricity Rules explicitly allow for such consideration of revenues:

> The NER now permit us to reduce regulated revenues where electricity supply businesses **earn unregulated revenues with the same shared assets.**[16] [emphasis added]

The AER's guidelines then very clearly state that it will take into account revenue earned from unregulated services where that revenue involves the use of shared assets:

> But where unregulated revenues are greater than one per cent of a service provider's revenue requirement, a cost reduction would occur. By reducing a service provider's annual revenue requirement, tariffs paid by consumers for standard control (or prescribed transmission) services will be lower than otherwise. Because standard control (or prescribed transmission) services are consumed by most electricity consumers, lower tariffs for these services mean lower electricity prices for most consumers.[17]

It is therefore not clear to me what basis there is for the claim that regulators do not consider revenues from other sources when setting cost-based prices.

The second reason I find the ACCC's claim problematic is that the ACCC does not specify what it means by the 'underlying costs' of the regulated services in the presence of shared assets. In fact, as far as I am aware, the term 'underlying costs' has no meaning or definition in regulatory economics.

When dealing with the economics of shared assets, the relevant distinctions are between incremental cost and stand alone cost of a service.[18] The difference between the two is the extent of common costs that are allocated to that service – with incremental cost of a service excluding any common cost contribution towards the recovery of the cost of the asset, and the stand alone cost being the incremental cost plus the full common cost.

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15 AER, *Shared Assets Guideline*, p. 13.

16 Ibid., p. 13

17 Ibid., p. 17

18 See, for example, W. Baumol and J.G. Sidak, *Toward competition in local telephony,* 1994, pp. 55-60.

The relevance of these costing concepts is that, in my opinion, the key issue that the ACCC should be focusing on is how costs are being recovered for assets which are shared across (regulated and unregulated) services. The ACCC's FLSM allocates shared asset costs to regulated services, which implicitly allows the remaining share of costs to be recovered from non-regulated services. Where revenue from an unregulated service (or another regulated service) already covers all of the shared costs of an asset, it is reasonable to ask whether and how the regulated service should contribute to that recovery. This is the reason why regulators – such as the AER – have been concerned about the potential for cost over-recovery.

The potential for over-recovery of shared asset costs was clearly in the ACCC's mind with Telstra's pricing of the LSS service (where shared line costs were already being recovered by Telstra's pricing of the line rental service). The ACCC found that while economic efficiency may be enhanced through the inclusion of a contribution to line costs in LSS rental charges, in the cases where line rental charges fully recover line costs, the inclusion of such a contribution would lead to an over-recovery of network cost. The ACCC said that revenue earned was relevant:

> Hence, to the extent that an access provider was recovering all of its line-related costs from **other revenue** sources, the Commission believes it would be inappropriate for the access provider to recover an additional amount of its line costs in the price of a LSS.[19] [emphasis added]

And in relation to these 'other revenue' sources, the ACCC said that:

> ...Telstra in all cases receives payments for the line rental and call charges for the underlying voice band PSTN service that is supplied on all lines on which a LSS is also provided. These charges could be **either wholesale or retail payments**. Accordingly there is already a contribution being made to the cost of the line over and above any contribution from an LSS charge.[20] [emphasis added]

I conclude that the ACCC is incorrect in claiming that regulators only consider the costs of supplying regulated services in setting (cost-based) prices.

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19 ACCC, *Access Dispute between Chime Communications Pty Ltd and Telstra Corporation Limited 2007*, p. 24.

20 ACCC, *Review of the Line Sharing Service Declaration Final Decision*, October 2007, p. 88.

4 The third question: Can the ACCC's existing cost allocation method be reconciled with a regulatory values approach?

The ACCC's existing FLSM uses a cost allocation method which the ACCC describes as a 'partial allocation' approach. Many of the initial allocations were based on a model (the Analysys Mason model). The ACCC described the initial allocation factors and adjustments as follows:

> Analysys model cost allocation factors were derived from demand data for individual services combined with routing factors (from engineering and industry best practice). These factors reflect the share of particular assets used in providing the fixed line services. The ACCC updated the factors obtained from the Analysys model for actual service demands in 2008–09 to obtain the starting point factors for the FLSM.[21]

The allocations to the declared fixed line services are then updated over time in line with change for the demand for the fixed line service (only).

As I indicate in my response to the first two questions, I am not convinced that the ACCC has made the case for the regulatory values approach. Nonetheless, I have formed the view that the ACCC could implement the regulatory values approach in a manner consistent with its current cost allocation approach. In the following three sections, I describe how this could be done for the following kinds of assets:

- Assets sold to NBN Co
- Assets leased to NBN Co
- Assets decommissioned or used less intensively by Telstra

4.1 Assets sold to NBN Co

As I noted in Section 1, the ACCC's position on transferred assets is that they should be treated as asset disposals and removed from the RAB. The amounts to be removed from the RAB to reflect the sale of assets to NBN Co should be based on the regulatory value of those assets.

I believe that the ACCC's approach of treating asset sales as disposals for regulatory purposes is unobjectionable and consistent with standard regulatory practice.

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21 ACCC, Inquiry to make final access determinations for the declared fixed line services, July 2011, p. 96.

The primary query about the application of the ACCC's approach is how the regulatory values are deducted from the RAB. My understanding is that the RAB asset classes comprise a collection of assets with no specific geographic or dollar values attached to single assets. That is because, for example, the ACCC raised the value attached to the 'ducts and pipes' asset class by $911 million over-and-above the written down value of the assets that appeared in Telstra's accounts. To my knowledge, this was not apportioned between different assets within the class and so Telstra's accounting records (written down values) will show a lower value than that attributed within the RAB.

My understanding of the revised agreements between Telstra and NBN Co is that ownership of assets will transfer progressively through the rollout period. This implies that there will need to be a commensurate reduction in asset value attributed to disposed assets. Rather than referring to the disposal of specific assets, it will be necessary to link reductions in the RAB to the aggregate disposal of SIOs.

I understand Telstra supports an approach similar to this, noting that in its submission of October 2014, it states that:

> This approach ensures that the adjustment that is made for asset disposals properly reflects the change in the cost base at the time of disposal...In accounting for disposals, Telstra has assumed copper assets required for FTTN are transferred to NBN Co at the ready-for-service date for an FTTN area. Consistent with this assumption, the value of the RAB for copper cables is reduced each year, by an equivalent proportion to the number of copper SIOs expected to be ready for service in that year (i.e. if 10% of active copper lines are declared ready for service in a given year, 10% of the remaining RAB value for copper cables is deducted from the RAB.[22]

This seems an appropriate and feasible methodology that would be workable under any cost allocation approach.[23]

4.2 Assets leased to NBN Co

As noted in section 1, the ACCC's position is that asset use by NBN Co should be accounted for in the cost allocation framework of the FLSM. This was preferred to the alternative of reducing the total revenue requirement by the value of the payments received by Telstra.

22 Telstra submission, October 2014, p. 77.

23 It might be inappropriate if there were considerable differences between the characteristics of the disposed assets and the average regulatory values. Say, for example, that assets disposed of were lower value due to their geographical location relative to the average value.

In principle, the approach proposed offers a reasonable path to accounting for NBN Co's usage of assets, as was pointed out in an earlier Frontier submission to the ACCC:

> ...Our key finding is that further analysis and revision of the FLSM is likely to be required to ensure that cost allocations accurately reflect usage and therefore offer a reasonable approach to cost recovery. The key issue here is that the two major assets that appear to be the subject of the payments – ducts and exchange costs – are not allocated to the declared fixed line services on the basis of their most obvious cost driver (distance and exchange space, respectively). Rather, they are allocated on the basis of lines and call minutes. As NBN Co's use of assets make no difference to lines or call minutes, this could mean that there is no additional cost allocated to Telstra's supply even though it is using the assets more intensively than it was previously. To properly account for these issues, it may require the ACCC to become more specific about the treatment of the payments and distinguishing the services which NBN Co acquires in the FLSM.[24]

Telstra's submissions to the ACCC have included a 'fully allocated' cost approach, which explicitly includes forecasts of NBN Co's usage of key assets, including ducts and exchanges.

If this approach is taken, then costs are allocated between NBN Co's usage and usage by Telstra's fixed network and other networks (e.g. mobile networks). Over time, as NBN Co's usage increase, a higher proportion of cost is allocated to it.

4.2.1 A fully allocated costing approach?

Taking account of NBN Co's usage of Telstra's network would require significant changes to the FLSM. Changing cost allocation methods will also have broader implications for the ACCC's price setting process, because taking account of changes in total network demand changes the balance of demand risks between Telstra and access seekers.

In my opinion, if the ACCC was minded to change to a fully allocated approach, it would also need to address the linkage between the current cost allocation methodology and the setting of the initial RAB value in 2011. The ACCC increased the RAB value in 2011 over-and-above a base cost valuation – which was contingent on the ACCC's cost allocation method – to generate a ULLS price consistent with the pre-2011 price. This linkage means the ACCC cannot reasonably change the cost allocation approach without re-visiting its initial approach to setting the RAB. An earlier analysis from Frontier Economics suggests that the ACCC will need to reduce the current RAB if it wishes to change cost allocation methods at this juncture.[25]

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24 Frontier Economics, *Payments between NBN Co and Telstra and prices for the declared fixed line services*, March 2014, p. 30.

25 See Frontier Economics, *Cost allocation methodology and its relationship to the opening regulatory asset base,* December 2014.

4.2.2 Adjustments without changing the cost allocation approach

If the ACCC was not minded to change its cost allocation approach, it would have two options.

The first option would be to disregard NBN Co's increasing usage of shared assets. A possible basis for such an approach would be that the FLSM already takes sufficient account of NBN Co's increasing usage of assets, and the decline in the share of costs associated with the provision of the declared fixed line services. An example of the adjustment process within the current FLSM is that as the NBN is rolled out, there will be reductions in cost allocation factors for the declared services (as these cost allocation factors take account of changes in the demand for declared services) and reductions in total operating and capital expenditure costs.[26] So, for example, a 10 per cent reduction in demand for ULLS due to NBN migrations will be reflected in a 10 per cent lower *share* of costs allocated to ULLS. If the operating costs of providing ULLS should also fall, there will be an implicit increase in costs allocated to NBN Co.

The approach of making no specific adjustments may not be conceptually ideal. However, this must be balanced against the other concerns that arise from (a) the use of a fully allocated method, and (b) not taking account of the value of the payments to Telstra.

Analysis recently prepared by Frontier Economics illustrates the impact of maintaining the ACCC's existing costing approach which does not take into account changes in NBN Co's usage of assets. The effect of the reductions in cost allocation factors and lower cost forecasts is sufficient to reduce unit costs across the declared fixed line services, even with constant or falling ULLS and WLR demand. This is shown in Figure 1.

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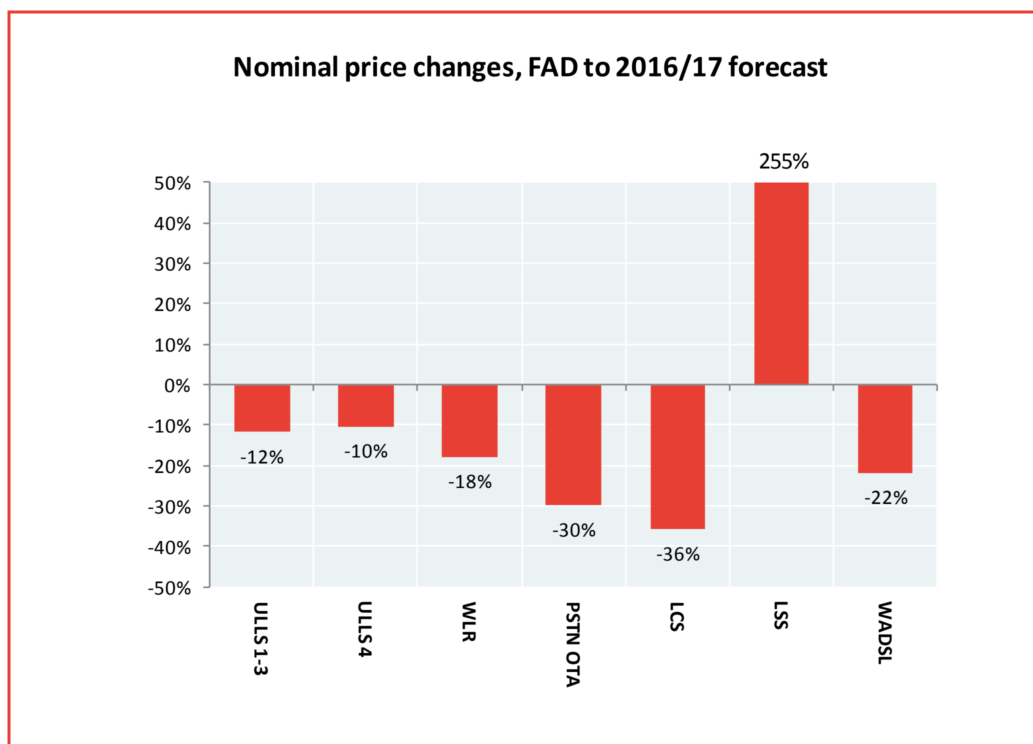
26 Assuming that the pattern of NBN migrations is similar between Telstra's retail customers and access seekers'.

Figure 1: Unsmoothed prices – price changes implied



Source: Frontier Economics analysis, Fixed line access prices using the ACCC's fixed line services model, December 2014

If the ACCC considered that it did want to take account of NBN Co's increasing asset usage, as it has flagged in its Position Statement, then I believe it has several options. In broad terms these options may be categorised as adjustments to the *inputs* into the FLSM or to the *outputs* from the FLSM.

An example of an approach that focuses on *inputs* might be to reduce the cost allocations to the declared fixed line services further based directly on NBN Co's (forecast) increasing usage of assets, while holding total demand for services (lines or calls) fixed. This would require the same usage data as for a fully allocated cost approach, but would require adjustments that are more *ad hoc* in nature. This is because there is no specific means to allow for increasing NBN Co usage of assets in the current FLSM.

In relation to *outputs*, an example could be a rule applied to prices, for example, that prices should not rise as a result of the NBN migration. I consider there could be merit in such an approach, as it is a potentially a low-cost method of regulation compared to taking explicit account of asset usage forecasts.

In conclusion, I find that the ACCC does have some options in how it takes account of NBN Co's asset usage under its current cost allocation framework. One option is not to take specific account of the changing usage. Preliminary modelling shows that the FLSM already takes some account of reducing relative

fixed line usage. There could be further benefits from taking the usage into account, but these benefits could be offset by additional model complexity.

4.3 Assets de-commissioned as a result of migration to NBN Co

In relation to the **migration** of customers to NBN Co, the ACCC notes that one consequence of migration is that certain assets will be either decommissioned or utilised to a lesser extent.[27]

The ACCC proposes that assets decommissioned, and an appropriate share of assets utilised to a lesser extent as a result of NBN migration, should be removed from the regulated cost base.

4.3.1 Taking account of de-commissioned or under-utilised assets

In my opinion, the ACCC has two options for dealing with de-commissioned or under-utilised assets.

The first option is that it could do nothing. This would allow Telstra to recover (part of) the regulatory value of these assets from access seekers.

The second option is that it could remove the (regulatory) value of these assets from the RAB by counting these as asset disposals. I understand this is currently the ACCC's preferred option, although it does not comment on how the costs would be specifically removed.

I note that either approach seems compatible with the ACCC's existing partial allocation approach. Both also seem compatible with the alternative fully allocated cost approach. This is because the likely nature of adjustments would be reductions to the RAB.

If the second approach of removing the regulatory value of de-commissioned assets is favoured, I note that at this point, significant uncertainty remains about exactly which assets will be de-commissioned or otherwise be under-utilised. This means that it would be difficult to forecast this in the FLSM at this time, and I would need more detail about the likely extent of de-commissioning or under-utilisation before. That being said, it might be possible to either:

- link the utilisation of assets (or certain asset classes) with the NBN roll out.

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27 My reading of the revised agreements is that potentially the quantum of assets affected in this way may be significantly reduced under the MTM. This is because copper lines were to be decommissioned rather than sold to NBN Co, as under the current agreements.

- set up a process whereby Telstra could report on assets that have been de-commissioned, and on utilisation of key assets likely to be stranded by customer migration towards the NBN.

The second of these approaches would likely be more accurate, but be more complex and costly to set up.

4.4 Would there be advantages in using the partially allocated approach?

It follows from sections 4.1 to 4.3 that I consider the ACCC's current partially allocated cost allocation approach could be reconciled with a regulatory values approach to dealing with the NBN Co payments to Telstra.

The second part of the question I am asked is what the advantages would be in using the ACCC's current cost allocation method to implement the 'regulatory values' approach. I understand that this question seeks to compare the partially allocated approach used currently with a fully allocated approach, as proposed by Telstra.

At face value, the major difference between the ACCC's current cost allocation approach and the fully allocated approach favoured by Telstra appears to relate to treatment of increasing asset usage by NBN Co. This is because the current cost allocation framework does not directly take into account asset usage by NBN Co. However, as I describe in section 4.3.2, it may be feasible to account for increasing asset usage by NBN Co within the context of a partially allocated approach, but given the complexity involved there is also a case for not making any specific adjustments.

I observe that there would be three major advantages in using the partially allocated approach compared to a fully allocated cost approach (as proposed by Telstra):

a. The partially allocated method would be more consistent with the ACCC's existing method. This contributes to certainty and the predictability of the regulatory process.

b. It would be less information and resource intensive to implement, as it only requires forecasts for the declared fixed line services. In contrast, the fully allocated method requires accounting for all uses of the assets used to provide the declared fixed line services, and changes in this use over time.

c. Retaining the current method would also avoid specific problems that are associated with the introducing of a 'fully allocated' methodology which I have noted in section 4.2.1, including that it shifts demand risk from Telstra to access seekers and that the setting of the opening RAB was dependent on the partial allocation method being used.

5 Declaration

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance that I regard as relevant have, to my knowledge, been withheld from my report.

Warwick Davis, Frontier Economics

Annexure A: Letter of instruction

THOMSON GEER
LAWYERS

Level 20, 385 Bourke Street
Melbourne VIC 3000 Australia

GPO Box 524 Melbourne VIC 3001
DX 428 Melbourne

T +61 3 9670 6123
F +61 3 9670 5670

Our ref GXP:1358374999

18 December 2014

Mr Warwick Davis
Frontier Economics
By email to: warwick.davis@frontier-economics.com.au

Dear Warwick

Treatment of arrangement between Telstra and NBN Co – request for report

We act for iiNet Limited (**iiNet**).

As you are aware, the Australian Competition and Consumer Commission (**ACCC**) is currently conducting a public inquiry into making a final access determination (**FAD**) for each of the following fixed line services:

- the Unconditioned Local Loop Service (**ULLS**);
- the Line Sharing Service (**LSS**);
- the Wholesale Line Rental Service (**WLR**);
- the Local Carriage Service (**LCS**);
- the Fixed Originating Access Service (**FOAS**);
- the Fixed Terminating Access Service (**FTAS**); and
- Wholesale ADSL Service (**WDSL**),

(**the Declared Services**).

The FADs will include the primary price terms for each of the Declared Services for the next regulatory period.

In October 2014 the ACCC released a position statement entitled: *Public Inquiry into final access determinations for fixed line services – primary price terms, Position statement on the treatment of the Telstra-NBN Co arrangements for regulated pricing* (**the Position Statement**).

The Position Statement sets out the ACCC's view on how the impacts of the arrangements between Telstra and NBN Co should be quantified for the purpose of setting prices for declared services. The ACCC's view is that the impacts of the arrangements between Telstra and NBN Co should be quantified using a regulatory values approach. This approach is described in more detail in chapter 3 of the Position Statement.

iiNet wishes to know:

1. Is it correct to say, as the ACCC does in the Position Statement, that the use of regulatory values as a basis for valuing transactions impacting regulated assets is standard practice by economic regulators?

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2. Is it correct to say, as the ACCC does in the Position Statement, that regulators consider only the costs attributable to regulated services and do not factor in the revenue a regulated business receives from other sources?

3. Can the ACCC's current partially allocated cost allocation approach be reconciled with a regulatory values approach to dealing with the NBN Co payments to Telstra, and if so, what are the advantages of doing so?

We would be grateful if Frontier Economics could provide us with a report that addresses each of these questions.

We have attached to this letter a copy of the Guidelines for Expert Witness in the Federal Court of Australia (**the Expert Guidelines**). We would be grateful if you could please have regard to the Expert Guidelines when preparing your report and, in particular, could you please ensure that:

- when preparing your report, you ensure that you have made all inquiries that you believe are desirable and appropriate and that no matters of significance that you regard as relevant have, to your knowledge, been withheld from your report;
- the report identifies any assumptions on which any of the conclusions in the report are based; and
- any conclusions in the report are based on Frontier Economics' knowledge and experience as economists.

Yours sincerely

Graham Phillips
Partner
T +61 3 9641 8639
M +61 411 646 770
E gphillips@tglaw.com.au

Annexure B: Warwick Davis CV

NAME:	WARWICK DAVIS
Profession:	Economist

Warwick advises clients on economic regulation issues in Australia, New Zealand and the broader Asia-Pacific region, with a focus on the telecommunications and transport sectors.

He has particular expertise in the areas of pricing and market analysis, including the application of pricing and costing frameworks to regulated network industries such as telecommunications, airports, post, rail and stock exchanges. Warwick has also advised on anti-competitive conduct and structural reform issues across a wide range of industries.

Warwick has 17 years experience as a professional economist, with 11 years in consulting and six years working for telecommunications and competition regulators in Australia and the United Kingdom.

KEY EXPERIENCE

A selection of recent projects Warwick has either managed or materially contributed to are presented below.

Telecommunications

- Provided an export report for iiNet on the issues raised by the Vertigan Review related to the current Part XIC access regime in the Competition and Consumer Act 2010.
- Provide an export report for Vocus on an appropriate methodology for determining the price of access to Telstra's ducts.
- Engaged by iiNet to examine the implications of the payments made by NBN Co for access to Telstra's infrastructure used in the delivery of the national broadband network.
- Prepare a report setting out the principles the NZ Commerce Commission should use when developing a cost model to set prices for the unbundled copper local loop service.

- Engaged to identify and provide some preliminary analysis of the economic issues in a forthcoming review of regulated prices for telecommunications services that are subject to access regulation.
- Engaged by an access seeker to estimate the efficient cost and price of accessing exchange buildings in which the access seeker installed equipment.
- Advised Macquarie Telecom and other access seekers on whether the service definition for wholesale line rental (WLR) and local carriage services (LCS) should be amended to include CBD areas.
- Advised Telstra on the pricing of the wholesale ADSL service, including preparation of expert reports.
- Provided an expert report on behalf of a group of access seekers in an ACCC arbitration dispute with Telstra on the prices charged for housing interconnect cables in its exchanges.
- Managed a consultancy for the Department of Broadband, Communications and the Digital Economy analysing data supplied by mobile operators in Australia and New Zealand to assess whether the market for mobile roaming services between the two countries was subject to market failure.
- Advising NBN Co on its Special Access Undertaking: Warwick led Frontier's team engaged by NBN Co to review and develop aspects of its Special Access Undertaking to be lodged with the ACCC.
- Advising the Australian Government on the National Broadband Network: Warwick led a team from Frontier advising the Department of Broadband, Communications and the Digital Economy on the assessment of proposals to build a national broadband network (NBN).

Other sectors

Warwick has advised clients in other network industries including airports, taxis, heavy vehicles, rail and stock exchanges, and on general competition matters. Details of this experience can be provided on request.

CAREER

2006 - present	Frontier Economics, Australia
2004-2006	Director, Telecommunications Group, ACCC
2002-2004	Economic adviser, Oftel / Ofcom (UK)
1999-2002	Senior Project Officer/Assistant Director, Telecommunications Group, ACCC

1997-1999	Consultant, Competition and Regulation Group, KPMG Consulting

EDUCATION

1998 – 2000	M.Commerce (Economics), with 1st class honours, University of Melbourne
1993 – 1996	B.Economics (Hons), with 1st class honours, Monash University, Melbourne

RELEVANT PUBLICATIONS

Journal Articles

- "From Futility to Utility: Recent developments in fixed line access pricing in Australia", *Telecommunications Journal of Australia*, Vol 61, No 2, 2011.
- (With Philip Williams), "Structural separation in Australia, economic and policy issues", *Telecommunications Journal of Australia*, Vol 58, May 2008, 11.1-11.13.

Other

- *Vertical price squeezes – lessons from New Zealand*, Paper presented at 8th Australian Business Law Workshop, November 2009

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FRONTIER ECONOMICS | MELBOURNE | SYDNEY
Frontier Economics Pty Ltd 395 Collins Street Melbourne Victoria 3000
Tel: +61 (0)3 9620 4488 Fax: +61 (0)3 9620 4499 www.frontier-economics.com
ACN: 087 553 124 ABN: 13 087 553 124