



TELSTRA CORPORATION LIMITED

**RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE
TERMINATING ACCESS SERVICE (MTAS)**

Public version

July 2011

TABLE OF CONTENTS

| | |
|--|----|
| EXECUTIVE SUMMARY | 5 |
| 1. INTRODUCTION | 8 |
| 2. FIXED AND MOBILE MARKET AND MTAS TRAFFIC FLOWS | 9 |
| 2.1. MTAS TRAFFIC FLOWS BETWEEN NETWORK OPERATORS | 9 |
| 2.2. MTM MTAS TRAFFIC | 10 |
| 2.3. FTM MTAS TRAFFIC | 11 |
| 3. PRICING METHODOLOGIES | 12 |
| 3.1. INTRODUCTION AND SUMMARY | 12 |
| 3.2. TSLRIC/TSLRIC+ | 12 |
| 3.2.1. CONSISTENCY OF TSLRIC/TSLRIC+ WITH THE STATUTORY CRITERIA . | 13 |
| 3.2.2. ESTIMATION OF TSLRIC+: FIXED VERSUS MOBILE NETWORKS | 13 |
| 3.2.3. ENGINEERING ECONOMIC COST MODELS | 14 |
| 3.3. BAK AND ASYMMETRIC PRICES | 20 |
| 3.3.1. OVERSEAS REGULATORY CONSIDERATIONS OF BAK PRICING FOR THE MTAS | 22 |
| 3.3.2. BAK AND INCENTIVES FOR ARBITRAGE | 23 |
| 3.3.3. NEUTRALITY OF BAK AND TRANSACTIONAL COST SAVINGS | 24 |
| 3.3.4. MTAS, VOICE CIRCUIT SWITCHING AND IP NETWORKS | 25 |
| 3.3.5. BAK, ASYMMETRIC RATES AND ALLOCATIVE EFFICIENCY | 25 |
| 3.4. PURE LRIC | 26 |
| 3.4.1. PURE LRIC DOES NOT ALLOW FOR EFFICIENT COST RECOVERY | 27 |
| 3.4.2. PURE LRIC AND CROSS-SUBSIDISATION | 28 |
| 4. IMPLEMENTATION OF PRICING METHODOLOGY & THE APPROPRIATE PRICE LEVEL 30 | |
| 4.1. INTRODUCTION AND SUMMARY | 30 |
| 4.2. INTERNATIONAL BENCHMARKING | 30 |
| 4.3. COST MODELLING AND THE 2007 WIK MODEL | 33 |
| 4.4. ACTUAL COST INFORMATION | 34 |
| 4.4.1. USE OF ACTUAL COST INFORMATION IS NOT APPROPRIATE | 34 |
| 4.4.2. EFFICIENTLY INCURRED COSTS | 35 |
| 4.5. GLIDE PATHS | 35 |
| Table 2: International glide paths | 36 |
| 4.6. BAK COMMERCIAL IMPLEMENTATION ISSUES | 37 |
| 4.6.1. MNOS ARE UNLIKELY TO NEGOTIATE MTM BAK AGREEMENTS | 37 |
| 4.6.2. COMMISSION SHOULD NOT SET A PRICE OF ZERO FOR MTM | 37 |
| 4.6.3. MTM DEREGULATION | 38 |

| | |
|--|----|
| 5. FIXED SERVICES AND FTM MTAS | 39 |
| 5.1. INTRODUCTION | 39 |
| 5.2. FTM MTAS PASS-THROUGH | 39 |
| 5.2.1. CUSTOMERS PURCHASE FIXED VOICE SERVICES AS A BASKET OF PSTN SERVICES | 40 |
| 5.2.2. PREVIOUS REDUCTIONS IN THE MTAS PRICE BEEN PASSED THROUGH TO CONSUMERS | 40 |
| 5.3. BENEFIT FROM MTAS REDUCTIONS ON FTM TRAFFIC IS MODEST | 41 |
| 5.4. COMMISSION’S SPECIFIC PASS-THROUGH PROPOSAL | 43 |
| 5.5. MTAS PRICE AND VOIP | 45 |
| 5.5.1. VOIP PROVIDERS CHOOSE THEIR OWN PRICING STRUCTURE | 45 |
| 6. NON-PRICE TERMS AND CONDITIONS | 46 |
| 6.1. MTAS FAD SHOULD NOT INCLUDE NON-PRICE TERMS AND CONDITIONS | 46 |
| 6.2. MTAS FAD SHOULD NOT INCORPORATE 2008 MODEL TERMS | 46 |
| 6.3. CONSISTENCY WITH OTHER SERVICES | 47 |
| 6.4. COMMUNICATIONS WITH END USERS, NETWORK MODERNISATION AND UPGRADE, AND FACILITIES ACCESS | 47 |
| 6.4.1. COMMUNICATIONS WITH END USERS | 47 |
| 6.4.2. NETWORK MODERNISATION AND UPGRADE | 47 |
| 6.4.3. FACILITIES ACCESS | 48 |
| 7. CONCLUSION | 49 |
| Appendix A – MATTERS THAT THE COMMISSION MUST AND SHOULD TAKE INTO ACCOUNT | 50 |
| 1. STATUTORY CRITERIA | 50 |
| 1.1. LONG-TERM INTERESTS OF END-USERS | 50 |
| 1.2. THE LEGITIMATE BUSINESS INTERESTS OF THE ACCESS PROVIDER, AND THE CARRIER’S OR PROVIDER’S INVESTMENT IN FACILITIES USED TO SUPPLY THE DECLARED SERVICE | 53 |
| 1.3. THE INTERESTS OF ALL PERSONS WHO HAVE RIGHTS TO USE THE DECLARED SERVICE: | 53 |
| 1.4. THE DIRECT COSTS OF PROVIDING ACCESS TO THE DECLARED SERVICE | 53 |
| 1.5. THE VALUE TO A PARTY OF EXTENSIONS, OR ENHANCEMENT OF CAPABILITY, WHOSE COST IS BORNE BY SOMEONE ELSE | 54 |
| 1.6. THE OPERATIONAL AND TECHNICAL REQUIREMENTS NECESSARY FOR THE SAFE AND RELIABLE OPERATION OF A CARRIAGE SERVICE, A TELECOMMUNICATIONS NETWORK OR A FACILITY | 54 |
| 1.7. THE ECONOMICALLY EFFICIENT OPERATION OF A CARRIAGE SERVICE, A TELECOMMUNICATIONS NETWORK OR A FACILITY | 55 |
| 1.8. APPLICATION OF THE STATUTORY CRITERIA | 55 |
| 2. OTHER MATTERS THE COMMISSION SHOULD TAKE INTO ACCOUNT | 56 |
| 2.1. CLARITY, BALANCE AND REASONABLENESS | 56 |

| | |
|--|----|
| 2.2. SCOPE OF THE FADS..... | 56 |
| 2.3. COMMERCIAL PRACTICE | 57 |
| Appendix B – Answers to Discussion Paper Questions..... | 58 |
| Appendix C – Pricing Methodologies | 65 |
| 1. TSLRIC/TSLRIC+ | 65 |
| 1.1. THE CONCEPT | 65 |
| 1.2. TSLRIC/TSLRIC+ ESTIMATION IN PRACTICE | 66 |
| 1.2.1. ESTIMATING THE TSLRIC COMPONENT | 66 |
| 1.2.2. ESTIMATING THE “+” COMPONENT | 67 |
| 1.3. PURE LRIC | 69 |
| 1.4. BAK | 70 |
| Appendix D – BAK, Asymmetric Rates and Allocative Efficiency | 72 |
| 1.1 INTRODUCTION | 72 |
| 1.2 MTM MTAS AT BAK AND BELOW-COST RETAIL MTM PRICING | 72 |
| 1.3 MTM MTAS AT BAK AND POSITIVE FTM MTAS CHARGES..... | 74 |
| 1.4 MTM MTAS ABOVE BAK AND POSITIVE FTM MTAS CHARGES..... | 77 |
| Appendix E – Arbitrage Scenarios from Asymmetric Rates | 78 |
| Appendix F – WIK Model Sensitivity Testing | 79 |

EXECUTIVE SUMMARY

- i. This submission has been prepared in response to the Australian Competition and Consumer Commission's (**Commission**) Discussion Paper for the Domestic Mobile Terminating Access Service (**MTAS**), June 2011 (**Discussion Paper**). Telstra notes the Discussion Paper was prepared in compliance with the Commission's requirement under Part 25 of the *Telecommunications Act 1997* (Cth) to commence a public inquiry into a proposal to make an Access Determination.
- ii. The price of MTAS is highly significant to the future efficiency, stability and growth of the mobile industry, and telecommunications more broadly. To date, mobile network operators (**MNOs**) have invested heavily in the infrastructure necessary to deliver ever-improving services on a competitive basis across almost all of the geographic areas where Australians live. This investment continues.
- iii. This submission sets out Telstra's views in response to the Discussion Paper, and provides a suggested way forward in pricing MTAS. A summary of Telstra's views is set out below.

TSLRIC + is the appropriate pricing methodology

- iv. TSLRIC+ prices for MTAS will best promote the long-term interests of end-users (**LTIE**) as it is a cost based price methodology which allows a return on, and return of, efficiently invested capital and the recovery of efficient common costs. Telstra does not consider that the other pricing methodologies (pure LRIC or BAK) will promote the LTIE or the other statutory criteria. Neither provides for the recovery of common and joint network costs incurred by an efficient multi-product mobile network operator. This will result in inefficient mobile market outcomes.

The appropriate TSLRIC+ MTAS rate is around 6 cents per minute

- v. Given that formal cost modelling has not yet been done by the Commission, Telstra considers that based on international benchmarking of TSLRIC+ prices and the 2007 WIK model results, 6 cents per minute (cpm) is an appropriate price.

International benchmarking

- vi. In the absence of up to date cost modelling, Telstra is of the view that international cost benchmarking may be useful for assessing whether a TSLRIC+ price is reasonable. However, any international benchmarking has to be carefully undertaken, with the appropriate cost drivers identified and adjustments made to account for Australia-specific factors.
- vii. In the absence of an updated comprehensive international benchmarking study, Telstra submits that the recent TSLRIC+ estimates across 12 countries (including Australia) assessed by the New Zealand Commerce Commission (**NZCC**) should be used by the Commission for Australia.
- viii. The NZCC found a range of TSLRIC+ MTAS estimates from NZ\$0.0277–NZ\$0.1089 per minute. Given the large range of estimates, Telstra considers that a higher point in the TSLRIC+ estimates of the MTAS range should be taken, so that:
 - (a) it can be safely assumed to not be below the cost of supplying the MTAS in Australia; and

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (b) it accounts for Australia being a large sparsely populated country, which as WIK Consult has recognised, is characterised by higher MTAS costs relative to other countries.

This confirms a price of 6 cpm is appropriate.

The WIK Model

- ix. The WIK model, built for the Commission in 2007, provides a TSLRIC+ estimate for MTAS for a 2G mobile network in Australia of approximately 6 cpm. While the WIK model is a 2G cost model, WIK Consult did make adjustments to account for 3G network deployments. Based on 2007 data, it showed that the cost savings of sharing infrastructure and the effects of data traffic increases on 3G networks meant that MTAS costs would decrease from 5.9 cpm to between 5.4-5.8 cpm.
- x. While there will be some cost savings from the new networks deployed and the increased volume of minutes since 2007, there will be several offsetting factors that will have increased costs. Examples of this include investment in additional coverage, capacity and increases in the proportion of traffic at busy hour periods.

Bill and Keep is distortionary and inefficient, and should be dismissed by the Commission

- xi. Bill and Keep (**BAK**) pricing, in effect, sets the MTAS price to zero. Whether the commercial exchanges that occur under these conditions are economically efficient (for example, whether network costs are recovered) then depends upon a range of other variables including the balance and mix of traffic between parties to the exchange. Setting prices to zero gives rise to incentives which distort demand and compromise efficiency, contrary to the LTIE.
- xii. Regulating MTAS prices on a BAK basis is unprecedented in jurisdictions where the calling party's network pays, and has only ever been applied in unique circumstances. It has been recently dismissed by regulators in jurisdictions such as NZ and the UK, and should be similarly dismissed by the Commission in Australia.
- xiii. MTAS prices should be set symmetrically across all types of MTAS. Even if it were a desirable approach (which it is not), BAK should not be applied asymmetrically as between Mobile-To-Mobile (**MTM**) interconnection, and Fixed-To-Mobile (**FTM**) interconnection since this results in different pricing, depending on the type of network the caller uses. MTAS is a homogenous product; the network elements used to supply MTAS are the same regardless of whether the call originates from a fixed or mobile network. Therefore there should be no distinction between FTM and MTM MTAS. This is consistent with the Commission's approach to determining the pricing of other regulated services.
- xiv. If MTM MTAS is treated on a BAK basis and FTM is treated differently this will lead to:
 - (a) the introduction of arbitrage opportunities;
 - (b) below cost MTM retail prices resulting in inefficient:
 - i. overuse of the mobile network; and
 - ii. under consumption of fixed services due to fixed to mobile substitution.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- xv. These distortions will not be in the LTIE of either fixed or mobile services. Moreover, BAK would provide little or no benefit in billing and transaction cost savings, as traffic in various classes would still need to be measured, and then a zero price applied where it originates on a mobile network. If anything, it could lead to increased transactional costs as changes to billing and other systems would need to be made.
- xvi. For these reasons, MTAS rates should be symmetrical and undifferentiated, irrespective of origination.

Retail FTM pass-through should not be imposed

- xvii. The Commission appears to suggest that a reduction in MTAS should lead to a comparable reduction in FTM retail prices. However, this assertion has two flaws.
- xviii. First, it fails to take into account the reality that customers purchase fixed voice services as a basket of PSTN services (i.e. access, local, national long distance, FTM and international calls) rather than as component services. Changes in underlying costs for one service may be passed on across the bundle of services.
- xix. Second, it assumes, without examining the prices of these bundles, that previous reductions in the MTAS price have not been passed through.
- xx. Telstra submits that retail pass-through should not be imposed because from 2004-2010, the average price of supplying the bundle of voice services has fallen by more than reductions in the unit cost of supplying the bundle (including the cost of terminating FTM calls). This shows that the reduction in MTAS price has been more than passed through to customers in the bundled price.
- xxi. In addition, even if the change in MTAS prices is passed-through to FTM retail prices, the actual impact is relatively modest in the context of Telstra's total retail FTM traffic.

MTAS FAD should not include non-price terms and conditions

- xxii. The inclusion of non-price terms and conditions in the MTAS FAD would impose additional regulatory burden with no additional benefits, given that parties have proven able to reach commercial agreements on these terms without intervention. Further, reference to fixed services non-price terms may not be relevant to the MTAS FAD.

1. INTRODUCTION

- 1 Telstra welcomes the opportunity to comment on the Commission's Discussion Paper.
- 2 Telstra provides this submission on the basis that the Commission intends to publish a draft final access determination (**FAD**) in due course. Whilst Telstra has flagged some issues which it believes the Commission should take into account before publishing its draft FAD, Telstra will provide more detailed submissions on any terms and conditions once they are published in a draft FAD.
- 3 In making a FAD, the Commission must take into account:
 - (a) the mandatory considerations set out in subs 152BCA(1) of the Competition and Consumer Act 2010 (**CCA**); and
 - (b) any other relevant considerations that are mandatory by implication from the subject matter, scope and purpose of Part XIC of the CCA.¹
- 4 The Commission may also take into account any other matters that it thinks are relevant.² Telstra's comments in relation to these considerations are set out in Appendix A.
- 5 The remainder of Telstra's submissions are structured as follows:
 - Section 2 sets out Telstra's response to the Commission's comments on how the fixed and mobile networks affect MTAS traffic flows;
 - Section 3 sets out Telstra's response to the various pricing methodologies for MTAS canvassed by the Commission in its Discussion Paper;
 - Section 4 sets out Telstra's response to the Commission's options for implementing those pricing methodologies;
 - Section 5 addresses several issues regarding FTM pass-through and the MTAS; and
 - Section 6 sets out Telstra's views on the Commission's proposal to incorporate various non-price terms and conditions.
- 6 In addition, Telstra sets out its responses to the Commission's questions in Appendix B.

¹ Minister for Aboriginal Affairs v Peko-Wallsend Ltd (1986) 162 CLR 24, 39-40 per Mason J.

² Refer to s 152BCA(3).

2. FIXED AND MOBILE MARKET AND MTAS TRAFFIC FLOWS

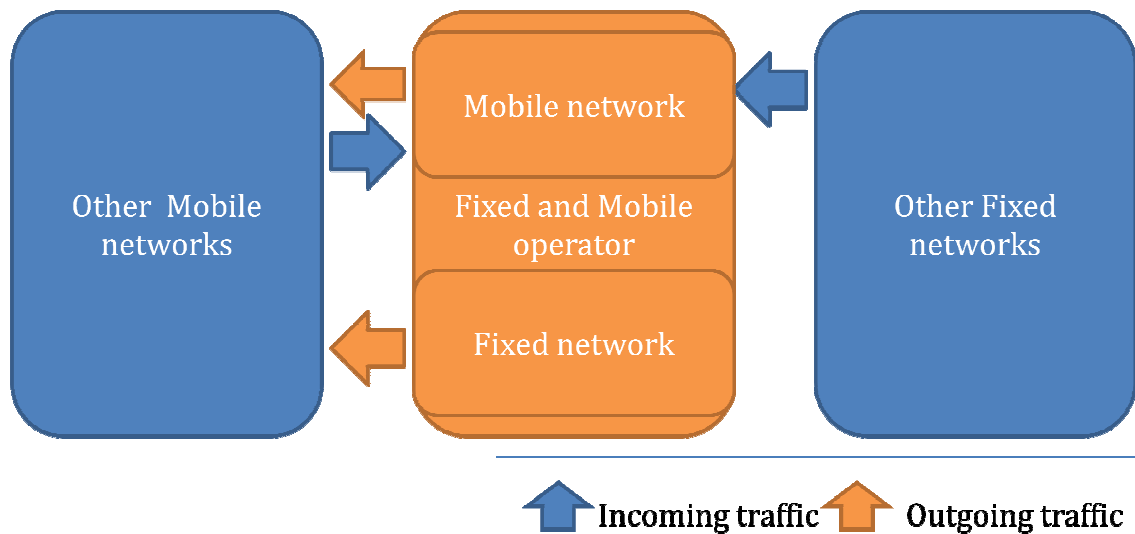
- 7 The domestic MTAS is defined as an access service for the carriage of voice calls from a point of interconnection, or potential point of interconnection, to a B-party directly connected to the access provider's digital mobile network. This definition reflects the fact that the cost of termination to the access provider of the B-party is the same regardless of the type of network from which the A-party calls.
- 8 That is, MTAS is a homogenous product. The Commission has acknowledged this but is also of the opinion that the downstream retail markets into which MTAS is an input, the fixed and mobile services markets, are different markets with different market dynamics. This difference in the downstream markets appears to have been used as the basis for the Commission considering that a different approach might be appropriate for pricing MTM MTAS and FTM MTAS.³
- 9 Telstra maintains that MTM and FTM MTAS are homogenous products, and to the extent (if any) that the retail markets in which mobile and fixed services are supplied are characterised by different market dynamics, this will impact on the MTAS traffic flows between suppliers, depending upon whether they operate fixed or mobile networks, or a combination of both. The traffic flows will also impact on the associated revenues from the service. An outline of the relevant MTAS traffic flows are set out below.

2.1. MTAS TRAFFIC FLOWS BETWEEN NETWORK OPERATORS

- 10 An operator's net traffic balance is dependent on the type of networks it operates. That is, whether the operator is a net receiver or originator of MTAS traffic will depend upon whether it is:
- (a) a fixed network operator;
 - (b) a mobile network operator; or
 - (c) a fixed and mobile network operator.
- 11 Fixed network operators do not receive, but only originate MTAS traffic. They are therefore net payers of MTAS charges.
- 12 An MNO will receive MTAS traffic from fixed network operators which implies incoming MTAS revenues. MNOs will also receive and originate MTAS traffic to and from other mobile networks, leading to in- and out-payers. However, as they are one-way recipients of incoming MTAS traffic from fixed operators, unlike fixed operators, they are more likely to be net recipients of MTAS traffic.
- 13 In the case of an operator of both fixed and mobile networks, the overall result depends on the amount of traffic originated from the operator's fixed or mobile networks to the networks of other MNOs, and the amount of traffic received from other fixed or mobile networks to the MNO's network.
- 14 The respective traffic flow received by the parties, that will also affect the net in-payments and out-payments, is highlighted in Figure 1 below.

³ The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 4.

FIGURE 1: MTAS Traffic Flows and Mobile, Fixed and Integrated Network Operators



2.2. MTM MTAS TRAFFIC

- 15 The Commission has suggested that, in the wholesale market for MTM MTAS, the voice traffic flows between any pair of the three operators with similar scale are likely to be broadly symmetrical. Further, this has been used as a justification for MTM MTAS traffic being priced on a Bill and Keep (**BAK**) basis. Telstra does not agree with this conclusion.
- 16 If all MNOs had an equal number of outgoing and incoming calls to and from other MNOs, regardless of market share, there would be no imbalance between MNOs. The imbalance is created where mobile customers receive more calls than they originate (or vice versa).
- 17 As a result any factor that leads to customers on one network making more calls on average than receiving calls, will mean the operator of that network will be a net out-payer of MTAS revenues to the other network operators.
- 18 This customer behaviour can be attributed to a number of inter-related factors including, but not limited to:
- (a) post to prepaid customer mix;
 - (b) mobile tariff structure; and
 - (c) special service customers who only originate calls and by definition will have asymmetric calling patterns.
- 19 For example, there is a segment of prepaid customers who are low-use customers who use their prepaid mobile to receive calls rather than make calls (which uses up credit). All other customer behaviour held constant, a mobile network with more low use prepaid customers (relative to the other networks) would be expected to be a net recipient of MTAS traffic.
- 20 **[C-I-C]**

2.3. FTM MTAS TRAFFIC

- 21 Unlike MTM traffic, where the traffic is two-way, FTM traffic is one-way. As a result, the market share of a fixed operator (relative to other fixed networks) is relevant to their net outgoing FTM traffic flows. The operator with the highest fixed market share will have the highest fixed-to-mobile originating minutes and therefore, out-payments. However, as both a mobile and fixed operator, Telstra's FTM traffic out-payment will be offset to some extent by the incoming fixed traffic to its mobile network. The same could be said for Optus with its HFC and other fixed network investments. Telstra operates a fixed network from which FTM traffic is originated on Telstra's network and terminated on other operators' mobile networks. Further, some carriers including Telstra also provide mobile termination from incoming overseas calls. **[C-I-C]**

3. PRICING METHODOLOGIES

3.1. INTRODUCTION AND SUMMARY

- 22 Telstra believes that the Commission, in determining MTAS prices designed to best promote the LTIE and meet the other statutory criteria, should set symmetric prices for the MTAS based on a TSLRIC+ methodology. A TSLRIC+ based price for MTAS will best promote the LTIE as it provides an access provider with an expectation of a return on efficiently invested capital and the recovery of efficiently incurred common costs.
- 23 Telstra submits that when considering the pricing methodology, neither BAK nor pure LRIC will promote the LTIE, because neither approach provides for the recovery of joint network costs and common costs incurred by an efficient multi-product mobile network operator. Those cost methodologies are also not consistent with other statutory criteria. Further, asymmetric pricing of the homogenous MTAS service (by having different regulated prices for MTM and FTM traffic) will create inappropriate incentives for arbitrage and result in inefficient mobile and fixed market outcomes.
- 24 Telstra's reasons are set out below.

3.2. TSLRIC/TSLRIC+

- 25 The Commission acknowledges that the positive aspects of TSLRIC/TSLRIC+ are that:

"TSLRIC pricing encourages access providers to continue minimising the cost of providing the MTAS, while at the same time acknowledging the legitimate commercial interests of an efficient access provider. TSLRIC also encourages competition by promoting efficient entry and exit from the industry."⁴

- 26 Telstra agrees. The Commission, however, also raises concerns that:
- (a) the efficiency gains that can be derived from TSLRIC or TSLRIC+ estimates are reliant on correct modelling of network costs of the best-in-use technology that is commercially available and, due to large technology changes in mobile networks, this requires ongoing reworking of the engineering economic cost model, which, amongst other things, involves large costs, a significant regulatory burden, and subjective judgments having to be made about the modelling process. Not updating the model could lead to under- or over-recovery of costs, both of which would offset efficiency gains from TSLRIC pricing;
 - (b) the allowance for common costs recovery under TSLRIC+ could provide for the over-recovery of costs as voice termination takes up a smaller amount of the capacity of overall transmission, and current networks are increasingly being optimised for mobile data and undergoing a transformation to an all IP-based network; and
 - (c) recent regulatory events have cast doubt on the continued use of TSLRIC+. This was highlighted by the Tribunal's statement that TSLRIC+ is overly complex and a simpler pricing methodology should be used. The Commission also noted that other jurisdictions had moved away from TSLRIC+.

⁴ The Commission, Domestic Mobile Terminating Access Service (MTAS) Public Inquiry to make an Access Determination, Discussion Paper, June 2011, p. 15.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- 27 Telstra believes these concerns are unjustified, for the reasons set out below. In Telstra's view, the Commission should use TSLRIC+ of MTAS to set the price of MTAS.
- 28 The Commission's Access Pricing Principles 1997⁵ were careful to distinguish between:
- (a) the cost concept of TSLRIC; and
 - (b) the process of estimating TSLRIC.
- 29 The Commission's current assessment of pricing methodologies in the Discussion Paper does not make this distinction. This leads to confusion when assessing pricing options. In particular, Section 6 of the Discussion Paper, which assesses the different pricing options for the MTAS, alternates between looking at appropriate pricing principles and looking at ways to estimate price. For example, actual costs and International Benchmarking are talked about as alternative pricing methodologies to TSLRIC/TSLRIC+ and LRIC. While typically TSLRIC/TSLRIC+ and LRIC estimates have been based on replacement or forward-looking (**FL**) costs and estimated using an engineering economic cost model, with assumed network design and technology parameters, the estimation of TSLRIC/TSLRIC+ or LRIC could also be done through international benchmarking. Telstra has attempted to distinguish the pricing methodology from its implementation in detail in Appendix C.

3.2.1. CONSISTENCY OF TSLRIC/TSLRIC+ WITH THE STATUTORY CRITERIA

- 30 The advantage of TSLRIC+ is that it provides the opportunity for the regulated supplier to recover its long run costs of supplying the service, even in the presence of scale economies. (See Appendix C on pricing methodologies for a full discussion of the TSLRIC/TSLRIC+ concept.) Provided costs are appropriately estimated, Telstra agrees with the Commission that TSLRIC+ based pricing will encourage the access provider to minimise the costs of providing the MTAS. This will promote competition and serve the LTIE.
- 31 Further, by including a return on efficiently invested capital (i.e. through the WACC), a return of efficiently invested capital (i.e. through depreciation), and a return of efficiently incurred common costs, TSLRIC+ pricing also promotes the legitimate commercial interests of an efficient access provider and recovers the direct costs of MTAS.

3.2.2. ESTIMATION OF TSLRIC+: FIXED VERSUS MOBILE NETWORKS

- 32 Telstra considers that estimating TSLRIC+ by an FL cost-based engineering economic cost model that incorporates best-in-use technologies for mobile networks, is less likely to face the problems identified by the Tribunal in Telstra's Application⁶ for fixed line services.
- 33 Whilst there has been ongoing investment in Telstra's fixed line network, asset valuation has been a contentious issue in that context due to the long history of the network, previous Government ownership and some parties' perceptions of the legacy nature of the asset. In contrast, mobile networks:
- (a) are newer;

⁵ The Commission, Access Pricing Principles — Telecommunications: A Guide, July 1997, available at <http://www.accc.gov.au/content/item.php?itemId=324346&nodeId=359f0b07ce6bf9362bd99ef124334523&fn=Access%20pricing%20principles.pdf>

⁶ Application by Telstra Corporation Limited [2010], ACompT 1, 10 May.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (b) have a natural oligopoly cost structure with multiple MNOs operating across broad geographic regions; and
 - (c) are continually being upgraded with new technologies.
- 34 Hence, arguments against allowing FL cost recovery are less relevant for MTAS. In particular, having multiple MNOs operating similar networks implies that the “hypothetical new entrant” concept is not as problematic for estimating mobile networks service costs as it is for fixed line services, as a number of mobile networks can each be used to inform the characteristics of the hypothetical entrant being modelled. Further evidence of the less problematic nature of any cost modelling is that, as Davis has noted, when assessing the appropriate pricing principles for MTAS, the Commission did not justify the use of TSLRIC+ based on the same “buy or build” philosophy as adopted prior to 2009 in fixed line services pricing.⁷ (See Appendix C for further discussion.)
- 35 In the context of MTAS, the presence of a number of competing ubiquitous network operators does, however, make it slightly more challenging for an FL engineering economic cost model to incorporate a scorched node approach. That is, unlike fixed networks where there is typically only one nationwide supplier, a scorched node approach for mobile networks requires a judgement to be made about which MNO’s nodes should be scorched. Consequently, unlike the cost models used for fixed line services, many FL engineering economic cost models for mobile services are built on a scorched earth basis. A scorched earth model may result in efficiencies being imposed that cannot be achieved by an actual efficient MNO. However, this potential issue can be overcome by the regulator making the appropriate adjustments to the prices resulting from these models.
- 36 A case in point is the WIK Consult cost model developed by the Commission to estimate the TSLRIC+ for the MTAS in Australia in 2007. The Commission maintained in 2009 that in part, because WIK employs a scorched earth approach, the model assumes cost efficiencies that may not be obtainable by an efficient MNO rolling out its network under competitive conditions.⁸ Consequently, the Commission considered that, despite adjustments made for Australian conditions, the WIK TSLRIC+ estimates provided an estimate that was somewhat lower than that achievable in reality.⁹ The Commission accounted for this by setting an indicative price of 9 cpm despite the model estimating an MTAS price of around 6 cpm.¹⁰

3.2.3. ENGINEERING ECONOMIC COST MODELS

- 37 Telstra acknowledges that there are challenges associated with estimating the TSLRIC+ for a mobile network and there is a need to ensure that if any engineering economic cost modelling exercise is undertaken, clear implementation rules are set down by the Commission. The Commission will need to set rules in respect of whether a top-down or bottom-up model is used, the level of network coverage, market share, technology mix and whether to adopt a scorched earth or scorched node approach (see paragraph 35 above).

⁷ This lack of reliance on the “buy or build” philosophy is highlighted by W. Davis (Frontier Economics), “From Futility to Utility – Recent Developments in Fixed Line Access Pricing”, Telecommunications Journal of Australia, Volume 61, Number 2, 2011, 32.1-32.16, p. 32.12.

⁸ The Commission, Domestic Mobile Terminating Access Service Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011, July 2009, p. 17 available at <http://www.accc.gov.au/content/item.phtml?itemId=864976&nodeId=1e1b39d5ede14c87b6482438d70ca1df&fn=MTAS%20pricing%20principles%20determination%202009%E2%80%9311.pdf>

⁹ Ibid, p. 18.

¹⁰ Ibid, p. 18.

- 38 Telstra acknowledges that the mobile industry has been the subject of rapid technology changes and, over the past decade, MNOs in Australia have upgraded networks from 2G voice networks to 3G and HSPA networks capable of handling increased data services.
- 39 Telstra does not consider, however, that the challenges, in respect of adopting and updating engineering economic cost models that are presented by ongoing technology changes, are insurmountable. In any event, although a failure to update the engineering economic cost model due to a technology change may result in over- or under-estimation of costs, this does not necessarily discourage the LTIE. As outlined in Section 3.2.3.1, the existence of multiple MNOs adopting new technologies makes the case for adopting FL engineering economic cost models more compelling and subject to less controversy than has been evident for fixed line networks.

3.2.3.1. USE OF ENGINEERING COST MODELS FOR MTAS

- 40 A survey of European countries indicates that more engineering economic cost models are now being used by national regulatory authorities (**NRAs**) than in the past, with MTAS prices being set for up to five years based upon the resulting outcomes. While the models in Europe increasingly provide for Pure LRIC estimates, the models are often the same as those employed to calculate a TSLRIC+ estimate.¹¹
- 41 The main reason for this is likely to be that the EC recommended that, from 2009, NRAs should adopt bottom-up cost models to estimate MTAS prices.¹² Regardless of the reason for the move, the increased use of engineering economic cost models in recent years highlights that such models can be built in the presence of new and emerging technologies.
- 42 Telstra recognises that the short timeframe for the current consultation limits the Commission's ability to build its own model. Provided that appropriate adjustments are made to account for differences in overseas market conditions and different regulatory approaches (i.e. Pure LRIC versus TSLRIC+), the Commission could use the results obtained from engineering economic cost models in other jurisdictions to inform the range of prices that could apply in Australia. This is discussed in greater detail in Section 4.
- 43 Further, Telstra believes that, although there are some limitations to the 2G WIK model, it still provides a useful point of reference given that:
- (a) it is configured to Australian market conditions; and
 - (b) it has in the past been adjusted to account for newer network technologies.
- 44 In the absence of a new model, the WIK model can still be used by the Commission for assessing the reasonableness of any MTAS prices or in determining an estimated range. Telstra provides further detail about how the WIK model results could be used to inform such an estimate in Section 4.

¹¹ Some of these engineering economic cost models have also been based on historical or actual costs rather than replacement costs. France is an example of a country where historical costs were incorporated into an engineering cost model that was used to derive the cost-based price. Estimates were also done with replacement costs and only a 2% difference was found in the LRIC+ estimate in 2007. (See ARCEP, Décision n° 08-1176 de l'Autorité de régulation des communications électroniques et des postes en date du 2 décembre 2008 portant définition de l'encadrement tarifaire des prestations de terminaison d'appel vocal mobile des opérateurs Orange France, SFR et Bouygues Telecom pour la période du 1er juillet 2009 au 31 décembre 2010, 2 December 2008.) In a more recent decision 2010 decision ARCEP outlined there was only a small difference, of the order of a few percentage points, between historical and current cost estimates. (See ARCEP, Décision portant sur la détermination des marchés pertinent relatifs à la terminaison d'appel vocal sur les réseaux mobiles français en métropole et outre-mer, la désignation d'opérateurs exerçant une influence significative sur ces marchés et les obligations imposées à ce titre pour la période 2011-2013, Decision no 2010-1149, 2 November 2010, footnote 26.

¹² European Commission (EC), Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, 7 May 2009.

3.2.3.2. TSLRIC + AND POTENTIAL FOR UNDER- AND OVER-RECOVERY

Expectation of a normal return

- 45 Engineering economic cost models and TSLRIC+ pricing estimates should provide, *ex ante*, an opportunity, for a firm that operates efficiently, to earn a normal return on the investment associated with the supply of the regulated service. The key elements of this are that:
- (a) it provides the opportunity for, but does not guarantee, a return;
 - (b) the price is set *ex ante* and, accordingly, there will normally be a certain amount of *ex post* under- or over-recovery of the costs incurred by access providers; and
 - (c) to the extent that an access provider adopts innovations that promote efficiencies, it should be rewarded, for a transitory period, by earning the benefits of that innovation. This is a key principle in any incentive-based regulatory regime.
- 46 A major concern that has been highlighted with FL TSLRIC or TSLRIC+ cost estimates obtained from engineering economic cost models has been that the need to rebuild a hypothetical network in each regulatory period, subject to certain network design and technology rules, has resulted in either:
- (a) an access provider being compensated for costs that it has never actually incurred, which results in an upward revaluation of the asset and an expectation of an above-normal return on its investment, despite no corresponding increase in efficiency (i.e. what is sometimes referred to by regulators as "a revaluation gain"); or
 - (b) a network that contains efficiencies that the access provider's network is unable to replicate, which results in a downward revaluation of the asset and an expectation of a below-normal price of return on the investment, even though past investments were prudently and efficiently incurred by the access provider (i.e. what is sometimes referred to as "a revaluation loss").¹³
- 47 The potential for such outcomes appeared to underpin the Tribunal's concerns about TSLRIC+ in *Application by Telstra* where the Tribunal noted that Telstra's business interests should be largely confined to receiving "*a commercial return on its prudent (past) investment in the infrastructure used to supply the ULLS, not a hypothetical new investment.*"¹⁴

Valuation of asset for mobile versus fixed networks

- 48 Telstra considers that, where asset valuations fluctuate substantially across regulatory periods, due to engineering economic cost models valuing networks in a manner that

¹³ Alfred Kahn has been a strident critique of the TSLRIC+ equivalent Total Element Long Run Incremental Cost (TELRIC) approach used in the US for this reason. He has pointed out that the engineering cost model of pricing fixed networks amounted to a rebuilding of the network on a blank slate, and was an incorrect approach as firms competed based on whether they could outperform the actual costs for the incumbent supplier. See A.E. Kahn, *Whom the Gods Would Destroy, or How Not to Deregulate*, 2001, AEI-Brookings Joint Center for Regulatory Studies, p. 4, which states that:

"I never dreamed, however, in proclaiming that efficient prices should be based on incremental costs, that policymakers would then proceed to ignore the actual incremental costs of the incumbent suppliers and instead adopt as the basis for policy the costs of a hypothetical, most efficient new entrant, constructing an entire set of facilities as though writing on a blank slate"

¹⁴ Application by Telstra Corporation Limited [2010], ACompT 1, 10 May, p.61, [244].

bears little or no resemblance to the underlying prudent network investments made by the access provider, it would *ex ante* create the expectation by the access provider that it would either under- or over-recover costs despite there being no corresponding efficiencies or inefficiencies over that regulatory period. The unpredictable and unstable nature of such a pricing regime would not be in LTIE. A network asset should not be valued on the basis of a network that bears little or no resemblance to the actual efficient costs associated with supplying services.

- 49 However, for the reasons outlined above, Telstra maintains that there is less concern about asset valuation of a hypothetical mobile network compared to a fixed line network. As outlined, the problem of the hypothetical new entrant investment process is simpler, as, unlike fixed line networks, there are a number of mobile competitors on which to assess the appropriate asset value across a broad geographic area (although the extent of coverage does vary amongst the operators). Further, the mobile networks are relatively new, there has been consistent investment in them and new technologies have been adopted where appropriate. Over the past decade in Australia, the mobile networks have developed from 2G voice-only networks to 3G networks adopting HSPA technologies, and are now in the process of adopting 4G LTE technologies. Consequently, there should not be the same level of concern associated with potential revaluation gains and losses from the use of FL engineering economic cost models to derive TSLRIC+ estimates for mobile networks, as assets are being consistently upgraded and replaced by all operators.
- 50 In relation to the Commission's application of the WIK model, to the extent that network design rules could create efficiencies that cannot be achieved by existing efficient networks, the Commission in its 2009 decision demonstrated that it was prepared to adjust the resulting TSLRIC+ estimate upwards.¹⁵ This effectively ensured that it avoided any unanticipated revaluation losses on prudent investments.

Potential for over- and under-recovery

- 51 The Commission has also stated that, given the nature of mobile networks and evolving technologies, it will need to consistently update the costs in a cost model. The Commission expresses concern that a failure to update an economic model "will almost certainly lead to under- or over-recovery."
- 52 Telstra, however, queries why constant updating of the model would be required. For the reasons set out above, it maintains that the Commission need not be concerned by under- or over-recovery of costs, especially where it is an *ex post* outcome and has not resulted from a change in a cost that the supplier can control.
- 53 Telstra considers that there is no need to continuously update costs in an economic cost model. If a model is used to estimate the price of a service when a given technology is in place but, during the course of the regulatory period to which that price relates, the provider increases its cost efficiencies through adopting some form of innovation, then, despite the regulated firm having an *ex ante* expectation of a normal return on its investment, it will *ex post* enjoy a certain amount of over-recovery of costs. This encourages innovation and productive efficiency throughout the regulated period, which is in the LTIE.
- 54 If the regulator were to update costs in the model immediately following the innovation, it would prevent the access provider from realising rewards from its new investment and

¹⁵ The Commission, Domestic Mobile Terminating Access Service Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011, July 2009, p. 17 available at <http://www.accc.gov.au/content/item.phtml?itemId=864976&nodeId=1e1b39d5ede14c87b6482438d70ca1df&fn=MTAS%20pricing%20principles%20determination%202009%E2%80%9311.pdf>

innovative activity. This would deter efficient investment activity thus reducing productive efficiency, contrary to the LTIE. The potential reward for being efficient is a key element of any incentive-based regulatory regime and mimics the type of outcomes anticipated in effectively competitive markets where firms are rewarded over some transitory timeframe for adopting successful market innovations.

- 55 The fact that there might be *ex post* under- or over-recovery of costs is not a legitimate reason for the Commission to dismiss an engineering economic cost model that has not been updated, as the adoption of new technologies within a regulatory period is entirely consistent with principles of an incentive-based access regime.

3.2.3.3. COMMON COST RECOVERY

- 56 The concern raised in Section 6.1 of the Discussion Paper about whether there is a need for common cost recovery is a concern about implementation of the cost model, as opposed to the cost concept of TSLRIC+.

- 57 Telstra notes that allowance for the recovery of common costs is legitimate, as it is aligned with efficient cost allocation rules (see Appendices A and C) and regulatory principles around cost allocation (see paragraph 119), and ensures that efficient regulated MNOs have the opportunity to earn a normal return. Failing to take common costs into account is contrary to the legitimate business interests of the access provider, is not in LTIE and goes against the previous position adopted by the Commission. For example, the 1997 Access Pricing Principles paper recognised that:¹⁶

"Failing to account for these common costs could violate the legitimate business interests of the access provider, reduce incentives to maintain and invest in infrastructure and distort the choice of technology towards technologies with low common costs."

- 58 In the context of MTAS pricing, the Commission has previously highlighted the legitimacy of efficient firms recovering common costs. In its 2007 Pricing Principles Determination, it stated that:¹⁷

"An efficient multi-product firm would have the expectation of recovering, in some manner, these common costs. As a result it would be expected that the prices of the firm's services (including prices for access) incorporate some contribution to these costs."

- 59 Telstra recognises that mobile networks are increasingly carrying more data, with voice now accounting for a smaller fraction of overall network capacity. It does not follow, however, that there should be no recovery of common costs associated with providing voice services. Ramsey-Boiteux pricing principles illustrate that an approach where no costs are allocated to one particular service would decrease allocative efficiency, which is contrary to the LTIE (See Appendix C).

- 60 To the extent that there is any *ex ante* expectation of an over-recovery of costs, it would be due to a failure to adjust the "+" downwards to take into account the smaller proportion

¹⁶ The Commission, Access Pricing Principles — Telecommunications: A Guide, July 1997. p. 39, footnote 41, available at <http://www.accc.gov.au/content/item.phtml?itemId=324346&nodeId=359f0b07ce6bf9362bd99ef124334523&fn=Access%20pricing%20principles.pdf>

¹⁷ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, p. 16, available at <http://www.accc.gov.au/content/item.phtml?itemId=804768&nodeId=d5983a0a28e85ce384267d635824d04d&fn=MTAS%20pricing%20principles%20determination%20report.pdf>

that voice makes up of the overall costs. However, assuming that the Commission continues to adopt the Equi-Proportionate Mark-Up (**EPMU**) rule that was applied to MTAS in 2007, then the amount of any "+" mark-up will depend on the amount of directly attributable costs compared to the total directly attributable costs. (See Appendix C for further details about the application of EPMU.) Accordingly, it is not apparent why TSLRIC+ pricing would lead to an expectation of an over-recovery of any joint and common costs to suppliers. This would only be the case, when using EPMU, if it was anticipated that the estimate of the directly attributable voice costs was too high, too low, or alternatively the "+" was not properly updated. This point is highlighted by the following example.

- 61 Consider initially that the TSLRIC for voice (not unitised) was \$20 million of the \$40 million of directly attributable costs of supplying all services, and there were \$10 million of common costs. Under EPMU voice would bear 50% of the \$10 million common costs, or \$5 million. However, if over time there was the same common cost, but the TSLRIC of total voice increased to \$30 million and total directly attributable costs of all services were now \$120 million, then under EPMU voice services should bear 25% of the overall \$10 million common costs, or \$2.5 million. That is, to the extent voice has become less of a contributor to the direct costs of the network, the "+" amount should be updated to avoid any over-recovery. Over-recovery will only occur to the extent that:
- (a) the "+" is not properly updated, and is left equal to the original amount of \$5 million;
 - (b) the direct costs of voice in the next period are expected to be over-estimated and set at, for example, \$60 million; or
 - (c) the total network costs are not updated, resulting in voice recovering, for example, 75% of the common costs.

3.2.3.4. VIEWS OF OTHER REGULATORY AUTHORITIES

62 In *Application by Telstra 2010*,¹⁸ the Tribunal's criticisms of TSLRIC and TSLRIC+ were largely with problems that it considered arose regarding the implementation of TSLRIC+ and the buy or build philosophy underlying the pricing of services subject to natural monopoly conditions.

63 In particular, the Tribunal stated that:¹⁹

"...the Tribunal's difficulty with the submissions presented to it on TSLRIC+ goes deeper than the specifics of the TEA Model. It is troubled by the notion that prices should be set on the basis of hypothetical competition for a market that has natural monopoly characteristics, just as it would be puzzled by a proposal to price access to an electricity distribution network in a way intended to cause users to choose whether or not to overbuild the whole network, replacing it completely. Quite separately, the Tribunal notes that the Commission proposes to examine TSLRIC+ as part of its review of pricing principles. The Tribunal encourages that review and the consideration by the Commission of alternative pricing regimes..."

64 Further, the Tribunal noted that "if TSLRIC+ continues to be preferred, more guidance needs to be given on how it should be implemented."²⁰

¹⁸ Application by Telstra Corporation Limited [2010], ACompT 1, 10 May.

¹⁹ Application by Telstra Corporation Limited [2010], ACompT 1, at [239].

²⁰ Application by Telstra Corporation Limited [2010], ACompT 1, at [239].

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

65 As outlined above, it is not evident to Telstra that the same considerations apply when estimating TSLRIC+ for mobile networks. Due to the actual level of competition between MNOs and the ongoing upgrade, investment and modernisation of mobile networks, there should be fewer implementation concerns about using FL TSLRIC+ estimates derived from economic cost models.

66 Regulators in other jurisdictions, such as Ofcom, have however questioned the conceptual validity of TSLRIC+ pricing. In 2010, when moving from LRIC+ (i.e. the UK equivalent of TSLRIC+) to a Pure LRIC approach, Ofcom concluded that Pure LRIC better promoted sustainable competition, was economically efficient and was unlikely to raise material equity concerns. It did however note that there were merits to both Pure LRIC and LRIC+ pricing:²¹

"Our analysis suggest that there are merits in the pure LRIC approach as well as in the LRIC+ approach, and the economic judgment on which is better is finely balanced. Therefore in the absence of sufficient reasons to depart from the approach set out in the Recommendation, we think that it is appropriate to follow it."

67 Telstra considers that TSLRIC+ is conceptually more suited to pricing MTAS than pure LRIC based costing, which excludes recovery not only for common costs but also for any joint network costs. A full critique of Pure LRIC is provided in Section 3.4 below and further information about Pure LRIC is available in Appendix C.

68 Finally, Telstra notes that in order to undertake a Pure LRIC assessment in Europe, the NRAs have been required to consider exactly the same type of engineering economic cost models that have been used to derive the TSLRIC+ estimates. In fact, the same model is sometimes used to derive pure LRIC and TSLRIC+ estimate for the service. Therefore, despite the European trend away from TSLRIC+ pricing, the FL engineering economic cost model has been retained. The ongoing use of these models for mobile networks by overseas regulators further highlights that the implementation concerns of the Tribunal about fixed line networks in Telstra's Application²² are less relevant to mobile networks.

3.3. BAK AND ASYMMETRIC PRICES

69 The Commission states that, as it believes that voice traffic flows between the three MNOs with similar scale are likely to be broadly symmetrical, MTM MTAS prices could be based on BAK in 2012. Further, it considers that BAK could be introduced more generally for MTAS pricing, but that a glide path may be more appropriate to account for the large disparity the Commission sees between current MTAS and PSTN TA prices.

70 The Commission, in putting forward this proposal, highlights the benefits of BAK for MTM MTAS in Section 4.2 of the Discussion Paper, and the benefits for BAK more generally in Section 6.5. It relies on:

- (a) a number of theoretical papers that illustrate the allocative efficiency benefits of BAK over a Caller Party Network Pays (**CPNP**) scheme in the presence of a calling externality;
- (b) the productive efficiency benefits through the reduction of frictional and transactional costs associated with collecting, reconciling and billing large volumes of call record data;

²¹ Ofcom, Wholesale mobile voice termination Market Review Volume 2—Main Consultation, 1 April 2010, available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/summary/wmvct_consultation.pdf

²² Application by Telstra Corporation Limited [2010], ACompT 1, at [239].

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (c) the fact that a number of countries with BAK regimes have lower prices and higher utilisation prices in their retail sectors and that the Body of European Regulators for Electronic Communications (**BEREC**) recently found that BAK was likely to deliver material welfare gains; and
 - (d) the fact that rapid technological advances and growth of data services are leading to a decrease in costs such that cost-based prices will eventually be close enough to zero so that BAK will have the advantage of removing any ongoing regulatory burden. With respect to the views on technology and the transition to an all IP-based network, the Commission in Section 5 of the Discussion Paper also suggests that the high voice revenues from the legacy circuit switched world might deter further investment in IP technologies.
- 71 The Commission does, however, acknowledge in relation to asymmetric pricing of the MTM MTAS and FTM MTAS, that there will be opportunities for arbitrage, and that work may need to be done with industry to ensure compliance in the presence of asymmetric prices being introduced.
- 72 Telstra considers that BAK is not an appropriate pricing mechanism for MTAS and is inconsistent with the statutory criteria for the reasons set out below.
- 73 Unlike TSLRIC+ (discussed in Section 3.2), BAK does not provide for the recovery of efficiently incurred costs in supply of MTAS. In addition to this, (as outlined in Appendix C which considers the concept of BAK and its uses in practice) the efficiency of BAK relies upon the existence of either:²³
- (a) strong call externalities. That is, as a customer derives a benefit from incoming calls that are unaccounted for by the calling party, efficiency (allocative) will be maximised by setting a termination price that is below cost to encourage calling; or
 - (b) low costs associated with supplying the MTAS and significant cost savings from avoiding the transactions costs associated with billing.
- 74 Telstra considers that BAK will be neither efficient, nor consistent with the statutory criteria, as:
- (a) the Commission cannot be satisfied of the existence of calling externalities in Australia that would provide the efficiency basis for the adoption of BAK pricing; and
 - (b) there are still non-trivial costs associated with the supply of MTAS which need to be recovered, and the continuation of MTAS charges will result in minimal transactional costs being incurred.
- 75 Telstra believes that as MTAS is a homogenous service that needs to be priced the same way regardless of whether a call originated from a fixed or mobile network, the existence of asymmetric prices and the use of BAK will create inappropriate incentives for arbitrage. Further, in the absence of any calling externalities, asymmetric pricing will result in allocative, productive and dynamic inefficiencies and thus not be in the LTIE. This is due to:

²³ This criterion was also used by the New Zealand Commerce Commission when assessing the appropriateness of BAK being adopted for MTAS. See Commerce Commission, Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS) Commerce Commission, 5 May 2011

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (a) inefficient over-use of MTM calling and over-use of the mobile network; and
 - (b) inefficient FTM voice substitution.
- 76 To highlight these issues with BAK and asymmetric prices, Telstra provides details below outlining the following:
- (a) recent regulatory decisions from the UK and New Zealand that have rejected the adoption of BAK for MTAS;
 - (b) inappropriate incentives for arbitrage that asymmetric prices with BAK for MTM MTAS creates;
 - (c) the lack of any transaction costs savings under BAK and the non-neutral impact of BAK across businesses;
 - (d) the fact that consideration by the Commission of developments in an all IP environment is inappropriate given that it is still evolving and large scale demand for IP interconnection service is likely to be 5-10 years away; and
 - (e) the fact that, in the absence of a calling externality, BAK combined with an above cost FTM MTAS price will result in allocative inefficiency.

3.3.1. OVERSEAS REGULATORY CONSIDERATIONS OF BAK PRICING FOR THE MTAS

- 77 Telstra is not aware of any country or regulator that has successfully moved from a charging arrangement for the MTAS (i.e. a caller party network payment (CPNP) regime) to a BAK pricing arrangement. While the US and Singapore are examples of markets that have BAK pricing, both are also markets that already have retail receiver party pays (RPP) arrangements in place.
- 78 Regulators and Regulatory Oversight bodies have assessed the potential efficiencies and market distortions that could arise from BAK pricing of MTAS, with both Ofcom and the New Zealand Commerce Commission recently rejecting its use.
- 79 Ofcom rejected BAK on the basis that:²⁴
- (a) assessing the size of call externalities or the degree of possible internalisation is difficult;
 - (b) no regulator mandates BAK; and
 - (c) mandating BAK would mean a departure from prices that reflect the underlying costs of termination—a significant change from past regulation.
- 80 The Commerce Commission noted that BAK may incentivise operators to attract customers who make more calls than they receive, and it would also encourage off-net calling. It

²⁴ Ofcom, Wholesale mobile voice termination Market Review Volume 2—Main Consultation, 1 April 2010, pp. 81-82, available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/summary/wmvct_consultation.pdf

considered that this was likely to be inefficient as such behaviour was not being driven by the underlying costs of supplying termination.²⁵ Further, it rejected BAK on the basis that:

- (a) it was not satisfied that there were sufficient un-internalised calling externalities in the context of the New Zealand market; and
- (b) it could lead to arbitrage opportunities due to the differential prices for FTM and MTM MTAS.²⁶

81 In addition, in 2009, the European Commission (**EC**), when assessing BAK, outlined a number of concerns around the distortionary impact it could have, stating that:²⁷

"setting the price of any service at zero may cause distortionary behaviour, bring arbitrage opportunities, lead to inefficient traffic routing and inefficient network utilisation. For instance a potentially problematic issue might be inefficient routing of traffic from operators not participating in the Bill and Keep scheme."

82 The incentives for arbitrage, and the potential for distortionary behaviour and inefficiencies, are examined further in Section 4.2.2.

3.3.2. BAK AND INCENTIVES FOR ARBITRAGE

83 Prior to 2005, the French regulator (ARCEP) mandated BAK for MTM MTAS, but excluded FTM MTAS from the scope of the arrangement. The arrangement was ultimately abandoned by the ARCEP due to fixed networks operators (**FNOs**) and MNOs taking advantage of the arbitrage opportunities presented by the MTM MTAS zero price.

84 This was done by FNOs routing FTM calls through a third party mobile operator's gateway to avoid the FTM MTAS prices. The MNOs were incentivised to participate, as by taking this traffic from the fixed networks at a lower price than the applicable FTM MTAS price, it could then terminate that traffic on another mobile network, and keep the difference. The FNOs paid less than the FTM termination price.

85 In 2004, it was estimated that as a consequence of this behaviour up to 80-90% of FTM calls were being routed through mobile gateways.²⁸ ARCEP acted by removing BAK and introducing cost-based MTAS prices across FNOs and MNOs. It concluded that BAK was not sustainable if implemented partially in the industry.

86 Telstra considers that the example in France demonstrates that asymmetric MTAS prices create incentives for firms to take advantage of, and exploit, arbitrage opportunities. This in turn promotes:

- (a) non-commercial use of the network assets despite the increased usage of the network;
- (b) distorted and inefficient investments that would not otherwise be taken in non-productive and non-network related activities such as SIM boxes or GSM gateways;

²⁵ Commerce Commission, Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS) Commerce Commission 5 May 2011, p. 34.

²⁶ Ibid, p. 89.

²⁷ European Commission, Commission staff working document accompanying the commission recommendation on the regulatory treatment of fixed and mobile termination rates in the EU: Explanatory Note, 7 May 2009.

²⁸ NERA, MTAS—Applicability of Bill and Keep, 13 February 2009, p. 5.

- (c) the potential for extra traffic without investment to manage this, resulting in network congestion; and
- (d) inefficient acceleration of substitution of traffic from fixed line to mobile markets.

The potential for allocatively inefficient usage of services in the mobile and fixed markets with asymmetric prices is examined further in Appendix D.

- 87 Telstra’s preliminary analysis suggests that there is nothing preventing similar arrangements being set up in Australia if the Commission were to introduce BAK pricing for MTM MTAS and at the same time set a positive FTM MTAS price. Telstra considers that there is the potential for each of the following scenarios to arise with differential MTAS prices:

[C-I-C]

- 88 Diagrams, highlighting each of the above scenarios, are provided in Appendix E.
- 89 Telstra has observed that some providers, in particular, those less regulated providers of international services have attempted to take advantage of arbitrage opportunities in the past. This strong incentive for arbitraging differential prices, along with the adverse consequences, highlights the inappropriateness of the Commission introducing a similar arrangement in the Australian market.

3.3.3. NEUTRALITY OF BAK AND TRANSACTIONAL COST SAVINGS

- 90 As set out in Section 2, the Commission should not conclude that equal market share will result in balanced traffic between the MNOs. This depends on the calling profile of end users on each network, including, for example, the mix of pre-paid versus post-paid customers. However, even if traffic did appear balanced and the net payments remained the same, BAK pricing will not have a neutral impact on the MNOs. That is, even if there is no change in the payments between operators, the access charge will impact each network’s marginal cost differently and thus impact on the prices charged for retail services. This is known as the “bill and keep fallacy”.²⁹ The Commission should take this impact into account if undertaking any assessment of BAK arrangements.
- 91 Further, Telstra maintains that a move to BAK for MTM traffic only would not reduce transactional costs and, in fact, would likely increase those costs. Telstra’s system for recording its wholesale fixed and mobile interconnecting traffic is a fixed cost and would exist with or without charges for MTAS.
- 92 If BAK was introduced for MTM calls only, Telstra’s network would still need to generate call records for all calls, mediate those calls and then price them in Telstra’s wholesale system. It is only at the point of pricing the call that it can be clearly and unambiguously identified as an MTM call as distinct from another call. Simply pricing the MTM call at zero will not remove the need to undertake this work.
- 93 As the pricing of MTAS traffic currently does not distinguish between FTM and MTM calls, Telstra does not have to validate whether the call originated from a fixed or mobile network. A move to BAK for MTM, while retaining a charge for FTM, would introduce the need to differentiate between mobile and fixed originated traffic for charging purposes. This additional step would increase system complexity and cost, not reduce it.

²⁹ J-J. Laffont and J.Tirole, *Competition in Telecommunications*, 2000, The MIT Press, Cambridge, Massachusetts.

- 94 Finally, operators could have already voluntarily chosen to enter into BAK schemes, yet they have not done so, despite the cost savings anticipated by the Commission. This shows that the commercial savings from such an arrangement are not that compelling.

3.3.4. MTAS, VOICE CIRCUIT SWITCHING AND IP NETWORKS

- 95 Telstra agrees with the Commission that investments in all IP networks and increased data usage will lower the efficient costs of supplying MTAS over time. However, Telstra submits that consideration of an all IP world with IP interconnection is not a relevant matter for the purposes of current pricing of MTAS. It is unnecessary and unwarranted given that access providers do not currently operate in an IP world and it is not clear what an IP world will look like. Telstra believes that demand for IP interconnection services on a meaningful scale is still at least 5-10 years away. In addition, service standards for IP interconnect are yet to be defined properly by international bodies.
- 96 MTAS voice services are still typically supplied using a circuit-switched voice service which imposes non-trivial and positive costs on suppliers. Accordingly, there should be positive charges for these services to recover costs.
- 97 Telstra disputes the claim by the Commission that the current revenue model "*relies on profit from wholesale voice termination*" and that it potentially might create "*an incentive for MNOs to retain their legacy circuit-switched technologies to earn termination revenues, at the expense of investing in the LTE*".³⁰
- 98 Telstra does not consider wholesale voice termination to be a service from which it profits. This is reflected in the current submission, and in previous submissions, where Telstra has consistently supported the Commission's use of a cost-based termination price based on a TSLRIC+ standard. Such an MTAS price only provides for the expectation of return on and normal return on efficiently invested capital and a mark up for efficient common costs. In the 2009-2011 pricing determination, Telstra supported an MTAS price from the WIK model that the Commission concluded was below cost, as, in its view, it reflected efficiencies that were not achievable by an efficient actual MNO.
- 99 Further, Telstra disagrees with the Commission that MTAS prices might somehow defer innovation. The Commission itself acknowledges that all MNOs currently have plans to provision LTE in their networks. Telstra considers that the MTAS price should provide for the expectation of cost recovery, including the return of, and a normal return on, efficient invested capital.

3.3.5. BAK, ASYMMETRIC RATES AND ALLOCATIVE EFFICIENCY

- 100 BAK pricing will only be efficient if there is some un-internalised calling externality in the market. Therefore, the Commission must be satisfied that such externality exists, as otherwise, in the absence of lower transaction cost benefits, BAK will decrease the efficient operation of the mobile and fixed line telecommunications market. Telstra is unaware of any evidence of a un-internalised calling externality in the Australian market that would justify the use of BAK pricing.
- 101 In the absence of the Commission being satisfied that un-internalised calling externalities exist, such a regime will decrease allocative efficiency. This outcome is set out in greater detail in Appendix D which examines the following scenarios:

³⁰ The Commission, Domestic Mobile Terminating Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 14.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (a) the impact of BAK for MTM MTAS prices on the retail MTM market;
 - (b) the impact of a combination of MTM MTAS at BAK and FTM MTAS at TSLRIC+ on the retail MTM market and fixed voice service market, when the shortfall in interconnection revenues is not made up for by the FTM MTAS price;
 - (c) the impact of a combination of MTM MTAS at BAK and FTM MTAS at TSLRIC+ on the retail MTM market and fixed voice service market, when the shortfall in interconnection revenues is made up from by an increase in the FTM MTAS price; and
 - (d) the impact on the retail MTM market and fixed voice service market if MTM MTAS prices were set slightly above BAK prices.
- 102 The analysis illustrates that such an access pricing regime will result in:
- (a) below-cost pricing for retail MTM calling, which creates allocatively inefficient over-consumption of MTM calls; and
 - (b) a lower price for MTM calling relative to fixed line voice service calling, which generates allocatively inefficient FTM substitution.
- 103 These outcomes are in addition to potential productive inefficiencies generated through investment in unproductive arbitrage activities and dynamic inefficiencies from the failure to recover investment costs on the termination service.
- 104 Given the potential for these inefficiencies across both the MTM retail market and the fixed voice services market, Telstra maintains that BAK cannot be considered in the LTIE.

3.4. PURE LRIC

- 105 The Commission outlines in the Discussion Paper that the EC Recommendation has set out that NRAs should set MTAS prices based on a Pure LRIC method using a bottom-up economic model with current costs, and that a number of NRAs have subsequently adopted this approach.³¹
- 106 The Commission notes that, in contrast to TSLRIC, Pure LRIC does not provide for the recovery of common costs of a network providing a full range of services, and states that the LRIC approach:
- (a) acknowledges the legitimate interests of access providers by allowing for efficient cost recovery; and
 - (b) ensures that access seekers acquiring voice termination are not subsidising access providers for network and investment costs incurred in providing data services.³²
- 107 Finally, the Commission indicates that, in order to estimate a Pure LRIC on an FL cost basis, a regulator must overcome similar challenges to those faced when estimating the TSLRIC+.
- 108 Telstra acknowledges that a number of NRAs in Europe have proposed implementing the Pure LRIC model during the current control period or the next regulatory control period

³¹ European Commission (EC), Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, 7 May 2009.

³² The Commission, Domestic Mobile Terminating Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 16.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

(including Austria, Belgium, France, Netherlands, Portugal, Spain, Sweden and the UK) and that at times the same engineering economic costs models are used to derive Pure LRIC and TSLRIC+ estimates.

- 109 The Belgian regulator, BIPT, was the first to adopt the approach and, in June 2010, estimated a TSLRIC+ for MTAS for 2010 with a glide path to a Pure LRIC price for 1 January 2013.³³ On 15 March 2011, Ofcom chose to adopt a Pure LRIC approach and outlined a four-year glide path for its introduction in April 2014.³⁴
- 110 From the limited number of Pure LRIC estimates, the prices appear to be 30-40% of the corresponding TSLRIC+ estimates. The large difference is due to Pure LRIC being based on avoidable costs and therefore excluding non-traffic related costs, such as common costs (i.e. corporate overheads costs) and joint network costs (i.e. infrastructure that jointly supplies voice termination services and other services).
- 111 For the reasons set out below, Telstra considers that the Commission should not use Pure LRIC to set prices for the MTAS. In particular, Telstra considers that Pure LRIC does not provide an MNO with an expectation of recovering its efficient costs, and it is incorrect to suggest that Pure LRIC on the voice MTAS avoids a subsidy payment being made by access seekers of voice termination to data services.

3.4.1. PURE LRIC DOES NOT ALLOW FOR EFFICIENT COST RECOVERY

- 112 The LRIC approach is an approximation of the long run marginal cost of supplying MTAS, and, in the presence of significant economies of scale, can provide for an expectation of significantly below normal returns. The LRIC approach fails to account for a cost that efficient firms undertaking prudent investment would allocate across services and is not, therefore, in the legitimate interests of access providers. Given that it will lead to under investment and will fail to promote competition it is also not in the LTIE and is inconsistent with the other statutory criteria.
- 113 Although the Commission has previously expressed doubts about the applicability of TSLRIC+ pricing estimates using FL costs for fixed line access services, it has at no point suggested joint and common costs are an irrelevant cost that the access provider should not be able to recover. As highlighted in paragraphs 57-58, in both the Access Pricing Principles Paper³⁵ and in its 2007 MTAS Pricing Principles documents,³⁶ the Commission has stated respectively that:

"Failing to account for these common costs could violate the legitimate business interests of the access provider, reduce incentives to maintain and invest in infrastructure and distort the choice of technology towards technologies with low common costs."

and

"An efficient multi-product firm would have the expectation of recovering, in some manner, these common costs. As a result it would be expected that the prices of the

³³ Ovum (M. Howett, C. Wang, M.P. Sirio), "The status of mobile termination regulation in the EU15", 9 November 2010.

³⁴ See Ofcom, Wholesale Mobile Voice Call Termination Statement, Annex 3, 15 March 2011.

³⁵ The Commission, Access Pricing Principles — Telecommunications: A Guide, July 1997, p.39, footnote 41, and

³⁶ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, available at <http://www.accc.gov.au/content/item.phtml?itemId=804768&nodeId=d5983a0a28e85ce384267d635824d04d&fn=MTAS%20pricing%20principles%20determination%20report.pdf>

firm's services (including prices for access) incorporate some contribution to these costs."

- 114 For similar reasons, the NZCC rejected the EC access pricing approach for MTAS. It stated that pure LRIC was "problematic" as it involved the recovery of common costs from services other than MTAS.³⁷ The NZCC considered that a TSLRIC-based pricing approach using FL costs for the voice termination service with a mark-up to account for common costs was likely to best promote competition for the long term benefit of end users.³⁸
- 115 Further, while Ofcom adopted a pure LRIC approach, it did note that it did not provide for overall cost recovery and compared to LRIC+ (i.e. TSLRIC+ in Australia). It was therefore less preferable for dynamic efficiency,³⁹ and carried with it some risk of reduced investment because of the failure to recover joint network and common costs.⁴⁰ The failure of pure LRIC to recover costs was highlighted by its acknowledgement that a larger proportion of common costs may have to be recovered from the retail side of the market.⁴¹

3.4.2. PURE LRIC AND CROSS-SUBSIDISATION

- 116 It is incorrect for the Commission to suggest that an advantage of pricing voice MTAS at Pure LRIC is that voice access seekers will not subsidise access providers for network and investment costs incurred in providing data services.
- 117 Voice access seekers should contribute to overhead expenses and investment infrastructure that is shared when supplying voice and data services. It is this payment that is being avoided under Pure LRIC pricing, and it is wrong to suggest that this contribution to overall cost is in any sense a subsidy, as the payment is not funding any infrastructure that is solely used for data services. Further, a "subsidised" service in a regulatory economics context would normally be defined as a service for which the price was set below the TSLRIC.⁴² Under the standard definition of subsidy in a regulatory economics context, it is the Pure LRIC priced voice service that is being subsidised by the other services, such as the data service.
- 118 In particular, recovering Pure LRIC costs on voice termination only means that voice origination, which Ofcom acknowledged shares much of the infrastructure with termination access,⁴³ will bear all the joint network investment costs and a portion of voice termination's common costs. That is, mobile voice origination would effectively be forced

³⁷ Commerce Commission, Final Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specified services, 22 February 2010, p. 96, para 361.

³⁸ Commerce Commission, Final Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specified services, 22 February 2010.

³⁹ Ofcom, Wholesale Mobile Voice Call Termination Statement, 15 March 2011, p. 24.

⁴⁰ Ibid, pp. 174-175, paras 8.50-8.51. This shows that ultimately Ofcom determined that this risk was relatively small due to the small differences in termination revenues between LRIC and LRIC+. Further, Ofcom assessed that MNOs still had strong investment incentives to continue investing in infrastructure that would deliver terminating services as these assets were largely shared with originating access services.

⁴¹ Ibid, Section 7.

⁴² G.R. Faulhaber, "Cross-Subsidisation: Pricing in Public Enterprises", American Economic Review 65, 1975, pp. 966-977. Under Faulhaber's definition, pricing between the equivalent of total service long run incremental costs, (which he refers to as incremental costs), and stand-alone costs, will be "subsidy-free".

⁴³ Ofcom, Wholesale Mobile Voice Call Termination Statement, 15 March 2011, pp. 174-175, paras 8.50-8.51, highlights that terminating service assets were largely shared with originating access services.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

to subsidise mobile voice termination investments. This point is also noted by WIK which in commenting on the EC recommendations states that:⁴⁴

"The crucial aspect of the approach [proposed by the EC] is that it considers termination as the service that the operator has, as it were, taken into its portfolio as the very last service.

...

WIK-Consult considers this new interpretation of the LRIC cost standard as ill-founded. There is no reason to assume that termination is the last service for which an operator provides capacity in its network."

- 119 This highlights that implicit in pure LRIC is the notion that, as the termination component of the service comes last in the supply of an overall voice service, it should not be responsible for bearing any contribution that the end-to-end voice service makes to the joint and common costs. This approach, however, fails to recognise that, when allocating joint and common costs, a fundamental tenet of access pricing regulation has been that unless special circumstances arise, if neither service can currently be supplied without having access to the common or shared infrastructure then the timing and ordering of the services supplied is an irrelevant factor. This was considered by Baumol and Sidak, who state in relation to principles of cost allocation:⁴⁵

"..suppose that equipment used to produce service X and equipment used to produce equipment Y are both housed in a single space that must be carefully air-conditioned to prevent contamination of the equipment. The outlay for air conditioning must be made if the company supplies only X, only Y, or both X and Y. Consequently, the cost of the air-conditioning equipment is not incremental to either X or Y alone. If either service were discontinued, the company could not avoid the cost of replacing the air conditioner when the time for that arrived. Nor can one argue that the air conditioner cost is the responsibility of the service that happened to be provided first. That the company started to supply X in 1980, while Y was not introduced until 1987, is an irrelevant piece of history. Today, neither service can be provided without the air-conditioning, and once the firm has decided to continue either one of the services, provision of the other adds zero to total air-conditioning costs."

- 120 Therefore, common and joint network costs should legitimately be shared between termination and other network services.

⁴⁴ WIK, Commentary on issues raised in submissions regarding the Commerce Commission's MTAS investigation and during the conference on 2 and 3 September 2009, February 2010, pp. 25-26.

⁴⁵ See W.J. Baumol and J.G. Sidak, *Toward Competition in Local Telephony*, MIT Press 1994, p. 69.

4. IMPLEMENTATION OF PRICING METHODOLOGY & THE APPROPRIATE PRICE LEVEL

4.1. INTRODUCTION AND SUMMARY

121 The Commission has considered a range of implementation issues, including how the price of the MTAS might be estimated (e.g. international benchmarking versus the use of actual costs), the necessity of a glide-path in relation to any pricing, and how a BAK arrangement might be introduced.

122 Telstra considers that:

- (a) in the absence of specific cost modelling being done, the appropriate TSLRIC+ for MTAS can be informed through the use of international benchmarking and the previous WIK cost model estimates. Based upon these estimates Telstra believes that 6 cpm represents a reasonable estimate for the TSLRIC+ of MTAS;
- (b) the use of actual costs of suppliers is not appropriate for estimating the MTAS cost. Whilst these costs are likely to have been efficiently incurred due to the dynamics of the market, there is currently too much discretion provided to different MNOs as to how costs are allocated across various services in the network. This makes any like-for-like comparison between suppliers difficult;
- (c) in order to avoid any market disruptions, the use of glide paths should be considered. In particular, the lower the regulated MTAS price the Commission sets, then the greater the number of steps there should be in any glide path; and
- (d) implementing BAK will be administratively costly, as the Commission and operators will need to look at how to prevent opportunities for arbitrage.

123 Telstra's arguments are set out below.

4.2. INTERNATIONAL BENCHMARKING

124 Telstra maintains its view that the TSLRIC+ cost model is the best approach to estimate MTAS pricing, and considers that international benchmarking can be used to inform the Commission about the TSLRIC+ of MTAS in Australia.

125 The Commission has previously considered the use of international cost benchmarking and stated that:

"Given the Commission has not formally modelled TSLRIC+ for the MTAS, however, the Commission believes that, for the purposes of its current pricing principles, the price of the MTAS should only trend towards the top of the range of reasonable estimates of TSLRIC+ available to it [5-12cpm]. Hence, the Commission believes the LTIE would be promoted by the price of the MTAS trending towards 12 cents per minute."⁴⁶

and

⁴⁶ The Commission, Mobile Services Review Mobile Terminating Access Service, Final Decision, June 2004, p.xix. Available at: [http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20\(June%202004\).pdf](http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20(June%202004).pdf)

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

"The ACCC is of the view that international cost benchmarking may be useful in put in determining the efficient cost of supplying the MTAS. Many of these adjustments include spectrum allocations, network purchasing power, vertical/horizontal integration, network usage and scale, population density, land and labour costs, the use of different technology, retail prices, scope of services offered and the quality of services offered.

...

The ACCC will place progressively more weight on benchmarking analyses that contain progressively more comprehensive adjustments to address Australian-specific factors.⁴⁷

- 126 Telstra agrees with the Commission's view that care and a conservative approach should be taken when considering international benchmarking data and adjustments must be made to benchmarking data in order to address Australian-specific factors.
- 127 In the absence of an updated and comprehensive international benchmarking analysis being done, which identifies the relevant cost drivers of the service across countries, Telstra considers that the recent NZCC access determination which assessed TSLRIC+ estimates for MTAS across 12 countries (including Australia)⁴⁸ should be considered by the Commission. The NZCC found TSLRIC+ estimates in the sample for countries ranging from NZ\$0.0277-NZ\$0.1089 per minute.⁴⁹
- 128 Telstra submits that given the Commission's previous approach to the consideration of international data, if such a large price range of NZ\$0.0277-NZ\$0.1089 per minute were to be considered in Australia, it would be appropriate to take a point higher in that data range to ensure against below-cost pricing of MTAS. Therefore, Telstra submits that this approach would support a price of 6cpm.
- 129 Further in support of a higher MTAS price for Australia relative to other countries, in a 2008 study, commissioned by the NZCC,⁵⁰ WIK compared outcomes when applying nine different scenarios to each of the three different cost models for what it described as:
- (a) a small densely populated country (not unlike Austria, Switzerland, Slovakia);
 - (b) a medium densely populated country (not unlike Germany, France, UK); and
 - (c) a large sparsely populated country (not unlike Australia, Canada, Brazil).
- 130 In its analysis, WIK consistently showed that in all but one of the scenarios, the cost model estimate for the large sparsely populated country was higher than the other two types of countries. Typically the large sparsely populated country had a cost around 0.5 euro cent per minute higher than the medium densely and small densely populated country, but in one scenario, the large sparsely populated country had a cost that was over 1 eurocent per minute higher.

⁴⁷ The Commission, Domestic Mobile Terminating Access Service Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011, July 2009, pp. 19-20, available at <http://www.accc.gov.au/content/item.phtml?itemId=864976&nodeId=1e1b39d5ede14c87b6482438d70ca1df&fn=MTAS%20pricing%20principles%20determination%202009%E2%80%9311.pdf>

⁴⁸ NZCC, Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS)), 5 May 2011

⁴⁹ NZCC, Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS)), 5 May 2011, p. 91.

⁵⁰ See WIK Consult (W. Neu), Cost Sensitivity Analyses with Mobile Cost Models – A study for the Commerce Commission of New Zealand, 22 December 2008, p. 4.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

131 WIK found that the reason for this result was the fact that the cost of termination for large sparsely populated countries reflects the relatively high costs of transport between nodes which is due to the greater distances in that country.

132 More recently in a 2009 report by WIK on behalf of the NZCC, WIK noted that the large sparsely populated country was likely to have a price that was higher than the small sparsely populated country, stating that:⁵¹

"The WIK bottom-up model was applied to two very different types of countries, one small and densely populated, the other very large and sparsely populated, where one should expect that the latter has conditions making for substantially higher costs. When keeping other things equal except these truly exogenous conditions, the results are that the costs for the large and sparsely populated country are in fact higher than those for the small and densely populated country, but they are higher by no more than 30%."

133 The geographic size and the population characteristics of Australia and other countries are shown in the table below. The results below highlight that Australia is a large sparsely populated country as it has a lower population density and urban population density.

Table 1: Population, Land Area, Urban Population, Urban Land Area⁵²

| | National Population | Land Area (sqkm) | Population Density | Urban Population | Urban Land Area (sqkm) | Urban Density |
|--------------------|---------------------|------------------|--------------------|------------------|------------------------|---------------|
| Australia | 20,601,000 | 7,686,850 | 2.7 | 14,918,300 | 12,467 | 1197 |
| Austria | 8,206,000 | 83,858 | 97.9 | 2,175,000 | 759 | 2866 |
| Belgium | 10,404,000 | 30,510 | 341.0 | 2,890,000 | 1,605 | 1801 |
| Brazil | 191,909,00 | 8,511,965 | 22.5 | 72,420,000 | 14,271 | 5075 |
| Canada | 33,213,000 | 9,976,140 | 3.3 | 20,246,000 | 14,012 | 1445 |
| Denmark | 5,485,000 | 43,094 | 127.3 | 1,525,000 | 648 | 2353 |
| France | 62,100,000 | 547,030 | 113.5 | 27,210,000 | 19,534 | 1393 |
| Germany | 82,370,000 | 357,021 | 230.7 | 25,995,000 | 9,454 | 2750 |
| Israel | 7,112,000 | 20,770 | 342.4 | 3,850,000 | 914 | 4212 |
| Lithuania | 3,565,000 | 65,200 | 54.7 | 550,000 | 220 | 2500 |
| Netherlands | 16,645,000 | 41,526 | 400.8 | 4,025,000 | 1,507 | 2671 |
| New Zealand | 4,173,000 | 268,680 | 15.5 | 2,335,000 | 1,228 | 1901 |
| Norway | 4,644,000 | 324,220 | 14.3 | 1,365,000 | 571 | 2391 |
| Portugal | 10,677,000 | 92,391 | 115.6 | 3,285,000 | 1,270 | 2587 |
| Spain | 40,491,000 | 504,782 | 80.2 | 13,775,000 | 2,813 | 4897 |
| Sweden | 9,045,000 | 449,964 | 20.1 | 2,560,000 | 804 | 3184 |
| Switzerland | 7,582,000 | 41,290 | 183.6 | 1,444,000 | 399 | 3619 |
| Slovakia | 5,455,000 | 48,845 | 111.7 | 400,000 | 119 | 3361 |
| UK | 60,944,000 | 244,820 | 249.4 | 30,842,000 | 7,441 | 4144.9 |

⁵¹ WIK Consult, Commentary on issues raised in submissions regarding the Commerce Commission’s MTAS investigation and during the conference on 2 and 3 September 2009, 13 November 2009, p. 8 cited in Commerce Commission, Final Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message service termination) should become designated or specified services, 22 February 2010, p. 113, paras 449–450.

⁵² Land area data was taken from 2008 data in the CIA World Fact Book, and Population data was based on 2008 data from the CIA World Fact Book and citypopulation.de. Urban density figures were taken from Demographia, World Urban Areas: Population & Density, 4th Comprehensive Edition: Revised, August 2008, Table 1 Urban Areas by Geography.

- 134 Therefore, despite Australia's relatively high level of urbanisation, the low population density and the low urban population density means that there will be higher MTAS costs relative to other countries. This arises due to:
- (a) a need to transport traffic between the urban centres in Australia, which unlike the other countries, are far more geographically dispersed due to the much larger size of the country. In particular, other countries do not have locations such as Hobart, Perth and Darwin; and
 - (b) Australia having a much lower level of urban density than all other countries, which means that even the distance between nodes within the urban centres will be greater, and for any given frequency, more base stations will be required to cover any given urban centre.
- 135 This higher cost driver in Australia compared to the other countries, supports using a higher point on the range, and confirms that 6 cpm is a reasonable estimate of TSLRIC+ for MTAS.

4.3. COST MODELLING AND THE 2007 WIK MODEL

- 136 Telstra maintains the view that TSLRIC+ is the appropriate methodology for determining the price of MTAS and the Commission should consider the development of a new cost model to estimate the price of MTAS using TSLRIC+ which takes into account current technologies and Australian mobile market conditions.
- 137 The original WIK model estimated the MTAS cost in the range of 6.1-6.6cpm using 2007 market parameters. The updated WIK model was then used by the Commission to substantiate prices in the MTAS Pricing Principles and Indicative Prices 2009-2011 to reach a range of 5.9-6.2 cpm.⁵³
- 138 While the WIK model was originally built for a 2G network, certain adjustments were made in order to take into account 3G network considerations. In particular, WIK Consult in 2007 examined two implications of a 3G network, adjusting for:
- (a) the cost savings from deploying a 3G network if 2G/3G equipment shared existing 2G infrastructure. This resulted in an MTAS cost reduction from 5.9 to 5.8 cpm; and
 - (b) the effects of an increase of data traffic on mobile networks. This resulted in an MTAS cost reduction from 5.9 to 5.4 cpm.
- 139 In the Commission's 2007 MTAS decision, the Commission stated that:

"The WIK model replicates an optimised network for a hypothetical efficient operator under certain assumptions about market penetration and population coverage. As indicated, this is a scorched-earth approach to network design. In this way the WIK model is not intended to represent the actual deployment of any MNO's network in Australia.

...

⁵³ The Commission, Domestic Mobile Terminating Access Service Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011, March 2009, p. 15. Available at: <http://www.accc.gov.au/content/item.phtml?itemId=864976&nodeId=1e1b39d5ede14c87b6482438d70ca1df&fn=MTAS%20pricing%20principles%20determination%202009%E2%80%9311.pdf>

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

The Commission considers that the use of a scorched-earth approach to network design is consistent with examining the costs of an efficient operator providing the MTAS in Australia.

...

However, the Commission has discretion over calibration of the network in the WIK Model to contextualise the WIK Model for an Australian regulatory context.”⁵⁴

140 The Commission then reached a 9 cpm calibrated MTAS price after considering some international benchmarking data and stated that:

“... the Commission has made an indicative price of 9cpm, compared with a TSLRIC+ estimate of 6.1-6.6cpm, which is the result of calibration of the WIK model for realities of actual MNOs’ networks.”⁵⁵

141 Telstra believes that in the absence of a new cost model and full international benchmarking analysis (see Section 4.2) the WIK model still provides a useful point of reference for assessing the reasonableness of any MTAS prices and determining an estimated range. The WIK model, with adjustments for 3G network considerations in 2007, estimated a MTAS TSLRIC + between 5.4-5.8 cpm.

142 In addition, while there are some factors which may lower the current MTAS costs on a 3G network, such as increased data services and higher voice services, there are also other offsetting factors (not accounted for in the last WIK model) faced by current mobile operators which will increase voice costs, such as:

- (a) increased investment costs in base stations to meet additional coverage;
- (b) increased investment in capacity to meet the increased levels of voice traffic; and
- (c) a higher proportion of voice traffic being in the busy hour.

143 All of the factors highlighted above will increase the costs of supplying the MTAS. (See Appendix F which set out results from Telstra’s sensitivity testing of the previous WIK modelled results.)

144 Therefore, given the Commission’s previous approach to calibrate the WIK estimates for realities of actual MNO’s networks and the additional factors which increase 3G costs, Telstra considers that 6cpm currently represents a reasonable estimate for the TSLRIC+ of the MTAS.

4.4. ACTUAL COST INFORMATION

4.4.1. USE OF ACTUAL COST INFORMATION IS NOT APPROPRIATE

145 Actual cost information should not be used to set the MTAS price because the discretion that an MNO has when determining how to allocate costs across the various services on its network will inevitably lead to varying results across MNOs.

⁵⁴ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, p. 21. Available at: <http://www.accc.gov.au/content/item.phtml?itemId=804768&nodeId=d5983a0a28e85ce384267d635824d04d&fn=MTAS%20pricing%20principles%20determination%20report.pdf>

⁵⁵ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, pp. 54-56 and p. 116.

- 146 If Telstra’s submission is not accepted, then to minimise the risk of varying results, the Commission must, at a minimum:
- (a) be highly prescriptive in the identification and definition of costs, and create specific rules as to how those costs are allocated across the various services carried on the mobile networks (both voice and data), to ensure consistent application of the rules by the various MNOs. Telstra therefore suggests that, at a minimum, the Commission must be sufficiently prescriptive in setting rules which:
 - i. determine what costs are and are not captured in the allocation of services to the MTAS;
 - ii. include a prescriptive definition of the relevant cost categories;
 - iii. set out how those costs are to be determined; and
 - iv. set out how those costs are to be allocated across the various types of traffic carried over mobile networks, including the MTAS;
 - (b) ensure that all types of traffic carried across the mobile networks are reduced to a common base, so that allocation of costs between the different types occurs in an even-handed manner. Given that mobile networks are now effectively data networks, Telstra believes that the most sensible approach for the Commission is to convert voice traffic from Minutes of Use (**MOU**) into a Mbytes measure. Telstra believes that cost allocation should be based on service usage.

4.4.2. EFFICIENTLY INCURRED COSTS

- 147 Concern about inefficient actual costs is typically a problem associated with productive efficiency of a monopoly supplier, and the failure to minimise costs due to the lack of ongoing competitive pressures faced by the firms.⁵⁶ As MNO’s in Australia face competition, Telstra believes that inefficient actual costs are unlikely.

4.5. GLIDE PATHS

- 148 As set out in Section 3, Telstra believes that TSLRIC+ is the most appropriate pricing methodology to use. If such a price would lead to a large decrease from the current MTAS price, then Telstra considers it would be appropriate for the Commission to adopt a glide path when setting the MTAS price.
- 149 The NZCC has identified the following benefits of providing a glide path:
- (a) it allows operators time to adjust retail prices where a rapid or sudden drop may generate significant and potentially harmful disruption to the operations and planning of telecommunications carriers; and
 - (b) it reduces impact on certain customer segments. For example, a reduction in MTAS prices may lead to a change in relative balance between wholesale revenues, monthly subscription prices and handset prices and lead operators to increase

⁵⁶ This type of inefficiency is sometimes referred to in the economics literature as “X-inefficiency” and arises due to “managerial slack” from the lack of competitive pressures.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

subscription prices or reduce handset subsidies. The steeper the drop in MTAS prices, the more pronounced these effects may be.⁵⁷

- 150 In addition, a sudden drop in MTAS prices may cause significant disruptions in the market to the detriment of end users. As the Commission has previously stated:

*"the Commission believes the LTIE would be promoted by the price of the MTAS trending towards 12 cents per minute. The Commission is concerned, however, that if the price of the MTAS were to fall to 12 cents per minute immediately, this would generate significant and potentially harmful disruption to the operations and planning of a number of telecommunications carriers."*⁵⁸

- 151 Therefore, if the price is decreased to the TSLRIC+ estimate of around 6cpm, then a glide path may be less necessary. However, if the Commission were to estimate a lower TSLRIC+ price than 6 cpm, then a glide path should be considered. Telstra believes that any glide path put into place will need to be longer and have more steps, the lower the price that is being set.

- 152 For example, BAK and pure LRIC will require longer glide paths, due to the zero or much lower prices that they generate. Table 2 shows that European regulators, such as the UK which is moving from a TSLRIC+ to Pure LRIC MTAS rate, have all looked to adopt a glide path over a number of years, with a number of steps.

Table 2: International glide paths⁵⁹

| Country | Glide path timeframe | Comments |
|----------------------|----------------------|-------------------|
| Belgium | 2005–2013 | 8 step glide path |
| Denmark | 2005–2010 | 5 step glide path |
| Netherlands | 2005–2012 | 7 step glide path |
| Norway ⁶⁰ | 2011–2013 | 5 step glide path |
| Sweden | 2005-2010 | 5 step glide path |
| United Kingdom | 2007–2015 | 7 step glide path |

⁵⁷ Commerce Commission, Standard Terms Determination for designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS), Decision 724, 5 May 2011, pp. 127-128.

⁵⁸ The Commission, *Mobile Services Review Mobile Terminating Access Service*, Final Decision, June 2004, p.xix. Available at: [http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20\(June%202004\).pdf](http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20(June%202004).pdf)

⁵⁹ Ovum (M. Howett, C. Wang, M.P. Sirio), "The status of mobile termination regulation in the EU15", 9 November 2010. pp. 9-28. The glide path steps are based on the average mobile termination rates changes of each country.

⁶⁰ Norwegian Post and Telecommunication Authority, Decisions for designating undertakings with significant market power and imposing specific obligations in the markets for voice call termination on individual mobile networks (market 7), 27 September 2010.

4.6. BAK COMMERCIAL IMPLEMENTATION ISSUES

4.6.1. MNOS ARE UNLIKELY TO NEGOTIATE MTM BAK AGREEMENTS

153 Telstra considers it highly unlikely that MNOs will negotiate BAK-based agreements for MTM given that MNOs have not yet done so in a mature market and the difficulty of negotiating consistent pricing across all operators (mobile and fixed operators).

4.6.2. COMMISSION SHOULD NOT SET A PRICE OF ZERO FOR MTM

154 Given the inefficiencies of BAK set out in Section 3 above, and for the reasons set out below, the Commission should not set a price of zero for MTM MTAS.

4.6.2.1. COSTS TO THE COMMISSION AND OPERATORS

155 The Commission should not set MTM MTAS to zero. The asymmetrical MTM and FTM MTAS prices that would arise if this approach is adopted will result in opportunities for arbitrage and the Commission and operators alike incurring large administrative costs to prevent these opportunities from being exploited.

156 The EC stated that:

"...setting the price of any service at zero may cause distortionary behaviour, bring arbitrage opportunities, lead to inefficient traffic routing and inefficient network utilisation. For instance, a potentially problematic issue might be inefficient routing of traffic from operators not participating in the BAK scheme."⁶¹

157 In order to prevent regulatory created arbitrage, operators and the Commission will need to undertake a number of mitigation strategies, including amending the service description. This will give rise to administrative costs for the Commission and operators.

158 In addition to the costs of preventing arbitrage, as outlined in Section 3.3.3, billing procedures of operators will need to be amended to separate MTM and FTM MTAS minutes, which will create further costs.

159 Accordingly, no administrative efficiencies will be gained. Instead a move to zero MTM MTAS prices would create administrative burdens for the Commission, Telstra and other operators.

4.6.2.2. LACK OF INTERNATIONAL PRECEDENT

160 There is a lack of international precedent of regulators setting MTAS prices at zero where retail prices are set on a calling party pays basis (CPP).

161 According to the EC, there is no record of BAK being imposed by any regulatory authority. Rather, the EC notes that BAK generally results from voluntary commercial agreements between interested parties, particularly where the net financial settlements are close to zero.⁶²

⁶¹ European Commission, Commission staff working document accompanying the commission recommendation on the regulatory treatment of fixed and mobile termination rates in the EU: Explanatory note, 7 May 2009.

⁶² European Commission, Commission staff working document accompanying the commission recommendation on the regulatory treatment of fixed and mobile termination rates in the EU: Explanatory note, 7 May 2009, p. 30.

162 As noted by the NZCC, in most places where BAK arises, MNOs have adopted receiving party pays (RPP) model rather than a CPP model at the retail level (for example, Canada, Singapore, Hong Kong and the United States). This leads to mobile operators recovering part of their overall costs, including termination costs, from their own retail customers via charges for receiving calls.⁶³

4.6.3. MTM DEREGULATION

163 If commercial BAK arrangements for MTM termination were implemented successfully, Telstra considers that MTM termination should be deregulated subject to ensuring that no individual provider has the ability to “tip”⁶⁴ the market.

164 Commercial incentives normally exist to maintain interconnection in mature markets provided no supplier has the ability to tip the market. Given the maturity of the market, the existence of three MNOs, and the relevant market shares, incentives to refuse interconnection are unlikely to arise.

⁶³ Commerce Commission, Standard Terms Determination for designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS), Decision 724, 5 May 2011, p. 41.

⁶⁴ In the absence of mandated interconnection, it is sometimes said that a larger network can potentially “tip” the market in its favour, and create the conditions for a near monopoly to evolve, by refusing interconnection with smaller networks operators. That is, in the presence of strong network effects, if a larger network refuses to interconnect with a smaller network, then the larger network may be able to create greater value for its subscribers as they can contact more people. Customers from the smaller networks, who are unable to interconnect with many people will then be incentivised to switch to the larger network, which provides it with more value. This further increases the value of the larger network to subscribers and decreases the value associated with staying on the smaller network. Faulhaber outlines four conditions that can lead to market tipping from a refusal to interconnect: (i) the largest network is much larger than its competitors; (ii) the network effect associated with the services must be strong that customers get a large amount of value from switching to the largest network; (iii) low customer switching costs; and (iv) it is difficult for smaller networks to create a coalition and coordination. (See G.R. Faulhaber, “Bottlenecks and Bandwagons: Access Policy in the New Telecommunications”, Handbook of Telecommunications Economics, Volume 2, M.E. Cave, S.K. Majumdar and I. Vogelsang (eds.), 2005, Elsevier Science B.V., Amsterdam).

5. FIXED SERVICES AND FTM MTAS

5.1. INTRODUCTION

165 The Commission has indicated in its Discussion Paper that it does not consider that Telstra has passed through the cost savings from MTAS to its retail prices. It has discussed various incentive mechanisms that could be put in place to encourage pass-through and outlined that high MTAS prices may be inhibiting innovation in the supply of VOIP services. Telstra disagrees with the Commission's analysis.

166 Telstra submits that:

- (a) any retail requirement for FTM pass-through should not be imposed, because, from 2004-2010, the average price of supplying the bundle of voice services has fallen by more than the reduction in the input costs of supplying the bundle (including the cost of terminating FTM calls). This shows that the reduction in MTAS has been more than passed through customers in the bundled price;
- (b) Even if the change in FTM MTAS is passed-through individually to FTM retail calls, the actual impact is relatively modest in the context of Telstra's total retail FTM traffic;
- (c) the pass-through pricing proposals detailed in the Discussion Paper go beyond the scope of regulating access to MTAS; and
- (d) MTAS pricing does not affect VOIP providers in the manner suggested by the Commission.

167 Telstra's arguments are set out below.

5.2. FTM MTAS PASS-THROUGH

168 The Commission appears to consider that it is in the LTIE that reductions in the cost of providing FTM minutes (for example, by reductions in the cost of terminating FTM minutes on mobile networks) should be passed through to FTM prices only.⁶⁵ That is, the Commission seems to suggest that a reduction in MTAS should lead to a comparable reduction in FTM retail prices.

169 This idea, however, has two flaws:

- (a) first, it fails to take into account the reality that customers purchase fixed voice services as a basket of PSTN services (i.e. access, local, national long distance (NLD), FTM and international) not as component services. Changes in underlying costs for one service may be passed on across the bundle of services; and
- (b) second, it assumes, without examining the prices of these bundles, that previous reductions in the MTAS rate have not been passed through.⁶⁶

⁶⁵ The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 8.

⁶⁶ The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, Section 3.2.2.

5.2.1. CUSTOMERS PURCHASE FIXED VOICE SERVICES AS A BASKET OF PSTN SERVICES

- 170 It is inappropriate to base an assessment of pass-through only on revenues and margins attached to individual products.
- 171 The Commission in its analysis dismisses the practice of consumers buying bundles of voice services. Yet competition already exists between numerous retail suppliers to supply bundles to customers. In markets subject to this type of competition, reductions in the cost of supplying any one service in the bundle can be passed on in the competitive pricing of other components of the bundle. Indeed, passing through cost reductions in this way can produce better outcomes for consumers than if those cost reductions were passed through to only FTM prices. For example, as noted by the Commission, consumers normally buy their PSTN services including FTM calls in a bundle and, hence, consumers have benefited from the reduction in the average price of the PSTN basket of services:

"The ACCC also notes that a sub cap may have the potential to adversely affect future investment by competing fixed line service providers and is not supported by mobile service providers."⁶⁷

- 172 The issue of retail price responses to changes in the underlying wholesale price was recently considered by Ofcom in its review of MTAS. It noted that, in the UK, FTM call revenue per minute has historically appeared to increase while mobile termination has decreased. However, in Ofcom's view, this was not necessarily an indication of a failure to pass through savings at the wholesale level, as a retail price adjustment can take many forms. Consequently, it is inappropriate to base an assessment of pass-through only on revenues and margins attached to *individual* products:

"We argued that the correct approach is to consider prices (and margins) in the round rather than focusing on those for specific types of calls. We highlighted that in our Fixed Narrowband Retail market review, we had found that overall retail prices for a bundle of call types have fallen as MTRs have fallen, even if retail prices for F2M calls have decreased proportionally less."⁶⁸

- 173 Ofcom also noted that it was difficult to attribute falling retail prices to any one particular driver, given the number of influences on costs and prices (including MTAS):

"MTRs are only one of a number of factors which influence costs and prices, making it impossible to isolate the effect of any downward pressure resulting from falling MTRs from other pressures which may have pushed prices up or down."⁶⁹

5.2.2. PREVIOUS REDUCTIONS IN THE MTAS PRICE BEEN PASSED THROUGH TO CONSUMERS

- 174 The Commission states that reductions in the MTAS price have been insufficiently passed through to consumers, but only considers changes in the retail price of FTM and not changes to prices in the broader bundle of voice services. Failure to consider competition for the bundle is most evident in the Commission's Figure 1: Evolution of Telstra's retail FTM call rates compared to the MTAS. This figure sets out the retail price of FTM and the MTAS price in isolation from other components of the bundle.
- 175 If the Commission's Figure 1 is replicated with information in relation to the bundle included (as done below in nominal terms), it shows that, from 2004 to 2010, the average

⁶⁷ The Commission, Review of Telstra's price control arrangements, March 2010, p. 28

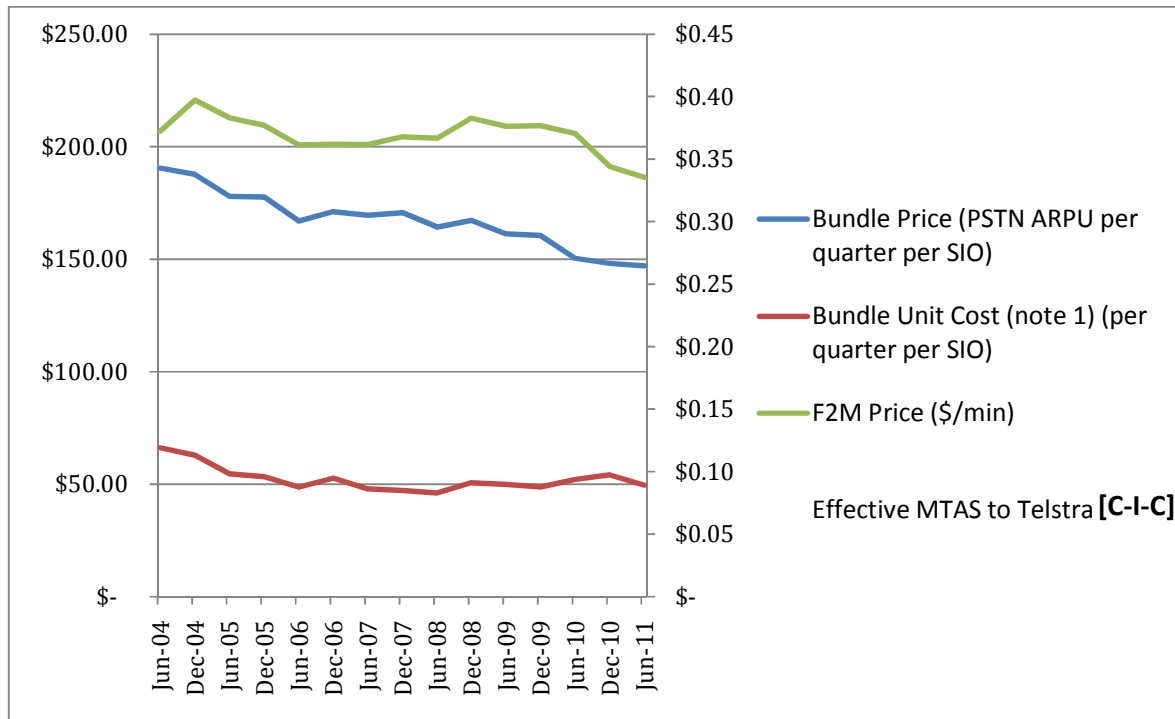
⁶⁸ Ofcom, Wholesale Mobile Call Termination Statement, 15 March 2011, p. 154 Para 7.183

⁶⁹ Ofcom, Wholesale Mobile Call Termination Statement 15 March 2011, p. 158, Para 7.194

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

price of supplying the bundle of voice services has fallen by more than the reductions in the unit cost of supplying the bundle, including the cost of terminating FTM calls. This illustrates that reductions in the price of MTAS have been more than passed through to consumers in price reductions for the bundle as a whole.

Figure 1: Average price of supplying voice bundled services 2004-2011



5.3. BENEFIT FROM MTAS REDUCTIONS ON FTM TRAFFIC IS MODEST

176 As stated in the previous section, customers purchase a bundle of PSTN services not FTM as a discrete service. As a result, Telstra passes cost savings through to prices as a bundle of PSTN services.

177 However, even if Telstra was to price FTM on the basis of individual pass through, the reduction in wholesale liability to 'pass-through' is relatively modest (as set out below).

178 The following analysis compares the year-on-year change in Telstra's FTM retail related MTAS liabilities that resulted from the change in MTAS from FY03/04 to FY10/11. Telstra's change in MTAS liability is a function of the change in:

- (a) off-net FTM traffic; and
- (b) MTAS price.

179 The analysis is based on the following data:

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (a) MTAS (\$)– The average MTAS price over the Financial Year (FY) from FY03/04–FY 10/11⁷⁰;
- (b) Retail off-net FTM minutes (millions)– Total outgoing minutes originated on Telstra’s fixed network from customers on PSTN and ISDN networks and terminated on another MNO’s (excludes Transit, Telstra internal and wholesale traffic); and
- (c) Retail FTM minutes (millions) – Telstra’s retail FTM traffic originated from customers on PSTN and ISDN networks terminating on a mobile network (excludes Transit, Telstra internal and wholesale traffic).

| | 03/04 | 04/05 | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| A MTAS | \$0.21 | \$0.195 | \$0.165 | \$0.135 | \$0.09 | \$0.09 | \$0.09 | \$0.09 |
| B Retail off net FTM minutes (millions) | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] |
| C Retail FTM minutes (millions) | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] |

180 Telstra’s change in FTM related MTAS liability in any one year is calculated in the table below.⁷¹

| | 03/04 | 04/05 | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| A x B FTM payments (millions) | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] |
| D Yr on yr change in MTAS liability (millions) | | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] |

181 If Telstra did not pass through cost reductions across a bundle of services but instead passed through this change in liability directly to our FTM retail traffic, the following price changes would result.

| | 03/04 | 04/05 | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 |
|--|-------|---------|---------|---------|---------|---------|---------|---------|
| D/C 'Saving' per MOU in cents | | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] | [c-i-c] |

⁷⁰ Assumed MTAS rate of 21cpm in FY03/04, and remaining years MTAS rates are calculated using the regulated rates for each period. That is, 1 July 2004–31 December 2004, 21cpm; 1 January 2005–31 December 2005 18cpm, 1 January 2006–31 December 2006 15cpm; 1 January 2007–30 June 2007 12cpm; 1 July 2007 – 2011 9cpm.

⁷¹ This analysis assumes a zero own-price elasticity for FTM calls.

182 Telstra reiterates that isolating a single service for price reductions in response to a change in the underlying wholesale rate is not reflective of Telstra's retail pricing, which instead passes on savings to the bundle of PSTN services. However, as illustrated above even if this approach is taken the savings are modest and would predict a price change of around [C-I-C] since 2004-05.

5.4. COMMISSION'S SPECIFIC PASS-THROUGH PROPOSAL

183 In its Discussion Paper, the Commission states that:

"The ACCC is aware that structural issues in the fixed line services market cannot be addressed by reductions in the MTAS rate alone. An Analysys Mason report commissioned by the ACCC finds that regulating FTM pass-through in conjunction with the MTAS would increase consumer surplus through reduced retail pricing."

184 The Commission proposes the following specific remedy to address the perceived lack of pass through of MTAS price reductions to FTM prices:

- (a) a requirement that any further reduction in the MTAS price be linked to a full or partial pass-through obligation;⁷² and,
- (b) a suggestion that the regulated MTAS price be expressed as a function of a firm's retail FTM price.⁷³

185 With regards to the Commission's view in the Discussion Paper that there are structural issues with the fixed services market, Telstra considers that the market in which fixed line voice services is supplied is effectively competitive. Consumers can choose from a wide range of telecommunications service types from a variety of service providers over a variety of fixed network infrastructure (or quasi-infrastructure build, such as the ULLS). It is widely recognised that there are competitive substitutes to the PSTN, the most pertinent of which is the ability of consumers to acquire voice services from a mobile service provider. In addition to the impact of mobiles, the PSTN is also subject to substitution effects from wireless broadband, HCF cable, VOIP and ULLS based services. The effectiveness of these competitive substitutes to the PSTN is evident in the declining use and price of PSTN services compared with the increased demand for and use of these substitute services. Furthermore, the comprehensive wholesale access regime allows competitors to replicate Telstra's price controlled services at prices set by the regulator.

186 As set out below, the specific proposals in the Discussion Paper are not only unnecessary, but, in Telstra's view, would distort competition and could result in the Commission acting *ultra vires*.

187 First, neither of these mechanisms is necessary because previous reductions in MTAS prices have, in fact, been passed through in the prices for the bundle of fixed services. Further, there is no reason to believe that future MTAS reductions will not be similarly passed through.

188 Second, the mechanisms proposed would distort competition:

- (a) The first mechanism proposed is intended to force parties to pass MTAS price reductions through to the FTM price and prevent the reductions being passed through

⁷² The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 9.

⁷³ Ibid.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

to other components of the bundle. This would be detrimental to consumers, since consumers are likely to benefit more from MTAS cost reductions being passed through to prices of other components of the bundle rather than on the FTM.⁷⁴ In any event, it is unlikely that the first proposal would work in the long run. MTAS reductions might be passed through in the short run by competitive firms in accordance with the proposed mechanism. However, to the extent that FTM price reductions are the less efficient way of competing, firms will eventually rebalance their prices for FTM and other components of the bundle to improve their chances in competition for the bundle with other competitors.

- (b) The second proposal would likely reverse the last seven years of MTAS regulation and Telstra considers that such an approach is inappropriate and not in the LTIE. In particular it will result in asymmetric pricing for MTM and FTM MTAS, resulting in inappropriate incentives and inefficiencies, highlighted in Section 3.3. Further, it has the potential to create asymmetric pricing of the FTM MTAS for the different fixed suppliers to whom the scheme applies. This outcome would be inconsistent with the LTIE, and with moves by regulators in Europe to remove asymmetries in prices between established network providers and to converge network operators to a single cost-based termination rates.

189 Finally, in respect of the Commission's request for views on its specific proposal to impose a pass-through obligation on fixed or integrated operators in respect of the FTM termination price as described above,⁷⁵ Telstra believes that the Commission's proposal may be outside jurisdiction.

190 Section 152BC(1) of the CCA provides that the Commission may make a written determination relating to access to a declared service. The remaining provisions of section 152BC, which detail the Commission's power to make access determinations, are all concerned with the principal objective contained in section 152BC(1); that is, the provisions empower the Commission to set terms and conditions governing access to the relevant declared service.

191 The pass-through pricing proposals detailed in the Discussion Paper seem to go beyond the scope of regulating access to MTAS, and instead could be considered an attempt to regulate prices in the downstream retail market over which the Commission has no regulatory jurisdiction and which are regulated via a separate regime.⁷⁶ For example, by fixing the MTAS price by reference to each vertically integrated operator's average retail FTM price in the FAD, the Commission would be attempting to regulate the commercial returns of vertically integrated operators in the downstream retail FTM market. That is, the proposal seeks to utilise a variable MTAS price to effectively impose a "*normal commercial return*"⁷⁷ on those operators in the downstream retail FTM market.

192 It is of course the case the Commission must have regard to the factors in section 152BCA in making a FAD (and in particular, the LTIE). However, these factors apply in the context of the Commission regulating access to MTAS. They do not have the effect of extending

⁷⁴ See Telstra, Submission in response to the Australian Competition & Consumer Commission's Review of Telstra Price Control Arrangements, 12 February 2010. **[C-I-C]**

⁷⁵ The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, pp. 8-10.

⁷⁶ See: *Telstra Carrier Charges - Price Control Arrangements, Notification and Disallowance Determination No. 1 of 2005*

⁷⁷ The Commission, Domestic Mobile Termination Access Service (MTAS) Public Inquiry to make an Access Determination Discussion Paper, June 2011, p. 10.

the power in section 152BC beyond the scope of access to the relevant declared service, and into the area of the supply of downstream services.

5.5. MTAS PRICE AND VOIP

193 For the reasons set out below, and in response to the Commissions' concerns in Section 5.4 of the Discussion Paper, Telstra submits fixed operators and VOIP providers have the same cost base.

194 This arises as:

- (a) Certain VOIP providers incur the same costs as any other fixed operator. That is, they purchase MTAS at the regulated price; and
- (b) Other VOIP providers that do not directly interconnect to the network will incur the regulated MTAS price with a small transit margin (charged by their interconnection provider). However, any transit margins charged for interconnection will be low, and, in any case, VOIP providers do not incur an origination cost as compared to a fixed operator.

On this basis, VOIP providers have comparable costs to other fixed operators.

5.5.1. VOIP PROVIDERS CHOOSE THEIR OWN PRICING STRUCTURE

195 As discussed above, VOIP providers have the same cost base as other fixed operators.

196 The prices charged for fixed line services and charges for mobile services by each VOIP provider, as shown in Table 2 on page 13 of the Commission's Discussion Paper, reveals that each VOIP provider has its own pricing structure and chooses to recover its costs and attract a premium either through fixed line services or through mobile services. These providers bundle their services in different ways and their bundling decision is not directly related to the MTAS price.

197 Therefore, MTAS prices are not an obstacle to new VOIP operators or prevent innovation because VOIP operators have the same cost structure as fixed operators and the prices they charge are part of their overall bundling decision.

6. NON-PRICE TERMS AND CONDITIONS

6.1. MTAS FAD SHOULD NOT INCLUDE NON-PRICE TERMS AND CONDITIONS

198 Telstra submits that the FAD should not incorporate such generic commercial non-price terms and conditions. In this regard, Telstra notes that non-price terms and conditions of access to MTAS have not been the subject of any prior Final Determinations or Interim Determinations published on the Commission's website.⁷⁸ This suggests that these more generic commercial terms have not been a matter for dispute between the parties historically and that the parties have been able to reach commercial agreement on these terms of access in the past.

199 Therefore, regulation of these matters is unnecessary as it would impose additional regulatory and compliance burdens on the parties with no additional benefits.

6.2. MTAS FAD SHOULD NOT INCORPORATE 2008 MODEL TERMS

200 In noting that it is "minded" to include non-price terms and conditions in an MTAS FAD, the Commission states that "the most appropriate NPTCs [non-price terms and conditions] for an MTAS FAD are based on the Commission's 2008 Model Terms".⁷⁹

201 If the Commission includes non-price terms and conditions in the FAD, Telstra submits that an MTAS FAD should not incorporate the Commission's 2008 Model Terms. This is because the nature of model terms and their underlying purpose (to provide a non-binding "model" as guidance for commercial negotiations and access arbitrations) is less onerous than when included in an ex ante and binding access determination. Indeed, the Commission has previously acknowledged that the Model Terms were intended to "assist parties to reach commercial agreement on the terms and conditions of access, or to submit access undertakings, thus providing more timely access for Access Seekers to 'core' fixed line network services".⁸⁰

202 A FAD, on the other hand, is intended to be a binding set of terms applicable to the Access Provider and the Access Seeker where they are unable to agree on a set of commercial terms. This will be the case regardless of how inappropriate or unsuitable the terms may be for the particular circumstances.

203 In addition, a breach of a FAD, in addition to enlivening the statutory right of action,⁸¹ constitutes a breach of a carrier licence condition⁸² and a service provider rule⁸³, which could result in pecuniary penalties of up to \$10 million.

204 If, following this initial consultation, the Commission remains minded to include non-price terms and conditions of access to MTAS in the draft FAD, Telstra encourages the Commission to engage in further consultation on this issue, at which point Telstra will provide more detailed submissions on any proposed non-price terms and conditions.

⁷⁸ See <http://www.accc.gov.au/content/index.phtml/itemId/793063>

⁷⁹ Discussion Paper, p. 22.

⁸⁰ Commission, Final Determination - Model Non-price Terms and Conditions, November 2008, p. 3.

⁸¹ CCA, section 152BCQ.

⁸² CCA, section 152BCO.

⁸³ CCA, section 152BCP.

6.3. CONSISTENCY WITH OTHER SERVICES

- 205 If the Commission does decide to include non-price terms and conditions of access to MTAS in a FAD, Telstra submits that to the extent that non-price terms and conditions are relevant, those terms and conditions should be consistent across the different declared services. Consistency will minimise the parties' regulatory and compliance burdens.
- 206 However, issues such as consistency should be considered only if the Commission is of the view (despite Telstra's submissions) that non-price terms and conditions are, in fact, relevant.

6.4. COMMUNICATIONS WITH END USERS, NETWORK MODERNISATION AND UPGRADE, AND FACILITIES ACCESS

- 207 If the Commission includes non-price terms in a MTAS FAD, Telstra agrees that provisions relating to billing and notification, creditworthiness and security, general dispute resolution procedures, confidentiality, and suspension and termination may be relevant. However, Telstra considers that provisions relating to communications with end users, network modernisation and upgrade, and facilities access are not relevant to MTAS, for the reasons set out below.

6.4.1. COMMUNICATIONS WITH END USERS

- 208 Provisions relating to communications with end users, such as those in section 4.F of the 2008 Model Terms, are rarely relevant to MTAS. The circumstances where there would be contact with an end user are very rare (and relate to fault detection and repair) and would only occur following consultation with the access seeker and after obtaining consent from the access seeker. This reflects the nature of the MTAS service as a network-to-network interconnection service rather than a regulated access service for which these types of provisions are largely intended. It is by definition where the originating network operator who acquires the termination leg manages call set up and routing direct to its own end user.
- 209 Given that communication with end users is extremely rare (and occurs with access seekers' consent), it is unnecessary to include provisions such as those contained in section 4.F of the Model Terms in any MTAS FAD. Historically, this has not been an issue and these provisions would only expose the parties to unnecessary regulatory and compliance burdens.

6.4.2. NETWORK MODERNISATION AND UPGRADE

- 210 Looking at the definition of "Major Network Modernisation and Upgrade" in clause 4.G.9 of the 2008 Model Terms, it is clear that both paragraphs (a) and (b) of that definition are applicable only to ULLS. Thus, the only possible application of the definition in this context is paragraph (c), which covers the situation where an upgrade results in a Service no longer being supplied or adversely affects the quality of a Service (or any Services supplied by access seekers to their end-users using the Service).
- 211 Telstra submits that no upgrade would produce either of these outcomes in respect of the supply of MTAS. Consequently, the inclusion of network modernisation and upgrade provisions into an MTAS FAD would be unnecessary. Again this reflects the distinction between an upgrade and modernisation for a customer access network (CAN) based service versus a network to network interconnection service, where changes to the core network will not affect the interconnecting service providers requirement to route and

deliver the call in accordance with the agreed technical specifications for network to network connectivity for voice services.

6.4.3. FACILITIES ACCESS

212 Telstra submits that the provisions relating to facilities access set out in clause K of the 2008 Model Terms should not be included in a MTAS FAD.

213 That is because those terms and conditions were not intended to be applied to MTAS. In that regard, the Commission stated that they:

"set out how an access seeker can access Telstra facilities in order to acquire a core service and interconnect its own equipment in order to supply services to end-users. Of the core services, "facilities access" terms and conditions are relevant to the ULLS and, to a lesser extent, PSTN OTA services".⁸⁴

214 Thus, those terms and conditions set out how requests for access to TEBA space is to be dealt with by Telstra.

215 Accordingly, it is beyond the scope of the Commission's powers to include such terms and conditions of access to TEBA space for MTAS in a FAD. The standard access obligation (set out in subs 152AR(5) of the CCA) in relation to the interconnection of facilities provides that an Access Provider must, if requested to do so by a service provider, "permit interconnection of those facilities with the facilities of the service provider for the purpose of enabling the service provider to be supplied with active declared services in order that the service provider can provide carriage services and/or content services". The interconnection of facilities - or TEBA - is not needed in order to provide the MTAS. This is because an Access Seeker does not require access to an Access Provider's exchanges in order to acquire MTAS.

216 The relevant equipment to connect with MTAS can be located outside of Telstra's exchange.

217 Thus, given that an access seeker acquiring MTAS is not required to acquire facilities access from Telstra, these provisions should not be included in an MTAS FAD.

218 If the Commission considers that the MTAS FAD should include terms and conditions in respect of facilities access, the provisions set out in the Model Terms should not be incorporated. Telstra's position on the 2008 Model Terms has consistently been that they are beyond power to the extent that they seek to deal with access to Telstra's exchanges. Telstra does not resile from that position here. Further, the Model Terms around facilities access are outdated and have been superseded by a number of developments in recent years.

Other Provisions

219 Telstra agrees with the Commission that provisions relating to liability (risk allocation), changes to operating manuals, and ordering and provisioning do not need to be addressed in the MTAS FAD given the lack of historical access disputes in respect of these provisions.

⁸⁴ Commission, Final Determination - Model Non-price Terms and Conditions, November 2008, p. 51.

7. CONCLUSION

- 220 MTAS prices should be symmetrical given that it is the same service regardless of the network from which the call originates.
- 221 Telstra considers the LTIE and other statutory criteria are best promoted by determining MTAS prices based on TSLRIC+. That approach provides for an expectation of an appropriate return of, and return on, efficiently invested capital, and the recovery of efficiently incurred common costs. It therefore balances the interests of the access provider, the access seeker and the end user.
- 222 BAK and Pure LRIC fail to provide for the recovery of efficient joint and common costs and create the potential for inefficiencies to arise in the mobile market. This is especially the case when implemented in an asymmetric manner. Asymmetric MTAS pricing will create distortions and inefficiencies in both the FTM and MTM related markets and increase regulatory costs for both the Commission and MNOs.
- 223 In the absence of an up-to-date cost model and a thorough international benchmarking analysis, TSLRIC+ is most appropriately informed by the Commission using higher estimates of MTAS costs from a sample of international benchmarks used by the NZCC, and the results of the WIK model. Telstra maintains that this information implies that a reasonable estimate of a TSLRIC+ for the MTAS is 6cpm.
- 224 Telstra does not believe that there should be any FTM pass-through mechanism. There is no separate FTM retail market and lower MTAS prices have been passed through, which is evidenced by the lower overall bundled fixed voice service prices.
- 225 Finally, a MTAS FAD should not include non-price terms and conditions, as they merely add to regulatory burden without providing any additional benefits.

APPENDIX A – MATTERS THAT THE COMMISSION MUST AND SHOULD TAKE INTO ACCOUNT

1. STATUTORY CRITERIA

- 1 In making a FAD the Commission must have regard to each of the mandatory relevant considerations set out in subs 152BCA(1). The Full Court of the Federal Court has provided guidance on the content of this obligation in the following terms:⁸⁵

*When the expression "... regard must be had to ..." is used in a statute in respect of a particular criterion or factor to be considered by a decision maker, the decision maker is bound to treat such a factor as a central or fundamental element in the making of the relevant decision (see the discussion of these principles by Rares J in *Telstra Corp Ltd v Commission* [2008] FCA 1758 at [103] to [112]).*

- 2 In the decision cited by the Full Court, Rares J said, in reference to High Court authorities⁸⁶ on obligations expressed in similar terms:⁸⁷

*I am of opinion that the sense in which the High Court used the expression "fundamental weight" in this context is to require the decision-maker to treat the consideration of the factors, as opposed to the factors themselves, as a central element in the deliberative process: *Meneling Station* 158 CLR at 338 per Mason J. (emphasis in original)*

- 3 Thus, the consideration of each matter must be given fundamental weight in order for the Commission to produce a valid decision. Further, in weighing up the mandatory relevant considerations, the Commission cannot "jettison or ignore" any mandatory consideration, or "give it cursory consideration only in order to put it to one side".⁸⁸

1.1. LONG-TERM INTERESTS OF END-USERS

- 4 Sub-section 152BCA(1)(a) requires the Commission to take into account the overall object of Part XIC in making a FAD on access to a declared service. Section 152AB provides that regard must be had to three objectives, and the Full Court of the Federal Court has recently confirmed that each one of these objectives is a mandatory relevant consideration in its own right.⁸⁹ Those three objectives are:

- (a) promoting competition in markets for carriage services and services provided by means of carriage services: subs 152AB(2)(c) (competition objective);

⁸⁵ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23 at [267].

⁸⁶ *Namely Reg v Hunt; Ex parte Sean Investments Pty Ltd* (1979) 180 CLR 322 and *The Queen v Toohey; Ex parte Meneling Station Pty Limited* (1982) 158 CLR 327; see *Telstra Corporation Ltd v ACCC* [2008] FCA 1758 at [103]ff.

⁸⁷ *Telstra Corporation Ltd v ACCC* [2008] FCA 1758 at [110].

⁸⁸ *Telstra Corporation Ltd v ACCC* [2008] FCA 1758 at [107], citing *East Australian Pipeline Pty Ltd v Australian Competition and Consumer Commission* (2007) 233 CLR 229 at 244 per Gleeson CJ, Heydon and Crennan JJ.

⁸⁹ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (b) achieving any-to-any connectivity in relation to carriage services that involve communication between end-users: subs 152AB(2)(d); and
- (c) encouraging economically efficient use of, and investment, in the infrastructure by which carriage services and services provided by means of carriage services are supplied, are capable of being supplied or are likely to become capable of being supplied: subs 152AB(2)(e) (investment objective).

5 Telstra contends that the critical issue is that an efficient provider of access must recover its costs from the prices of access services, given the constraints imposed upon it. While access prices that do not recover cost may stimulate short-term but inefficient competition, such below cost pricing necessarily has an adverse impact on long-term investment, and hence on long-term competition. Pricing that does not recover costs acts as an economic deterrent to infrastructure investment and use, both in the short-term and in the long-term. This is clearly not in the LTIE, the interests of access providers or of access seekers.

6 The Tribunal expressed this conclusion in *Re Seven Network Limited (No 2)*⁹⁰ in the following terms:

"In considering how these elements may combine, it may be the case, for example, that very low prices are in the short-term interests of end-users. Over the long-term, however, sustainably low prices (which may be higher than the 'very low prices' referred to above) are more likely to enhance their interests, as the long-term interests of end-users are likely to suffer in an environment characterised by short-lived operators who fall over soon after the customer signs with them, as distinct from one in which reliable service-providers offer competitive, but sustainable, services. Moves that enhance the quality and diversity of service may be subject to a similar analysis.

The use of the 'long-term' may also assist in resolving the apparent tension between the criteria in ss 152AB(2)(c) and (e). For example, action that promotes competition in the short-term may deter investment and hence, over the longer-term, competition may lessen (resulting in reduction to efficiency and innovation). Moreover, an action may promote competition at the retail level (resulting in more channels offered by more operators), but may deter facilities-based competition, with fewer service providers being prepared to establish delivery mechanisms of their own than would otherwise be the case. Assessed over the long-term, however, there is less likely to be any conflict between the promotion of competition and efficiency. Nonetheless, to the extent that there are mixed effects, we will have regard to the overall or net effect."

7 Indeed, below cost pricing would harm the development of long-term sustainable competition. Below cost pricing discourages competitive build and instead promotes free-riding, leading to unsustainable short-term competition and increased reliance on the continued availability of below-cost access to the existing infrastructure. Below cost pricing also undermines the incentives for access providers to continue to invest. The Commission appears to accept this proposition, see for example, the Commission's Fixed Services Review, a Second Position Paper, April 2007 (Fixed Services Review):

⁹⁰ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

*"The Commission needs to ensure that the access regime does not discourage investment in networks or network elements where such investment is efficient."*⁹¹

- 8 In effect, artificially low access pricing does not promote dynamic efficiency (and, in the long run, this results in allocative and productive inefficiencies). As the Commission also commented in the Fixed Services Review:

*"Facilities-based competition is more likely to lead to sustainable competition, spur dynamic innovation and encourage the diffusion of new technologies over time; ultimately providing greater prospects for the relaxation or removal of access regulation."*⁹²

- 9 Further, in relation to the competition objective in particular, the Tribunal observed in *Telstra Corporation Ltd (No 3)* [2007] A Comp T 3 (17 May 2007) that:

*"[I]n this context we are considering the likelihood of the promotion of 'competition'; not the promotion of competitors".*⁹³

- 10 Lower prices may promote certain competitors but such prices will not necessarily promote competition. As noted by the Tribunal, in considering the LTIE, *"it is just as important that [Telstra] is able to compete on the basis of its own efficiencies in telecommunications markets as it is that other competitors are able to compete on the basis of their own efficiencies in these markets."*⁹⁴

- 11 Accordingly, the Commission should ensure that it does not set prices which do not enable the access provider to recover its costs from the prices of MTAS, even in the short-term. While lower access prices may stimulate short-term but inefficient competition, this is not in the LTIE due to the significant adverse impact on future infrastructure build. Where there is uncertainty regarding the true cost of services, the Commission should err on the side of setting prices that will promote the LTIE by encouraging investment in infrastructure, consistent with the emphasis on the long-term.

- 12 In relation to the investment objective, Rares J observed in *Telstra Corporation Limited v Commission*⁹⁵ that competition cannot be promoted, and thus the long-term interests of end users (LTIE) may not be attained, if infrastructure investment is not economically feasible for an efficient service provider to make or support. His Honour went on to find that:⁹⁶

"[B]y 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 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."

- 13 The clear implication of this finding is that the LTIE will not be promoted where the Access Provider is unable to recover all of the costs of providing access to its infrastructure or

⁹¹ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

⁹² Fixed Services Review, [21].

⁹³ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

⁹⁴ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

⁹⁵ [2008] FCA 1758, referring to the equivalent provisions in the Trade Practices Act 1974 (Cth).

⁹⁶ *Telstra Corporation Limited v ACCC* [2008] FCA 1758 at [111].

where it is obliged to act in a way which is economically unjustifiable. This will include the costs of complying with non-price terms on which access must be provided.

1.2. THE LEGITIMATE BUSINESS INTERESTS OF THE ACCESS PROVIDER, AND THE CARRIER'S OR PROVIDER'S INVESTMENT IN FACILITIES USED TO SUPPLY THE DECLARED SERVICE

- 14 Subsection 152BCA(1)(b) requires the Commission to take into account the legitimate business interests of the Access Provider and its investment in facilities used to supply the declared service. An Access Provider would not invest in infrastructure if it was unable to achieve a return that recovers all of its costs and enables it to make a return commensurate with the risk involved. It would instead elect to make its investment (and receive a better return on that investment) elsewhere.

1.3. THE INTERESTS OF ALL PERSONS WHO HAVE RIGHTS TO USE THE DECLARED SERVICE:

- 15 Sub-section 152BCA(1)(c) inherently contemplates a balancing of interests between the rights of end-users and the rights of access seekers. It refers to "all persons" not just "access seekers", so necessarily contemplates persons beyond access seekers. Further, "access seeker" is defined in s 152AC. If Parliament had intended s 152CR(1)(c) to be confined to access seekers it could have referred to them expressly. Consequently, the focus of the analysis is not purely on the rights of access seekers; an appropriate balance of the interests of all parties is required.

- 16 Although it is arguably in the short-term interests of persons who have rights to use MTAS to be supplied at below-cost prices, this is not in the long-term interests of either access seekers or end-users, for the reasons set out above. Further, it will be in the interests of all persons who have rights to use MTAS, for the service to be priced symmetrically across FTM and MTM calls. That is, all parties calling mobile networks should be treated equivalently, and there should be no artificial incentives created by the regulatory regime to favour one type of user of the service over another.

1.4. THE DIRECT COSTS OF PROVIDING ACCESS TO THE DECLARED SERVICE

- 17 Telstra observes the Commission correctly states that "*the direct costs of providing access to a declared service are those incurred (or caused) by the provision of access, and includes the incremental costs of providing access*".⁹⁷ This is consistent with the judgment of Rares J in *Telstra Corporation Limited v Commission*.⁹⁸ In relation to the costs of complying with a FAD in particular, the criterion in subs 152BCA(1)(d) must be read consistently with the Commission's obligation under subs 152BCB(1)(f) of the CCA to refrain from making any determination under which a party would be required to bear an unreasonable amount of the costs associated with extending or enhancing a facility.⁹⁹
- 18 The direct costs of providing MTAS should also include a contribution to common costs, being the costs incurred in providing MTAS which is incurred in common with the provision of other services.
- 19 This is supported by the Tribunal's decision in *Application by Optus Mobile Pty Limited and Optus Networks Pty Limited (2006) ACompT 8*, where it recognised that access pricing

⁹⁷ Commission, Discussion Paper, p. 32.

⁹⁸ [2008] FCA 1758.

⁹⁹ *Telstra Corporation Limited v ACCC* [2008] FCA 1758 at [123].

should also incorporate an appropriate allocation of fixed and common costs efficiently incurred in the long run. The Tribunal, in discussing fixed and common costs, made the following statement:¹⁰⁰

"[D]irect costs are a reference to the total costs of providing access to the relevant declared service which ordinarily include an appropriate allocation of FCCs [fixed and common costs] because without the existence of the assets in respect of which the FCCs are incurred, the relevant access could not be provided."

- 20 In order to consider the Access Provider's direct costs, the Commission must give fundamental weight to the Access Provider's direct costs of implementation where it:
- (a) imposes new processes;
 - (b) specifies changes to systems;
 - (c) identifies additional information that the Access Provider must make available to an Access Seeker; or
 - (d) imposes any other non-price term that increases costs or risks.
- 21 This consideration suggests that the Commission should not mandate, via the mechanism of a FAD, that steps be undertaken unnecessarily. In addition, Telstra submits that the consideration militates against the Commission imposing obligations where there are substantial implementation costs or increased risks and the obligations would not promote the LTIE to any significant extent.
- 22 As noted by the Commission, this criterion is concerned with ensuring that the costs of providing the service are recovered.¹⁰¹ It is not permissible to defer consideration of this issue to a later date.¹⁰²

1.5. THE VALUE TO A PARTY OF EXTENSIONS, OR ENHANCEMENT OF CAPABILITY, WHOSE COST IS BORNE BY SOMEONE ELSE

- 23 Subsection 152BCA(1)(e) requires the Commission to take into account the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else. This criterion is relevant to any proposed terms and conditions which would require Telstra to make changes to its IT systems and otherwise, at significant cost, enhance the capability of its facilities in order to comply.

1.6. THE OPERATIONAL AND TECHNICAL REQUIREMENTS NECESSARY FOR THE SAFE AND RELIABLE OPERATION OF A CARRIAGE SERVICE, A TELECOMMUNICATIONS NETWORK OR A FACILITY

- 24 The operational and technical requirements necessary for the safe and reliable operation of MTAS have cost implications for the configuration and operation of the underlying network. These costs need to be recovered in access pricing in order for there to be sufficient funds available for the access provider to maintain safe and reliable services.

¹⁰⁰ *Telstra Corporation Limited v Australian Competition Tribunal* [2009] FCAFC 23. See in particular at [260-270] per the Court.

¹⁰¹ Commission, Discussion Paper, p. 32.

¹⁰² *Telstra Corporation Limited v ACCC* [2008] FCA 1758 at [117].

Access prices that are below the cost of supply therefore risk compromising the safety and reliability of the service.

1.7. THE ECONOMICALLY EFFICIENT OPERATION OF A CARRIAGE SERVICE, A TELECOMMUNICATIONS NETWORK OR A FACILITY

25 For the reasons set out with respect to s 152BCA(1)(a), Telstra maintains that access prices should not be set below efficient cost recovery levels. If they are, it would lead to long-term economic inefficiencies (and, it is the long-term that is given pre-eminence). In particular:

- (a) below cost access pricing (including a price that does not include the cost of the network) creates free-riding incentives. In effect, economic resources will be diverted away from other forms of competition, resulting in a resource misallocation and inefficient use of infrastructure. In the long-term, this is not economically efficient; and
- (b) the economic distortion arising from below cost access pricing is also likely to have a cascading and long-term spill over effect into downstream and related markets. For example:
 - i. below cost access pricing will disincent the access provider from investing in its network. An absence of sufficient network investment by the access provider will eventually require regulatory settings to be adjusted. This will be all the more difficult to achieve where an entire industry has arisen on the basis of artificially low access pricing. This will prolong the long-term negative efficiency consequences of the below cost access prices; and
 - ii. below cost access pricing will discourage efficient investment in other technologies and infrastructure by third parties. This will result in considerable consumer detriment, as new, different, and competing services are not provided longer-term to the community.

26 This is contrary to the LTIE and the statutory criteria to which the Commission is required to have regard in making the FADs.

1.8. APPLICATION OF THE STATUTORY CRITERIA

27 In relation to a FAD, Telstra submits that the Commission should assess the statutory criteria on a "future with" and "future without" basis.¹⁰³ The "future without" FAD terms is not one where there are no terms on the subject matter covered by the FAD. Rather, it is one where commercial agreements which are currently on foot between the parties, or which are being offered by the Access Provider, apply.

28 Where any terms and conditions in a FAD do not address the matters set out in subs 152BCA(1) any better than they are currently addressed by commercial arrangements, Telstra submits that such terms should not be made because they impose additional regulatory and compliance burdens for no discernible benefit over and above that which the market is currently providing.

29 Telstra notes that the Commission is yet to analyse the application of the statutory criteria to any proposed FAD terms and conditions. Telstra expects that the Commission will

¹⁰³ This approach was recently taken by the Australian Competition Tribunal in *Re AAPT Ltd* [2009] ACompT 5, [5] and *Application by Chime Communications Pty Ltd* (No 2) [2009] ACompT 2, [12] - [14].

perform this analysis when it releases a draft FAD. When this occurs, the relevant analysis should be conducted on a “future with” and “future without” basis in the manner described above. In addition, Telstra submits that interested parties should be afforded an opportunity to comment on the draft FAD and the Commission’s analysis of the statutory criteria.

2. OTHER MATTERS THE COMMISSION SHOULD TAKE INTO ACCOUNT

- 30 In addition to the statutory framework set out above, Telstra considers that the Commission should, in preparing a draft FAD, take into account the following relevant considerations.

2.1. CLARITY, BALANCE AND REASONABLENESS

- 31 In light of the severe consequences for Access Providers and Access Seekers if they breach a FAD, and in order to avoid unnecessary disputes regarding the interpretation of the various FAD terms and conditions, any MTAS FAD terms and conditions should be clear.
- 32 A FAD must also be carefully drafted to ensure that it strikes an appropriate balance between two competing considerations. On the one hand, the FAD must contribute to an effective regime for infrastructure sharing that will facilitate competition in the telecommunications market. On the other hand, the FAD must avoid placing undue, onerous or unnecessary costs and burdens on market participants who would otherwise invest in infrastructure, so that infrastructure can continue to be developed and shared between market participants. If the scale is tipped in favour of economic disincentives on Access Providers, then instead of investing in infrastructure that may be shared, Access Providers are likely to invest in other areas. For this reason, it is important to avoid incorporating any provisions into a FAD which would have the effect of placing undue, onerous or unnecessary costs and burdens on Access Providers.
- 33 Finally, a FAD should be reasonable in its impact on both Access Providers and Access Seekers. A FAD should not impose on Access Providers unduly onerous obligations which have little or no benefit for Access Seekers.

2.2. SCOPE OF THE FADS

- 34 A FAD must be within the scope of the Commission’s powers. Thus, the Commission must not make a FAD which would have any of the effects set out in subs 152BCB(1). That is, the FADs must not include provisions which, for example:
- (a) require a person (other than an Access Seeker) to bear an unreasonable amount of the costs of extending or enhancing a facility’s capability: subs 152BCB(1)(f); or
 - (b) require the provision of access where there are reasonable grounds to believe that the Access Seeker would fail to comply with the relevant terms and conditions: subs 152BCB(1)(g).
- 35 Examples of the grounds mentioned in subs 152BCB(1)(g) include evidence that the Access Seeker is not creditworthy¹⁰⁴ or repeated failure by the Access Seeker to comply with terms and conditions on which a Service has been provided.¹⁰⁵

¹⁰⁴ CCA, subs 152BCB(2)(a).

2.3. COMMERCIAL PRACTICE

- 36 Telstra submits that any FAD provisions should be consistent with commercial practice and should adequately cater for the individual characteristics of each Access Provider and Access Seeker. Given that the FADs are intended to be default contractual terms and the parties will have to comply with them, they should reflect commercial and practical reality for all Access Seekers and Access Providers.
- 37 In that regard, if the Commission is to determine non-price terms as part of its FAD (which Telstra believes is unnecessary for the reasons mentioned above), adopting terms and conditions which are consistent with commercial practice is preferable because those practices reflect an efficient outcome resulting from balanced negotiations between the parties. As set out in 2.1.5, that efficient outcome should not be overturned without the Commission providing considered reasons why the proposed terms would promote the statutory criteria more than that efficient commercial outcome.

¹⁰⁵ CCA, subs 152BCB(2)(b).

APPENDIX B – ANSWERS TO DISCUSSION PAPER QUESTIONS

| | Commission Question | Telstra response |
|---|---|---|
| 1 | Is the flow of voice traffic between any pair of mobile operators broadly symmetrical? | <p>Traffic flows between operators will not necessarily be symmetric between two networks of equal scale. It will depend on such things as, the type of customers using the network (pre-versus post-paid customers), and whether a network has special mobile services which only provide for origination. [C-I-C]</p> <p>See Section 2.2</p> |
| 2 | Is there any evidence which suggests that retail pricing of FTM services reflects the reducing cost of MTAS? | <p>Yes. From 2004-2010, the average price of supplying the bundle of voice services has fallen by more than the unit cost of supplying the bundle (including the cost of terminating FTM calls). This shows that the reduction in MTAS has been more than passed through customers in the bundled price.</p> <p>See Sections 5.2 and 5.3</p> |
| 3 | Are MNOs likely to negotiate BAK-based access agreements for MTM calls commercially, and if so, within what timeframes? | <p>Telstra considers it highly unlikely that MNOs will negotiate BAK-based agreements for MTM given that MNOs have not yet done so in a mature market.</p> <p>See Section 4.6</p> |
| 4 | Should the Commission set a price of zero for MTM termination in the MTAS FAD? | <p>No. The Commission should not set MTM MTAS to zero. BAK is only efficient if there are un-internalised calling externalities or it results in lower transactions costs associated with the supply of the service. As there is no evidence of un-internalised calling externalities and there do not appear to be any costs savings, it is unlikely that BAK will generate outcomes in the LTIE.</p> <p>The application of asymmetric MTM and FTM MTAS prices will result in opportunities for arbitrage, and large administrative costs associated with preventing these opportunities from being exploited for both the Commission and operators. In the absence of any un-internalised call externality, asymmetric rates will also decrease allocative efficiency. This is not in the LTIE.</p> |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|---|--|---|
| | | See Sections 3.3, 4.6 and Appendix C |
| 5 | If commercial BAK arrangements for MTM termination were implemented successfully, should MTM termination be deregulated? | <p>If commercial BAK arrangements for MTM termination were implemented successfully, Telstra considers that MTM termination could be deregulated subject to ensuring that no individual provider has the ability to “tip” the market. However, for the reasons noted earlier in this submission, Telstra does not believe that BAK is appropriate for MTM termination.</p> <p>See section 4.6</p> |
| 6 | If MTM termination was deregulated, how would any-to-any connectivity be maintained? | <p>Given the maturity of the market, the existence of three MNOs, and the relevant market shares, incentives to refuse interconnection are unlikely to arise.</p> <p>See Section 4.6</p> |
| 7 | Should reductions in the MTAS rate be subject to a pass-through safeguard for fixed or integrated operators? | <p>No. Customers purchase fixed voice services as a basket of PSTN services. Therefore pass-through should be considered in the context of a bundled price. Retail FTM pass-through should not be imposed, because, from 2004-2010, the average price of supplying the bundle of voice services has fallen by more than the unit cost of supplying the bundle (including the cost of terminating FTM calls). This shows that the reduction in MTAS has been more than passed through customers in the bundled price. In addition, it is inappropriate for the Commission to regulate retail market prices via a wholesale access regime.</p> <p>See Section 5.2</p> |
| 8 | If a percentage pass-through obligation is adopted, should pass-through occur at the same time, or after the reduction in the MTAS rate? What is the most effective way for the Commission to monitor compliance with the provision? | <p>Telstra considers this as inappropriate given our response to Question 7.</p> <p>See Section 5.2</p> |
| 9 | If a ‘retail-minus’ approach is adopted, should integrated operators lodge their average retail prices with the Commission? | <p>Telstra considers this as inappropriate given our response to Question 7 and considers the Commission’s proposal may be outside jurisdiction.</p> <p>See Sections 5.1 and 5.4</p> |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|----|---|--|
| | If so, how often should retail prices be reviewed? | |
| 10 | If a 'retail-minus' approach is adopted, what should the floor price be before integrated operators can return to the standard MTAS price set out in the FAD? | Telstra considers this as inappropriate given our response to Question 7 and considers the Commission's proposal may be outside jurisdiction. See Sections 5.2 and 5.4 |
| 11 | What factors should the Commission consider in setting minimum level of pass through? | Telstra considers this as inappropriate given our response to Question 7. See Section 5.2 |
| 12 | Are there other pass-through safeguard measures that promote the LTIE? | Telstra considers this as inappropriate given our response to Question 7. Telstra believes that fixed services market is already an effectively competitive market and that this measure is unnecessary given that FTM MTAS rates have been passed through. See Section 5.2 |
| 13 | Does TSLRIC+ remain an appropriate methodology for deriving an MTAS price? | Yes. A TSLRIC+-based price for MTAS will best promote the LTIE as it is a cost-based price methodology which allows for a return on, and return of, efficiently invested capital and the recovery of efficiently incurred common costs. It is the only pricing approach examined by the Commission which satisfies the relevant statutory criteria. See Section 3.2 and Appendix C |
| 14 | Is a new cost model required to estimate the price of the MTAS using a TSLRIC+ pricing methodology? | The Commission should consider the development of a new cost model to estimate the price of MTAS using TSLRIC+ which takes into account current technologies and Australian mobile market conditions. Until this occurs, the Commission could use international benchmarking of TSLRIC+ approaches to determine the appropriate price. As Telstra has demonstrated in its submission, this price is 6cpm. See Section 4.3 |
| 15 | Is pure LRIC an appropriate methodology for deriving an MTAS | No, because pure LRIC does not allow for the recovery of joint network and common costs. It also results in other services, such as voice origination bearing more of the joint network costs and a portion of voice termination's common costs. This is contrary to the LTIE. |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|----|--|---|
| | price? | See Section 3.4 and Appendix C |
| 16 | Is international benchmarking an appropriate methodology for deriving the MTAS price? | In the absence of up to date cost modelling Telstra is of the view that international cost benchmarking may be useful for assessing whether a TSLRIC+ price is reasonable. See Section 4.2 |
| 17 | Which parameters should be adjusted so as to ensure a benchmarked result reflects Australian conditions? | Telstra considers that a thorough benchmarking analysis would include adjustments for: <ul style="list-style-type: none"> o the cost methodology used (TSLRIC, TSLRIC+, pure LRIC) o country specific allocators and drivers including: <ul style="list-style-type: none"> o Volumes of demand; o Traffic distribution; o Market maturity o Demographic and urbanization density; o Network coverage; and o System input costs. o the tariff structure and the applicable time period; o inflation; and the appropriate exchange rates (use of purchasing power parity and consistent conversion methods and times). |
| 18 | Are MNOs actual costs an appropriate methodology for deriving the MTAS price? | Actual cost information should not be used to estimate the MTAS price because the discretion that an operator has when determining how to allocate costs across the various services on its network will inevitably lead to varying results across operators. See Section 4.4 |
| 19 | On what basis could MNOs demonstrate that their actual costs are efficiently incurred? | Telstra believes that inefficient actual costs are unlikely. See Section 4.4 |
| 20 | What is an appropriate timeframe for the MNOs to provide the Commission with this information? | Not applicable given Telstra’s view above. |
| 21 | In the likely event that the MNOs provide the Commission with | Contrary to Telstra’s submission, if actual cost information is to be used, the Commission must be highly prescriptive in the identification and definition of costs and their allocation, |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|----|--|--|
| | different MTAS cost figures, how should the Commission arrive at a single price for the MTAS in the FAD? For example, would a weighted average be appropriate and what weighting factors should be used? | and that all types of traffic are reduced to a common base. Telstra believes the most sensible approach for the Commission is to convert voice traffic from Minutes of Use into a Mbytes measure. Telstra believes that cost allocation should be based on service usage. See Section 4.4 |
| 22 | Is a BAK system an appropriate methodology for the MTAS? | No, BAK is not an appropriate methodology for the MTAS as it leads to inefficiencies. See Section 3.2 and Appendix D. |
| 23 | How significant is the traffic imbalance (if any) between FTM and mobile-to-fixed (MTF) calls? | Telstra does not understand the relevance of this question in the context of determining the appropriate costs for the MTAS. |
| 24 | Should there be a glide path or a single transition point? | Telstra considers it would be appropriate for the Commission to adopt a glide path if it proposes to set the MTAS price at a price which is below the current 9cpm rate. This is consistent with international best practice and would reduce any potential harmful disruption to the operations and planning of operators. See Section 4.5 |
| 25 | If a glide path was implemented what would be the appropriate frequency and size of adjustments? | Any glide path will need to be longer and have more steps the lower the MTAS price being set to avoid any market disruption. See Section 4.5 |
| 26 | If a glide path was implemented, should the end point be cost-based, BAK-based or zero? | TSRLIC+ is the appropriate pricing methodology and the end point should be TSLRIC+. See Sections 3.2 and 4.5 |
| 27 | Are there any circumstances that warrant a difference in the expiry dates of the access determination and the MTAS declaration? | No. |
| 28 | Is the current MTAS service | No. |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|----|--|---|
| | description appropriate and relevant to the continued promotion of the long-term interests of end-users? | |
| 29 | Would there be significant consumer benefits gained from including other mobile termination services in the MTAS service description? | <p>No, because:</p> <p>(1) other mobile termination services are not yet developed enough (i.e., IP based services; and</p> <p>(2) there is no reason to consider SMS termination in the Australian market.</p> <p>Telstra notes that in NZ other forms of termination such as SMS were considered. However, the Commerce Commission considered SMS termination due to the specific market failure in NZ which arose from:</p> <p>(a) the high use of text messaging;</p> <p>(b) the prevalence of high differential rates between on- and off-net texts. Telstra does not consider this to be a problem in the Australian market; and</p> <p>(c) the difficulty of new entrants to compete with the high differential rates – again, given the well-established position of all three mobile operators in the market, Telstra does not believe that this is relevant in Australia.</p> |
| 30 | Please provide comments regarding the appropriateness of the proposed NPTCs above. | <p>Telstra submits that the FAD should not incorporate such generic commercial non-price terms and conditions. Regulation of these matters for MTAS is unnecessary as it would impose additional regulatory and compliance burdens on the parties with no additional benefits.</p> <p>See Section 6</p> |
| 31 | Should the Commission include terms and conditions relating to the liability and risk allocation in the FAD? If so, should it apply to all access seekers equally, or should it be restricted to a particular class of access seekers? | <p>Telstra agrees with the Commission that provisions relating to liability (risk allocation), changes to operating manuals, and ordering and provisioning do not need to be addressed in the MTAS FAD given the lack of historical access disputes in respect of these provisions.</p> <p>See Section 6</p> |
| 32 | Please provide any comments regarding additional NPTCs the Commission ought to include in | See Telstra’s response to Question 31 above. |

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

| | Commission Question | Telstra response |
|--|----------------------------|-------------------------|
| | the FAD. | |

APPENDIX C — PRICING METHODOLOGIES

1. TSLRIC/TSLRIC+

1.1. THE CONCEPT

- 1 TSLRIC is made up of three components:
 - (a) **Incremental Cost** is the cost over a specific increment of the service being supplied;
 - (b) **Total Service** implies that the relevant incremental cost is measured over the total amount of the service being supplied or the entire production element being used; and
 - (c) **Long Run** implies that all factors of production (e.g. labour and capital) are variable, and that the relevant cost will therefore include not only the operating and maintenance expenses, but also the annualised capital costs, which are often significant in telecommunications due to the capital-intensive nature of the industry. The annualised capital costs will be comprised of both a return of efficiently invested capital, through an appropriately specified depreciation profile, and a return on capital, via some estimate of the weight average cost of capital (WACC) or funds to the firm.
- 2 However, the TSLRIC concept, as defined by regulators in Australia, does not account for the common costs of supplying the service (e.g. corporate overheads).¹⁰⁶ Given there is a need to recover common costs that cannot be allocated to a specific service, and in the absence of any two-part tariff,¹⁰⁷ it is recognised that the most efficient way for prices to be set (i.e. by applying Ramsey-Boiteux pricing principles), will result in all services making some contribution to these costs.¹⁰⁸ The “+” term is used to capture the mark-up required on TSLRIC to recover some portion of the joint and common costs, with the resulting cost estimate in Australia being referred to as TSLRIC+.¹⁰⁹
- 3 To provide a per unit cost measure of the TSLRIC+, the total cost estimate for the service, is divided by the total service increment. The resulting per unit TSLRIC+ estimate is therefore an estimate of the average cost at the total quantity of the service being supplied, which includes some contribution for the common costs, and

¹⁰⁶ This is in contrast to New Zealand, where the Total Service in the acronym TSLRIC actually includes any joint and common costs. See New Zealand Commerce Commission, *Application of a TSLRIC Pricing Methodology—Discussion Paper*, July 2002.

¹⁰⁷ D. Biggar, “Access Pricing and Competition”, Paper presented at the Regulation and Investment Conference, Commission, Sydney, 26-7 March 2001, available at <http://www.accc.gov.au/content/item.php?itemId=259604&nodeId=487f9cfcccafec827b748d035b4929e3&fn=Darryl%20Biggar%20paper%20-%20Access%20Pricing%20&%20Competition.pdf>, notes on p.15, para 72 that the use two-part tariffs for wholesale access pricing problematic, as it creates economies of scale and could turn a competitive industry into one where there are natural monopoly cost conditions.

¹⁰⁸ Under second-best efficient Ramsey-Boiteux pricing principles, the relative mark-up in price from marginal cost (that minimises the level of inefficiency) will depend on the relative responsiveness of the underlying demand (i.e. the elasticity of demand) for that service. Under such pricing, it is efficient for a service to bear common costs in all but circumstances where demand is perfectly elastic or demand for another service is perfectly inelastic. Such outcomes are highly unlikely. In addition, if compensated demand curves or Hicksian demand curves are used, which should be the case if a proper welfare/efficiency analysis is being conducted, then demand curves will always be downward sloping. This implies that it will be welfare improving, from an allocative efficiency perspective, for each service to make some level of contribution to the overall joint or common costs.

¹⁰⁹ In Europe the terminology often used for an equivalent estimate is LRIC+.

provides for a return of, and return on, capital.¹¹⁰ The benefit of an average cost measure is that it provides a supplier with cost recovery in the presence of economies of scale associated with the investment.

- 4 Technically, TSLRIC+ is in the family of fully-distributed cost (**FDC**) pricing methods. It has, however, been distinguished from these methods, because, rather than using historical or backward-looking costs which is typical of FDC methods, TSLRIC+ estimates have been estimated using forward-looking (**FL**) costs. A discussion of the use of FL costs to estimate TSLRIC+ is outlined below.

1.2. TSLRIC/TSLRIC+ ESTIMATION IN PRACTICE

1.2.1. ESTIMATING THE TSLRIC COMPONENT

- 5 With the deregulation of the telecommunication sector allowing for competitive entry in a number of countries, national regulatory authorities overseeing telecommunications markets have had to set prices for one-way access and two-way interconnection to bottleneck components of the network. Until recently, in order to derive access prices, regulators, including the Commission, have generally used an estimate of the TSLRIC/TSLRIC+.¹¹¹
- 6 While it has been acknowledged that TSLRIC/TSLRIC+ estimates can be based on either historical/backward looking (**BL**) costs or replacement/FL costs,¹¹² over the course of regulation of prices for telecommunications wholesale access and interconnection access in Australia (and most other countries), FL costs have been applied. The regulatory justification for not adopting BL costs has been that it would not promote the efficient use of, or investment in, infrastructure because it would compensate access providers for costs that were not efficiently incurred and would encourage inefficient investment by access providers and access seekers. In relation to access seekers, it has been claimed that BL costs could lead to access prices being set too high, which would promote inefficient bypass by alternative providers. FL costs were viewed as necessary to promote an efficient "buy or build" decision.
- 7 To derive FL TSLRIC/TSLRIC+ estimates, fixed and mobile engineering economic cost models have been employed by regulators. To derive estimates these models also often contain rules about appropriate design configuration of the network (i.e. scorched node versus scorched earth approaches) and the type of technology that should be deployed in the network (i.e. best in use versus best available technology). The predominant use of FL costs and the use of engineering economic cost models in telecommunications regulation to derive TSLRIC/TSLRIC+ estimates, has led to the cost concept and pricing methodology often being considered (incorrectly)

¹¹⁰ The average cost nature of the estimate was also noted by W. Davis (Frontier Economics), "From Futility to Utility – Recent Developments in Fixed Line Access Pricing", Telecommunications Journal of Australia, Volume 61, Number 2, 2011, 32.1-32.16, p. 32.3.

¹¹¹ There are different acronyms used by telecommunication regulators across the different countries to refer to the same cost estimation technique. The European equivalent to TSLRIC/TSLRIC+ is Long Run (Average) Incremental Cost (i.e. LRIC/LRIC+/LR(A)IC) and US equivalent is Total Element Long Run Incremental Cost (TELRIC). Further, in New Zealand the equivalent to the Australian TSLRIC is actually LRIC, and the equivalent of TSLRIC+ is their estimate of TSLRIC. In New Zealand the term Total Service has been used to capture the Common Network Costs.

¹¹² See J.S. Gans and S.P. King, "Comparing Alternative Approaches to Calculating Long-Run Incremental Cost", Melbourne Business School Working Paper, 2004, available at: <http://mbs.edu.au/home/jgans/papers/LRIC.pdf>, which on p. 6 states that TSLRIC is a "technology-dependent" measure, which means it can be estimated by employing either backward-looking/historical or forward-looking/replacement cost technology. They recognised however on p. 7 that: "The use of forward-looking costs to estimate TSLRIC-based interconnection prices and other cost-based pricing in telecommunications has become relatively standard worldwide."

synonymous with the implementation methodology or process. This view is reflected in comments made by the Australian Competition Tribunal.¹¹³

"The Tribunal does not consider that it is possible sensibly to evaluate the use of TSLRIC+ approach without concurrently considering how it is implemented and, in particular, the way in which costs are estimated. Indeed, discussion of the TSLRIC+ approach in the submission is, perhaps unavoidably, sometimes conflated with discussion of its implementation, with TSLRIC+ being assumed to have certain features beyond those, explained earlier in these reasons, by which it is named. A forward-looking basis is generally assumed to be part of the TSLRIC+ approach, and further assumption about how forward looking costs should be estimated are often embedded in the treatment of TSLRIC+."

- 8 Davis¹¹⁴ also notes that the justifications for adopting FL TSLRIC/TSLRIC+ estimates have, in the past, differed slightly, depending upon whether the Commission has been dealing with fixed line or mobile pricing issues. In relation to fixed line pricing, up until 2009 – when the Commission began to cast doubts on the appropriateness of TSLRIC/TSLRIC+ estimates – there was a greater emphasis on the need to encourage efficient buy or build incentives for the access seeker. However, the “buy or build” justification was not used by the Commission in reaching the conclusion that TSLRIC was the appropriate pricing principle for the MTAS in its 2004 Mobile Services Review of Mobile Termination.¹¹⁵ Rather, the Commission stated that:

"Largely, the Commission has found this pricing principle to be appropriate for declared telecommunications services because it:

- *reflects the direct cost of supplying the service;*
- *ensures equally-efficient access seekers in related markets are able to compete on an equal footing with vertically-integrated access providers as both will face similar input costs for declared service;*
- *takes account of the interests of both access providers and access seekers; and*
- *encourages the economically efficient use of, and the economically efficient investment in, the infrastructure used to provide telecommunications services"*.

1.2.2. ESTIMATING THE “+” COMPONENT

- 9 Regulators have also applied rules for how to estimate the “+” component – i.e. the mark up to account for any joint and common costs. The Commission previously recognised that:¹¹⁶

"Failing to account for these common costs could violate the legitimate business interests of the access provider, reduce incentives to maintain and

¹¹³ Application by Telstra Corporation Limited [2010], ACompT 1, 10 May 2010, at [181].

¹¹⁴ W. Davis (Frontier Economics), “From Futility to Utility – Recent Developments in Fixed Line Access Pricing”, Telecommunications Journal of Australia, Volume 61, Number 2, 2011, 32.1-32.16, p. 32.12.

¹¹⁵ The Commission, Mobile Services Review Mobile Terminating Access Service Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access services, June 2004, available at:

[http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20\(June%202004\).pdf](http://www.accc.gov.au/content/item.phtml?itemId=708251&nodeId=869923e2dc6450fb03830deb9aca5c19&fn=Final%20report%20-%20mobile%20terminating%20access%20service%20(June%202004).pdf). See p. 205.

¹¹⁶ The Commission, Access Pricing Principles — Telecommunications: A Guide, July 1997, p. 39, footnote 41.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

invest in infrastructure and distort the choice of technology towards technologies with low common costs.”

- 10 In the context of MTAS pricing, the Commission has also highlighted the legitimacy of efficient firms recovering the common costs, stating that:¹¹⁷

“An efficient multi-product firm would have the expectation of recovering, in some manner, these common costs. As a result it would be expected that the prices of the firm’s services (including prices for access) incorporate some contribution to these costs.”

- 11 In terms of achieving second-best efficient outcomes, given that there is linear pricing and a need to deviate price away from marginal costs in order to recover any joint and common costs, Ramsey-Boiteux pricing establishes that the relative mark-up in price from marginal cost that minimises the level of inefficiency will depend on the relative responsiveness of the underlying demand (i.e. the elasticity of demand) for that service.¹¹⁸ Whilst Ramsey-Boiteux prices are theoretically efficient, in practice, it has been observed that up-to-date estimates of elasticities of demand for price setting purposes can be challenging.¹¹⁹ Accordingly, Ramsey-Boiteux prices have not explicitly been calculated for the pricing of wholesale access services. In that regard, the Tribunal has previously stated that:¹²⁰

“The body of expert economic material is persuasive of the proposition that consistent with accepted economic theory and principles, it is not appropriate to use the R-B [Ramsey-Boiteux] pricing principles to determine the allocation of FCC [Fixed and Common Costs] to an MTAS.”

- 12 Instead, to derive the “+” for the MTAS in its TSLRIC+ estimates, the Commission has adopted the equi-proportionate mark-up (**EPMU**) rule to allocate the joint and common costs across services.¹²¹ This involves estimating the directly attributable costs of each service within a group and allocating the common costs based on each service’s proportion of the total direct costs.
- 13 The EPMU approach is in line with what the majority of regulators use to recover joint and common costs.¹²² It will result in outcomes consistent with the theoretically efficient Ramsey-Boiteux pricing principles where services have identical elasticities of demand.
- 14 In order to understand how EPMU operates in practice, assume that:

¹¹⁷ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, available at <http://www.accc.gov.au/content/item.php?itemId=804768&nodeId=d5983a0a28e85ce384267d635824d04d&fn=MTAS%20pricing%20principles%20determination%20report.pdf>. See p. 16.

¹¹⁸ It will be efficient for a service to not bear any of the common costs if it has perfectly elastic demand, or another service has perfectly inelastic demand. However, as set out in footnote 108, these outcomes are unlikely to arise.

¹¹⁹ W.J. Baumol and J.G. Sidak, *Toward Competition in Local Telephony*, MIT Press, Cambridge, 1994, state on p. 39 that:

...up-to-date estimates of the full set of pertinent elasticities and cross-elasticities are virtually impossible to calculate,...As a result, an attempt to provide the regulator with an extensive set of Ramsey prices is likely to be beset by inaccuracies, by obsolete data, and by delays...

¹²⁰ Application by Optus Mobile Pty Limited & Optus Networks Pty Limited, [2006], ACompT 8, 22 November 2006 at [236], available at, <http://www.accc.gov.au/content/item.php?itemId=796020&nodeId=97cabb8ea9c2f2780d6ea0c876714783&fn=7%20Application%20by%20Optus%20Mobile%20Pty%20Ltd%20Limited%20%20Optus%20Networks%20Pty%20Limited%20%5B2006%5D%20ACompT8%20.pdf>

¹²¹ The Commission, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008, November 2007, pp.16-17.

¹²² Analysys Limited, *Final Report for Vodafone Australia - Review of WIK’s Mobile Network Cost Model (Analysys Report on WIK Model)*, 6 August 2007, p. 29.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- the directly attributable costs for the regulated services = \$4 million;
- the total directly attributable costs for all services is \$20 million; and
- the overheads that cannot be attributed = \$5 million.

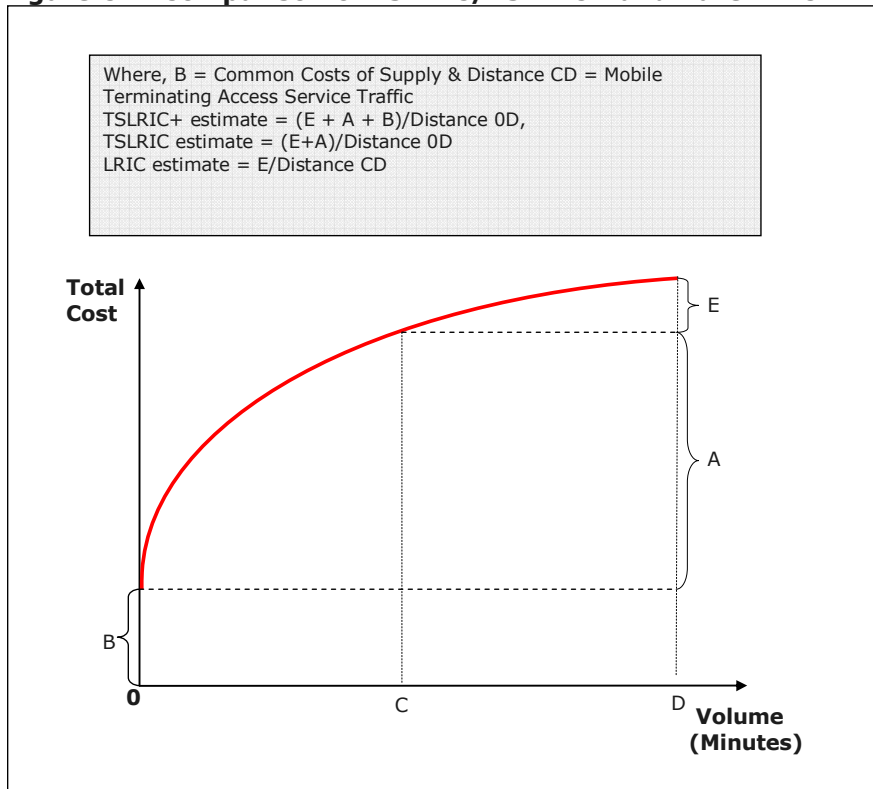
15 Under EPMU, given that 20% of the costs are directly attributable to the regulated service, the common costs allocated will be $20\% \times \$5$ million, which implies \$1 million of the common cost is allocated to the regulated service. That is, in total \$5 million of the total costs will be recovered from the regulated service.

1.3. PURE LRIC

16 Pure LRIC provides an estimate that is closer to the LRMC of supplying a service. While it provides for a return on, and of, capital (i.e. long run costs), this is only provided on capital that is relevant to supplying the regulated increment of the service. This implies that it excludes recovery of any corporate overhead common costs (similar to TSLRIC), but also does not make a contribution to the joint network costs (i.e. recovery of the costs associated with infrastructure that is used to jointly supply other network services).

17 Pure LRIC is an avoidable cost and, for a regulated service, represents the difference between the total long run costs estimated by the provider from supplying all its services, minus the total long run cost of supplying full range of services excluding the regulated service. For purely illustrative purposes, a comparison of the relevant cost concepts and the type of difference that can arise is highlighted in the diagram in the figure outlined below.

Figure C.1: Comparison of TSLRIC/TSRLIC+ and Pure LRIC



RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- 18 Therefore, in the presence of significant economies of scale associated with supply of the service, and in the absence of these costs not being recovered on other services, pure LRIC estimates could result in an expectation of significantly below normal returns across all services supplied by the access provider. This has led to it to being considered less preferable than TSLRIC+ in terms of dynamic efficiency.
- 19 To harmonise MTAS prices across Europe – which have typically been the subject of great variance over the past decade – the EC Recommendation¹²³ set out that, unless special circumstances were to arise, National Regulatory Authorities (**NRAs**) should ensure that, by 31 December 2012, termination rates were brought down to efficient cost levels and that any asymmetry in rates was removed. Further, when evaluating efficient costs, the EC recommended that NRAs should move to a “pure LRIC” method using a bottom-up engineering economic model with current costs.
- 20 The pure LRIC approach proposed by the EC would not provide the operator with any contribution for common overhead costs and joint network cost, as it only allows for the recovery of network costs that are sensitive to mobile termination traffic.
- 21 Ovum has estimated that the adoption of pure LRIC with bottom up cost models is likely to result in substantial reductions in the average MTAS prices throughout Europe over next five years. In part due to exclusion of the common and joint costs, it is estimated that MTAS prices will fall from the 2010 average of €0.06 per minute to less than €0.01 per minute.¹²⁴ A number of NRAs (such as Austria, Belgium, France, Netherlands, Portugal, Spain, Sweden and the UK) have proposed implementing the pure LRIC approach recommended by the EC during either the current or next regulatory control period.
- 22 The Belgian regulator, BIPT, was the first in Europe to adopt the pure LRIC approach and, in June 2010, estimated a TSLRIC+ for MTAS for 2010 with a glide path to a pure LRIC price for 1 January 2013.
- 23 Ofcom, on 15 March 2011, also adopted pure LRIC price and provided a four year glide path. Under this approach, prices decreased from the current (above TSLRIC+) estimated price of £0.0418-£0.04480 for April 2011, to the pure LRIC price estimate of £0.0069 for April 2014. The estimates derived from the blended 2G/3G cost model prepared by Analysys-Mason on Ofcom’s behalf, showed that the TSLRIC+ price (i.e. “LRIC+”) were approximately two-and-a-half times higher than pure LRIC prices. Ofcom noted that the equivalent TSLRIC+ estimate in April 2014 was £0.0161.¹²⁵
- 24 Whilst Ofcom considered that Pure LRIC would increase competition and consumer benefits, it noted that in contrast to LRIC+, Pure LRIC did not provide for cost recovery, and that common and joint network costs would need to be recovered from elsewhere.¹²⁶

1.4. BAK

- 25 Bill and Keep (**BAK**) involves charging a zero price for the interconnection of traffic between two networks. That is, each network agrees to terminate traffic (voice or data) at no charge. The charging regime implies that any costs associated with terminating traffic are not recovered from termination.

¹²³ European Commission (EC), Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, 7 May 2009.

¹²⁴ Ovum (M. Howett, C. Wang, M.P. Sirio), “The status of mobile termination regulation in the EU15”, 9 November 2010.

¹²⁵ See Ofcom, Wholesale Mobile Voice Call Termination Statement, Annex 3, 15 March 2011.

¹²⁶ Ofcom, Wholesale Mobile Voice Call Termination Statement, 15 March 2011, Section 7.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- 26 Such a scheme may be considered to be efficient under each of the following circumstances:¹²⁷
- there are strong call externalities. That is, as a customer derives a benefit from incoming calls that are unaccounted for by the calling party, efficiency (allocative) will be maximised by setting a termination rate that is below cost to encourage calling; or
 - there are low costs associated with the supply of the termination service and there are significant cost savings from avoiding the transactions costs associated with billing for terminating services.
- 27 Zero prices are often talked about in the context of IP Interconnection, due to zero pricing peering arrangements being in place for Internet Traffic. However, these peering arrangements often have very stringent conditions and strict rules attached to them. In particular, where traffic comes out of balance by a certain amount or where the infrastructure of one party greatly exceeds the infrastructure of another, then non-zero "transit" payment fees will often apply. In the unregulated Internet environment these interconnection arrangement evolved commercially and reflect outcomes that are aligned with the commercial interests of the parties.
- 28 In contrast, the telecommunications environment has traditionally been more heavily regulated than the Internet, and over the past 20 to 30 years regulators have typically been involved with ensuring interconnection between networks and the price and terms at which the service is provided. Regulators for the most part have used cost-based rates as the basis for pricing services.
- 29 There are only a few countries, such as those highlighted by the Commission where BAK or zero pricing arrangements are in place for interconnection. In two of these countries, the US and Singapore, the retail prices are based on a Receiver Party Pays (**RPP**) structure, as opposed to the Caller Party Pays (**CPP**) regime used in most countries, including Australia.

¹²⁷ The criteria outlined here was used by the New Zealand Commerce Commission when assessing the appropriateness of BAK being adopted for MTAS.

APPENDIX D – BAK, ASYMMETRIC RATES AND ALLOCATIVE EFFICIENCY

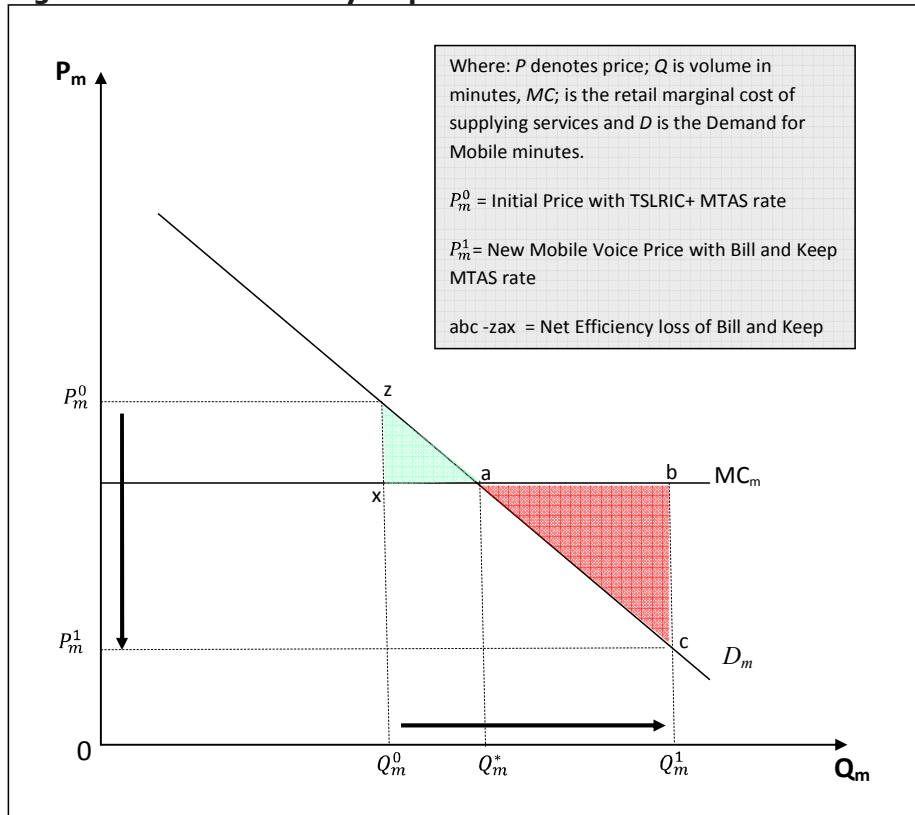
1.1 INTRODUCTION

- 1 BAK pricing will be efficient if there is some un-internalised calling externality in the market. Telstra is not aware of any evidence of un-internalised calling externalities in the Australian market to justify its use.
- 2 In the absence of the Commission being satisfied that an un-internalised calling externality exists, it will not be allocatively efficient for it to set BAK prices, and setting such a price would be contrary to the achievement of the LTIE. The potential for an inefficient outcome when there is no calling externality is highlighted in various diagrams and analysis that follow.

1.2 MTM MTAS AT BAK AND BELOW-COST RETAIL MTM PRICING

- 3 The diagram in Figure D.1 below highlights the net welfare or efficiency impact on MTM voice services of a move from charging the current TSLRIC+-price for the MTAS, to charging a zero price, or BAK price for MTM MTAS.

Figure D.1: Net Efficiency Impact of a Move to MTM MTAS BAK



RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

4 Figure D.1 shows that, with a decrease in the MTM MTAS prices to zero, there will be a subsequent decrease in the retail MTM usage price per minute denoted by P_m . The decline in the retail price from

- P_m^U (which is the initial price that covers the TSLRIC+ MTAS price, retail and marketing costs, the originating access costs, and a commercial return on capital)

to

- P_m^L (which recovers the same cost, except for the MTAS cost, which now has a zero termination rate),¹²⁸

increases demand for the volume of mobile service minutes, denoted by Q_m , from Q_m^U to Q_m^L .

5 Figure D.1 highlights that the overall net welfare impact from the change in economic activity as a result of the retail market price decrease on MTM calling, and the increased consumption of MTM minutes will be comprised of:

- (a) an efficiency gain as price moves towards marginal costs, as the benefit to society of supplying those minutes from Q_m^U to Q_m^L exceeds the cost associated with supplying those minutes by area zax , and
- (b) an efficiency loss, as a result of the cost to society of supplying those minutes from Q_m^L to Q_m^U exceeding the benefit derived by consumers by the area abc .¹²⁹

6 Ultimately, the figure shows that, relative to the efficient outcome Q_m^* , there is inefficient overuse of MTM calling occurring. The net impact of regulation on the MTM market will, in this figure, depend on the size of the two areas. All other things being equal, assuming the retail market is reasonably competitive, the larger any increases in mobile consumption due to operators taking advantage of arbitrage opportunities, such as those provided through the use of SIM boxes or mobile gateways, the greater the likelihood that an overall net efficiency loss will arise in the MTM market.

7 In undertaking an overall efficiency analysis of the impact of BAK MTAS pricing, it is necessary for the Commission to consider the impact that changes in the mobile voice market will have to efficiency in related markets. The Commission, in Section 5.2 of its Discussion Paper, recognises the interactions of the mobile market with the fixed line market. As it is recognised mobile and fixed services can be both access and usage substitutes, a change in the relative price of the two services can impact on:

¹²⁸ Implicit in this analysis is their being pass-through of any reduction in the MTAS rates in the retail pricing of mobile voice calls. This appears reasonable given that statistics from the OECD indicate that a 1% reduction in mobile termination rates results in a 0.69% reduction in the average final mobile price. (See V. Lazauskaite, "Mobile termination rates – to regulate or not to regulate", ITU/GSR Discussion Paper, 2009, p. 18.) Further, recent econometric estimates by, C. Growitsch, J.S. Marcus, and C. Wernick, "The Effects of Lower Mobile Termination Rates (MTRs) on Retail Price and Demand", Communications & Strategies, 80, 2010, pp. 119-140, find that lower MTRs tend to result in a lower retail prices, with a 1% reduction in MTAS leading to a 0.71% reduction in the average retail unit prices.

¹²⁹ B. Hansen, J.I. Kroken, H.L. Røhr, "Regulation of Mobile Termination Rates—Possible Effects of Bill and Keep Regime", Telenor R&I Research Report, 20 March 2009, shows a similar diagram in Figure 6 on p. 26 of the report. Their diagram differs slightly from that in Figure 1 as the authors have assumed prices were initially at marginal cost prior to the zero cost BAK rate being introduced.

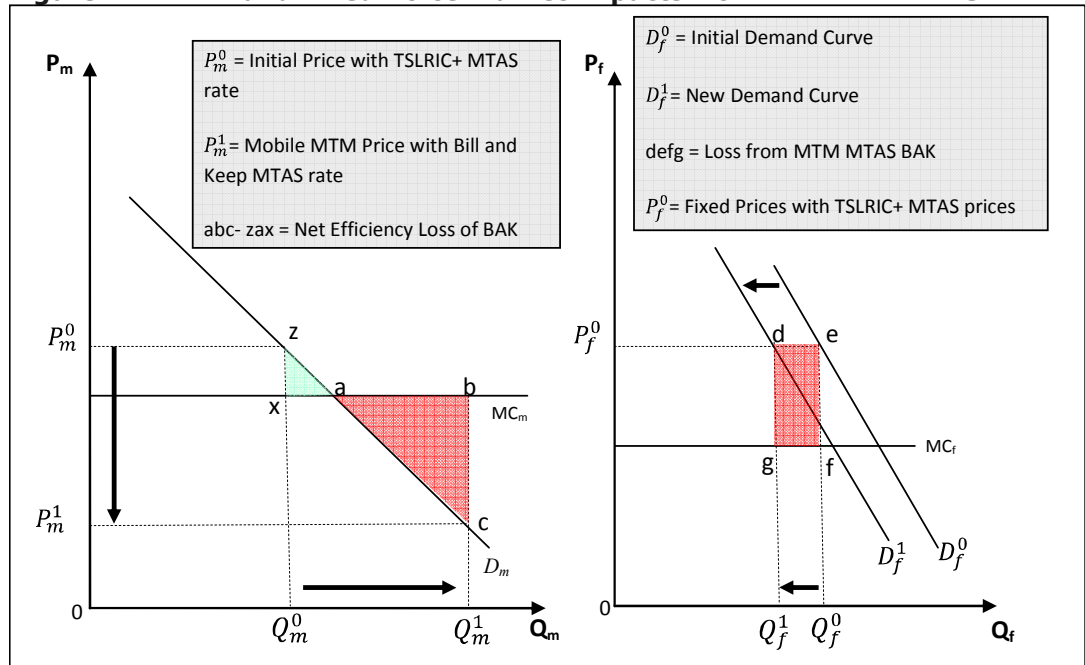
RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- (a) a customer’s choice about whether they discontinue their fixed-line subscription and instead use a mobile-only solution to meet their basic connectivity needs (access substitution); and
 - (b) whether they opt to make more calls on their mobile phones rather than their fixed-line phones (usage substitution).
- 8 The net efficiency analysis is covered in the analysis that follows, which looks at the overall impact of asymmetric rates being proposed by the Commission.

1.3 MTM MTAS AT BAK AND POSITIVE FTM MTAS CHARGES

- 9 Figure D.1, outlining the net efficiency impact of BAK, was based on a partial equilibrium analysis, focusing only on the own price effect of the lower price in the MTM retail voice market. It ignored:
- (a) related retail market impacts on the retail fixed voice market; and
 - (b) the implications for having to recover a return on and of efficiently invested capital and the joint and common costs associated with the supply of the interconnection service.
- 10 As highlighted in Section 3.3.2, there are strong incentives for carriers to take advantage of any opportunities for arbitrage. Such an opportunity exists where the regulator sets asymmetric prices for services. In relation to MTAS, this was highlighted by the experience in France, where BAK for MTM MTAS had to be withdrawn as operators used mobile gateways or SIM boxes to avoid paying higher FTM rates.

Figure D.2: MTM and Fixed Voice market impacts from BAK MTM MTAS



RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

- 11 Arbitrage opportunities are financially rewarding for particular individual operators and are financially rewarding for particular individual operators and represent investments in unproductive activities which are inefficient from a societal point of view. However, they are also likely to have significant related market impacts and create inefficient distortions in both existing and related markets. In particular, as evidenced from France, asymmetric pricing for MTM and FTM MTAS is likely to distort FTM access and usage substitution, which will result in an overall efficiency loss across the two voice service markets. This outcome is highlighted Figure D.2.
- 12 Setting aside the need to recover a return on, and of, capital and the common costs associated with the supply of MTAS, a decrease of MTM MTAS prices to BAK will lead to below-cost pricing for retail MTM voice services. This will stimulate overall demand for MTM calls, as a result of an own-price effect and potentially also as a result of FTM access substitution that occurs due to the lower relative price of MTM calling. For simplicity, the overall increase in demand is simply captured by movement down the demand curve in the diagram and as highlighted in Figure D.2, there is a net efficiency impact for MTM retail services of area $zax-abc$.
- 13 The lower relative price for retail mobile voice services also affects the fixed voice services market, which is a substitute for mobile voice services. As noted in Section 5.2, FTM MTAS rates are considered by Telstra as a relevant input into a bundle of fixed voice services. The price for fixed voice services in Figure D.2, P_f , is actually a combined retail price for fixed voice services. This will be based on a combination of such things as the input costs of PSTN originating and terminating access, retail costs of supplying fixed voice services, and the price for FTM MTAS. Assuming, therefore, that there is no change in any of these underlying input costs when the MTM MTAS price goes to BAK, the price for the fixed voice bundle services will remain constant at the initial level P_f . As the lower relative retail price for mobile voice services generated by the MTM MTAS decreases, and given usage and access substitution, this will lead to a lower demand for fixed voice services at any given price and is captured by an inward shift of the demand curve from D_f^0 to D_f^1 , and a decrease in the volume of fixed voice services minutes demanded, which are denoted by Q_f from Q_f^0 to Q_f^1 .
- 14 This decrease in demand on services from Q_f^0 to Q_f^1 (where the value of the service exceeds the resource costs to society of supplying these units) will exacerbate the overall efficiency loss arising from BAK. That is, given there is no change to any input prices for fixed voice services, there will be a Harberger rectangle efficiency loss equal to area $d-e-f-g$ in Figure D.2 in the retail fixed voice services market due to inefficient FTM substitution generated by the BAK pricing of the MTAS.¹³⁰ That is, the value on those fixed voice services no longer consumed (i.e. $d \cdot (Q_f^0 - Q_f^1)$) will exceed the costs to society of supplying those minutes (i.e. $e \cdot (Q_f^0 - Q_f^1)$).
- 15 However, the analysis in Figure D.2 ignores that the fact that, if the return on, and of, capital and the joint and common costs are still to be recovered from interconnection, then the TSLRIC+ estimate for FTM MTAS will actually need to increase when prices for MTAS MTM go to BAK. That is, as costs associated with MTM MTAS are no longer recovered from MTM MTAS services, the FTM MTAS services will need to increase to cover a greater amount of the overall capital and the joint and common costs. All other things being equal, this increase in the input price for fixed voice services, will

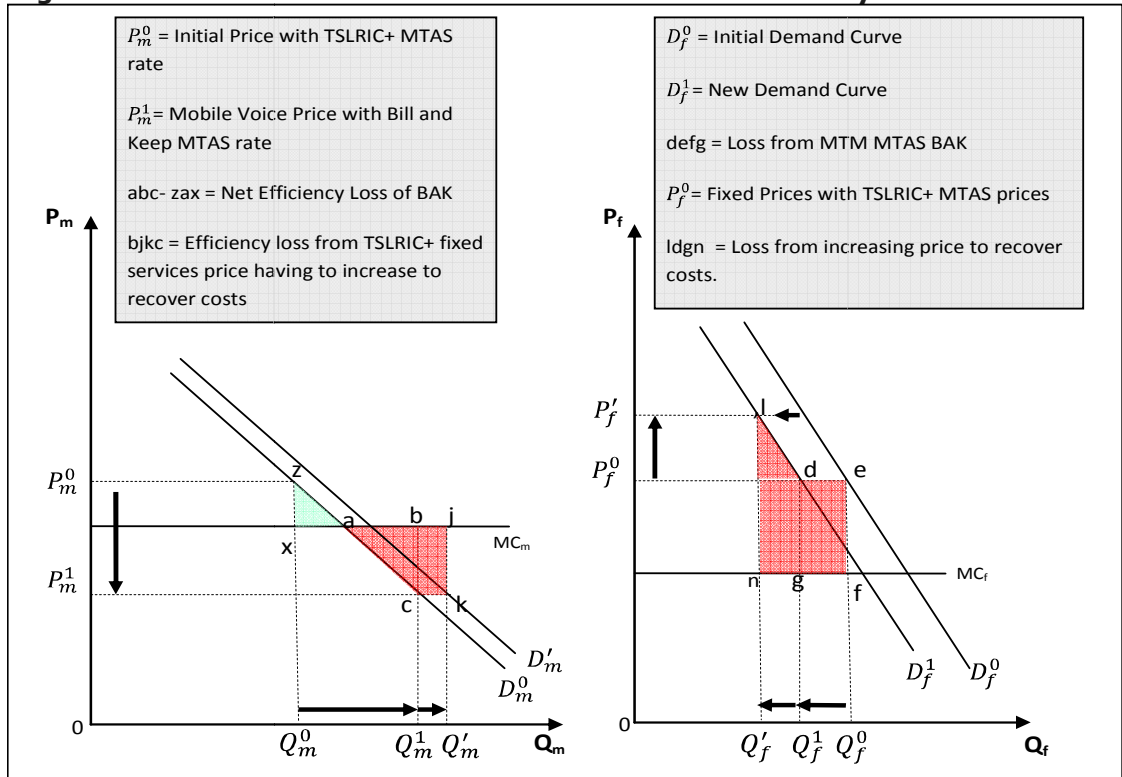
¹³⁰ A. Harberger, "Three Basic Postulates for Applied Welfare Economics: An Interpretative Essay", Journal of Economic Literature 9, 1971, pp. 785-97.

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

result in a corresponding increase in the retail fixed voice service charges. This is depicted in Figure D.3 below by the increase in price from P_f^0 to P_f^1 .¹³¹

- 16 This higher fixed voice retail price implies that there will be a further decrease in the volume of minutes of fixed voice services consumed from Q_f^1 to Q_f^0 . As the value of that usage to consumers (i.e. ldQ/Q_f) exceeds the resource costs to society of producing those units (i.e. ngQ/Q_f), this generates a further efficiency loss in the fixed voice services market equal to area l-d-g-n in Figure D.3.
- 17 The higher relative price for fixed voice services compared to mobile services though, also results in additional FTM substitution. This shifts the demand curve for mobile services right and increases consumption for MTM voice minutes by the amount Q_m^0 to Q_m^1 . As the value to consumers of the additional units of the retail MTM minutes consumed are bjQ_m^1 , and the resource costs of supplying those services is ckQ_m^1 , there will be a Harberger efficiency loss equal to area bjkc in Figure D.3 in the retail mobile market due to the inefficient over-consumption of MTM voice services.
- 18 Therefore, moving away from a partial equilibrium analysis and by further retaining the need to price interconnection for FTM MTAS to recover the capital and joint and common costs associated with supply of the overall MTAS service, there will be a net welfare loss of area ldefn+ajkc-zax in Figure D.3.

Figure D.3: MTAS MTM BAK and FTM MTAS with Cost Recovery

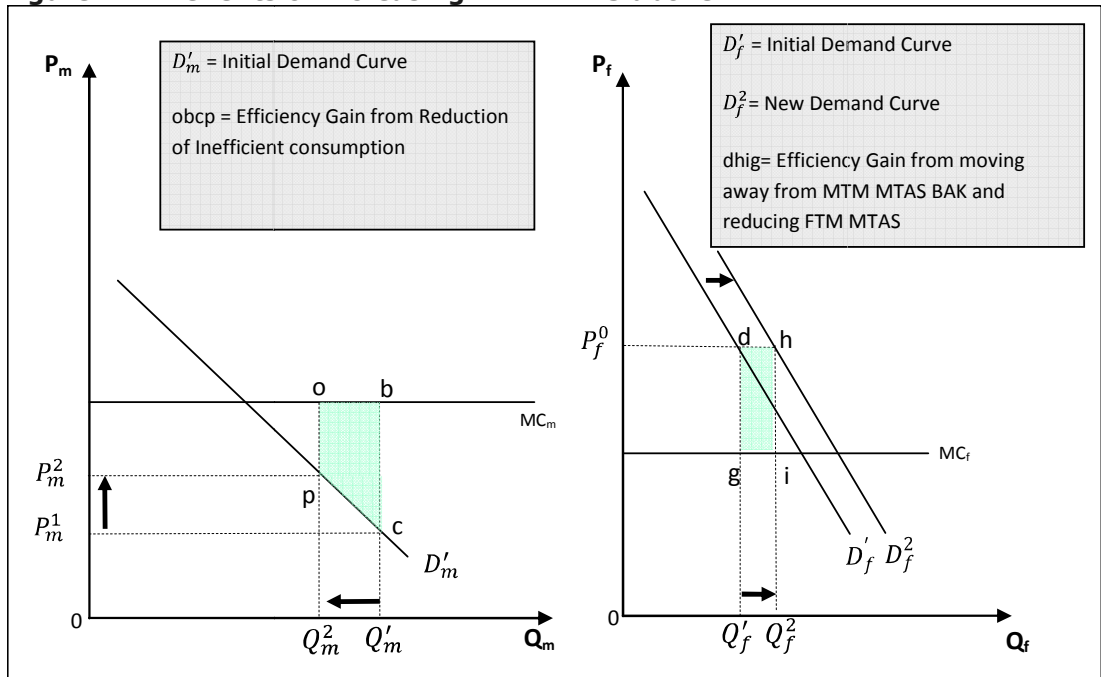


¹³¹ This analysis implicitly relies on their being a relationship between the MTAS rate and the bundle of fixed voices services. Telstra establishes that this pass-through is occurring in Section 5.

1.4 MTM MTAS ABOVE BAK AND POSITIVE FTM MTAS CHARGES

- 19 Ignoring the need to increase the FTM MTAS price to ensure cost recovery of the capital and joint and common costs, or alternatively assuming that these costs can be recovered – as Ofcom has suggested (in relation to pure LRIC pricing) – via changes to other components of retail multi-part tariffs (e.g. the subscription charge), the following diagram in Figure D.4 shows that if MTM MTAS is based on BAK prices, there will actually be an unambiguous efficiency gain from increasing the MTM MTAS price above BAK level.
- 20 That is, an increase in the MTM MTAS rate will increase the MTM retail price from P_m^1 to P_m^2 resulting in a decrease in the level of inefficient over-use of MTM voice minutes from Q_m^1 to Q_m^2 , and an allocative efficiency gain of area obcp in Figure C.4. Further, the higher price of MTM calls relative to fixed line calls as a result of the MTM MTAS increasing above BAK (although still not increasing retail MTM above marginal cost) will increase the demand for fixed voice services.
- 21 This substitution toward fixed line services is captured by a rightward shift in the demand curve for fixed voice services from D_f^1 to D_f^2 . As the value to consumers on the additional fixed voice minutes consumed from Q_f^1 to Q_f^2 (i.e. area dh $Q_f^2Q_f^1$) exceeds the cost to society of the additional fixed voice minutes supplied (i.e. area gi $Q_f^2Q_f^1$) there is an overall increase in welfare in the fixed services market of dhig. Therefore, the overall efficiency gain across both markets from increasing the MTAS slightly above BAK is equal to area obcp + dhig in Figure D.4.

Figure D.4: Benefits of increasing MTM MTAS above BAK



APPENDIX E — ARBITRAGE SCENARIOS FROM ASYMMETRIC RATES

[C-I-C]

APPENDIX F — WIK MODEL SENSITIVITY TESTING

- 1 The updated WIK model was used by the Commission to substantiate the pricing in the MTAS Pricing Principles and Indicative Prices 2009-2011. The updated model, which included uplifts for MOU, mobile penetration and the WACC, produced a price range of 5.9 cpm to 6.2 cpm depending on the market share assumed.
- 2 Telstra ran several sensitivities¹³² on the model at that time.
- 3 The outputs from these sensitivity tests can be used to test the output from the WIK model, were it to be updated to take account of current market conditions.

| Parameter to be changed | Base Value | Sensitivity Value | Change to output MTAS rate | Cumulative Change low | Cumulative Change high | Scenario |
|------------------------------|---------------------|-------------------|----------------------------|-----------------------|------------------------|-------------------------|
| Penetration | 96% | 100% | -0.7% | -0.7% | | 25MS96COV100PEN |
| Market Share (28 BSC) | 25% | 31% | -7.8% | | -8.4% | 31MS96COV96PEN28BSC |
| Market Share (24 BSC) | 25% | 31% | -9.1% | -9.7% | | 31MS96COV96PEN24BSC |
| Traffic per user (25 BSC) | 12.6 mE | 15.0 mE | -6.3% | | -14.1% | 25MS96COV96PEN15ME25BSC |
| Traffic per user (21 BSC) | 12.6 mE | 15.0 mE | -7.6% | -16.6% | | 25MS96COV96PEN15ME21BSC |
| Coverage | 96% | 99% | 4.0% | -13.2% | -10.7% | 25MS99COV100PEN |
| Busy Hour | 8.5% | [C-I-C] | [C-I-C] | [C-I-C] | [C-I-C] | 25MS96COV96PEN10BH |
| Traffic distribution | 94%Voice/ 6%Data | [C-I-C] | [C-I-C] | [C-I-C] | [C-I-C] | 25MS96COV96PEN50DATA |
| WIK output ACCC run MTAS cpm | [C-I-C] | | Updated MTAS rate cpm | [C-I-C] | [C-I-C] | |

- 4 The sensitivities tested only go so far in estimating current market conditions.
 - Australia has a penetration rate in excess of 100% - as at December 2010 it was over 120%. The model does not allow a value greater than 100% to be entered;
 - Telstra considers that an increase in total traffic per user to 15 mE for both voice and data demand is an underestimate of current total demand, and a much higher level of demand per user could be expected;
 - Telstra believes that the proportion of traffic in the busy hour could be [C-I-C]; and
 - the recent explosion in smart phone usage has fuelled much greater demand for data services over mobile networks. [C-I-C]
- 5 The investment costs for a 3G network are assumed to be significantly lower than for 2G, especially when the 850Mhz spectrum is employed. In the WIK Report on the MTAS Model for Australia, the conclusion was reached that "a substantial reduction in

¹³² See

<http://www.accc.gov.au/content/item.phtml?itemId=854367&nodeId=774663f51d7f09e7eb87d40419ac6b17&fn=Schedule%203:%20Sensitivity%20Testing%20of%20the%20WIK%20Model.pdf>

RESPONSE TO THE COMMISSION DISCUSSION PAPER ON DOMESTIC MOBILE TERMINATING ACCESS SERVICE (MTAS)

the number of Node Bs relative to the required BTSs could be realised which, even considering that 3G technology is still 30 per cent more expensive than 2G technology, could result in significant cost savings"¹³³. Telstra believes that costs for 3G equipment have declined since this report was released, however allowance would be required for additional investment to extend coverage and capacity to meet the demands in today's market.

¹³³ WIK Consult (M. Brinkman, K. D. Hackbarth, D. Illic, W. Neu, K-H. Neumann, A.P. Figueras), Mobile Termination Cost Model for Australia, January 2007, p. 144, available at <http://www.accc.gov.au/content/item.phtml?itemId=783055&nodeId=1a2eee9394ef3123590dbf874692a13b&fn=Mobile%20termination%20cost%20model%20for%20Australia%20%28WIK%20report%29.pdf>