

Public inquiry on the access determination for the Domestic Mobile Terminating Access Service

Draft report

May 2020

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Executive Summary

The ACCC has reached a draft position on the price and non-price terms to be included in the new final access determination (FAD) for the mobile terminating access service (MTAS).

The ACCC's draft position on the price terms for the MTAS FAD is as follows:

| | Price (cents/minute) | Effective period |
|------------------|----------------------|-------------------------------|
| MTAS price terms | 1.22 | 1 January 2021 – 30 June 2024 |

The ACCC considers the draft MTAS price reflects a reasonable estimate of the current cost of provide the MTAS in Australia. This is based on the cost outputs of publicly available cost models for equivalent services that have been adjusted for Australian conditions.

The ACCC has consulted on the pricing approach to set the regulated price for the MTAS. The ACCC concluded that a cost-based price consistent with the TSLRIC+ pricing principles remains the most appropriate pricing approach having regard to relevant matters, including the long-term interests of end-users (LTIE). The ACCC has decided to estimate the cost of providing the MTAS using an international benchmarking approach.

The ACCC acknowledges that a cost modelling approach is likely to produce the most accurate cost estimate for the MTAS and recognises that there is support for developing a new cost model for the MTAS. However, the ACCC considers that a cost model developed at this point in time would not be able to properly incorporate 5G technology which would make the cost model obsolete quickly. This would mean that the extensive investment in time and resources by all stakeholders in developing a cost model cannot be justified at this time. As such, the ACCC considers that an international benchmarking approach provides a more practical pricing option for this FAD. The ACCC intends to explore the possibility of cost modelling once 5G deployment is more advanced.

The ACCC will also consider whether to conduct a holistic review of the MTAS and the fixed terminating access service (FTAS) prior to the expiry of the current MTAS and FTAS declarations. Any cost model, if developed, will likely be used to inform the determination of new regulated prices as part of that review.

The ACCC has carefully considered the views in submissions that the current MTAS price, at 1.7 cents per minute, should be rolled over for the next FAD period. The ACCC has concluded that rolling over the current MTAS price would not promote the LTIE, as it would likely entrench an MTAS price that is above the efficient cost of providing the service. This finding is supported by the outcome of the benchmarking exercise, which suggests that the cost of providing the MTAS has significantly declined since the last FAD. Further, the ACCC has found that a further reduction in the MTAS price would still benefit downstream markets, by enabling smaller fixed line operators and the mobile virtual network operators (MVNOs) to provide more competitive offerings.

The ACCC's draft position is to retain the current non-price terms and conditions (NPTCs) in the FAD. The ACCC notes that stakeholders provided general support to retaining the current NPTCs and do not consider any change is required.

The ACCC's draft view is that the new FAD should come into force on 1 January 2021 and expire on 30 June 2024. The proposed commencement date is intended to provide additional time for stakeholders to renegotiate commercial arrangements and implement change to the MTAS price. The proposed expiry date aligns with the expiry of the current MTAS declaration.

1. Introduction

1.1. Background

The mobile terminating access service (MTAS) is a wholesale service provided by a mobile network operator (MNO) to fixed line operators and other MNOs to connect or 'terminate' a call on its mobile network. It is an essential wholesale interconnection service which enables subscribers from a mobile or fixed line network to make calls to subscribers on a different mobile network.

Each MNO has exclusive access to subscribers on their network. In the absence of regulation, an MNO has the incentive and ability to set unreasonable terms of access to terminating voice calls on its network, including by setting high prices that are not based on the efficient costs of providing voice terminations services. For this reason, the ACCC has historically regulated mobile voice termination by making the MTAS a declared service. It was deemed a declared service in June 1997 and since then the declaration has been varied and extended in 2002, 2004, 2009, 2014 and 2019.

The ACCC has also set regulated prices for the MTAS by making final access determinations (FADs). The table below sets out the regulated MTAS voice price since 2004.¹

Table 1: Regulated MTAS voice prices (nominal) set by the ACCC²

| Time period | Voice (cent/min) |
|-----------------------------------|---------------------|
| 1 July 2004 – 1 December 2004 | 21 |
| 1 January 2005 – 31 December 2005 | 18 |
| 1 January 2006 – 31 December 2006 | 15 |
| 1 January 2007 – 30 June 2007 | 12 |
| 1 July 2007 – 31 December 2011 | 9 |
| 1 January 2012 – 31 December 2012 | 6 |
| 1 January 2013 – 31 December 2013 | 4.8 |
| 1 January 2014 – 30 December 2015 | 3.6 |
| Since 1 January 2016 | 1.7 |

On 28 June 2019, the ACCC finalised its MTAS declaration inquiry and decided to extend MTAS voice declaration but remove SMS termination from the MTAS.³

The current MTAS FAD was due to expire on 30 June 2019 but was extended until the day immediately before the day on which the new FAD comes into force.⁴ On 6 June 2019, the

For a discussion of the ACCC's approach to setting the MTAS price in the past, see ACCC, Public inquiry on the access determination for the Domestic Mobile Terminating Access Service: Discussion paper, August 2019, p. 6. SMS termination was included in the MTAS declaration from 2014 to 2019.

ACCC, MTAS Final Access Determination — Final Decision (MTAS FAD), August 2015; ACCC, Inquiry to make a final access determination for the MTAS — Access Determination Explanatory Statement (MTAS FAD — Explanatory Statement), 7 December 2011; ACCC, MTAS Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011, March 2009; ACCC, MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008: Report, November 2007; ACCC, Mobile Services Review: Mobile Terminating Access Service Final Decision on whether or not the Commission should extend, vary, revoke its existing declaration of the MTAS, June 2004.

³ ACCC, Domestic Mobile Terminating Access Service Declaration Inquiry: Final report, June 2019.

ACCC commenced a public inquiry into making a new final access determination (FAD) for the MTAS.⁵ Due to the removal of SMS termination from the MTAS declaration, this public inquiry considers the price and non-price terms for access to mobile voice termination service only.

On 4 December 2019, the ACCC published a written notice on the ACCC website by which the ACCC extended the decision-making period for the inquiry by six months.⁶ The ACCC is now required to make the FAD by 6 June 2020 and will need to extend the decision-making period for the inquiry again to allow for a longer consultation period.

The following section sets out the consultation conducted in this inquiry so far.

1.2. Inquiry consultation process

On 30 August 2019, the ACCC released a Discussion Paper⁷ which considered relevant market developments since the previous MTAS FAD was made and discussed a number of pricing options for stakeholder comment. In particular, the ACCC identified three possible cost-based pricing options (i.e. cost modelling, international benchmarking and a simple adjustment to the current price) and two non-cost based pricing options (rolling over the existing price and bill and keep). The ACCC received seven submissions in response to the Discussion Paper.

After considering these submissions, the ACCC came to the preliminary view that international benchmarking is the most appropriate pricing option for this MTAS FAD and engaged Analysys Mason to undertake the benchmarking exercise.

On 18 December 2019, the ACCC released a Position and Consultation Paper⁸ setting out the ACCC's reasons for adopting the international benchmarking pricing approach and outlining the proposed benchmarking methodology for consultation. The ACCC also published a report prepared by Analysys Mason which provided details of its proposed benchmarking methodology (Draft Methodology Report).⁹ The ACCC received five submissions in response to the Position and Consultation Paper. The ACCC also sought information from the MNOs necessary for the implementation of the benchmarking exercise.

Since then, Analysys Mason has revised the benchmarking methodology after considering stakeholders' submissions and has prepared a *Report for the ACCC – Benchmarking the cost of providing the MTAS in Australia* (the Draft Benchmark Report). The Draft Benchmark Report sets out: the revised methodology adopted; the draft outputs; and Analysys Mason's recommendations to the ACCC on the cost of providing the MTAS in Australia.¹⁰

See notice of extension on the ACCC website at: https://www.accc.gov.au/public-registers/telecommunications-registers/s152bcw-access-determinations-register/final-access-determination-no-1-of-2015-for-the-mobile-terminating-access-service-mtas.

See notice of the inquiry on the ACCC website at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/notice-of-mtas-fad-inquiry.

Pursuant to subsection 152BCK(3) of the CCA. The notice of extension is available on the ACCC website at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/extension-of-decision-making-period.

ACCC, Public inquiry on the access determination for the Domestic Mobile Terminating Access Service: Discussion paper, August 2019. (Discussion Paper)

ACCC, Public inquiry on the access determination for the Domestic Mobile Terminating Access Service: Position and consultation paper, 18 December 2019 (Position and Consultation Paper).

See Analysys Mason, Approach to benchmarking the cost of providing MTAS in Australia, 13 December 2019.

Analysys Mason, Report for the ACCC – Benchmarking the cost of providing MTAS in Australia, May 2020 (Draft Benchmark Report), available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report.

1.3. Structure of this report

This draft report of the MTAS FAD inquiry (the Draft Report) sets out:

- the legislative criteria that the ACCC must have regard to in making a FAD (chapter 2),
- the ACCC's draft view on the MTAS pricing approach, having considered submissions to the Position and Consultation paper (chapter 3),
- the ACCC's draft view on the price terms for the new MTAS FAD after considering the Draft Benchmark Report (chapter 4), and
- the ACCC's draft view on the non-price terms and conditions (NPTCs) for the new MTAS FAD (chapter 5), and
- the ACCC's draft view on the duration and commencement of the new MTAS FAD (chapter 6).

A draft FAD instrument is also provided at **Appendix D**.

Chapters 3 to 6 of this draft report first set out the ACCC's preliminary position from the Position and Consultation paper and responds to submissions from stakeholders before setting out the ACCC's draft view having regard to the legislative criteria listed in chapter 2.

1.4. Making submissions to the Draft Report

The ACCC seeks stakeholder views on this Draft Report (including the draft FAD terms) and Analysys Mason's Draft Benchmark Report. Please provide reasons and evidence to support your views.

After considering stakeholder submissions, the ACCC will determine if any further revisions to the benchmarking exercise, including the inputs used, are appropriate. The ACCC expects to release a final report for the MTAS FAD inquiry in August/September 2020.

The ACCC will accept submissions in response to this Draft Report until **5pm**, **Friday 10 July 2020**. Submissions received after this time may not be considered. The ACCC prefers to receive submissions in electronic form, either in PDF or Microsoft Word format, which allows the submission to be text searched.

Submissions should be sent to: MTASInquiry@accc.gov.au and copied to:

Tara Morice
Director
Infrastructure Regulation Division, ACCC (02) 9230 3857
tara.morice@accc.gov.au

Chris Xie
Assistant Director
Infrastructure Regulation Division, ACCC
(02) 9102 4082
chris.xie@accc.gov.au

The ACCC will consider all submissions as public submissions and will post them on the ACCC's website. If you wish to submit commercial-in-confidence material, please submit both a public and confidential version of your submission. The confidential version should clearly identify commercial-in-confidence material and the public version should clearly identify where commercial-in-confidence material has been removed.

The ACCC has published a guideline setting out the process parties should follow when submitting confidential information to the ACCC. The ACCC/AER Information Policy June 2014 sets out the general policy of the ACCC and the Australian Energy Regulator (AER) on

| the collection, use and disclosure of information. A copy of the guideline and policy is available on the ACCC website. ¹¹ | | | | |
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Please see ACCC website at: https://www.accc.gov.au/publications/accc-aer-information-policy-collection-and-disclosure-of-information.

2. Legislative framework

The telecommunications access regime in Part XIC of the *Competition and Consumer Act* 2010 (CCA) gives the ACCC the power to, among other things, make a written determination relating to access to a declared service. ¹² If the ACCC makes a FAD with terms and conditions on which the access provider must comply with the Standard Access Obligations (SAOs) or any other terms and conditions on which the access seekers can seek access to the declared service, the terms and conditions must include terms relating to price or a method of ascertaining price. ¹³

A FAD provides a base set of terms and conditions that access seekers can rely on if they are unable to come to a commercial agreement with an access provider on the terms and conditions of access to a declared service. If parties come to an agreement on terms and conditions of access, their access agreement will prevail over the FAD to the extent of any inconsistency.¹⁴

The ACCC must take into account a range of matters when making a FAD, including:

- a) whether the determination will promote the long-term interests of end-users (LTIE) of carriage services or services supplied by means of carriage services
- b) the legitimate business interests of a carrier or carriage service provider (CSP) who supplies, or is capable of supplying, the declared service, and the carrier's or provider's investment in facilities used to supply the declared service
- c) the interests of all persons who have rights to use the declared service
- d) the direct costs of providing access to the declared service
- e) the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else
- f) the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility, and
- g) the economically efficient operation of a carriage service, a telecommunications network or a facility. 15

The ACCC may also take into account any other matters that it thinks are relevant. 16

In considering whether the determination will promote the LTIE, the ACCC must have regard to the extent to which the determination is likely to result in the achievement of the objectives of:

- · promoting competition in markets for listed services
- achieving any-to-any connectivity, and
- encouraging the economically efficient use of, and the economically efficient investment in, infrastructure by which listed services are supplied. 17

¹² Subsection 152BC(1) of the CCA.

¹³ Subsection 152BC(8) of the CCA.

¹⁴ Section 152BCC of the CCA.

¹⁵ Subsection 152BCA(1) of the CCA.

¹⁶ Subsection 152BCA(3) of the CCA.

¹⁷ Subsection 152AB(2) of the CCA.

Detailed discussion of how the ACCC takes into account the above matters is at **Appendix A**.

Compliance with a FAD is both a carrier licence condition and a service provider rule, ¹⁸ the breach of which may lead to a pecuniary penalty of up to \$10 million for each contravention. ¹⁹ Private enforcement of a FAD is available in the Federal Court. ²⁰

¹⁸ Sections 152BCO and 152BCP of the CCA.

¹⁹ Section 570 of the *Telecommunications Act* 1997 (Cth).

²⁰ Section 152BCQ of the CCA.

3. The pricing approach

This chapter sets out the ACCC's draft view on the pricing approach it will adopt for the MTAS FAD. It first sets out the ACCC's preliminary view as expressed in the December 2019 Position and Consultation paper before summarising stakeholder submissions to that paper. The ACCC then sets out its draft view, having regard to submissions and the legislative criteria (subsection 152 BCA(1) of the CCA).

In summary, the ACCC's draft view is that:

- an MTAS price based on the efficient cost of providing the MTAS using total service long run incremental cost plus organisational level costs (TSLRIC+)²¹ pricing principles is appropriate, and
- for the purpose of this inquiry, estimating the MTAS cost by using an international benchmarking approach rather than developing a cost model is the most pragmatic approach to take. While a cost model is likely to produce the most accurate estimate, a cost model developed at this point in time to could not properly include 5G technology, making it difficult to justify the extensive investment in a cost model.

3.1. ACCC view in Position and Consultation Paper

In the Position and Consultation Paper released in December 2019, the ACCC expressed the preliminary view that an international benchmarking exercise based on TSLRIC+ pricing principle is the most appropriate pricing option for this MTAS FAD, because:

- It allows the recovery of common costs incurred in providing the MTAS and other services and is more appropriate having regard to the legitimate business interests of the access providers in providing the declared service.
- It reflects the costs of a hypothetically efficient operator based on the best-in-use technology and therefore encourages the access provider to invest in the most efficient technology in providing the service, reflecting the rapid development of technology in the mobiles industry.²²

The ACCC also expressed the view that at this time an international benchmarking exercise is more appropriate for this inquiry in deriving a TSLRIC+ cost estimate for the MTAS than cost modelling, as it is less resource intensive and time consuming and would lead to timelier implementation of an efficient MTAS price. A key consideration supporting this conclusion is the difficulty of any cost modelling exercise to properly take into account 5G technology at this this point in time, making it difficult to justify investment in the time and resources by all stakeholders to develop a bespoke cost model. However, the ACCC did acknowledge some support from industry to develop a new cost model for the MTAS and indicated its intention to explore this option in the future.²³

The ACCC did not consider the option of rolling over the current MTAS price without adjustment would be appropriate, despite strong support for this option from Optus and VHA. The ACCC reached this view based on the following reasons:

 The ACCC's decision to roll over the fixed line services FAD prices, including the price for the fixed terminating access service (FTAS) was due to the need to provide

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TSLRIC+ refers to total service long run incremental cost plus organisational level costs. It is a pricing principle whereby the relevant increment is widely defined as total network traffic, rather than just terminating voice traffic. It allows the recovery of common network cost via the price of the MTAS plus a mark-up for organisational level costs.

Position and Consultation Paper; pp. 15–17.

²³ Position and Consultation Paper, p. 22.

price stability during the transition to the NBN and the same consideration does not apply to the MTAS.

- Relevant market trends since the current MTAS price was determined, in particular
 the shutdown of 2G networks and the introduction of voice-over-LTE (VoLTE) means
 that, everything else being equal, the cost of the MTAS is likely to have declined.
 There is a risk that rolling over the current MTAS price would lead to the imposition of
 a price that no longer reflects the efficient cost of providing the service.
- A reduction in the MTAS price that is in line with the reduction of its estimated cost creates an environment for more competitive retail offerings, which could benefit fixed line voice and mobile consumers who still do not have access to unlimited calls. The ACCC acknowledged that as the MTAS price becomes lower over time, the incremental impact of the MTAS on downstream markets would become smaller. However, the ACCC considered that any further reduction may have a bigger impact on smaller fixed line network operators and mobile virtual network operators (MVNOs) than the MNOs.
- The ACCC acknowledged that it would be beneficial to examine whether the MTAS and FTAS should be priced using the same methodology and noted that it would consider whether to conduct a holistic review of the MTAS and FTAS after the NBN rollout is concluded. However, the ACCC did not consider that it would be appropriate to maintain the MTAS price purely based on the basis that the FTAS price has been rolled over before such a review was conducted.²⁴

In addition, the ACCC noted the lack of stakeholder support for the options of applying a simple adjustment to the current MTAS price or a regulator imposed bill and keep arrangement, ²⁵ and acknowledged the range of concerns raised regarding these two options. As such, the ACCC expressed the view that these two options are unlikely to be appropriate for the MTAS. ²⁶

3.2. Submissions to the Position and Consultation Paper

The ACCC received five submissions in response to the Position and Consultation Paper.²⁷

The Australian Communications Consumer Action Network (ACCAN) submitted that it supports the ACCC's pricing approach as outlined in the Position and Consultation Paper. ACCAN believes that the use of international benchmarking in the manner proposed by the ACCC strikes the balance between alternative options for revising the MTAS costs. ACCAN also acknowledges that while its preference is for a bespoke cost model to be developed, the use of international benchmarking would allow for the benefit of a timely revision of the MTAS cost to flow through.²⁸

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Position and Consultation Paper, pp. 17–21.

A bill and keep arrangement is where network operators exchange traffic between networks without payments, i.e. termination rate is effectively zero.

Position and Consultation Paper, pp. 21–22.

One submission is from the NTRA, the telecommunications regulator in Egypt. The NTRA recommended a new pricing option in its submission, which estimates the cost of providing mobile voice termination service as a percentage of retail on-net rate. The ACCC notes this option was raised after the ACCC conducted consultation on the pricing options and therefore did not receive comments from other stakeholders. In the interest of progressing the inquiry and finalising the new FAD within a reasonable period of time, the ACCC is not intending to reconsider the pricing option and therefore will not be seeking further views on the new pricing option in the NTRA's submission. See NTRA, Submission in response to the ACCC Position and Consultation Paper regarding the MTAS, February 2020.

²⁸ ACCAN, Submission to the Public inquiry on the access determination for Domestic Mobile Terminating Access Service position and consultation paper, 10 January 2020, p. 1. (ACCAN Submission)

Telstra also supports the ACCC's approach to setting prices for the MTAS. Telstra agrees that the TSLRIC+ based pricing approach best approximates the costs to provide the service and that a benchmarking approach as proposed by the ACCC is a less resource intensive approximation of the TSLRIC+ costs associated with the complex bottom-up cost model. However, Telstra submitted that there are limitations associated with a complex benchmarking approach. It considers that the benchmarking results are best used to provide a 'sense check' on existing prices and current MTAS price should be rolled over unless there is a compelling case for change.²⁹

Optus agrees that a TSLRIC+ based price would best promote the LTIE as it strikes the right balance of ensuring prices reflect efficient costs while still supporting access providers by ensuring cost recovery. However, Optus submitted that, should international benchmarking be used again, a similar approach to the previous benchmarking exercise that is less onerous to the industry based on generic Australia-specific adjustment factors should be considered.³⁰

Optus and VHA reiterated their submissions to the Discussion Paper released in August 2019 that the current MTAS should be rolled over without adjustment. Both Optus and VHA raised similar arguments to those raised in their submissions to the Discussion Paper, as summarised below.

 Further reductions in the MTAS price will not lead to more competition in the downstream markets

VHA submitted that due to the lack of fixed-to-mobile (FTM) pass-through and the declining use of traditional fixed voice line services in Australia, the relevance of the MTAS as a cost driver in the fixed market services has diminished. VHA also argued that changes in the MTAS rate are unlikely to fundamentally alter MVNOs' ability to compete in downstream markets. Turther, VHA raised concern that MTAS reductions have had an unacknowledged negative impact on consumer welfare by reducing the dimensions of mobile service competition, and by failing to create incentives for the timely deployment of quality-of-service improvements (e.g. HD voice and VoLTE). 32

Similarly, Optus disputes there is any connection between the MTAS rate and retail prices, noting the following observations in the retail markets:

- Most retail plans already offer unlimited calls and SMS, with competition based on data inclusions. pay as you go (PAYG) plans only represent a small proportion of overall services in Australia.
- Even in PAYG plans, excluding data-only plans, the current MTAS rate only represents a very small portion of the retail rate, with no differentiation between onnet and off-net calling charges.
- Lower MTAS rates do not necessarily imply lower prices. Price reductions have also been achieved during a period of stable MTAS rates, demonstrating a lack of connection between wholesale MTAS rates and retail pricing.

Telstra, Submission to the public inquiry on the access determination for the Domestic Mobile Terminating Access Service – Position and consultation paper, 7 February 2020, pp. 1–2. (Telstra Submission)

Optus, Submission in response to ACCC Consultation Paper: Domestic Mobile Terminating Access Service Access Determination, February 2020, pp. 13–14. (Optus Submission)

Vodafone Hutchison Australia (VHA), Access determination for the mobile terminating access service: Submission to the Australian Competition and Consumer Commission, February 2020, pp. 1–4. (VHA Submission)

³² VHA Submission, p. 5.

- MTAS reductions will not benefit MVNOs, as they do not pay or receive MTAS payments. MVNOs also increasingly offer unlimited voice and SMS in their retail plans.³³
- The ACCC's pricing approaches to the MTAS and FTAS are inconsistent

Optus submitted that the reasons relied upon by the ACCC to reject rolling over the MTAS price also apply to the FTAS and therefore that the ACCC's argument for rolling over the FTAS applies. Specifically Optus submitted that:

- One of the reasons for the ACCC maintaining the MTAS price in the 2009 pricing review was to provide 'greater certainty in regulatory outcomes which is more likely to encourage MNOs to commit to large scale investment required to roll out extensive network'. Optus considers that there is greater need for certainty at this point in time due to the impending uncertainties and costs associated with the 5G rollout.
- The ACCC cannot rely on the efficient cost argument to justify MTAS reduction when it has rolled over the FTAS price despite the FTAS price which is likely to be above the efficient cost of providing the service.
- The ACCC argued that the NBN migration has no impact on the provision of the MTAS. The same could be said for the FTAS, which is technology neutral and applies to the termination of calls to geographic numbers regardless of the underlining access network. Optus argued that the reason why FTAS was not amended was not due to NBN stability, but rather the complexity of removing FTAS from the broader suite of fixed line services.³⁴

VHA submitted that the current FTAS rate is likely to be above efficient costs, and that this has the effect of distorting competition and deter consumer switching. VHA argued that the NBN migration is precisely when the ACCC should be taking regulatory actions that promote competition in fixed voice services, as it is a unique event that will prompt consumers to consider switching suppliers. VHA therefore called for an urgent review of the FTAS in a standalone inquiry or as part of a holistic review of the MTAS and the FTAS.³⁵

Reliance on 3G voice traffic is still significant.

Optus reiterated the fact that there is still a significant reliance on the provision and supply of 3G voice traffic, particularly in regional areas. It also considers that the assumption that newer data-focussed mobile technologies like 4G and 5G automatically lead to implications for traditional voice services is not valid and the impact of these new technologies on the cost of MTAS requires further analysis once all fixed and mobile voice terminations service are able to be considered together. 36

Further, VHA disagrees that the difficulty of including 5G technology in a cost model means that international benchmarking should be favoured over cost modelling, as the current benchmarking approach does not take into account 5G either.³⁷

3.3. ACCC view in draft report

The ACCC has considered the submissions of stakeholders on the appropriate pricing option for this MTAS FAD. The ACCC remains of the view that a price based on the efficient cost of

Optus Submission, pp. 8–12.

Optus Submission, pp. 5–8.

³⁵ VHA Submission, pp. 7–10.

³⁶ Optus Submission, p. 13.

³⁷ VHA Submission, pp. 5–6.

providing the MTAS consistent with TSLRIC+ pricing principles is appropriate having regarding to the relevant matters under subsection 152BCA(1) of the CCA. The ACCC also remains of the view that, at this point in time, it is more appropriate to estimate the efficient MTAS cost using an international benchmarking approach instead of developing a cost model.

The ACCC has formed these views having regard to the relevant legislative matters as discussed below.

The long-term interests of end-users – promoting competition in relevant markets

Consistent with the view expressed in the Position and Consultation Paper, the ACCC considers that any MTAS price reduction in line with the decline in efficient cost is likely to promote competition in the fixed and mobile services markets, by creating the environment for more competitive retail offerings.³⁸ The ACCC notes Optus' view that it is still relying on its 3G network to deliver much of its voice traffic, but does not consider this observation is inconsistent with undertaking an international benchmarking exercise to ascertain the cost of providing the MTAS. The benchmarking exercise takes into account the proportion of 3G and 4G voice traffic for a hypothetically efficient operator's network in Australia and Optus' traffic distribution is an input to the derivation of that traffic share.

The ACCC has considered Optus' and VHA's claims that further reductions in the MTAS price would not enable the MVNOs and smaller fixed line operators to offer more competitive retail products. The ACCC does not agree with these claims.

As discussed in the Position and Consultation Paper, the MTAS represents a direct cost for providing calls to mobile numbers for fixed line operators, and MTAS payments are likely to have a bigger impact on smaller operators as they seek to increase their subscriber base and grow market shares.³⁹

The ACCC has made further enquiries with the MVNOs to assess the claims that the MTAS does not impact the MVNOs. While the MVNOs do not pay or receive the MTAS payments, the ACCC understands that the MTAS price is an important cost indicator for the MVNOs when assessing wholesale offers from the MNOs. This is because the MTAS is an essential input to the MNOs' provision of wholesale services to MVNOs. While the ACCC considers it is likely that the MNOs will take into account a variety of considerations when making wholesale offers to the MVNOs, the ACCC is not convinced by Optus' claim that the MTAS plays no role in the pricing of MVNO services. In a competitive wholesale market with sufficient infrastructure competition between the MNOs, any reductions in the cost of essential input like the MTAS should result in the cost reduction being passed through to benefit wholesale customers (i.e. MVNOs). On the other hand, any reduction in termination revenue due to the reduction in the cost of providing the service should have no impact on the MNOs rather than being recouped through higher wholesale prices for the MVNOs. This is because should an MNO decide to raise their wholesale prices as a result of reduction in termination revenue, an MVNO could simply switch to a different MNO. Any difficulties in switching in this respect would indicate structural issues in the wholesale market or anticompetitive conduct which would require separate investigations under the CCA.

The ACCC also notes views presented by Optus and VHA regarding the negative impact of MTAS price reduction on the MNOs, in terms of reductions in net termination revenue. Optus considers that any cost savings to smaller fixed line operators is off-set by the large negative

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Position and Consultation Paper, pp. 22–23.

³⁹ Position and Consultation Paper, p. 19.

impact on the MNOs. The ACCC considers such comparison is not appropriate as both the cost savings to the MNOs and the reductions in the MNOs' termination revenue would be efficient if they reflect the reduction in the efficient cost providing the MTAS.

The ACCC is not convinced by Optus' contention that there is no connection between the MTAS price and retail prices. First, the ACCC reiterates the point noted in the Position and Consultation Paper that the proportion of consumers on PAYG plans does not necessarily correspond to proportion of PAYG plans on the market as many consumers may still be on historical plans that are no longer available. Second, as calls to mobiles are generally offered as part of a bundle of services in both the mobile and fixed line services markets, there are many ways in which service providers could pass on cost savings due to the MTAS price reduction and it may not necessarily be only reflected in retail prices for voice calls in PAYG plans. Finally, the MTAS price only represents one of the costs in the provision of retail services and the fact that price reductions may have been achieved in a period of MTAS price stability does not mean that the MTAS price has no effect on the retail offerings in downstream markets.

For the reasons discussed above, the ACCC is of the view an MTAS price based on the efficient cost of providing the service would be likely to promote competition in the relevant markets, thereby promoting the LTIE. Conversely, rolling over the current MTAS price without a costing exercise could lead to an above efficient MTAS price and forgo the opportunity for potential MTAS price reductions to promote competition in relevant markets.

The long-term interests of end-users – achieving any-to-any connectivity

The ACCC considers that any-to-any connectivity is largely achieved in this context by the MTAS declaration which would require access providers to comply with the Standard Access Obligations (SAOs) and provide access to the MTAS upon request. For the purpose of the FAD, the ACCC considers that an MTAS price based on the efficient cost of providing the service would not create any obstacles to achieving this objective. This is because this approach would allow the access providers to recover its cost of providing the service and therefore would not impede its ability to provide the service to access seekers.

The long-term interests of end-users – encouraging the economically efficient use of, and investment in, infrastructure

Generally, the ACCC considers that a regulated price based on the efficient cost of providing the service promotes allocative efficiency, 42 including incentives for the access providers to make efficient investment in infrastructure used to provide the service, as well as leading to more efficient use of the infrastructure by end-users. Nevertheless, the ACCC recognises that it is important that regulatory settings do not hinder or discourage investment to improve the quality of the service offered. 43

VHA submitted that the loss of termination revenue due to a MTAS price reduction would lead to the MNOs reducing their levels of investment to offset the lost revenue.⁴⁴ More specifically, VHA argued that MTAS price reductions have had a negative impact on consumer welfare by reducing the dimensions of mobile services competition and by failing

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Position and Consultation Paper, p. 18.

⁴¹ Section 152AR of the CCA.

Allocative efficiency is achieved when the price of resources reflect the underlying cost so they are allocated to the highest value uses. See Appendix A on page 55.

See for example, ACCC, *Domestic Mobile Roaming Declaration Inquiry: Final report*, October 2017, pp. 83–88.

⁴⁴ VHA Submission, p. ii.

to create incentives to the timely deployment of quality-of-service improvements (e.g. HD voice and VoLTE).⁴⁵

The ACCC does not agree with VHA's claim for a number of reasons.

First, as mentioned above, any revenue loss that is due to the reduction in the efficient cost of providing the service is likely to be efficient because it results from aligning prices with efficient costs.

Second, as discussed in the Position and Consultation Paper, MTAS revenue is likely to only represent a small proportion of the MNOs' overall revenue⁴⁶ and is highly unlikely to have a determinant effect on the overall level of investments made by the MNOs. In this respect, the ACCC considers that the focus of the MNOs' forward looking investment is on the continued upgrade of their 4G networks and the rollout of the 5G networks. In the short term, much of this investment is driven by the need to provide more capacity to accommodate the continued growth in data (and possibly to create opportunities for NBN bypass). In the medium and long term, this investment is driven by new revenue opportunities associated with 5G technology. The ACCC does not consider the MTAS price reduction is likely to have any impact on incentives to make these investments or that the loss in MTAS revenue is likely to adversely impact the business case of these investments.

Finally, the ACCC does not consider that an MTAS price based on the efficient cost of the service would discourage efficient investments made to improve the quality of voice service. In particular, investments made to enable VoLTE would facilitate the migration of voice services onto the more efficient 4G networks. An MTAS price based on the cost of a hypothetically efficient operator using best-in-use technology would in fact encourage investments that would enable the use of the best-in-technology to provide the service because failing to do so would likely result in the actual cost to the operator in providing the service being higher than what the operator is allowed to recover from the MTAS price.

For the reasons discussed above, the ACCC is of the view that an MTAS price that is based on the efficient cost of providing the service would encourage the economically efficient use of and investment in infrastructure used to provide mobile voice termination services, thereby promoting the LTIE. The ACCC believes that rolling over the current MTAS price without adjustment risks entrenching an MTAS price that is above the efficient cost of providing the service, and therefore is unlikely to achieve the objective of encouraging the economically efficient use of and investment in infrastructure.

Legitimate business interest of a carrier or carriage service provider

The ACCC considers that having regard to the legitimate business interest of the access provider, it is important that the regulated price for the declared service enables the access provider to recover the cost of providing the service, as well as earn a normal rate of return on its investment in the infrastructure used to provide the service. The ACCC considers that an MTAS price based on the efficient cost providing the service is appropriate having regard to the access provider's legitimate business interests. In undertaking the benchmarking exercise to estimate the efficient MTAS cost, the ACCC has also had regard to the need for the access provider to recover the cost of providing the service and to earn a normal rate of return in reaching its views on the methodology and inputs used. Further details on the benchmarking exercise and results discussed in chapter 4.

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VHA Submission, pp. ii and 5.

⁴⁶ See Position and Consultation Paper, p. 19.

Interests of all persons who have a right to use the declared service

The MTAS is an essential input used by access seekers to provide retail service in downstream markets. As such, it is important that access seekers' ability to compete in the downstream markets is not inhibited by an MTAS price that is above the efficient cost of providing the service. For this reason, an MTAS price that is based on the efficient cost of providing the service and which would allow any reduction in the cost to flow through to benefit access seekers, is appropriate. On the other hand, rolling over the current MTAS price, without an investigation into the cost of the service, is likely to undermine the interests of the access seekers.

Direct costs of providing access to the declared service

The ACCC considers that an MTAS price based on the efficient cost of providing the service is consistent with allowing the access provider to recover the direct costs of providing access to the declared service.⁴⁷

Economically efficient operation of a carriage service, a telecommunications network or a facility

The ACCC considers that it is relevant to consider the economically efficient operation of the retail service provided by access seekers using the MTAS and the telecommunications networks and infrastructure used to provide these service when having regard to this matter. The ACCC is of the view that an MTAS price based on the efficient cost of providing the service is more likely to lead to efficient pricing for the retail services that depend on the MTAS as an input. While the MNOs provide a range of services using their telecommunications networks and infrastructure, the economically efficient operation of these networks and infrastructure are more likely to be enhanced in the long run, if bottleneck inputs such as the MTAS are priced at the efficient cost of providing the service.

Any other relevant matters

As noted in the Position and Consultation Paper, the ACCC has in the past had regard to matters such as the time and costs involved in implementing a pricing options, the feasibility of implementing different methodologies and the risks of regulatory errors in determining the appropriate pricing approach.⁴⁹ The ACCC also considers that regulatory certainty and consistency is important when determining the terms of an FAD. The ACCC considers that these factors are particularly relevant in its decision to adopt an international benchmarking approach instead of cost modelling to estimate the MTAS cost for this FAD inquiry and sets out its reasoning below.

Time and cost involved in implementing pricing option

The ACCC recognises that, in general, a cost modelling approach is more time and resource intensive for all stakeholders than an international benchmarking approach, even though both are appropriate methods for deriving the efficient cost of the MTAS. However, as acknowledged in the Position and Consultation Paper, the ACCC recognises that there appears to be some support for a new cost model to be developed given that it has been a decade since the ACCC last developed a cost model for the MTAS.

⁴⁷ Under the TSLRIC+ pricing principle, the access provider will also be able to recover the indirect costs of providing the MTAS (i.e. organisational level costs), which the ACCC considers appropriate having regard to the legitimate business interests of the access provider.

⁴⁸ For more discussion about this listed matter, please see Appendix A on page 57.

See Position and Consultation Paper, p. 8; See also ACCC, MTAS FAD – Final Report, August 2015, pp. 9–10.

The ACCC considers that the overall advantage of having a cost model specifically developed for Australia may still justify the time and cost involved in doing so. However, the significant investment in time and resources does mean that timing of developing a cost model needs to be considered carefully. If a cost model is to be developed for the purpose of this inquiry it would not be possible for it to properly incorporate 5G technology given deployment is still nascent. This means that the model would become obsolete very soon. As such, the ACCC has come to the view that it would not be justifiable to make the relevant investment to develop a cost model at this point in time. ⁵⁰ Instead, the ACCC considers that international benchmarking is a more pragmatic approach that could be used in the interim while the ACCC further explores the possibility of cost modelling when 5G deployment is more advanced.

The ACCC disagrees with VHA's submission that the difficulty of incorporating 5G does not justify the preference for international benchmarking over cost modelling, given that the benchmarking exercise would only take into account 3G and 4G technology. The ACCC acknowledges that the difficulty of incorporating 5G applies to both cost modelling and international benchmarking. With regard to international benchmarking, the ACCC is not aware of any publicly available cost models which currently incorporate 5G technology. This may reflect the fact that globally, the rollout of 5G is still in its infancy stage and regulators around the world have yet to develop 5G cost models for the purpose of mobile termination services. However, as cost modelling takes considerably more time and resources than international benchmarking, the inability to incorporate 5G technology into a cost model at this point in time makes it difficult to justify making the required investment to develop a model.

Risk of regulatory error

The ACCC has acknowledged in the past that the use of international benchmarking gives rise to some inherent risk of regulatory error, particularly compared to a cost modelling approach which is more precise in estimating the cost of providing the MTAS in Australia. However, the ACCC has noted that the impact of regulatory error, due to the cost estimate deviating from a more precise measure from a cost modelling exercise, may have become smaller given the significant reduction in the MTAS price over the years.⁵¹

As mentioned, the ACCC considers that the alternative option of rolling over the current MTAS price without adjustment also gives rise to a risk of regulatory error. This is because with this approach, no investigation would be made into the efficient cost of providing the service and the impact of any regulatory error could be large if the current MTAS price is significantly above the efficient cost.

Regulatory certainty and consistency

The ACCC considers that the use of a cost-based approach consistent with TSLRIC+ pricing principles for the MTAS promotes regulatory certainty and consistency.

The ACCC notes Optus' and VHA's further submissions regarding the ACCC's different approaches to the MTAS and the FTAS in response to the ACCC's view expressed in the Position and Consultation Paper. The ACCC does not consider that the submissions provide arguments or evidence that warrant the ACCC taking a different pricing approach (i.e. rolling over MTAS price) for this FAD. The reasons for this position are discussed below.

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Position and Consultation Paper, p. 22.

⁵¹ ACCC, MTAS FAD – Final decision, August 2015, p. 10.

The ACCC considers that the consideration of regulatory certainty and consistency does not require the ACCC to take the same pricing approach for all declared services. The ACCC has taken different approaches to pricing the various declared services, such as the MTAS, the fixed line services, and the domestic transmission capacity service (DTCS) having regard to the relevant matters under subsection 152BCA(1) of the CCA in light of the specific circumstances that apply to the provision of each declared service.

With regard to the MTAS and the FTAS, the ACCC has in the previous and current MTAS FAD inquiries, expressed the view that it has been appropriate to use the Building Block Model approach for the fixed line services including the FTAS, and the TSLRIC+ pricing approach for the MTAS. While the other declared fixed line services decline in significance as the NBN rollout nears completion, the FTAS (and possibly the Fixed Originating Access Service) is likely to remain a bottleneck because it will still apply to the termination of all voice calls, regardless of underlying network. Therefore, as stated in the ACCC's 2019 Fixed Line Services FAD final decision⁵³, pricing for fixed voice interconnection services could be given further consideration in the future. This could involve separating out voice interconnection from the other resale fixed line services and considering the FTAS and the MTAS together in a holistic review. Such a review could consider issues raised by Optus and VHA such as the appropriate pricing methodologies for the FTAS and the MTAS, whether a consistent pricing approach would be appropriate, and ultimately are the efficient costs of providing the services.

The ACCC further notes Optus' submission that in 2009 the ACCC maintained the MTAS price in order to provide 'greater certainty in regulatory outcomes which is more likely to encourage MNOs to commit to large scale investment required to roll out extensive network'. The ACCC considers it important to distinguish the circumstance around the ACCC's decision to maintain the MTAS price at 9 cents per minute as part of its 2009 review of the pricing principles for the MTAS. While the MNOs are making significant investments in rolling out their 5G networks, as discussed earlier, the ACCC does not consider that MTAS price reductions in line with the efficient cost of the service would likely impact the level of 5G investments given that this investment is responding to increasing levels of demand for data consumption.

The ACCC also notes Optus' claim that there is material uncertainty around the actual level of efficient costs due to insufficient data and lack of cost modelling.⁵⁵

The ACCC considers that the availability of data is an important consideration in assessing the outcome of any costing exercise, whether it is conducted through cost modelling or international benchmarking. In some cases, the ACCC and the relevant consultant undertaking the costing exercise may need to make appropriate assumptions on inputs if there are gaps in the data provided by regulated entities or otherwise available. The ACCC acknowledges it may also be appropriate for the ACCC to take a conservative approach to determining the regulated price in these circumstances. However, the ACCC has concerns over adopting a position where the lack of data results in the ACCC not conducting any costing exercise on the basis that there would be uncertainty around establishing the efficient cost. In most cases, the ACCC relies on the regulated entities to provide the required data and such a position would create adverse incentives for these entities in properly recording and retaining data that may be used for regulatory cost exercises. This

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⁵² See ACCC, MTAS FAD – Draft Decision, May 2015, p. 11.

⁵³ ACCC, Fixed Line Service FAD – Final decision, November 2019, pp. 15-16.

⁵⁴ The ACCC expects that such a review will need to be conducted well before the expiry of the current MTAS and FTAS declarations.

⁵⁵ Optus Submission, p. 6.

would make future costing exercises more difficult and clearly undermines the efficacy of the ACCC's regulatory functions under Part XIC.

While the ACCC considers that cost modelling is likely the most accurate cost estimate, an international benchmarking approach will provide a reasonable estimate of the MTAS price. For reasons discussed earlier, the ACCC is of the view that for the purpose of this inquiry, international benchmarking is a more pragmatic approach, while the ACCC will give further consideration to developing a cost model when 5G deployment is more advanced in Australia.

4. Benchmarking methodology and results

As discussed in the previous chapter, the ACCC has formed the draft view that:

- an MTAS price based on the efficient cost of providing the MTAS using TSLRIC+ pricing principles is appropriate, and
- estimating the MTAS cost by using an international benchmarking approach rather than developing a cost model is the most appropriate approach to take for this inquiry.

This chapter discusses in detail the:

- methodology adopted in undertaking the international benchmarking exercise for the purpose of this draft report,
- the results from the benchmarking exercise, and
- the ACCC's draft position on the MTAS price having regard to the outcome of the benchmarking exercise.

4.1. Benchmarking methodology

4.1.1. Proposed methodology and stakeholder views

The ACCC commissioned Analysys Mason to undertake the international benchmarking exercise to estimate the cost of the MTAS in Australia. The ACCC instructed that the benchmarking exercise should include two important parts:

- the selection of a benchmark set which includes TSLRIC+ cost estimates of equivalent services that have been derived from publicly available cost models, and
- the application of appropriate adjustments to reflect Australia-specific cost driving factors.

In the Position and Consultation Paper, the ACCC outlined Analysys Mason's proposed methodology for undertaking the international benchmarking exercise. The ACCC also published Analysys Mason's Draft Methodology Report. The following table provides a summary of Analysys Mason's proposed methodology.

Table 2: Proposed benchmarking methodology

| Aspect of benchmarking exercise | Proposed methodology |
|---------------------------------|---|
| Benchmark set | Nine candidate models that are capable of |
| | producing TSLRIC+ (or LRAIC+) costs: |
| | East Caribbean |
| | • France ⁵⁶ |
| | Mexico |
| | Netherlands |
| | Peru |
| | Portugal |
| | Spain |
| | Sweden |

For the France model, Analysys Mason has created a separate workbook containing LRACI+ calculations. This file entitled 'France PlusLRAIC' is available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report.

| | United Kingdom |
|----------------------------|--|
| | Other publicly available models that do not include 4G technology or have heavily anonymised inputs are excluded. |
| Adjustments | |
| Level of demand | A time series of total market demand for Australia will be developed to be implemented in each benchmark model. MNOs' demand information was sought to |
| | develop this time series. |
| Assumed market share | Proposed to assume 33.3% of market share |
| Geography | Proposed to implement the Australian geography in each benchmark model by using the 2200 Statistical Local Areas Level 2 (SA2) areas used in the Australian Communications and Media Authority's (ACMA) Mobile Network Infrastructure Forecasting Model; ⁵⁷ definitions of geotypes in each benchmark model will be used to classify each SA2 area. |
| Cell coverage radii | Proposed to adjust the cell coverage radii for spectrum used in the most rural geotype to reflect that used in the ACMA's Mobile Network Infrastructure Forecasting Model. This adjustment is necessary because Australia is likely to have coverage in far more sparse areas than other countries included in the benchmark set and coverage sites in these areas would be overestimated if this adjustment is not made. |
| Mobile technologies in use | Proposed to switch off 2G technology from 2019 (or reduced to negligible deployment); 2G network costs assumed to be recovered prior to 2019 |
| Spectrum holdings | Proposed to assume nationwide spectrum licences due to some benchmark models not able to accommodate regional licences. The following conservative assumption of holdings in each band is proposed and will be sensitivity tested. • 700 MHz: 2 x 10 MHz • 800 MHz/900 MHz: 2 x 10 MHz • 1800 MHz: 2 x 15 MHz • 2100 MHz: 2 x 10 MHz • 2500 MHz: 2 x 20 MHz |
| Spectrum costs | Proposed to remove spectrum costs from the |

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The ACMA's Mobile Network Infrastructure Model is available at: https://www.acma.gov.au/publications/2015-06/report/mobile-network-infrastructure-forecasting-model.

| | benchmark models in the first instance. |
|---|--|
| | The spectrum costs for the assumed spectrum holdings will be calculated using auction fees, recurring fees (for apparatus licences), and renewal fees set by the Minister for Communications. The total spectrum costs will then be allocated to a time series of traffic and then added onto the benchmark MTAS price separately. |
| Weighted Average Cost of Capital (WACC) | Proposed to adjust the WACC values in each benchmark model using the WACC values provided by the ACCC. |
| Currency | Proposed to convert benchmark results using exchange rate, and then adjust the portion of non-tradable costs for purchasing power parity. |

For the purpose of making the appropriate adjustments, the ACCC noted that it would determine a nominal pre-tax WACC and a real pre-tax WACC implemented in the benchmark models. The following table provides the ACCC's proposed approach to determining the WACC parameters.

Table 3: Proposed approach to determining the WACC parameters

| WACC parameter | Proposed approach |
|--|---|
| Market risk premium (MRP) | Set at 6.1 per cent, consistent with the Australian Energy Regulator's 2018 Rate of Return Instrument. |
| Gamma (value of imputation credits, γ) | Set at 0.585, consistent with the Australian Energy Regulator's 2018 Rate of Return Instrument. |
| Risk-free rate (rf) | For 20 trading days close to the ACCC decision data, obtain the average of the yields on 10 year Commonwealth Government bonds (CGBs). A 10 year maturity for the risk free rate is consistent with the Sharpe-Lintner CAPM, which estimates the returns to an investor over a long-term horizon. |
| Cost of debt (Kd) | Obtain the 'typical' credit rating or a range of credit ratings of mobile operators in Australia. Obtain the yields of Australian corporate 10- year bonds with that credit rating or range of credit ratings. Obtain an average of these yields across 20 trading days close to the ACCC decision date. |
| Equity beta (βe) | Choose a set of publicly listed companies that are comparable to Australian mobile network operators, i.e. overseas mobile network operators. For each of these comparable companies, obtain estimates of its equity beta based on five years of weekly data. Obtain the equity beta parameter for the WACC on the basis of the estimates of the equity betas for these comparable companies. |

| Gearing (D) | Choose a set of publicly listed companies that are comparable to Australian mobile network operators, i.e. overseas mobile network operators. For each of these comparable companies, obtain estimates of its gearing ratio by taking averages of its gearing ratios for the past five years. Obtain the gearing ratio parameter for the WACC on the basis of the estimates of the gearing ratios for these comparable companies. |
|--------------------------|---|
| Debt raising costs (DRC) | Set at 0.07 per cent, consistent with the ACCC's approach in the 2015 MTAS FAD. |
| Company tax rate (Tc) | Set at 30 per cent, consistent with the Australian company tax rate. |
| Expected inflation (π) | Based on a geometric average of ten years of forecast inflation, consistent with the Australian Energy Regulator's 2017 decision on the Regulatory Treatment of Inflation. |

4.1.2. Submissions on proposed methodology

Telstra, Optus and VHA provided comments on various aspects of proposed methodology described in the ACCC's Position and Consultation Paper and Analysys Mason's Draft Methodology Report.

Benchmark set

Telstra submitted that the majority of the models included in the proposed benchmark set are appropriate with the exception of East Caribbean which has a vastly different geographic nature of many islands compared to Australia. Telstra suggested that any outliers from the majority of the results after the adjustments have been made should be excluded.⁵⁸

VHA submitted that the proposed benchmark set consists of a small opportunity sample which may lead to biased results or high degree of variance. VHA suggested that a process of identifying the degree of error from adjustment process should be undertaken to validate the appropriateness of the adjustment process.⁵⁹

Optus raised a number of issues with the proposed benchmark set, including that:

- not all benchmark models could be used to replicate the final mobile voice termination rates set by the national regulatory agencies,
- the ECTEL (East Caribbean) mobile model did not actually utilise 4G technology,
- some of the benchmark models, specifically the Dutch, French and UK models, are draft models only, and
- there is no robust discussion on the suitability of selected benchmark countries.⁶⁰

Selection of adjustment factors

Optus raised two concerns regarding the proposed adjustment factors.

⁵⁹ VHA Submission, p. 11.

⁶⁰ Optus Submission, pp. 17–18.

⁵⁸ Telstra Submission, p. 2.

First, Optus noted that the proposed adjustment factors are different to those adopted in the previous benchmarking exercise conducted as part of the 2015 MTAS FAD inquiry. Optus argued that while applying the adjustments directly in the models appears logical and reasonable, it is concerned about incorrect assumptions for the modelled Australian operator and incorrect application within the models.

Second, Optus submitted that the derivation of the Australian input values is not defined and there is insufficient information how the proposed data sources are used to derive the input values.⁶¹

Levels of demand

VHA submitted that there needs to be greater transparency on the forecasting method used by Analysys Mason to derive the levels of demand to be implemented in the benchmark models. Optus raised similar concerns that it is unclear how the data on demand is to be reconciled, given the confidential nature of the data, and the treatment in cost models which only rely on a single year input.

Assumed market share

VHA supports the assumption of 33.3 per cent of market share for the hypothetically efficient operator⁶⁴ while Optus noted that in practice there are significant regional differences in market shares.⁶⁵

Geography

VHA is generally supportive of the use of the 2200 SA2 areas used in the ACMA's Mobile Network Infrastructure Forecasting Model for the purpose of implementing the Australian geography in each of the benchmark models. However, VHA submitted that differences in the density thresholds used in each model may impact on the credibility of classifications produced from the benchmark cost models. 66

VHA also argued that traffic demand in dense urban areas should include people travelling to work, similar to the approach taken in the ACMA's Mobile Network Infrastructure Forecasting Model.⁶⁷

Optus again raised concerns that it is unclear how this approach of implementing the Australian geography in each benchmark model could be reconciled, other than that it is likely to increase the number of sites taking into account the larger Australian land mass.⁶⁸

Cell coverage radii

Optus raised concerns that the adjustment for cell coverage radii is only proposed for the most rural geotype, rather than for all geotypes.⁶⁹

⁶¹ Optus Submission, pp. 18–19.

⁶² VHA Submission, p. 18.

⁶³ Optus Submission, p. 20.

⁶⁴ VHA Submission, p. 18.

⁶⁵ Optus Submission, p. 20.

⁶⁶ VHA Submission, pp. 12–13.

⁶⁷ VHA Submission, p. 13.

⁶⁸ Optus Submission, p. 20.

⁶⁹ Optus Submission, p. 20.

On the other hand, VHA supported the proposed adjustment for cell coverage radii for the most rural geotype in each model, noting that there is no need to adjust for the cell coverage radii for other geotypes.⁷⁰

Mobile technologies in use

Optus submitted that the assumption of 2G shut down in 2019 and the need to forecast future traffic distribution risks entrenching model errors. Optus suggested that 2G voice traffic will need to move to 3G voice in the first instance.⁷¹

VHA supported the approach of assuming 2G shutdown in 2019 and that 2G network costs are recovered prior to 2019. VHA considers it is important that the ACCC's position makes clear the latter assumption. VHA also supports the assumption that the 3G network will continue to operate beyond 2024.⁷²

Spectrum holdings

VHA submitted that the assumption of nationwide spectrum holdings do not reflect reality and the cost of providing coverage in regional areas. VHA argued that at least three MNOs should have the assumed spectrum holdings. VHA also noted it is unclear how spectrum refarming is taken into account in implementing the spectrum holdings in the models.⁷³

On the other hand, Optus submitted that it is not clear why a smaller spectrum holding is considered given all other inputs are based on total market assumptions. Optus also raised the issue that spectrum holdings amongst the MNOs are not balanced across frequencies and geographies.⁷⁴

Spectrum costs

VHA submitted that the proposed approach to calculating spectrum costs appears reasonable but considers that any model used to calculate the spectrum costs should be made available for comment.⁷⁵

On the other hand, Optus submitted that total spectrum costs should be considered, including one-off spectrum costs and recurring apparatus licence fees. Telstra disagrees with the use of the 2012 Ministerial Direction on renewal fees for the 1800 MHz and 2GHz bands, as the fees are significantly lower than the auction fees for the same bands in the 2016 regional 1800 MHz band auction and the 2017 multiband auction. Telstra considers these auction fees to be more appropriate for the calculation of the relevant spectrum costs.

Currency

Telstra submitted that it would not expect the use of PPP adjustment or exchange rate to affect the outcome if the benchmark countries are broadly comparable. Telstra suggested

Public inquiry on the access determination for the Domestic Mobile Terminating Access Service

⁷⁰ VHA Submission, p. 14.

⁷¹ Optus Submission, p. 21.

⁷² VHA Submission, p. 18.

⁷³ VHA Submission, p. 17.

Optus Submission, pp. 19–20.

⁷⁵ VHA Submission, p. 17.

⁷⁶ Optus Submission, p. 21.

⁷⁷ Telstra Submission, p. 2.

that if any countries have materially different PPP or exchange rates, then Analysys Mason should investigate the cause of the difference and decide whether to include that country.⁷⁸

VHA argued that PPP adjustment does not take into account some of the specific costs associated with deploying a mobile network in Australia and therefore further adjustments would be required:⁷⁹

• Transmission costs

VHA argued that PPP adjustment does not account for the higher cost of transmission in Australia, specifically the longer distance between mobile sites and points of aggregation, as well as lower use of microwave backhaul. VHA suggested that the ACCC determine a proxy for metropolitan and regional transmission costs using the DTCS price formula and working out average distance from sites in different geotypes to major aggregation points. Even then, VHA considers there may be a need for an uplift to account for the cost of augmenting Telstra's existing transmission network for new sites in regional areas.

Site deployment costs

VHA argued that that the unit cost of site acquisition in some of the benchmark models are still significantly lower than the actual costs of site deployment in Australia, even after PPP adjustments. VHA suggested that the site acquisition costs in each benchmark model should be adjusted to reflect the costs in Australia.

Network costs relating to natural disaster

VHA submitted that there are additional costs incurred by Australian MNOs to strengthen their networks in case of natural disasters and therefore a higher cost profile for Australian MNOs may be appropriate.

National security arrangements

VHA submitted that Australia has more stringent national security arrangements that restrict the number of vendors that could supply network equipment for the purpose of deploying 5G networks in Australia. VHA argued that this also has implications for the costs of 3G and 4G network equipment, as MNOs would need to acquire backward-compatible equipment that could be upgraded for 5G use.

WACC

Optus submitted that there is no mobile-specific WACC in Australia and the fixed line services WACC used for the previous MTAS FAD is unlikely to be appropriate.⁸⁰

Similarly, Telstra submitted that a fixed line services WACC is not appropriate for the MTAS and that the WACC should reflect the additional risks faced by competitive mobile networks to adequately reflect funding costs.⁸¹

VHA supports the ACCC's proposal to have regard to the AER's Rate of Return Instrument when determining the WACC parameters, in particular the values of market risk premium and gamma. VHA also supports the ACCC's proposed approach to determining the risk free

⁷⁸ Telstra Submission, p. 2.

⁷⁹ VHA Submission, pp. 14–16.

Optus Submission, p. 21.

⁸¹ Telstra Submission, p. 2.

rate. VHA reserves its comment on the determination of equity beta until the list of comparable companies are made available by the ACCC.⁸²

VHA submitted that some of the information relating to the determination of the cost of debt is not available; [c-i-c]

[c-i-c].⁸³

4.1.3. ACCC views

The ACCC has considered the views of stakeholders in determining a benchmarking methodology to be implemented by Analysys Mason for the purpose of the draft report. This is discussed in detail below. Analysys Mason has also separately provided its response to stakeholder's comments on the proposed methodology in its Draft Benchmark Report.⁸⁴

Benchmark set

The ACCC does not agree with Optus' view about the suitability of the selected models. The ACCC considers that there are clear criteria on how benchmark models are selected, based on the public availability of the models, the useability of the models, whether the models can produce TSLRIC+ cost estimates and whether the models incorporate the appropriate mobile technology in use in Australia. The ACCC considers it is appropriate to include all of the nine proposed benchmark models, which satisfy these criteria, for the purpose of implementing the necessary adjustments to reflect the Australian telecommunications environment. It is then open for the ACCC to have regard to the outcome of the benchmark exercise and determine whether it would be appropriate to rely on the results from each of the benchmark models.

The ACCC acknowledges Telstra's concern regarding the inclusion of the East Caribbean model. The ACCC considers that for the reasons noted above, it would be appropriate, in the first instance, to include the East Caribbean model in the benchmark set. However, as will be discussed when examining the results of the benchmarking exercise, the ACCC will consider whether to exclude or give less weight to the results of some models on the basis that they produce outliers.

The ACCC notes VHA's claim that the benchmark set is a small opportunity sample and may lead to biased results and high degree of variance. The ACCC considers that an important part of the benchmarking exercise is to replicate the Australian environment in each of the benchmark models, at least in relation to the key cost drivers. This means that the exercise is different from other conventional statistical analyses where a much greater sample size is likely required. The ACCC considers that making the adjustments in nine benchmark models provides sufficient comparison for the ACCC to come to a view on the estimated cost of the MTAS in Australia.

Analysys Mason has investigated Optus' comments regarding the replicability of mobile termination rates adopted by the national regulatory agency, the use of 4G technology in the East Caribbean model and whether some of the models are draft versions only. Analysys Mason provided its response to these comments in Annex C of its Draft Benchmark Report. It concluded that the issues raised by Optus are unsubstantiated and do not warrant excluding any of the models in the benchmark set.

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VHA Submission, p. 18.

VHA Submission, pp. 18–19.

Analysys Mason, Draft Benchmark Report, Annex C.

Selection of adjustment factors

The ACCC considers that the key cost drivers that the adjustment factors seek to capture do not differ materially in this international benchmarking exercise compared to the previous benchmarking exercise conducted as part of the 2015 MTAS FAD inquiry. Rather, the way in which the differences in these cost drivers are adjusted differ because the current benchmarking exercise seeks to make changes to key inputs directly in the models, whereas the adjustment to key cost drivers were made externally to the models in the previous exercise conducted in 2015.

The ACCC considers that both approaches are appropriate as long as the inputs used for the purpose of making the adjustments can be substantiated. Nonetheless, the ACCC considers making adjustments to key inputs directly in the models is likely to address concerns raised by some stakeholders, including Optus, as part of the 2015 MTAS FAD inquiry regarding the lack of transparency in the adjustment process. In particular, concerns were raised during that process that making adjustments external to the models would require the use of elasticity values which reflect how the MTAS cost may change in response to a change in the key cost drivers. These was some concern that this approach was not sufficiently transparent and that a better approach is to directly make changes in the models.⁸⁵

Levels of demand

The methods of developing a time series of demand and a detailed description of the demand forecast are provided in chapter 4 of Analysys Mason's Draft Benchmark Report.⁸⁶

For the purposes of deriving the time series of market demand to be implemented in each benchmark model, the ACCC sought historical demand information from the MNOs. The information provided by the MNOs is incomplete and it was therefore necessary for Analysys Mason to rely on other sources of information in order to properly derive the time series. As noted in Analysys Mason's Draft Benchmark Report, other information relied on includes information provided under the ACCC's Division 12 Record Keeping Rules, information from the Australian Bureau of Statistics (ABS) website and Analysys Mason's research information.⁸⁷

The ACCC has made available the time series of demand developed by Analysys Mason and the actual inputs to each benchmark model for stakeholder comment. 88 Confidential information provided by the MNOs is redacted. It is open for stakeholders to seek access to this confidential information via confidentiality undertaking arrangements with each other.

Assumed market share

The ACCC considers that the proposed market share for the hypothetically efficient operator of 33.3 per cent is appropriate, having regard to the fact that there are currently three MNOs in Australia and this is unlikely to change in the foreseeable future. The ACCC notes for the purposes of the international benchmarking exercise, the assumed market share refers to the share of total network traffic.

See for example, Optus, Submission in response to ACCC Draft Decision: Mobile Terminating Access Service, June 2015, p. 5; Telstra, Response to the ACCC's Mobile Terminating Access Service final access determination – Draft Decision, 15 June, p. 14.

⁸⁶ Analysys Mason, Draft Benchmark Report, p. 15.

⁸⁷ Analysys Mason, Draft Benchmark Report, p. 15.

See Excel file entitled 'Inputs and Outputs of MTAS benchmark', available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report.

The ACCC does not consider that regional differences in market shares is a relevant factor that affects the appropriateness of this assumption. The ACCC has always considered the mobile services market to be a national market. Although the MNOs have different levels of geographic coverage and this has resulted in differences in the size of subscriber base for each MNO across the regions, there is no clear segmentation of the market based on geography. This is because network coverage is a quality of service factor on which the MNOs compete. The supply of mobile services in one region affects demand for an MNO's services on a national level. As such, the ACCC considers it appropriate to assume an overall market share of 33.3 per cent.

Geography and cell coverage radii

The ACCC considers that capturing the effect of Australia's unique geography on the cost of deploying mobile networks is a complex and difficult task. The ACCC notes that as a starting point, submissions did not oppose the proposed adjustment for geography or the use of the 2200 SA2 areas (as used in the ACMA's Mobile Network Infrastructure Forecasting Model) for the purposes of this adjustment.

The proposed approach to implementing the SA2 areas in each benchmark model still makes use of the geotype definitions used in the models. This means that each SA2 area in Australia is assigned a geotype in each model based on the population density thresholds used in that model. The ACCC acknowledges VHA's comment that the geotypes and population density thresholds for various geotypes used in the benchmark models are different. As such, the ACCC understands that this approach could result in some SA2 areas being assigned different geotypes across the models.

The ACCC considers that the most important outcome the implementation of the Australian geography is seeking to achieve is that the number of sites deployed in the models largely reflect the number of sites needed in practice to cover the much larger land mass of Australia given an assumed level of network coverage. Despite the different geotype definitions in the benchmark models, overall this outcome is still likely to be achieved because the same Australian SA2 areas are captured in each of benchmark model.

For the most rural geotypes, Analysys Mason adjusted the cell coverage radii because Australia is likely to have coverage in far more sparse areas than the benchmark models and the use of the original cell coverage radii in these areas is likely to result in an overestimation of the number of sites deployed in the most rural geotypes. Therefore, the cell coverage radii for a site in the most rural geotype is adjusted to 15 km, in light of the fact that the ACMA's Mobile Network Infrastructure Forecasting Model assumes cell radius of 14 km and 22 km in the rural and remote geotypes in Australia. ⁸⁹ The ACCC agrees with Analysys Mason's assessment that this adjustment is only necessary for the most rural geotypes, because the number of sites in these geotypes are most likely coverage driven and the cell coverage radii is therefore the most significant input. On the other hand, the number of sites generated in other geotypes is likely to be traffic driven so it will depend on a number of inputs and the cell coverage radii is unlikely to have a significant impact on the number of site required in those geotypes.

Analysys Mason has examined the number of sites generated by benchmark models and compared them to the number of sites actually deployed. This is discussed in detail in section 4.2 below.

The ACCC notes VHA's suggestion to adjust the traffic demand for dense urban and urban geotypes to account for the flow of commuters, similar to what was done in the ACMA's

Analysys Mason, Draft Benchmark Report, p. 10.

Mobile Network Infrastructure Forecasting Model. VHA submitted that increased demand in dense urban and urban areas during daytime busy hours affect an MNO's network dimensioning and costs. The ACCC understands that in the benchmark models, this may be reflected in an increase in traffic-driven sites in the more densely populated geotypes. Analysys Mason has investigated the possibility of replicating the demand adjustments made in the ACMA's Mobile Network Infrastructure Forecasting Model. Analysys Mason found that the inputs are specific to the geotypes in the ACMA's model and cannot be replicated in the benchmark models. Analysys Mason notes that if the MNOs can provide information on how the distribution of traffic is skewed away from the distribution of population, it may be able to consider how this can be captured in the benchmark models.

For the above reasons, while the ACCC considers there is some merit in VHA's suggestion, there is currently insufficient information which would allow the ACCC and Analysys Mason to test the impact of commuting traffic on the MTAS cost. However, the ACCC will consider further information and evidence provided on this issue, particularly on how the distribution on the traffic is skewed from the distribution of population, in reaching its position in the final report.

Mobile technologies in use

The ACCC considers that the proposed assumptions of a 2G shutdown in 2019 (such that all 2G related costs are recovered prior to 2019) and the continued operation of the 3G networks beyond 2024 are appropriate.

The ACCC notes Optus' concern that the arbitrary shutdown of 2G and the need to forecast traffic distribution across the various network may give rise to errors. However, the ACCC does not consider that the assumption of a 2G shutdown in 2019 is likely to impact traffic distribution forecast in any significant way. This is because MNOs' information shows that the share of traffic on 2G networks has been declining for many years and that it only accounts for a minimal proportion of overall traffic (less than 1 per cent) prior to shut down. As such, the ACCC does not consider that the assumption of a 2G shutdown in 2019 is arbitrary or that it is likely to lead to errors in forecast traffic distribution.

For the purpose of making the adjustments, it is also necessary to assume a level of network coverage. Analysys Mason has chosen to use Optus' network coverage as the basis for this assumption and has developed a profile for how Optus' coverage has increased using information in Optus' annual reports and coverage information provided by Optus during this inquiry. Analysys Mason considered that it is reasonable to use Optus' coverage because based on the traffic information provided Optus' network carries over a third of total network traffic, therefore it could be assumed that Optus' level of coverage is capable of supporting the assumed level of market share of 33.3 per cent.⁹¹

The ACCC considers that this is a reasonable approach. The ACCC notes that Analysys Mason has also conducted sensitivity analysis using Telstra's network coverage which shows that assuming a larger coverage equivalent to Telstra's would increase the MTAS cost in most benchmark models by between 2 to 16 per cent, while it has small reverse effects in the Portugal and UK models due to specific model assumptions used. 92 The ACCC's draft view is that based on the assumed market share, Optus' network coverage is

⁹⁰ Analysys Mason, Draft Benchmark Report, p. C-5.

⁹¹ Analysys Mason, Draft Benchmark Report, p. 11.

⁹² Analysys Mason, Draft Benchmark Report, p. 33.

likely to be more representative of that of a hypothetically efficient operator in Australia than Telstra's.⁹³

Spectrum holdings

The ACCC considers that the submissions from Optus and VHA on spectrum holdings broadly raise two issues, namely that:

- there are variations in actual spectrum holdings across regions, frequencies and operators. This calls into question the appropriateness of assuming nationwide spectrum licence holdings, and
- there appears to be some concern regarding the amount of spectrum holding
 assumed in each of the bands used in the models. VHA considers that the assumed
 spectrum holdings to be inappropriately large in some bands and submitted that at
 least three MNOs should have access to the spectrum holdings assumed. On the
 other hand, Optus questions the assumption of a small holding given that other
 inputs are based on total market assumptions.

On the first issue, the ACCC understands that many of the benchmark models are incapable of assuming regional spectrum licence holdings. ⁹⁴ This is a technical limitation which means that it is infeasible to assume different spectrum holdings in different regions. This is the key reason that a conservative small holdings is proposed to be used in making the relevant adjustments in the models.

On the second issue, there appears to be different views on the appropriate size of the spectrum holdings. The ACCC agrees generally with Optus' observation that the Australian inputs to the models are based on total market assumptions and disagrees with VHA's submission that at least three MNOs should have access to the assumed spectrum holdings. This is consistent with the assumption of the modelled operator being a hypothetically efficient operator, rather than a specific operator. However, given the technical limitation in taking into account actual variances in spectrum holdings across regions, the ACCC considers that it is appropriate to take a conservative approach and assume a smaller holdings, having regard to the legitimate business interests of the MNOs as access providers. The key impact of smaller holdings is that the models would generate more sites than otherwise would be the case, particularly in traffic-driven geotypes. Analysys Mason has compared the number of sites generated by the benchmark models with the actual site numbers deployed in practice. This is discussed in section 4.2.

Moreover, the ACCC considers VHA's concern that, in practice, it holds less than what is assumed in some of the bands (particularly in regional areas) is likely to be mitigated significantly by its ability to access TPG's spectrum holdings after the merger between the two companies is completed. 95 After the merger, it is expected that VHA will be able to access an additional 2 x 10 MHz in 700 MHz band for coverage, at least 2 x 10 MHz in the 1800 MHz band in various regional areas and 2 x 10 MHz in 2.5 GHz for capacity. 96

In implementing the assumed spectrum holdings in the benchmark models, Analysys Mason has also made some assumptions regarding refarming of spectrum due to the declining use

The network coverage inputs are detailed in the Excel file entitled 'Inputs and Outputs for MTAS Benchmark' available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report. As the assumed network coverage is based on information provided by Optus on its actual coverage, the coverage inputs contained in the published file have been rounded.

⁹⁴ Analysys Mason, Draft Benchmark Report, p. 11.

⁹⁵ Based on publicly available information, it is expected that the merger will be completed by mid-2020.

⁹⁶ Having access to TPG's 1800 MHz holdings would also mean that VHA has holdings in this band in all 1800 MHz licenced areas.

and shutdown of 2G technology in Australia. It is assumed that the 900 MHz spectrum originally used for 2G coverage is refarmed for 3G coverage, and that the 1800 MHz spectrum original used for 2G capacity is refarmed for 4G capacity. The ACCC considers these to be reasonable assumptions to adopt given the need for implementing 2G shutdown in the models.

Since the release of the Position and Consultation Paper, the ACCC has decided to make a slight change to the assumption of spectrum holdings in the 800/900 MHz bands, which is used for 2G and then 2G coverage. Instead of assuming that 2 x 10 MHz of 900 MHz band is used for this purpose, the ACCC considers it more appropriate to assume 2 x 5 MHz in each of the 800 MHz band and 900 MHz band, where the 900 MHz band is used initially for 2G and then for 3G, and the 800 MHz band has always been used for 3G. The ACCC understands that given the similar characteristics of the two bands, this change is unlikely to cause any material change in the number of sites generated by the model. However, this change would allow the ACCC to take into account the cost of the 800 MHz band spectrum in calculating the Australian spectrum costs. Tables 4 and 5 show the assumed spectrum holdings implemented in the benchmark models.

Table 4: Spectrum bands considered98

| Band | Spectrum frequencies (MHz) | Spectrum allocation (MHz) | First year |
|---------------------|--|----------------------------------|--------------------|
| 700 MHz | 703–748 paired with 758–803 | 2×10 | 2014 |
| 800 MHz/ 900 MHz | 825–845 paired with 870–890 and 890–915 paired with 935– 960 | 2×5 of 900 MHz 2×5 of 850 MHz | Beginning of model |
| 1800 MHz | 1710–1785 paired with 1805– 1880 | 2×15 | 2000 |
| 2100 MHz | 1920–1980 paired with 2110– 2170 | 2×10 | 2002 |
| 2.5 GHz | 2500–2570 paired with 2620– 2690 | 2×20 | 2014 |

Table 5: Spectrum holdings assumptions (MHz)99

| | Before 2004 | 2004–2013 | 2014–2016 | 2017–2018 | 2019 onward |
|----------------|----------------------|------------|------------|------------|----------------------|
| 2G coverage | 900: 2×5 850: 2×5 | 900: 2×5 | 900: 2×5 | 900: 2×5 | |
| 2G capacity | 1800:2×15 | 1800: 2×15 | 1800: 2×15 | | |
| 3G coverage | | 850: 2×5 | 850: 2×5 | 850: 2×5 | 850: 2×5 900: 2×5 |
| 3G capacity | | 2100: 2×10 | 2100: 2×10 | 2100: 2×10 | 2100: 2×10 |
| 4G coverage | | | 700: 2×10 | 700: 2×10 | 700: 2×10 |

⁹⁷ Analysys Mason, Draft Benchmark Report, p. 12.

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⁹⁸ Reproduced from Figure 5 in Analysys Mason, Draft Benchmark Report, p. 12.

⁹⁹ Reproduced from Figure 6 in Analysys Mason, Draft Benchmark Report, p. 12.

| 4G | 2500: 2×20 | 1800: 2×15 | 1800: 2×15 |
|----------|------------|------------|------------|
| capacity | | 2500: 2×20 | 2500: 2×20 |

Analysys Mason has also conducted sensitivity analysis on the impact of smaller holdings in the 1800 MHz band (2 x 10 MHz) and 2100 MHz band (2 x 10 MHz). The reduction in spectrum holdings in these two bands would have increased the number of traffic-driven sites and should, in theory, result in an increase in the MTAS cost. The expected change is observed in most of the benchmark models with the increase in MTAS cost ranging from minimal to 21 per cent. Importantly, the Mexico and East Caribbean models do not respond in the expected way in the sensitivity test where spectrum allocations are reduced. For reasons discussed earlier in this section, the ACCC's draft view is that the assumed spectrum holdings is already conservative and is appropriate. The ACCC does not consider that a smaller set of holdings, such as those used for sensitivity testing, is appropriate.

Spectrum costs

The ACCC notes Telstra's concern regarding the proposed use of renewal fees prescribed in the Minister's Direction on renewal fees in 2012 in calculating spectrum costs. ¹⁰¹ Telstra considers that these renewal fees contained are significantly below the value of spectrum achieved in more recent auctions, such as the 1800 MHz regional spectrum auction in 2016 and multiband residual lots auction in 2017. Telstra considers that the relevant auction prices are more appropriate for the calculation of Australian spectrum costs.

The ACCC understands that this issue concerns the costs of spectrum in the 1800 MHz and 2100 MHz bands. The ACCC considers that there is merit in taking into account the prices achieved for spectrum in these two bands in recent auctions. However, the ACCC does not consider that the renewal fees prescribed in the Minister's Direction in 2012 should be completely disregarded as these fees reflect what the MNOs actually paid for the majority of spectrum in these two bands. For these reasons, the ACCC considers that a blended approach should be taken where both the renewal fees and the auction prices should be taken into account in deriving a unit cost for spectrum in the 1800 MHz and 2100 MHz bands. This approach involves the following steps:

- first, for the 1800 MHz and 2100 MHz bands, derive a cost \$/MHz (paired)/pop¹⁰² based on the relevant renewal fees and auction prices respectively,
- second, derive a weighted population coverage which is assumed to be covered by
 the licences that are auctioned, as opposed to renewed, in the two bands. This step
 is necessary because some of the lots renewed and auctioned cover the same
 geographic areas and therefore the same population. In such cases, the ACCC has
 used the proportion of bandwidth that is auctioned as a percentage of overall
 bandwidth available in a geographic area to derive a weighted population coverage
 that is covered by the auctioned spectrum licence, and
- third, blend the unit costs of spectrum based on renewal fees and auction prices using the weighted population coverage derived. This blended unit cost is then used to calculate the total cost of spectrum in the relevant band based on the assumed holding.¹⁰³

¹⁰⁰ This is discussed in detail in section 4.2 below.

See Radiocommunications (Spectrum Access Charges) Direction 2012, available at: https://www.communications.gov.au/what-we-do/spectrum/spectrum-licences.

^{102 \$/}MHz (paried)/pop refers to the cost of spectrum per MHz paired per capital, which is a commonly used for expressing the unit cost of spectrum.

Please see **Appendix B** for derivation of the weighted population coverage.

As discussed above in relation to spectrum holdings, the ACCC has changed the assumed spectrum holdings initial proposed to now explicitly include 2 x 5 MHz of 800 MHz band. This means that the cost of the 800 MHz band spectrum in Australia has been taken into account calculating overall spectrum costs. The unit cost for spectrum in this band is based on the relevant renewal fees prescribed in the Minister's Direction in 2012.

Table 6 below shows the sources for calculating the spectrum costs for each band in the assumed spectrum holdings.

Table 6: Assumption of spectrum costs by band¹⁰⁴

| Band | Assumption | Source |
|--------------------------------------|--|--|
| 700 MHz | Derived from the spectrum auctions of the band in 2017 and 2013, excluding an assumed cost of the 2.5 GHz band (see below) | See entry for 2.5 GHz band |
| 900 MHz | No one-off fees, use renewal fees indicated by ACMA | Reflects situation in Australia |
| 850 MHz, 1800 MHz and 2100 MHz | Weighted average of renewal fees based on cost per MHz per capita issued by the Minister, and fees for auctioned spectrum in these bands in 2016 and 2017 (weighted by the coverage of the auctioned spectrum, expressed in terms of cost per MHz per capita) | Minister's Direction of 2012 for renewal fees, auction fees from ACMA website |
| 2.5 GHz | Derived from TPG's spectrum auction payment for a standalone allocation of 2.5 GHz spectrum in 2013 | ACMA website |

The calculations for Australian spectrum costs are included in a separate workbook provided by Analysys Mason, which is available on the ACCC's website.¹⁰⁵

Currency

The ACCC notes Telstra's view that the use of PPP adjustments or exchange rate should not affect the outcome of the benchmarking exercise if the benchmark countries are broadly comparable to Australia. The ACCC understands this to mean that if the cost of living is roughly the same in Australia and a benchmark country (i.e. the PPP multiplier is close to 1), then adjusting for PPP would not make a material difference to the outcome of the cost of MTAS. The ACCC agrees with this observation.

However, it remains the case that some of the benchmark countries do have materially different cost of living compared to Australia. According to the PPP multipliers derived by Analysys Mason, Australia is a more expensive country than all of the benchmark countries, and the difference is particularly stark compared to lower-income countries and economic areas such as Mexico, Peru, Portugal and East Caribbean. This is expected and it would mean that adjusting for PPP would likely lead to materially different outcome for the cost

Reproduced from Figure 7 in Analysys Mason, Draft Benchmark Report, p. 13.

See Excel file entited 'Inputs and Outputs of MTAS benchmark', available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report.

outputs from these models. The impact of the PPP adjustment would also be greater if a greater proportion of the cost is assumed to be non-tradeable.

Analysys Mason's Draft Benchmark Report shows that making the PPP adjustment resulted in an increase of between 4 to 104 per cent in the MTAS cost in the benchmark models. Analysys Mason recommends including the PPP adjustment. The ACCC agrees with this conclusion. The ACCC considers that given evidence that the purchasing power is significantly different in some of the benchmark countries compared to Australia, it would be appropriate to make PPP adjustment to the proportion of costs that are assumed to be non-tradeable to ensure that the MTAS cost outputs from these benchmark models are more representative of the relevant cost in Australia.

The ACCC has considered VHA's submission that PPP adjustments does not fully take into account the specific costs of deploying mobile networks in Australia and that additional adjustments would be required. The ACCC's views in response to VHA's submission are discussed below.

Transmission costs

The ACCC understands that VHA's suggestion to adjust for higher transmission costs are based on two factors:

- the average distance between mobile sites and the nearest aggregation points is likely to be longer in Australia compared to the benchmark countries, and
- the mix of transmission solutions in Australia is likely to be different to the benchmark countries; in particular, there Is less extensive use of the cheaper microwave backhaul in Australia and more reliance on dark fibre and leased lines.

The ACCC has asked Analysys Mason to investigate the determination of transmission costs in the benchmark models. It appears that most benchmark models do not have distance-related inputs when determining the costs of transmission services. This means that it would not be possible to adjust the models to reflect the average distance between mobile sites and the nearest aggregation points in Australia.

On the other hand, the benchmark models do take into account the mix of transmission solutions used in determining the transmission costs and it is possible to adjust for the proportion of mobile sites that are connected via the different types of transmission solutions. Given that different transmission solution is assigned a different unit cost, adjusting for the mix of transmission solutions in each benchmark model to reflect that of a hypothetically efficient operator in Australia would be appropriate.

Currently, the ACCC does not have sufficient information from all the MNOs regarding the mix of transmission solutions deployed at their mobile sites. The ACCC therefore instructed Analysys Mason to proceed with a base case without making adjustments to the split of backhaul options used. Analysys Mason then conducted sensitivity analysis using the following example of split between different backhaul options to test the impact of making this adjustment:

- Microwave backhaul 25 per cent
- Leased lines 25 per cent
- Dark fibre or owned fibre 50 per cent.¹⁰⁷

¹⁰⁶ Analysys Mason, Draft Benchmark Report, p. 33.

Analysys Mason, Draft Benchmark Report, p. 14.

The sensitivity analysis shows that making the above adjustment in the benchmark models had different impact on the MTAS costs from the models. The adjustment resulted in an increase in the MTAS cost in some models and a decrease in others. For most of the benchmark models, the adjustment had an immaterial impact on the cost outputs. However, for the Mexico and Spain models, the adjustment resulted in an increase in the MTAS cost of 13 and 7 per cent respectively. ¹⁰⁸ The ACCC considers that the materiality of the impact may change depending on how representative the assumed backhaul split is of Australian MNOs overall. Give this, the ACCC considers it would be prudent to refine the input based on information from all MNOs in reaching a position in the final report.

Site deployment costs

The ACCC understands that VHA has converted the unit costs of site deployment in some of benchmark models using PPP and found that they are significantly below the typical cost of site deployment in Australia, particularly with regard to Sweden and the UK. VHA considers that this suggests that PPP adjustment does not adequately take into account the cost of site deployment in Australia and that additional adjustment is required.

Analysys Mason has investigated the unit costs of site deployment in the benchmark models and compared those with the figures provided by VHA. Analysys Mason notes in its Draft Benchmarking Report that comparable figures to those used in the benchmark models should reflect the average cost of site deployment across *all* sites rather than just recent or new deployments.¹⁰⁹

The ACCC also has reservations regarding the comparability of the unit costs of site deployment in the benchmark models to the figures provided by VHA. By way of comparison, the average cost of a macrocell site deployment assumed in the 2007 WIK-Model is AUD 134,000, 110 which is approximately AUD 179,801 in 2019 price. 111 This is significantly below the figures provided by VHA. As such, the ACCC's draft view is that there is currently no evidence that the average site deployment cost in Australia is significantly above those assumed in the benchmark models such as to require an adjustment to this input.

Network costs associated with natural disasters

The ACCC notes VHA's submission that Australian MNOs may have a higher cost profile compared to the benchmark countries because of the need to strengthen infrastructure against natural disasters. Analysys Mason notes in its Draft Benchmark Report that MNOs would need to provide evidence on the cost uplift effect that this additional resilience brings to the network (or the amount they spent on suitable insurance).¹¹²

The ACCC's draft view is that it is unlikely that the need to have redundancy options and additional resilience in the network, whether in response to natural disasters or other unforeseen events, is Australian specific. It is also difficult to see how the ACCC could credibly make judgments as to how a hypothetically efficient operator in Australia is likely to approach this issue differently to the modelled operators in the nine benchmark countries. For this reason, the ACCC currently does not consider there is sufficient evidence that an adjustment or a general uplift in cost would be appropriate or that the extent of any

¹⁰⁸ Analysys Mason, Draft Benchmark Report, p. 33.

¹⁰⁹ Analysys Mason, Draft Benchmark Report, p. C-9.

This includes site acquisition, preparation, land and building cost. See WIK-Consult, Mobile Termination Cost Model for Australia, January 2007, p. 147.

CPI index for December 2006 and December 2019 are used for the conversion; see CPI index from ABS website at: https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Dec%202019?OpenDocument.

Analysys Mason, Draft Benchmark Report, p. C-9.

adjustment or uplift could be substantiated. The ACCC will however consider further evidence on this issue.

National security arrangements

The ACCC acknowledges that national security requirements which restrict the participation of certain vendors to be involved in the deployment of 5G networks in Australia will have implications on the competitiveness of the market for the supply of equipment. This will in turn affect the prices and quality of the equipment provided on the market. However, the ACCC considers that the exact impact of these restrictions on the cost of deploying mobile networks in Australia, particularly for the purpose of estimating the cost of the MTAS in this inquiry, is unclear.

The ACCC notes VHA's submission that there is some commentary on the impact of national security arrangements on the cost of 5G deployment. However, the actual impact of these restrictions on the cost of 5G deployment appears to be different for different MNOs and could depend on factors such as whether the MNO has a multi-vendor approach and the bargaining power an MNO has in negotiating with vendors.¹¹³

Moreover, as the current international benchmarking exercise seeks to estimate the cost of providing the MTAS on 3G and 4G networks only, the ACCC considers that clear evidence on the impact of Australia's national security arrangements on the deployment of 3G and 4G networks would be needed to justify any uplift on the MTAS cost. VHA submitted that restriction on certain vendors in providing equipment at the access layer of 5G networks would also impact an MNO's choice in deploying backward-compatible technologies due to the need for a clear upgrade path to 5G. The ACCC considers that more information is required on the extent to which this would affect the cost of deploying 3G and 4G networks and how this could be practically taken into account in the benchmarking exercise.

For the above reasons, the ACCC' draft view is that while it is clear that Australia' national security arrangements would have some impact on the market for vendor equipment, there is currently insufficient information on how this is likely to impact on the cost of providing the MTAS on 3G and 4G technologies for the purpose of this inquiry.

WACC

The ACCC has determined a WACC appropriate for a hypothetically efficient operator in Australia for the purpose of adjusting the benchmark cost models. The ACCC has provided Analysis Mason with a pre-tax cost of capital of 4.98 per cent in nominal terms, and 2.53 per cent in real terms.

Key WACC parameters are set out in Table 7 below.

Table 7: Key WACC parameters

WACC parameterValueRisk free rate r_f 1.02%Market risk premium MRP6.1%Corporate tax rate T_c 30.00%Imputation factor γ 0.585Asset beta β_a 0.48

See for example, ITnews, 'Vodafone warns investment uncertainty after Huawei 5G ban', 23 August 2018 at https://www.itnews.com.au/news/vodafone-warns-investment-uncertainty-after-huawei-5g-ban-500718; ZDnet, 'Huawei ban did not impact Optus 5G launch: CEO', 31 January 2019 at https://www.zdnet.com/article/huawei-ban-did-not-impact-optus-5g-launch-ceo/.

| Equity beta β_e | 0.76 |
|-----------------------------------|-------|
| Pre-tax cost of equity | 6.48% |
| Gearing ratio D | 37% |
| Cost of debt ¹¹⁴ K_d | 2.32% |
| Debt issuance costs DIC | 0.07% |
| Forecast inflation | 2.39% |
| Nominal pre-tax WACC | 4.98% |
| Real pre-tax WACC | 2.53% |

Source: ACCC calculations.

The ACCC has derived the WACC as follows:

$$WACC_{pre-tax,nominal} = [\frac{(r_f + \beta_e \times MRP)}{[1 - T_c \times (1 - \gamma)]}] \times (1 - D) + (K_d + DIC) \times D$$

$$WACC_{pre-tax,real} = \frac{1 + WACC_{pre-tax,nominal}}{1 + forecast\ inflation} - 1$$

The ACC notes submissions from Telstra and Optus that it would not be appropriate to use a WACC for fixed line services for the purpose of the MTAS. In particular, Telstra considers that fixed line services are not subject to the same systematic risks as faced by mobile services, and as such the WACC should be reflective of the additional risk faced by competitive mobile networks to adequately reflect funding costs.¹¹⁵

The ACCC considers the a key parameter that is concerned with reflecting systematic risks faced by mobile operators, as opposed to fixed line operators, is the equity beta. As proposed, the ACCC has used a benchmarking approach to estimating the equity beta and constructed a set of comparable firms that it considers reflect the risks faced by competitive mobile networks.

Details on the ACCC's approach to deriving the individual parameters is set out in **Appendix C**.

4.2. Results

This section outlines and discusses the results from the benchmark exercise after implementing the methodology discussed in section 4.1 above. The ACCC then provides its consideration of the benchmarking results, including Analysys Mason's recommendations, and presents its draft position on the MTAS price having regard to the outcome of the benchmarking exercise.

4.2.1. Summary of benchmarking results

Analysys Mason presents and discusses the benchmarking results in chapter 5 of its Draft Benchmark Report. The ACCC has reproduced the figures from Analysys Mason's Draft Benchmark Report showing the MTAS costs from each of the benchmark models after making the Australian-specific adjustments, but before Australian spectrum costs are added.

¹¹⁴ Cost of debt not including separately itemised debt issuance cost

¹¹⁵ Telstra Submission, p. 2.

See Analysys Mason, Draft Benchmark Report, p. 25.

Figure 1: MTAS cost results for 2020–2024 (nominal AUD cents, not adjustments for PPP, excluding spectrum costs)¹¹⁷

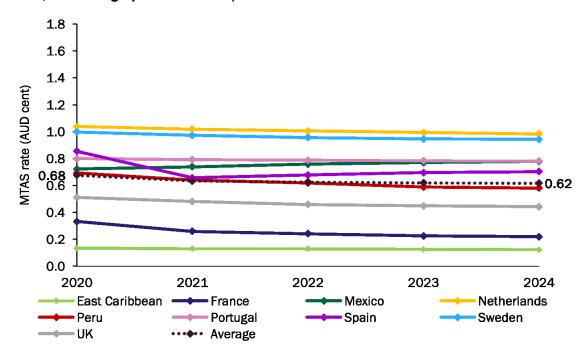
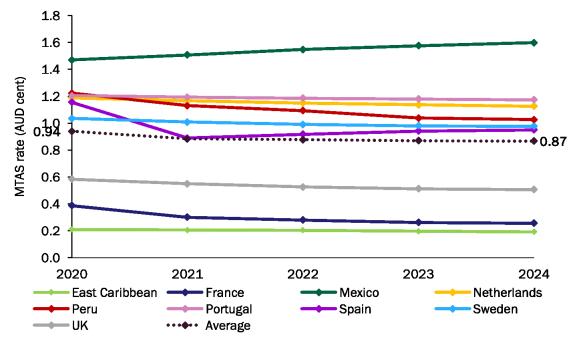


Figure 2: MTAS cost results from the benchmark models for 2020–2024 (nominal AUD cents, adjusted for PPP, excluding spectrum costs)¹¹⁸



As noted in section 4.1 above, the adjustment for PPP has had a material impact on the MTAS costs from some of the benchmark models and has resulted in an overall increase in the average MTAS cost across 2020 to 2024. For reasons discussed in Section 4.1, the

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Reproduced from Figure 21 in Analysys Mason, Draft Benchmark Report, p. 26.

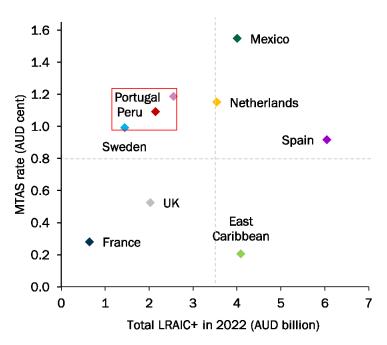
Reproduced from Figure 23 in Analysys Mason, Draft Benchmark Report, p. 28.

ACCC considers it is appropriate to make PPP adjustments to the MTAS cost outputs and has therefore focused on the results in Figure 2.

Analysys Mason notes that after the PPP adjustments, there is a definite cluster of MTAS costs from five benchmark models around the range of 1.0 to 1.2 cents (Netherlands, Peru, Portugal, Spain and Sweden). MTAS costs from UK, France and East Caribbean models are significantly below the clustered results while the MTAS costs from the Mexico model are significantly above the clustered results. Analysys Mason observes that the Mexico results increase over time due to its assumptions about inflation. Moreover, the high MTAS costs from the Mexico model are likely to be partly due to higher unit cost assumption for fibre transmission which is then exacerbated by the PPP adjustments. 120

Analysys Mason then investigated whether the differences in the MTAS cost results are due to differences in overall cost base or internal cost allocation mechanisms, or both, For example, if two models have similar economic cost base but different internal cost allocation mechanism, the results from the models are still likely to differ. Analysys Mason presents a scatter plot of total economic cost and the MTAS cost results for 2022, which is reproduced in Figure 3 below.

Figure 3: Total economic cost versus MTAS rate per minute in 2023, including PPP adjustment¹²¹



Analysys Mason notes that the Portugal, Peru and Sweden models form a cluster as their results are similar in both the total economic cost base and the resulting MTAS rate. Analysys Mason then notes that compared to these three models, the other models appear to differ in the level of total economic cost base or internal cost allocation mechanism or both, and that has likely led to differences in the MTAS cost results. For example, Analysys Mason notes that UK model appears to be generating a similar level of economic cost base

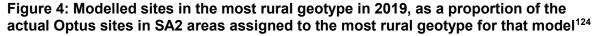
¹¹⁹ Analysys Mason, Draft Benchmark Report, p. 28.

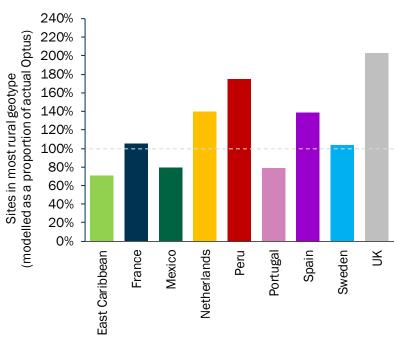
By comparing Figures 1 and 2, it can be seen that the PPP adjustment increases the Mexico results significantly.

Reproduced from Figure 25 in Analysys Mason, Draft Benchmark Report, p. 29.

as the clustered models, and its much lower MTAS cost result is likely to be primarily due to its rather different approaches to both economic depreciation and cost allocation. 122

Analysys Mason has also compared the number of mobile sites generated by each of the benchmark models after the Australia-specific adjustments are made with actual numbers deployed in Australian networks. Analysys Mason has considered the number of sites deployed in Optus' and VHA's networks for this comparison as the number of Telstra's sites would reflect a level of network coverage that is significantly larger than assumed in the benchmarking exercise. To show this comparison, Analysys Mason presents the number of sites generated in the most rural geotypes in each of the benchmark models as a proportion of actual number of Optus' sites in these areas. This is reproduced in Figure 4 below.





Analysys Mason observes that four of the models (Netherlands, Peru, Spain and UK) appear to generate significantly higher number of sites in the most rural geotype compared to actual sites. Analysys Mason investigated the possible causes for this and found that it is due to the specific network design assumptions used in these models, such as the low assumed traffic capacity of eNodeBs or site sharing inputs, or how the geotyping definition interacts with the Australian SA2 areas. Analysys Mason notes that across the most rural geotypes in the benchmark models, the average ratio of generated sites as a proportion of actual Optus sites is 121 per cent, Based on this, Analysys Mason considers that assumed cell coverage radii in the most rural geotype (currently assumed to be 15 km) should not be reduced further as it would cause this average ratio to be increased further.

¹²² Analysys Mason, Draft Benchmark Report, pp. 29–30.

¹²³ Analysys Mason, Draft Benchmark Report, p. C-4.

Reproduced from Figure 26 in Analysys Mason, Draft Benchmark Report, p. 30.

¹²⁵ Analysys Mason, Draft Benchmark Report, p. 31.

¹²⁶ Analysys Mason, Draft Benchmark Report, p. 32.

Analysys Mason also calculated the ratio of model generated sites over Optus' actual sites across other geotypes and in total. These two comparisons show the Netherlands and Spain models also generate significantly higher number of sites compared to actual sites across other geotypes and in total.¹²⁷

Having regard to all these comparisons, Analysys Mason considers there is evidence to exclude the Netherlands and Spain models on the basis that they overstate the number of sites required in both the most rural geotype and also across all other geotypes.¹²⁸

Finally Analysys Mason conducted sensitivity analysis on the following inputs or adjustments made to the benchmark models to test the impact of changes in these inputs to the MTAS cost results:

- implementing the PPP adjustment
- increasing the nominal-terms WACC to 5.07 per cent and real-terms WACC to 2.62 per cent¹²⁹
- reducing the spectrum allocation by 2×5 MHz of 1800 MHz spectrum (used for 2G and 4G) and 2×10 MHz of 2500 MHz spectrum
- reducing the market share to 25%
- assuming a greater level of network coverage for the operator (closer to that of Telstra)
- assuming a mix of radio site backhaul (assumed to be 25% microwave, 25% leased lines and 50% fibre backhaul).

The results of the sensitivity analysis are reproduced in the table below.

Table 8: Results of sensitivity tests (using the 2022 unit costs of MTAS, expressed in nominal AUD cents with no PPP adjustment)¹³⁰

| Country | Unadjusted MTAS cost in 2022 | PPP adjustment | WACC | Reduced spectrum allocation | 25% market share | Increased coverage | Adjusted mix of backhaul |
|-------------------|------------------------------------|-------------------|-------|-----------------------------|------------------------|--------------------|--------------------------------|
| East Caribbean | 0.13 | +57% | +0.2% | -25% | +12% | +19% | _ |
| France | 0.24 | +17% | +0.5% | +7% | +16% | +16% | +0.1% |
| Mexico | 0.76 | +115% | +0.0% | _ | +8% | +4% | +13% |
| Netherlands | 1.01 | +12% | +0.1% | +3% | +8% | +11% | -0.6% |
| Peru | 0.62 | +71% | +0.2% | -2% | +10% | +11% | +0.1% |
| Portugal | 0.81 | +48% | +0.1% | +0.0% | +7% | -0.2% | +1% |
| Spain | 0.68 | +48% | +0.3% | +20% | +34% | +12% | +7% |
| Sweden | 0.96 | +2% | +0.1% | +10% | +4% | +2% | -0.4% |
| UK | 0.46 | +13% | +0.7% | +1% | +16% | -2% | -0.0% |

¹²⁷ Analysys Mason, Draft Benchmark Report, p. 32.

¹²⁸ Analysys Mason, Draft Benchmark Report, p. 32.

The ACCC calculated the alternative WACC values for sensitivity testing. These values are based on equity beta and gearing estimates using a subset of comparable firms that have over 90 per cent of their total revenue derived from mobile activities. See Appendix C for details.

Reproduced from Figure 30 in Analysys Mason, Draft Benchmark Report, p. 33. Where +0.0% or -0.0% are indicated, it suggests minimal change in the outputs in the indicated direction.

The ACCC has discussed the results of the sensitivity analysis in relation to individual adjustment factors in section 4.1 and in Appendix C. As noted in those sections, the ACCC considers that it would be appropriate to include PPP adjustments in converting the cost outputs to Australian and to consider making an adjustment for the mix of backhaul after the MNOs' information is made available. However, the ACCC does not consider there are grounds for adopting the alternative WACC values, the reduced spectrum allocation and the increased network coverage for the purpose of making the adjustments in the benchmark models.

Analysys Mason observes that the benchmark models usually responded as expected in response to the changes in input. Some models responded in the opposite direction in relation to changes to some of the inputs. Analysys Mason has examined and discussed what specific modelling assumptions may have contributed to these.¹³¹

Analysys Mason identified the East Caribbean and Mexico models as the two models that do not respond in the expected manner in the sensitivity test where spectrum allocations are reduced. Specifically, the Mexico models do not respond at all and the results in the East Caribbean model significantly reduce. Analysys Mason considers while some of the sensitivity test results indicate changes that are either smaller than, or in the opposite direction to, what would be expected, based on their inspection these are due to specificities in the network design. Analysys Mason considers that in the Mexico and East Caribbean models, their response to the reduction in spectrum allocation is a more material cause for concern. For these reasons, Analysys Mason considers that less weight should be attributed to the results from the East Caribbean and Mexico models.¹³²

4.2.2. Analysys Mason recommendation

Based on the results of the international benchmarking exercise, Analysys Mason recommends that the ACCC adopts the following approach in considering the appropriate MTAS cost for Australia.

- PPP adjustments should be made to the MTAS cost outputs.
- Less weight should be given to results from the East Caribbean and Mexico models
 on the basis that they do not respond in the expected manner to the sensitivity
 analysis where spectrum allocations are reduced.
- The results from the Netherlands and Spain models should also be treated with caution as they significantly overstate the number of mobile sites required in the most rural geotypes and in total across all other geotypes.
- The remaining models (UK, France, Sweden, Peru and Portugal) all merit consideration. However, the greatest weight should be given to the results of Sweden, Peru and Portugal. This is because given common inputs, the three models all calculate comparable total economic costs for network deployment and allocate a similar proportion of costs to voice services. The UK model could also be included in this group on the basis that its total modelled economic cost is comparable to Portugal, Peru and Sweden, and its lower MTAS costs is primarily due to its allocation of costs between modelled services. ¹³³

The averages of the MTAS costs using different subsets of the benchmark models are reproduced in Table 9 below.

¹³¹ Analysys Mason, Draft Benchmark Report, p. 33.

¹³² Analysys Mason, Draft Benchmark Report, p. 34.

¹³³ Analysys Mason, Draft Benchmark Report, p. 34.

Table 9: Average costs per minute for the MTAS across different subsets of the models (nominal AUD cents, including PPP adjustment)¹³⁴

| Subset for averaging purposes (number of models) | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|------|------|------|------|------|
| All (9) | 0.94 | 0.88 | 0.88 | 0.87 | 0.87 |
| All except East Caribbean and Mexico (7) | 0.97 | 0.89 | 0.88 | 0.86 | 0.86 |
| Also exclude Netherlands and Spain (5) | 0.89 | 0.84 | 0.82 | 0.79 | 0.79 |
| Portugal, Peru, Sweden and UK (4) | 1.01 | 0.97 | 0.95 | 0.93 | 0.92 |
| Portugal, Peru and Sweden only (3) | 1.15 | 1.11 | 1.09 | 1.07 | 1.06 |

Analysys Mason has separately calculated the spectrum costs for Australia which will need to be added onto the MTAS cost outputs above. The unit spectrum costs for 2020 to 2024 are provided in Table 10 below.

Table 10: Per unit contribution from Australian spectrum costs¹³⁵

| Years | 2020 | 2021 | 2022 | 2023 | 2024 |
|------------------------------|------|------|------|------|------|
| Spectrum cost (cents/minute) | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 |

4.2.3. ACCC draft views on benchmarking results

The ACCC has considered Analysys Mason's Draft Benchmark Report, including its discussion of the benchmarking results and recommendation. The ACCC provides its draft views on the benchmarking results below.

At the outset, the ACCC notes that based on the PPP-adjusted MTAS costs and including Australian spectrum costs, all benchmark models with the exception of the Mexico model, generate MTAS costs that are well below the current MTAS price of 1.7 cents. The ACCC considers that unless overwhelming weight is to be attributed to the results from the Mexico model (which, based on Analysys Mason's recommendation, is not justified), the benchmarking results provide evidence that the cost of providing the MTAS has materially declined since the last FAD.

The ACCC considers that a key question when assessing the benchmarking results in order to determine the appropriate MTAS price, is the extent to which the ACCC should rely on the cost outputs of each of the benchmark countries.

Analysys Mason has gone through three exercises which formed the basis of its recommendations as to the weight that should be given to the results of each benchmark model:

- comparing the total economic cost calculated in each model with the MTAS cost
- comparing the number of sites generated in each model with actual sites deployed by Optus, and
- sensitivity testing of a number of inputs and assumptions.

The ACCC discusses its draft views on the findings of these three exercises below.

Reproduced from Figure 31 in Analysys Mason, Draft Benchmark Report, p. 34.

The calculations of spectrum costs are detailed in the Excel file entitled 'Inputs and Outputs of MTAS benchmark', available at: https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/draft-report.

Comparing total economic cost with MTAS cost

The ACCC considers that comparing the total economic cost with the MTAS cost output in each benchmark model is a useful exercise to undertake as it shows the underlining reasons for the differences in the MTAS costs produced by the benchmark models. The ACCC also considers that this exercise provides valuable insights on cost modelling exercises generally.

The comparison shows that three of the benchmark models, specifically Portugal, Peru and Sweden, are similar models which generate similar total economic costs and appear to allocate a comparable proportion of cost to voice services. Other models are different either in the level of total economic costs or internal cost allocation mechanisms, or both. The ACCC understands that these differences reflect different modelling inputs and design, which cannot be adjusted or controlled for in a benchmarking exercise.

The ACCC considers that by its very nature, the benchmarking exercise relies on different cost models that have been developed by various regulators and expert consultants. The ACCC does not seek to examine or validate specific modelling assumptions and designs used in each benchmark model. The ACCC considers that for the purpose of this benchmarking exercise, the more important question is whether the adjustments reflect Australian circumstances and can be properly applied in the model and whether the cost output responds in the expected manner. If so, the ACCC's view is that there is insufficient ground to exclude the relevant model from consideration, even though it produces cost estimates that appear materially higher or lower than others due to its specific modelling inputs and designs.

As such, the ACCC's draft view is that the findings of this exercise do not in themselves justify excluding any of the models from consideration. However, on the basis that the models of Sweden, Portugal and Peru produce clustered results both in terms of the MTAS costs and total economic cost, it may be appropriate to give the greatest weight to these three models compared to the others (which are not otherwise excluded from consideration on other grounds).

Comparing model generated sites and actual sites

The ACCC considers that it is a necessary and important step to examine the number of sites generated by the models and compare them with the actual number of sites deployed in Australia. This is because mobile sites constitute a significant cost in deploying a mobile network and some of the key adjustments, such as geography and spectrum holdings have material impact on the number of sites generated in the models.

Analysys Mason's comparison of site numbers shows that while four of the models appear to generate significantly higher number of sites in the most rural geotype when compared to actual site numbers, only two of these models (Netherlands and Spain) consistently generate excessively high numbers of sites in total across geotypes. Analysys Mason considers that this provides a basis for excluding these two models from consideration.

The ACCC understands that in a cost modelling exercise, the model is usually calibrated so that the number of sites generated by the model reflect the number deployed in practice. This is not possible in the current benchmarking exercise as it would not be feasible to adjust all relevant inputs in nine models to achieve a consistent level of modelled sites. As such, while the ACCC agrees that the number of sites deployed by the MNOs in practice provides a useful sense check on the number generated by the model, it would not be reasonable to expect that all benchmark models would generate a consistent level of sites.

The ACCC notes Analysys Mason's observation that most of the benchmark models, except for the Netherlands and Spain, generate numbers of sites that are within the range of the numbers actually deployed by Optus and VHA. Analysys Mason notes that, given the network coverage assumed in the benchmark exercise is comparable to Optus', it did not compare the model generated sites to Telstra's actual site number as Telstra's site count corresponds to a much higher level of network coverage.¹³⁶

The ACCC has examined the relative site numbers of the three MNOs and found that even if Telstra's site count is considered to be a ceiling for a reasonable range of sites that should be generated by the benchmark models, the numbers of modelled sites from the Netherlands and Spain model still appear excessive. On this basis, the ACCC agrees with Analysys Mason's finding that the Netherlands and Spain models appear to overstate the number of sites required to deploy a mobile network in Australia and that this provides a basis for excluding these two models from consideration.

Sensitivity testing

The ACCC considers that the sensitivity testing conducted by Analysys Mason on a number of inputs and assumptions is useful in two ways. First, it provides clarify on the impact of certain inputs and assumptions on the cost outputs. Second, it identifies models which do not respond in the expected manner to changes in certain inputs which warrant further investigation.

In this case, Analysys Mason found that the East Caribbean and Mexico models do not respond in the expected manner to sensitivity test where spectrum allocations are reduced, which Analysys Mason considers to be a material cause for concern.

In addition, the ACCC notes that the East Caribbean model does not respond to the adjustment for the mix of backhaul solutions deployed due to the specific manner in which backhaul solutions are generated within the model. 137

The ACCC considers that as the cost outputs from the East Caribbean and Mexico models do not respond in the expected manner to changes in spectrum holdings and/or mix of backhaul solutions, this gives rise to concern that the adjustments that the ACCC is seeking to make in these two models may not be properly applied. The ACCC's draft view is that as the adjustment process is integral to the benchmarking exercise, the inability to apply some of the adjustments properly would mean that these two models cannot produce reliable outputs which are reflective of the cost of the MTAS in Australia.

ACCC draft view on estimated MTAS cost

For reasons discussed above, the ACCC's draft view is that there is evidence that the cost results from the East Caribbean, Mexico, Netherlands and Spanish models are not reliable and should be excluded from consideration. This is because:

 The East Caribbean and Mexican models do not respond as expected to one of more changes in the adjustments or inputs, which suggests that the required adjustments may not be properly applied in the models to have a corresponding effect on the cost outputs. These two models produce the highest and lowest cost outputs in the benchmark set.

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¹³⁶ Analysys Mason, Draft Benchmark Report, p. C-4.

¹³⁷ Analysys Mason, Draft Benchmark Report, p. 33.

As discussed earlier, while the adjustment for backhaul mix is not implemented in the basecase for this Draft Report, the ACCC's intention is to implement this adjustment once relevant information from the MNOs are available.

• The models from the Netherlands and Spain overstate the number of sites required to deploy a mobile network in Australia so the network deployed after making the relevant adjustments in the model is not broadly reflective of a network deployed in Australia. As a matter of principle, the ACCC's draft view is that these two models should not be given consideration, even though they produce outputs that are within the closely clustered results between the 1.0 to 1.2 cents range.

The ACCC considers that a more difficult question is the extent to which the ACCC should rely on the results from each of the remaining five models (UK, France, Sweden, Peru and Portugal). The ACCC understands that as a starting point, all these models could merit consideration. However, Analysys Mason recommends different weight be given to these models, with the greatest weight to be given to the group of Sweden, Peru and Portugal, followed by UK, and lastly France.

The ACCC understands that the recommendation to attribute different weight is based on whether the models are considered 'outliers'. That is, the Sweden, Peru and Portugal models are relatively similar in that given a set of common inputs, they calculate comparable total economic cost and allocate a similar proportion of costs to voice services. As such, the cost results from these three models are also comparable and form a relatively close cluster. This provides a reasonable ground for placing the greatest weight on the cost outputs from these models.

On the other hand, the UK model is somewhat different. While it is similar in terms of the calculation of the total economic cost, it has a different cost allocation mechanism which has resulted in its cost output being significantly lower compared to those of Sweden, Peru and Portugal.

The French model is considered to be a low-cost model overall, i.e. low total economic base and low cost output. This would suggest, however, that the low cost output, is primarily the result of France having a lower total economic cost base. On the other hand, it may still be allocating a similar level of overall costs to voice services compared to the models of Sweden, Peru and Portugal.

In other words, there is an indication that the UK and French models generate relatively low cost outputs, i.e. 'outliers' in terms of the MTAS unit costs, due to different reasons. These reasons relate to specific modelling assumptions and designs, which, as noted earlier, are matters that the ACCC does not consider necessary or appropriate to examine in a benchmarking exercise. For this reason, the ACCC's draft view is that there is no sufficient basis, in principle, for the ACCC to place different weight on the UK and French models respectively, or to exclude either from consideration altogether. In other words, the ACCC considers that some weight should be given to both the UK and France models equally.

Having regard to all of the above considerations, the ACCC's draft view, is that based on the outcome of the benchmarking exercise, a reasonable estimate of the MTAS cost in Australia lies within the range of average costs resulting from two subsets of the benchmark models. These are set out in Table 11 below.

Table 11: Estimated MTAS cost range for 2020 to 2024 (nominal AUD cent, including spectrum costs)

| Years | 2020 | 2021 | 2022 | 2023 | 2024 |
|-------------------------------|------|------|------|------|------|
| Upper bound | | | | | |
| (Sweden, Peru and Portugal) | 1.28 | 1.24 | 1.22 | 1.20 | 1.20 |
| Lower bound | | | | | |
| (UK, France, Sweden, Peru and | | | | | |
| Portugal) | 1.02 | 0.97 | 0.95 | 0.92 | 0.93 |

4.3. Draft position on MTAS price

The ACCC considers that the estimated MTAS cost range in Table 11 above provides a reasonable starting point for determining the MTAS price to apply for the FAD period. The ACCC's draft position is that the new MTAS price should lie within the estimated cost range, although the ACCC acknowledges that the exact price point to pick would require a degree of regulatory judgment having considered all relevant circumstances.

The ACCC considers that picking a relatively high price point within the range would better protect the legitimate interests of the access seekers and minimise the risk of any cost under-recovery. On the other hand, picking a relatively low price point better promotes the interests of access seekers and may promote competition in downstream markets to a larger extent. In normal circumstances, the ACCC would consider that the midpoint of the range (50th percentile) would be appropriate as it balances the different interests that are likely to be affected by the MTAS price.

In this case, the ACCC considers that there are additional considerations which may warrant a more conservative approach in adopting a price point that lies above the midpoint of the estimated cost range.

Specifically, the ACCC considers that there are two forward-looking matters which are relevant in the ACCC's decision as to the price point that should be the regulated MTAS price in this inquiry. First, as discussed earlier, the ACCC is intending to consider whether to conduct a holistic review of the MTAS and FTAS prior to the expiry of the current FTAS and MTAS declaration, which will examine, amongst other matters, issues of whether a common pricing methodology should apply to both services and whether there are pricing relativities between the MTAS and the fixed voice interconnection services. Second, the ACCC is likely to explore the possibility of developing a cost model once 5G deployment is more advanced to inform that review, which will involve a more accurate and robust assessment of the cost of providing the MTAS in Australia. Both of these matters have implications for how the MTAS will likely be priced in the future. In the interim, the ACCC considers that a conservative approach to setting the current MTAS price would be appropriate. For the same reasons, the ACCC considers that it would be appropriate to adopt a flat-rate MTAS price that reflects the current cost of the MTAS for the duration of the FAD, instead of seeking to incorporate the estimated incremental cost reductions across the years 2021 to 2024.

Having regard to all the above considerations, the ACCC's draft position is to adopt the 75th percentile of the estimated cost range for 2020 as the new MTAS price, which is 1.22 cents per minute.¹³⁹ The ACCC notes that this price represents around 28 per cent reduction from the current MTAS price of 1.7 cents.

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This MTAS price will be subject to revision pending the adjustment for the mix of backhaul after the relevant information for the adjustment is made available.

5. Non-price terms and conditions

This chapter provides the ACCC's draft position on the NPTCs, if any, that should be included in the MTAS FAD.

5.1. ACCC views in Position and Consultation Paper

In the Position and Consultation Paper, the ACCC expressed its preliminary view that it would be appropriate to continue to include the NPTCs in the MTAS FAD as they appear to provide a useful set of terms and conditions for commercial negotiation for both access seekers and access providers of the MTAS as well as other service providers such as the MVNOs. The ACCC also noted that it would review the NPTCs to ensure that where appropriate they are consistent with the NPTCs in the most recent FADs of other declared services.

5.2. Submissions

Telstra agreed with the ACCC's position that the current NPTCs continue to be appropriate and provide an adequate fall-back set of terms. Telstra noted that there had been no substantive disputes relating to the NPTCs since the previous FAD was issued and therefore there is no reason to make changes to the NPTCS for the MTAS FAD.¹⁴⁰

No other stakeholders commented on this issue.

5.3. ACCC draft position

The ACCC considers that it is appropriate to continue to include NPTCs in the new MTAS FAD for the same reasons expressed in the Position and Consultation Paper.

For the purposes of the draft report, the ACCC considers that the NPTCs in the current MTAS FAD should be retained in the new MTAS FAD, which include terms relating to the following:

- billing and notification,
- creditworthiness and security,
- · general dispute resolution procedures,
- · confidentiality,
- suspension and termination,¹⁴¹
- liability and indemnity,
- communications with end-users,
- network modernisation and upgrade notice period.
- · changes to operating manuals, and
- recourse to regulated terms.

The current NPTCs are included in the draft FAD instrument at **Appendix D**.

¹⁴⁰ Telstra Submission, p. 1.

The ACCC has made minor drafting changes to subclause 7.10(b) to be consistent with the wording adopted in the most recent fixed line services FADs and the draft DTCS FAD.

6. Other issues

This chapter discusses the ACCC"s draft positions on the following issues:

- The duration of the MTAS FAD; and
- When the new MTAS FAD should come into force.

6.1. Duration of the FAD

In the Position and Consultation Paper the ACCC expressed the view that the new MTAS FAD should expire at the same time as the current MTAS declaration, on 30 June 2024. The ACCC considered that a mid-term review of the MTAS price to take into account the rollout of 5G is not appropriate as any such review would not be straightforward. The ACCC also considers that a mid-term review will not be necessary in light of the ACCC's intention to consider whether to conduct a holistic review of the MTAS and FTAS in the near future.

The ACCC received no submissions on this issue in response to the Position and Consultation Paper.

Accordingly, the ACCC remains the view that the new MTAS FAD should expire on 30 June 2024, aligned with the expiry of the current MTAS declaration.

6.2. Commencement of the FAD

In determining when the new MTAS FAD should come into force, the ACCC considers it appropriate to take into account a number of factors. On the one hand, access seekers and downstream end-users will benefit from a timely implementation of an efficient price. On the other hand, access providers and access seekers may need some time to renegotiate commercial arrangements and implement the new MTAS price.

The ACCC considers that in the current environment, where there are likely significant disruptions to business activities resulting from the outbreak of novel coronavirus (COVID-19) in the short term, it would be appropriate to provide additional time to industry before the new MTAS price comes into force. The ACCC's draft view is that the commencement date of 1 January 2021 is likely appropriate. However, the ACCC will consider stakeholders' views on whether a longer timeframe is required for industry to implement the new MTAS price.

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Appendix A Legislative framework for final access determinations

This section sets out the relevant legislative framework in relation to final access determinations (FADs).

Content of final access determinations

Section 152BC of the *Competition and Consumer Act 2010* (CCA) specifies what a FAD may contain. It includes, among other things, terms and conditions on which a carrier or carriage service provider (CSP) is to comply with the standard access obligations (SAOs) and terms and conditions of access to a declared service.

An FAD may make different provisions with respect to different access providers or access seekers.

Fixed principles provisions

An FAD may contain a fixed principles provision, which allows a provision in a FAD to have an expiry date after the expiry date of the FAD. 142 Such a provision allows the ACCC to 'lockin' a term so that it would be consistent across consecutive FADs.

Varying final access determinations

Section 152BCN allows the ACCC to vary or revoke an FAD, provided that certain procedures are followed.

A fixed principles provision cannot be varied or removed unless the FAD sets out the circumstances in which the provision can be varied or removed, and those circumstances are present.¹⁴³

Commencement and expiry provisions

Section 152BCF of the CCA sets out the commencement and expiry rules for FADs.

A FAD comes into force on the day specified in the FAD as the day on which the FAD is to come into force.

A FAD must have an expiry date, which should align with the expiry of the declaration for that service unless there are circumstances that warrant a different expiry date.¹⁴⁴

Matters to consider when making FADs

The ACCC must have regard to the matters specified in subsection 152BCA(1) of the CCA when making an FAD. These matters are:

 whether the determination will promote the LTIE of carriage services or services supplied by means of carriage services,

¹⁴² Section 152BCD of the CCA.

¹⁴³ Subsection 152BCN(4) of the CCA.

¹⁴⁴ Subsection 152BCF(6) of the CCA.

- the legitimate business interests of a carrier or CSP who supplies, or is capable of supplying, the declared service, and the carrier's or provider's investment in facilities used to supply the declared service,
- the interests of all persons who have rights to use the declared service,
- the direct costs of providing access to the declared service,
- the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else,
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility, and
- the economically efficient operation of a carriage service, a telecommunications network or a facility.

Subsection 152BCA(2) sets out other matters that the ACCC may take into account in making FADs in certain circumstances, whilesubsection 152BCA(3) allows the ACCC to take into account any other matters that it thinks are relevant.

The ACCC's views on how the matters in section 152BCA should be interpreted for the FAD process are set out below.

1. Promoting the LTIE (paragraph 152BCA(1)(a))

The first matter for the ACCC to consider when making an FAD is 'whether the determination will promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services'.

The ACCC has published a guideline explaining what it understands by the phrase 'long-term interests of end-users' in the context of its declaration responsibilities. ¹⁴⁵ This approach to the LTIE was also used by the ACCC in making determinations in access disputes. The ACCC considers that the same interpretation is appropriate for making FADs for the mobile terminating access service (MTAS).

In the ACCC's view, particular terms and conditions promote the interests of end users if they are likely to contribute towards the provision of:

- goods and services at lower prices
- goods and services of a high quality, and/or
- a greater diversity of goods and services.¹⁴⁶

The ACCC also notes that the Australian Competition Tribunal (the Tribunal) has offered guidance in its interpretation of the phrase 'long-term interests of end-users' (in the context of access to subscription television services):

Having regard to the legislation, as well as the guidance provided by the Explanatory Memorandum, it is necessary to take the following matters into account when applying the touchstone – the long-term interests of end-users:

* End-users: "end-users" include actual and potential [users of the service]...

ACCC, Telecommunications services – declaration provisions: a guide to the declaration provisions of Part XIC of the Trade Practices Act, July 1999, in particular pp. 31–38.

¹⁴⁶ ibid., p. 33.

* Interests: the interests of the end-users lie in obtaining lower prices (than would otherwise be the case), increased quality of service and increased diversity and scope in product offerings. ...[T]his would include access to innovations ... in a quicker timeframe than would otherwise be the case ...

* Long-term: the long-term will be the period over which the full effects of the ... decision will be felt. This means some years, being sufficient time for all players (being existing and potential competitors at the various functional stages of the ... industry) to adjust to the outcome, make investment decisions and implement growth – as well as entry and/or exit – strategies.¹⁴⁷

To consider the likely impact of particular terms and conditions on the LTIE, the CCA requires the ACCC to have regard to whether the terms and conditions are likely to result in:

- promoting competition in markets for carriage services and services supplied by means of carriage services
- achieving any-to-any connectivity, and
- encouraging the economically efficient use of, and economically efficient investment in:
 - the infrastructure by which listed carriage services are supplied, and
 - any other infrastructure by which listed services are, or are likely to become, capable of being supplied.¹⁴⁸

Promoting competition

In assessing whether particular terms and conditions will promote competition, the ACCC analyses the relevant markets in which the declared services are supplied (retail and wholesale) and considers whether the terms set in those markets remove obstacles to endusers gaining access to telephony and broadband services.¹⁴⁹

Obstacles to accessing these services include the price, quality and availability of the services and the ability of competing providers to provide telephony and broadband services.

The ACCC is not required to precisely define the scope of the relevant markets in which the declared services are supplied. The ACCC considers that it is sufficient to broadly identify the scope of the relevant markets likely to be affected by the ACCC's regulatory decisions.

The ACCC's view is that the relevant markets for the purpose of making FADs for the declared fixed line services are:

- the markets for wholesale mobile voice terminations services on each MNO's networks
- the downstream market for retail mobile services
- the downstream market for retail fixed voice services

Any-to-any connectivity

The CCA gives guidance on how the objective of any-to-any connectivity is achieved. It is achieved only if each end-user who is supplied with a carriage service that involves

¹⁴⁷ Seven Network Limited (No 4) [2004] ACompT 11 at [120].

¹⁴⁸ Subsection 152AB(2) of the CCA.

Subsection 152AB(4) of the CCA. This approach is consistent with the approach adopted by the Tribunal in Telstra Corporations Limited (No 3) [2007] A CompT 3 at [92]; Telstra Corporation Limited [2006] A CompT at [97], [149].

communication between end-users is able to communicate, by means of that service, with each other end-user who is supplied with the same service or a similar service. This must be the case whether or not the end-users are connected to the same telecommunications network. ¹⁵⁰

The ACCC considers that this matter is relevant to ensuring that the terms and conditions contained in FADs do not create obstacles for the achievement of any to any connectivity.

Efficient use of and investment in infrastructure

In determining the extent to which terms and conditions are likely to encourage the economically efficient use of and investment in infrastructure, the ACCC must have regard to:

- whether it is, or is likely to become, technically feasible for the services to be supplied and charged for, having regard to:
 - the technology that is in use, available or likely to become available
 - whether the costs involved in supplying and charging for, the services are reasonable or likely to become reasonable, and
 - the effects or likely effects that supplying and charging for the services would have on the operation or performance of telecommunications networks
- the legitimate commercial interests of the supplier or suppliers of the services, including the ability of the supplier or suppliers to exploit economies of scale and scope
- incentives for investment in the infrastructure by which services are supplied; and any
 other infrastructure (for example, the NBN) by which services are, or are likely to
 become, capable of being supplied, and
- the risks involved in making the investment.¹⁵¹

The objective of encouraging the 'economically efficient use of and economically efficient investment in ... infrastructure' requires an understanding of the concept of economic efficiency. Economic efficiency consists of three components:

- productive efficiency this is achieved where individual firms produce the goods and services that they offer at least cost
- allocative efficiency this is achieved where the prices of resources reflect their underlying costs so that resources are then allocated to their highest valued uses (i.e., those that provide the greatest benefit relative to costs), and
- dynamic efficiency this reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

On the issue of efficient investment, the Tribunal has stated that:

An access charge should be one that just allows an access provider to recover the costs of efficient investment in the infrastructure necessary to provide the declared service. 152

¹⁵⁰ Subsection 152AB(8) of the CCA.

¹⁵¹ Subsections 152AB(6) and (7A) of the CCA.

¹⁵² Telstra Corporation Ltd (No. 3) [2007] ACompT 3 at [159].

...efficient investment by both access providers and access seekers would be expected to be encouraged in circumstances where access charges were set to ensure recovery of the efficient costs of investment (inclusive of a normal return on investment) by the access provider in the infrastructure necessary to provide the declared service. 153

...access charges can create an incentive for access providers to seek productive and dynamic efficiencies if access charges are set having regard to the efficient costs of providing access to a declared service. 154

2. The legitimate business interests of a carrier or carriage service provider (paragraph 152BCA(1)(b))

The second matter requires the ACCC to consider 'the legitimate business interests' of the carrier or CSP when making an FAD.

In the context of access disputes, the ACCC considered that it was in the access provider's legitimate business interests to earn a normal commercial return on its investment. 155 The ACCC is of the view that the concept of 'legitimate business interests' in relation to FADs should be interpreted in a similar manner, consistent with the phrase 'legitimate commercial interests' used elsewhere in Part XIC of the CCA.

For completeness, the ACCC notes that it would be in the access provider's legitimate business interests to seek to recover its costs as well as a normal commercial return on investment having regard to the relevant risk involved. However, an access price should not be inflated to recover any profits the access provider (or any other party) may lose in a dependent market as a result of the provision of access. 156

The Tribunal has taken a similar view of the expression 'legitimate business interests'. 157

3. The interests of all persons who have a right to use the declared service (paragraph 152BCA(1))

The third matter requires the ACCC to consider 'the interests of all persons who have the right to use the service' when making an FAD.

The ACCC considers that this matter requires it to have regard to the interests of access seekers. The Tribunal has also taken this approach. 158 The access seekers' interests would not be served by higher access prices to declared services, as it would inhibit their ability to compete with the access provider in the provision of retail services. 159

People who have rights to currently use a declared service will generally use that service as an input to supply carriage services, or a service supplied by means of carriage service, to end-users.

ACCC, Resolution of telecommunications access disputes - a guide, March 2004 (revised) (Access Dispute Guidelines),

¹⁵³ ibid. at [164].

¹⁵⁴

¹⁵⁶ ACCC, Access pricing principles—telecommunications, July 1997 (1997 Access Pricing Principles), p. 9.

¹⁵⁷ Telstra Corporation Limited [2006] ACompT 4 at [89].

¹⁵⁸ Telstra Corporation Limited [2006] ACompT 4 at [91].

ibid.

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The ACCC considers that this class of persons has an interest in being able to compete for the custom of end-users on the basis of their relative merits. This could be prevented from occurring if terms and conditions of access favour one or more service providers over others, thereby distorting the competitive process. 160

However, the ACCC does not consider that this matter calls for consideration to be given to the interests of the users of these 'downstream' services. The interests of end users will already be considered under other matters.

4. The direct costs of providing access (paragraph 152BCA(1)(d))

The fourth matter requires the ACCC to consider 'the direct costs of providing access to the declared service' when making an FAD.

The ACCC considers that the direct costs of providing access to a declared service are those incurred (or caused) by the provision of access.

The ACCC interprets this matter, and the use of the term 'direct costs', as allowing consideration to be given to a contribution to indirect costs. This is consistent with the Tribunal's approach in an undertaking decision. 161 A contribution to indirect costs can also be supported by other matters.

However, the matter does not extend to compensation for loss of any 'monopoly profit' that occurs as a result of increased competition. 162

The ACCC also notes that the Tribunal (in another undertaking decision) considered the direct costs matter 'is concerned with ensuring that the costs of providing the service are recovered.'163 The Tribunal has also noted that the direct costs could conceivably be allocated (and hence recovered) in a number of ways and that adopting any of those approaches would be consistent with this matter. 164

5. The value to a person of extensions, or enhancement of capability, whose cost is borne by someone else (paragraph 152BCA(1)(e))

The fifth matter requires that the ACCC consider 'the value to a party of extensions, or enhancements of capability, whose cost is borne by someone else' when making an FAD.

In the 1997 Access Pricing Principles, the ACCC stated that this matter:

...requires that if an access seeker enhances the facility to provide the required services, the access provider should not attempt to recover for themselves any costs related to this enhancement. Equally, if the access provider must enhance the facility to provide the service, it is legitimate for the access provider to incorporate some proportion of the cost of doing so in the access price. 165

¹⁶¹ Application by Optus Mobile Pty Limited and Optus Networks Pty Limited [2006] ACompT 8 at [137].

¹⁶² See Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996, p. 44: [T]he 'direct' costs of providing access are intended to preclude arguments that the provider should be reimbursed by the third party seeking access for consequential costs which the provider may incur as a result of increased competition in an upstream or downstream market.

¹⁶³ Telstra Corporation Limited [2006] ACompT 4 at [92].

ibid. at [139].

ACCC, 1997 Access Pricing Principles, p. 11.

The ACCC considers that this application of paragraph 152BCA(1)(e) is relevant to making FADs.

6. Any necessary operational and technical requirements (paragraph 152BCA(1)(f))

The sixth matter requires the ACCC to consider 'the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility' when making an FAD.

The ACCC considers that this matter requires that terms of access should not compromise the safety or reliability of carriage services and associated networks or facilities, and that this has direct relevance when specifying technical requirements or standards to be followed.

The ACCC has previously stated in the context of model non-price terms and conditions, it is of the view that:

...this consideration supports the view that model terms and conditions should reflect the safe and reliable operation of a carriage service, telecommunications network or facility. For instance, the model non-price terms and conditions should not require work practices that would be likely to compromise safety or reliability. 166

The ACCC considers that these views will apply in relation to paragraph 152BCA(1)(f) for the making of FADs.

7. The economically efficient operation of a carriage service, a telecommunications network or a facility (paragraph 152BCA(1)(g))

The final matter of subsection 152BCA(1) requires the ACCC to consider 'the economically efficient operation of a carriage service, a telecommunications network facility or a facility' when making an FAD.

The ACCC noted in the Access Dispute Guidelines (in the context of arbitrations) that the phrase 'economically efficient operation' embodies the concept of economic efficiency as discussed earlier under the LTIE. That is, it calls for a consideration of productive, allocative and dynamic efficiency. The Access Dispute Guidelines also note that in the context of a determination, the ACCC may consider whether particular terms and conditions enable a carriage service, telecommunications network or facility to be operated efficiently.¹⁶⁷

Consistent with the approach adopted by the Tribunal, the ACCC considers that in applying this matter, it is relevant to consider the economically efficient operation of:

- retail services provided by access seekers using the access provider's services or by the access provider in competition with those access seekers, and
- the telecommunications networks and infrastructure used to supply these services.
- 8. Consideration of aspects of other eligible services (subsection 152BCA(2))

¹⁶⁸ Telstra Corporation Limited [2006] ACompT at [94]–[95].

ACCC, Final Determination – Model Non-price Terms and Conditions, November 2008, p. 8.

¹⁶⁷ ACCC, Access Dispute Guidelines, p. 57.

Subsection 152BCA(2) provides that, in making an AD that applies to a carrier or CSP who supplies, or is capable of supplying, the declared services, the ACCC may, if the carrier or provider supplies one or more eligible services, ¹⁶⁹ take into account:

- the characteristics of those other eligible services
- the costs associated with those other eligible services
- · the revenues associated with those other eligible services, and
- the demand for those other eligible services.

The Explanatory Memorandum states that this provision is intended to ensure that the ACCC, in making an AD, does not consider the declared service in isolation, but also considers other relevant services.¹⁷⁰ As an example, the Explanatory Memorandum states:

...when specifying the access price for a declared service which is supplied by an access provider over a particular network or facility, the ACCC can take into account not only the access provider's costs and revenues associated with the declared service, but also the costs and revenues associated with other services supplied over that network or facility.¹⁷¹

9. Consideration of other matters (subsection 152BCA(3))

This subsection states the ACCC may take into account any other matters that it thinks are relevant when making an FAD.

The ACCC is of the view that considerations of regulatory certainty and consistency will be important when setting the terms and conditions of the FADs.

The ACCC also considers that it should have regard to:

- its previous decisions in relation to the MTAS
- consultation documents and submissions in response to those documents
- information provided to the ACCC by stakeholders.

These considerations and documents do not limit the matters that the ACCC may have regard to when making the FAD for the MTAS.

¹⁶⁹ 'Eligible service' has the same meaning as in section 152AL of the CCA.

Explanatory Memorandum, Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010, p. 178.

¹⁷¹ ibid.

Appendix B Spectrum cost calculation for the 1800 MHz and 2 GHz bands

For the purpose of the benchmarking exercise, the ACCC has calculated the unit cost (\$/MHz paired/pop) for the 1800 MHz and 2 GHz bands spectrum by weighting the following:

- the unit cost of renewal fees of the spectrum as prescribed in the Radiocommunications (Spectrum Access Charges) Direction 2012¹⁷²
- the unit cost of the spectrum derived from auction prices achieved in the 2016 1800 MHz regional spectrum and the 2017 multiband residual lots auction.

Weighting applied to each of the unit costs specified above is calculated as the proportion of population covered by the spectrum renewed and auctioned respectively. As some of the lots renewed and auctioned cover the same geographic area and technically the same population, a weighted population coverage is calculated based on the proportion of total bandwidth that is renewed or auctioned in a geographic area.

The derivation of the weighted population coverage is shown in the tables below.

Table B.1: Weighted population coverage derivation for 1800 MHz band 173

| Licence area | Population covered* | Proportion of bandwidth auctioned (instead of renewed) (%) | Weighted population |
|--|---------------------|--|---------------------|
| Darwin | 126,476 | 80 | 101,181 |
| North Queensland (Cairns/Townsville) | 474,328 | 83 | 393,693 |
| Central Queensland (Mackay) | 362,120 | 80 | 289,696 |
| South Queensland (Maryborough) | 1,089,864 | 80 | 871,891 |
| Northern New South Wales (Grafton) | 500,478 | 80 | 400,383 |
| Western New South Wales (Dubbo) | 316,164 | 80 | 252,931 |
| Canberra (including south coast of New South Wales) | 671,691 | 80 | 537,353 |
| Southern New South Wales/Riverina (Albury) | 541,328 | 80 | 433,062 |
| Regional Victoria | 838,575 | 80 | 670,860 |
| Tasmania | 521,269 | 80 | 417,016 |

Available at: https://www.communications.gov.au/what-we-do/spectrum/spectrum-licences.

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¹⁷³ Estimated population data as in 2012 when the direction for licence renewal was made, which was used to calculate the amount of spectrum costs payable by the MNOS according to the Minister's direction 2012.

| Regional South Australia | 325,313 | 83 | 270,010 |
|-------------------------------|------------|--|-----------|
| Regional Western Australia | 282,104 | 80 | 225,683 |
| Adelaide | 1,348,457 | 7.7 | 103,831 |
| Sydney | 5,661,548 | 0 | 0 |
| Melbourne | 4,485,652 | 0 | 0 |
| Brisbane | 2,816,867 | 0 | 0 |
| Perth | 1,855,221 | 0 | 0 |
| Total population | 22,217,456 | Total weighted population | 4,967,589 |
| | | Percentage of population covered by auctioned spectrum | 22.36% |
| | | Percentage of population covered by renewed spectrum | 77.64% |

Table B.2: Weighted population coverage derivation for 2 GHz band 174

| Licence area | Population covered* | Proportion of bandwidth auctioned (instead of renewed) (%) ** | Weighted population |
|------------------|---------------------|---|---------------------|
| Sydney | 5,922,368 | 0 | 0 |
| Melbourne | 4,735,633 | 0 | 0 |
| Brisbane | 3,338,427 | 8.3 | 277,089 |
| Perth | 1,946,317 | 8.3 | 161,544 |
| Adelaide | 1,423,768 | 8.3 | 118,173 |
| Canberra | 467,539 | 25 | 116,885 |
| Darwin | 133,539 | 25 | 33,385 |
| Hobart | 271,219 | 25 | 67,805 |
| Regional East | 4,889,231 | 0 | 0 |
| Regional West | 351,135 | 0 | 0 |
| Total population | 23,479,176 | Total weighted population | 774,881 |
| | | Percentage of population covered by auctioned spectrum | 3.30% |
| | | Percentage of population covered by renewed spectrum | 96.7% |

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Population data as in 2016 when the licences were renewed, which was used to calculate the amount of spectrum costs payable by the MNOS according to the Minister's Direction in 2012.

Appendix C Derivation of WACC parameters

Market risk premium

The market risk premium (MRP) is the expected risk premium between a diversified market portfolio and the risk free asset. The MRP compensates an investor for the systemic risk of the market portfolio, and is a key driver of the required return on equity.

The ACCC has adopted a MRP at 6.1 per cent, consistent with recent ACCC regulatory decisions, as well as the AER's most recent Rate of Return Instrument. The ACCC considers that this is appropriate as by definition, the MRP is not an industry specific parameter but applies economy wide.

Value of imputation credits

Gamma (γ), represents the value of imputation credits attached to the dividends equity holders receive. Under a pre-tax WACC framework, gamma is a WACC parameter, and has the effect of lowering the effective rate of company taxation for the purposes of calculating a required cost of equity prior to taxation.

The ACCC has adopted the value of imputation credits as represented by gamma at 0.585, consistent with the AER's most recent Rate of Return Instrument. As gamma is estimated as an economy-wide parameter, the ACCC considers that applying the estimated during the AER's most recent Rate of Return process is appropriate.

Risk free rate

The risk free rate measures the return that an investor would expect from a hypothetical asset with no risk of default. The ACCC has estimated this rate at 1.02%, using the average yield on 10-year Commonwealth Government Securities (CGSs) over a twenty day period close to the date of this decision. 175

CGSs provide an appropriate proxy for the risk free rate due to the very low probability of the Commonwealth government defaulting on its debt. The ACCC considers that a 10-year maturity is also appropriate due to the Sharpe-Lintner Capital Asset Pricing Model's (CAPM) long-term horizon.

Cost of debt

The cost of debt is the return required by the market to lend to an entity of a given level of risk. The cost of debt reflects the creditworthiness of the borrower (indicated by the credit rating), and the term of the debt.

The ACCC has estimated a forward-looking cost of debt for a hypothetically efficient Australian mobile network operator at 2.39%, assuming a benchmark credit rating of A- and a term of ten years. This figure includes debt issuance costs of 0.07%.

For the purpose of estimating the cost of debt, the ACCC has synthesised a debt yield at an A- rating and a term of debt years by applying a weighted average to Bloomberg's BVAL 10-

¹⁷⁵ The ACCC has used the Bloomberg BVAL service to estimate the risk free rate and crosschecked against RBA estimates of CGS yields. The relevant BVAL curve is BV100127.

year Australian corporate bond yield curves for broad-A and broad-BBB. ¹⁷⁶ By weighting the average 2/3 A, and 1/3 BBB, an estimate can be taken of the cost of debt for a hypothetical entity rated A-.

This approach of weighting existing 'broad' curves to more accurately estimate the cost of debt at a specific credit rating mirrors the approach taken by the AER in determining the cost of debt for regulated energy businesses.¹⁷⁷

Credit rating

In determining the credit rating of a hypothetically efficient mobile operator, the ACCC considers a benchmarking approach is appropriate, given its clear empirical basis and reproducibility.

The ACCC has had regard to the credit ratings of a range of relevant telecommunications firms where available, including the Australian MNOs and parent entities of the Australian MNOs. The long-term Standard and Poor's credit ratings of these entities is set out in Table C.1 below.

Table C.1: Long term credit ratings of comparable entities

| Entity | Credit rating |
|---------------------|---------------|
| Telstra | A- |
| Optus | Α |
| Vodafone Group Plc. | BBB |
| CK Hutchison | Α |
| Singtel | A+ |
| Spark NZ | A- |
| Median | A/A- |

Source: Company annual reports.

The ACCC was unable to obtain a credit rating for Vodafone Hutchison Australia, and has relied on the credit ratings of its parent entities, Vodafone Group Plc.,CK Hutchison, and Spark New Zealand.¹⁷⁸

Although there is a mix of ownership structures amongst the comparator companies, the exact impact of ownership structure and parent entity involvement on individual credit ratings is unclear. The ACCC considers that it would not be appropriate to make arbitrary adjustments to observed credit ratings in order to reflect these differences.

Having regard to the above, the ACCC has determined that a conservative benchmark credit rating of A- is appropriate based on the observed credit ratings of relevant entities in Table D.1 above and the median rating of A/A-. The median rating of A/A- does not change with the exclusion of Singtel and Spark NZ, and does not change when taking into account only those firms (Telstra and Optus) that have been rated directly. The ACCC also notes that the

¹⁷⁶ The relevant BVAL curves are BVCSAE10 for broad-A, and BVCSAB10 for broad-BBB.

The AER target a BBB+ credit rating, and so apply a 1/3 broad-A and 2/3 broad-BBB to the curves used. A rating of A- can be considered one 'notch' above BBB+, requiring the use of 2/3 broad A and 1/3 broad-BBB. Note that a 50/50 weighting of broad-A and broad-BBB would approximate a credit rating halfway between A- and BBB+.

¹⁷⁸ Given the pending merger of VHA and TPG Telecom, the ACCC has also sought to obtain a credit rating for TPG, but no such credit rating was available.

median credit rating has not changed in three years, indicating a generally stable risk profile for the sector.

Debt term

The ACCC considers that ten years is an appropriate benchmark term for estimating the cost of debt. This reflects the relatively long-lived asset lives of telecommunications equipment, and the long-term investment cycles of mobile operators.

Ten years is also the term used in estimating the risk free rate for the purposes of estimating the return on equity.

Equity beta and gearing

The ACCC has estimated a cost of equity for a hypothetically efficient Australian mobile network operator at 5.67%. The ACCC has based its estimation on the Sharpe-Lintner CAPM, composed of the risk free rate and an equity risk premium (ERP), itself the product of the MRP and equity beta.

Equity beta

The ACCC estimates that an equity beta of 0.76 is representative of an efficient mobile operator within the OECD, and considers that it is appropriate to adopt this estimate for the purposes of estimating a WACC for a hypothetical mobile operator in Australia.¹⁷⁹

The ACCC has undertaken a benchmarking exercise for the purpose of estimating the equity beta and gearing. A benchmark set of 25 comparable firms has been assembled for this purpose. These firms are listed in Table C.2.

In considering which firms should be included in the comparable set, the ACCC has first sought to include firms that are mobile-only operators. However, given the nature of mature telecommunications markets, the ACCC found that partitioning participant firms into 'mobile-only' and 'integrated' categories is becoming increasingly difficult, as most mobile operators now also provide fixed line services. The ACCC note that this is the case in Australia and overseas.

The ACCC has investigated how other regulators determine comparable firms in estimating equity beta for the purpose of determining a WACC for mobile termination service. For example, Ofcom has previously used mobile-related revenue as a share of total revenue to measure a firm's exposure to risk in competitive mobile markets. Where this share is greater than 50%, a mobile operator can be assumed to be primarily a mobile provider, and a reasonable proxy for an efficient mobile network operator.

The ACCC considers that a similar approach could be adopted in the current inquiry. Instead of seeking to construct a comparable set comprising of 'mobile-only' operators, where the definition of 'mobile-only' has become increasingly untenable, it is more practical to include firms that are likely to be subject to significant exposure to mobile activities.

The ACCC notes that an equity beta of 0.76 is also comparable to those used by NRAs in Europe for mobile operators. See BEREC, BEREC Report Regulatory Accounting in Practice 2019, November 2019, 24--26, available here: https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8907-berec-report-regulatory-accounting-in-practice-2019.

See Nera Economic Consulting, Differences in the beta for fixed vs mobile telecommunications operators – For the Office of Communications (OFCOM), February 2017, available here: https://www.ofcom.org.uk/ data/assets/pdf file/0028/99640/Annex-21.pdf.

For the above reasons, the ACCC's draft view is that the selection criteria for the benchmark set of firms includes being a publicly-listed telecommunications firm in the OECD, with a market capitalisation of greater than AUD 500 million and a greater than 50 per cent exposure to the mobiles market in terms of revenue. Firms are excluded from this set where insufficient data is available either for the purposes of calculating a five-year average gearing level, or a robust beta. Firms

Table C.2: Comparator set for equity beta and gearing

| Company | Listed Country |
|-----------------------------------|----------------|
| America Movil SAB DE C-SER L | Mexico |
| AT&T Inc | United States |
| Cellcom Israel Ltd | Israel |
| Deutsche Telekom AG | Germany |
| Elisa Oyj | Finland |
| Empresa Nacional De Telecom | Chile |
| KDDI Corp | Japan |
| Orange Belgium | Belgium |
| Orange SA | France |
| Rogers Communications Inc-B | Canada |
| Shenandoah Telecommunications Co | United States |
| Sprint Corp | United States |
| Tele2 AB-B SHS | Sweden |
| Telefonica Deutschland Holding AG | Germany |
| Telefonica SA | Spain |
| Telekom Austria AG | Austria |
| Telenor ASA | Norway |
| Telia Co AB | Sweden |
| Telstra Corp Ltd | Australia |
| Telus Corp | Canada |
| T-Mobile US Inc | United States |
| Turkcell Iletisim Hizmet AS | Turkey |
| US Cellular Corp | United States |
| Verizon Communications Inc | United States |
| Vodafone Group Plc | United Kingdom |
| | |

Source: Bloomberg BICS; ACCC research.

¹⁸¹ Firm selection has been completed using the Bloomberg BICS search functionality.

¹⁸² For a firm to be included, five years of data for market cap and long term debt, and five years of weekly equity beta observations must be available from Bloomberg.

The ACCC has estimated raw equity betas for each of these firms using the Bloomberg BETA function. The ACCC considers the appropriate estimate to be a weekly beta, over a five year period, regressed against the relevant total returns index for each equity.

The ACCC has also identified a subset of nine firms with mobile revenues of greater than 90% of total revenue for the purpose of sensitivity testing with regard to equity beta and gearing. The sensitivity testing is discussed in detail below.

De-levering and re-levering

The ACCC has de-levered each entity's equity beta using their gearing obtained from the Bloomberg FA function. The de-levering process to asset beta is completed using the Brealey-Myers formula, as formulated:

$$\beta_e = \beta_a \left(1 + \frac{D}{E} \right)$$

Where β_e is the equity beta, β_a is the asset beta, and $\frac{{\scriptscriptstyle D}}{{\scriptscriptstyle E}}$ is the debt to equity ratio.

The arithmetic average of the 25 asset betas is taken as an estimate of the benchmark asset beta. Re-levering this asset beta by the benchmark gearing yields an estimate of the equity beta of 0.76.

Gearing

Gearing is used to weight the cost of equity and the cost of debt in the overall WACC. It is also used in the re-levering process of converting a benchmark asset beta to an equity beta.

The ACCC has estimated a benchmark gearing level of 37% using the benchmark set of 25 comparable firms used for the estimation of the equity beta. This figure represents debt funding as a percentage of enterprise value. The same 37% benchmark is used for both weighting the costs of debt and equity, and in re-levering the benchmark asset beta to a benchmark equity beta. The ACCC has obtained five years' data on each company's market cap and total debt using Bloomberg's FA function. A five-year average gearing level can then be calculated for each entity. The arithmetic average of these gearing levels is taken as an estimate of the efficient gearing level for a hypothetically efficient operator

Debt issuance cost

The ACCC has adopted a debt issuance cost of 0.07% in line with previous ACCC regulatory decisions.¹⁸³

Expected inflation

In order to undertake the international benchmarking exercise, Analysys Mason requires a WACC both in nominal terms and in real terms. Calculating a real WACC requires forming an expectation of expected inflation.

The ACCC has estimated expected inflation at 2.39%, using an annualised ten year geometric average of the Reserve Bank of Australia's (RBA) headline forecasts for the first two years, and the midpoint of the RBA's target band for years 3–10. The RBA's most recent

ACCC, Public inquiry into final access determinations for fixed line services – Final Decision, October 2015, p. 66.

Statement on monetary policy estimates inflation to end of FY21 and FY22 at 1.9% and 2.0%, respectively.¹⁸⁴ The mid-point of the target band remains 2.5%.

This approach replicates the method used by the AER, and incorporates the most up to date evidence on the appropriate estimation of inflation for regulatory purposes.¹⁸⁵

Corporate tax rate

Under a pre-tax WACC framework, the corporate tax rate is a WACC parameter. In this case, the rate of taxation payable on company profits affects the required return on equity, reflecting the need for the cost of company tax to be compensated for.

The ACCC estimates a pre-tax WACC on the assumption of a 30% corporate tax rate. This is consistent with the Australian company tax rate. The ACCC does not consider that the hypothetically efficient operator would be eligible for the lower company tax rate payable by small and medium businesses.¹⁸⁶

Sensitivity analysis

Analysys Mason has conducted sensitivity testing as part of their benchmarking study and report. In addition to the WACC of 4.98% (nominal, 2.53% real), the ACCC has also provided Analysys Mason with a pre-tax WACC adjusted for the purpose of testing the sensitivity of the benchmark models.

The adjusted WACC is 5.07% (nominal, 2.62% real), and reflects an equity beta and gearing based on a subset of nine firms from the beta/gearing comparator set with mobile revenues of greater than 90% as a proportion of total revenue, i.e. firms that have an overwhelming majority if not all of its revenue deriving from mobile activities. The adjusted parameters include a benchmarked equity beta of 0.85 and gearing of 0.43.

This marginal increase in the WACC resulted in a marginal increase in the unit cost output of the benchmark models of between 0% and 0.7%. Therefore, it appears that restricting the comparable set to firms that have a great majority or all of its revenue from mobile activities did not have a material impact on the MTAS costs from benchmark models.

For this reason, the ACCC's draft view is that adopting a materially larger comparable set of 25 firms with significant exposure to mobile activities (i.e. over 50% total of revenue from mobile services) is the preferred approach.

¹⁸⁴ Reserve Bank of Australia, Statement on Monetary Policy, February 2020, available here: https://www.rba.gov.au/publications/smp/2020/feb/forecasts.html

AER, Regulatory treatment of inflation – Final position, December 2017, p. 47, available here: https://www.aer.gov.au/system/files/AER%20-%20Final%20position%20paper%20-%20Regulatory%20treatment%20of%20inflation%20-%20December%202017%20-%20Web%20upload.PDF.

¹⁸⁶ The turnover threshold for the lower rate for FY21 is AUD 50m.

Analysys Mason, Draft Benchmark Report, pp. 34–35.

Appendix D Draft FAD Instrument



Final Access Determination No. X of 2020 (MTAS)

| Competition and Con | sumer Act 2010 |
|---------------------|----------------|
|---------------------|----------------|

The AUSTRALIAN COMPETITION AND CONSUMER COMMISSION makes this final access determination under section 152BC of the *Competition and Consumer Act 2010*.

Date of decision: insert

1. Application

- 1.1 This instrument sets out the final access determination (FAD) in respect of the declared domestic mobile terminating access service (MTAS).
- 1.2 This FAD replaces the previous FAD for the MTAS (Final Access Determination No. 1 of 2015).
- 1.3 The prices in this FAD are exclusive of tax payable under *the Utilities (Network Facilities Tax) Act 2006* (ACT).
- 1.4 The prices in this FAD are exclusive of Goods and Services Tax (GST).

2. Definitions and interpretation

- 2.1 Schedule 1 applies to the interpretation of this instrument.
- 2.2 The Schedules form part of this instrument.

3. Commencement and duration

- 3.1 This FAD comes into force on 1 January 2021.
- 3.2 This FAD remains in force up until and including 30 June 2024.

4. Terms and conditions of access

4.1 If a carrier or carriage service provider is required to comply with any or all of the standard access obligations as defined in the *Competition and Consumer Act 2010* in respect of the MTAS, the carrier or carriage service provider must comply with those obligations on the terms and conditions set out in this clause 4.

Note: The terms and conditions in a FAD apply only to those terms and conditions where terms and conditions on that matter in an Access Agreement cannot be reached, no special access undertaking is in operation setting out terms and conditions on that matter and no binding rules of conduct have been made setting out terms and conditions on that matter: section 152AY of the Competition and Consumer Act 2010.

4.2 If the carrier or carriage service provider is required to supply the MTAS to a service provider, the carrier or carriage service provider must supply the service at the price specified in Schedule 2.

The non-price terms and conditions set out in Schedules 3–12 apply to the access to the MTAS.

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Schedule 1 - Interpretation and definitions

Interpretation

In these FADs, unless the contrary intention appears:

- (a) the singular includes the plural and vice versa;
- (b) the words "including" and "include" mean "including, but not limited to"; and
- (c) terms defined in the Competition and Consumer Act 2010 or the *Telecommunications Act* 1997 have the same meaning.

Definitions

ACCC means the Australian Competition and Consumer Commission

Access Agreement has the same meaning as given to that term in section 152BE of the CCA

Access Provider has the same meaning as given to that term in subsection 152AR(2) of the CCA

Access Seeker has the same meaning as given to that term in section 152AG of the CCA

ACDC means the Australian Commercial Disputes Centre Limited

ACDC Guidelines means the mediation guidelines of the ACDC in force from time to time

ACMA means the Australian Communications and Media Authority

Billing Dispute means a dispute relating to a Charge or an invoice issued by the Access Provider

Billing Dispute Notice means a notice given pursuant to clause 3.10 in Schedule 3

Billing Dispute Procedures means the procedures set out in clauses 3.10 to 3.30 in Schedule 3

Breach Notice has the meaning set out in clause 7.5 of Schedule 7

Business Hours means 8.00 am to 5.00 pm Monday to Friday, excluding a day which is a gazetted public holiday in the place where the relevant transaction or work is to be performed

Business Day means any day other than Saturday or Sunday or a day which is a gazetted public holiday in the place concerned

Calendar Day means a day reckoned from midnight to midnight

Carriage Service has the same meaning given to that term in section 7 of the *Telecommunications Act 1997* (Cth)

CCA means the *Competition and Consumer Act 2010* (Cth)

Charge means a charge for the supply of a Service

Confidential Information means all information, know-how, ideas, concepts, technology, manufacturing processes, industrial, marketing and commercial knowledge of a confidential nature (whether in tangible or intangible form and whether coming into existence before or after the commencement of this FAD) relating to or developed in connection with or in support of the Service supplied under this FAD (the "first mentioned party") but does not include:

- (a) information which is or becomes part of the public domain (other than through any breach of this FAD);
- (b) information rightfully received by the other party from a third person without a duty of confidentiality being owed by the other party to the third person, except where the other party has knowledge that the third person has obtained that information either directly or indirectly as a result of a breach of any duty of confidence owed to the first mentioned party; or
- information which has been independently developed or obtained by the other party;
 or
- (d) information about Services supplied by the Access Provider (including where that information is generated by the Access Provider) that has been aggregated with other information of a similar or related nature, such that the Access Seeker cannot be identified by the information or any part of it.

Disclosing Party has the meaning set out in clause 6.5 in Schedule 6 of this FAD

Emergency means an emergency due to an actual or potential occurrence (such as fire, flood, storm, earthquake, explosion, accident, epidemic or war-like action) which:

- a) endangers or threatens to endanger the safety or health of persons or
- 1.
- b) destroys or damages, or threatens to destroy or damage property, being an emergency which requires a significant and co-ordinated response

Emergency Network Modernisation and Upgrade means a Major Network Modernisation and Upgrade that is required and is reasonably necessary and a proportionate response to address an Emergency

Equivalent Period of Notice means a period of notice commencing at the time that the Access Provider has approved and allocated the capital expenditure or otherwise approved and made a decision to commit to a Major Network Modernisation and Upgrade

Event means an act, omission or event relating to or arising out of this FAD or part of this FAD

Expert Committee means a committee established under clause 5.11 in Schedule 5

FAD means Final Access Determination

Fault means:

- (a) a failure in the normal operation of a Network or in the delivery of a Service; or
- (b) any issue as to the availability or quality of a Service supplied to an end-user via the Access Seeker, notified by the end-user to the Access Seeker's help desk, that has been reasonably assessed by the Access Provider as being the Access Provider's responsibility to repair

General Notification has the meaning set out in clause 10.1

Indemnifying Party means the Party giving an indemnity under this FAD

Individual Notification has the meaning set out in clause 10.1 of Schedule 10

Initiating Notice has the meaning as set out in clause 5.11 of Schedule 5

Innocent Party means the Party receiving the benefit of an indemnity under this FAD

Liability (of a party) means any liability of that party (whether in contract, in tort, under statute or in any other way and whether due to negligence, wilful or deliberate breach or any other cause) under or in relation to this FAD, or part of this FAD or in relation to any Event or series of related Events

Listed Carriage Service has the same meaning given to that term in section 7 of the *Telecommunications Act 1997* (Cth)

Loss includes liability, loss, damage, costs, charges or expenses (including legal costs)

Major Network Modernisation and Upgrade means a modernisation or upgrade that results in a Service no longer being supplied or adversely affects the quality of that Service (or any services supplied by an Access Seeker to their end-users using the Service), but does not mean, or include, an Emergency Network Modernisation Upgrade or an National Broadband Network related upgrade

Month means a period commencing at the beginning of any day of a named month and ending:

- (a) at the end of the day before the corresponding day of the next named month; or 2.
- (b) if there is no such corresponding day at the end of the next named month

MTAS means the mobile terminating access service declared under section 152AL of the CCA.

National Broadband Network means a national telecommunications network for the high-speed carriage of communications, where NBN Co has been, is, or is to be, involved in the creation or development of the network. To avoid doubt, it is immaterial whether the creation or development of the network is, to any extent, attributable to:

(a) the acquisition of assets that were used, or for use, in connection with another telecommunications network; or

(b) the obtaining of access to assets that are also used, or for use, in connection with another telecommunications network

NBN Co means NBN Co Limited (ACN 136 533 741), as the company exists from time to time (even if its name is later changed).

Network of a party, means that party's system, or series of systems, that carries, or is capable of carrying communications by means of guided or unguided electromagnetic energy

Non-Billing Dispute means a dispute other than a Billing Dispute

Ongoing Creditworthiness Information has the meaning as set out in clause 4.8 of Schedule 4 of this FAD

Party means a party to this FAD

People of a party, means each of that party's directors, officers, employees, agents, contractors, advisers and representatives but does not include that party's end-users or the other party;

Regulatory Determination means an access determination or a binding rule of conduct

Representative of a Party means each of that party's directors, officers, employees, agents, contractors, advisers and representatives, but does not include that Party's end-users or the other Party

Security means the amount and type of security provided, or required to be provided, to the Access Provider in respect of the provision by the Access Provider of Services, as set out in Schedule 4

Security Deposit means any sum of money deposited by the Access Seeker with the Access Provider, from time to time, for the purposes of fulfilling in whole or in part the requirement under this FAD that the Access Seeker provide Security to the Access Provider

Service means a service declared under section 152AL of the CCA

Structural Separation Undertaking means:

(a) an undertaking given by Telstra under subsection 577A(1) of the *Telecommunications Act 1997* (Cth) which came into force in accordance with

- section 577AB, and any amendment to that undertaking which comes into force in accordance with subsection 577B(6); and
- (b) a migration plan approved by the ACCC under Subdivision B of Division 2 of Part 33 of the *Telecommunications Act 1997* (Cth) which, pursuant to subsection 577BE(5), formed part of the undertaking referred to in paragraph (a), and any amendment to that plan which is approved by the ACCC in accordance with section 577BF, and includes all binding schedules, annexures and attachments to such documents

Suspension Event has the meaning set out in clause 7.2 of Schedule 7

Suspension Notice has the meaning set out in clause 7.2 of Schedule 7

Schedule 2 - Price

2.1 The price applicable to the MTAS is as follows:

| Time period | | Cent per minute | |
|--------------------|--------------------------|-------------------|--|
| <mark>1 Jan</mark> | uary 2021 – 30 June 2024 | <mark>1.22</mark> | |

Schedule 3 - Billing and notification

- 3.1 The Access Seeker's liability to pay Charges for the Service to the Access Provider arises at the time the Service is supplied by the Access Provider to the Access Seeker, unless the parties agree otherwise.
- 3.2 The Access Seeker must pay Charges in accordance with this FAD, including but not limited to this Schedule 3.
- 3.3 The Access Provider must provide the Access Seeker with an invoice each month in respect of Charges payable for the Service unless the parties agree otherwise
- 3.4 The Access Provider is entitled to invoice the Access Seeker for previously uninvoiced Charges or Charges which were understated in a previous invoice, provided that:
 - a) the Charges to be retrospectively invoiced can be reasonably substantiated to the Access Seeker by the Access Provider; and
 - b) subject to clause 3.5, no more than 6 Months have elapsed since the date the relevant amount was incurred by the Access Seeker's customer, except where:
 - i. the Access Seeker gives written consent to a longer period (such consent not to be unreasonably withheld); or
 - ii. to the extent that the Charges relate to services supplied by an overseas carrier and the Access Provider has no control over the settlement arrangements as between it and the overseas carrier, in which case the Access Provider shall invoice such amounts as soon as is reasonably practicable.
- 3.5 The parties must comply with the provisions of any applicable industry standard made by the ACMA pursuant to Part 6 of the *Telecommunications Act 1997 (Cth)* (Standard) and the provisions of any applicable industry code registered pursuant to Part 6 of the *Telecommunications Act 1997 (Cth)* (Code) in relation to billing. Where the effect of a Standard or Code is that an Access Seeker is not permitted to invoice its customers for charges that are older than a specified number of days, weeks or months (the Backbilling Period), the Access Provider must not invoice the Access Seeker for a Charge which was incurred by the Access Seeker's customers that, as at the date the invoice is issued, is older than the Backbilling Period.

3.6 Subject to clause 3.12

- a) An invoice is payable in full 30 Calendar Days after the date the invoice was issued or such other date as agreed between the parties.
- b) The Access Seeker may not deduct, withhold, or set-off any amounts for accounts in credit, for counter-claims or for any other reason or attach any condition to the payment, unless otherwise agreed by the Access Provider.
- c) All amounts owing and unpaid after the due date shall accrue interest daily from the

due date up to and including the date it is paid at the rate per annum of the 90 day authorized dealers bank bill rate published in the *Australian Financial Review* on the first Business Day following the due date for payment, plus 2.5 per cent.

- 3.7 In addition to charging interest in accordance with clause 3.6 or exercising any other rights the Access Provider has at law or under this FAD, where an amount is outstanding and remains unpaid for more than 20 Business Days after it is due for payment, and is not an amount subject to any Billing Dispute notified in accordance with this FAD, the Access Provider may take action, without further notice to the Access Seeker, to recover any such amount as a debt due to the Access Provider.
- 3.8 Unless the parties otherwise agree, there is no setting-off (i.e. netting) of invoices except where a party goes into liquidation, in which case the other party may set-off. However, in order to minimise administration and financial costs, the parties must consider in good faith set-off procedures for inter-party invoices which may require the alignment of the parties' respective invoice dates and other procedures to allow set-off to occur efficiently.
- 3.9 The Access Provider must, at the time of issuing an invoice, provide to the Access Seeker all information reasonably required by the Access Seeker to identify and understand the nature and amount of each Charge on the invoice, and the service the Charge relates to.

 Nothing in this clause 3.9 is intended to limit subsections 152AR(6) and 152AR(7) of the CCA.
- 3.10 If the Access Seeker believes a Billing Dispute exists, it may invoke the Billing Dispute Procedures by providing written notice to the Access Provider (Billing Dispute Notice). A Billing Dispute must be initiated only in good faith.
- 3.11 Except where a party seeks urgent injunctive relief, the Billing Dispute Procedures must be invoked before either party may begin legal proceedings in relation to any Billing Dispute.
- 3.12 If a Billing Dispute Notice is given to the Access Provider by the due date for payment of the invoice containing the Charge which is being disputed, the Access Seeker may withhold payment of the disputed Charge until such time as the Billing Dispute has been resolved or otherwise terminated. Otherwise, the Access Seeker must pay the invoice in full in accordance with this FAD (but subject to the outcome of the Billing Dispute Procedures).
- 3.13 Except where payment is withheld in accordance with clause 3.12, the Access Provider is not obliged to accept a Billing Dispute Notice in relation to an invoice unless the invoice has been paid in full.
- 3.14 A Billing Dispute Notice must be given to the Access Provider in relation to a Charge, at the earlier of:
 - a) as soon as reasonably practicable after the Access Seeker becomes aware a Billing Dispute exists, or
 - b) within six Months of the invoice for the Charge being issued in accordance with clause 3.6.

- a) The Access Provider must acknowledge receipt of a Billing Dispute Notice within two Business Days by providing the Access Seeker with a reference number.
- b) Within five Business Days of acknowledging a Billing Dispute Notice under clause 3.15(a), the Access Provider must, by written notice to the Access Seeker:
 - i. accept the Billing Dispute Notice; or
 - ii. reject the Billing Dispute Notice if the Access Provider reasonably considers that:
 - A. the subject matter of the Billing Dispute Notice is already being dealt with in another dispute;
 - B. the Billing Dispute Notice was not submitted in good faith; or
 - C. the Billing Dispute Notice is incomplete or contains inaccurate information.
- c) If the Access Provider fails to accept or reject the Billing Dispute Notice within five Business Days of acknowledging the Billing Dispute Notice under clause 3.15(a), the Access Provider is taken to have accepted the Billing Dispute Notice.
- d) For avoidance of doubt, if the Access Provider rejects a Billing Dispute Notice under clause 3.15(b)(ii)C, the Access Seeker is not prevented from providing an amended Billing Dispute Notice to the Access Provider relating to the same dispute provided that the amended Billing Dispute Notice is provided within the timeframe under clause 3.14.
- 3.16 The Access Seeker must, as early as practicable and in any case within five Business Days, unless the Parties agree on a longer period, after the Access Provider acknowledges a Billing Dispute Notice, provide to the other party any further relevant information or materials (which were not originally provided with the Billing Dispute Notice) on which it intends to rely (provided that this obligation is not intended to be the same as the obligation to make discovery in litigation).
- 3.17 Without affecting the time within which the Access Provider must make the proposed resolution under clause 3.1, the Access Provider may request additional information from the Access Seeker that it reasonably requires for the purposes of making a proposed resolution pursuant to clause 3.18. This additional information may be requested up to 10 Business Days prior to the date on which the Access Provider must make the proposed resolution under clause 3.18. The Access Seeker must provide the requested information within five Business Days of receiving the request. If the Access Seeker fails to do so within five Business Days, the Access Provider may take the Access Seeker's failure to provide additional information into account when making its proposed resolution.
- 3.18 The Access Provider must try to resolve any Billing Dispute as soon as practicable and in any event within 30 Business Days of accepting a Billing Dispute Notice under clause 3.15

(or longer period if agreed by the parties), by notifying the Access Seeker in writing of its proposed resolution of a Billing Dispute. That notice must:

- a) explain the Access Provider's proposed resolution (including providing copies where necessary of all information relied upon in coming to that proposed resolution); and
- b) set out any action to be taken by:
 - i. the Access Provider (e.g. withdrawal, adjustment or refund of the disputed Charge); or
 - ii. the Access Seeker (e.g. payment of the disputed Charge)

If the Access Provider reasonably considers that it will take longer than 30 Business Days after accepting a Billing Dispute Notice to provide a proposed resolution, then the Access Provider may request the Access Seeker's consent to an extension of time to provide the proposed resolution under this clause 3.18 (such consent not to be unreasonably withheld).

- 3.19 If the Access Seeker does not agree with the Access Provider's decision to reject a Billing Dispute Notice under clause 3.15 or the Access Provider's proposed resolution under clause 3.17, it must object within 15 Business Days of being notified of such decisions (or such longer time as agreed between the parties). Any objection lodged by the Access Seeker with the Access Provider must be in writing and state:
 - a) what part(s) of the proposed resolution it objects to;
 - b) the reasons for objection;
 - c) what amount it will continue to withhold payment of (if applicable); and
 - d) any additional information to support its objection.
 - If the Access Seeker lodges an objection to the proposed resolution under this clause, the Access Provider must, within 5 Business Days of receiving the objection, review the objection and
 - e) provide a revised proposed resolution (Revised Proposed Resolution in this Schedule 3); or
 - f) confirm its proposed resolution

3.20 Any:

- a) withdrawal, adjustment or refund of the disputed Charge by the Access Provider; or
- b) payment of the disputed Charge by the Access Seeker (as the case may be),

must occur as soon as practicable and in any event within one Month of the Access Provider's notice of its proposed resolution under clause 3.18 or its Revised Proposed Resolution under clause 3.19 (as applicable), unless the Access Seeker escalates the

Billing Dispute under clause 3.23. If the Access Provider is required to make a withdrawal, adjustment or refund of a disputed Charge under this clause but its next invoice (first invoice) is due to be issued within 48 hours of its proposed resolution under clause 3.18 or its Revised Proposed Resolution under clause 3.19 (as applicable), then the Access Provider may include that withdrawal, adjustment or refund in the invoice following the first invoice notwithstanding that this may occur more than one Month after the Access Provider's notice of its proposed resolution or Revised Proposed Resolution.

- 3.21 Where the Access Provider is to refund a disputed Charge, the Access Provider must pay interest (at the rate set out in clause 3.6) on any refund. Interest accrues daily from the date on which each relevant amount to be refunded was paid to the Access Provider, until the date the refund is paid.
- 3.22 Where the Access Seeker is to pay a disputed Charge, the Access Seeker must pay interest (at the rate set out in clause 3.6) on the amount to be paid. Interest accrues daily from the date on which each relevant amount was originally due to be paid to the Access Provider, until the date the amount is paid.

3.23 If

- a) the Access Provider has not proposed a resolution according to clause 3.18 or within the timeframe specified in clause 3.18, or
- b) the Access Seeker, having first submitted an objection under clause 3.19 is not satisfied with the Access Provider's Revised Proposed Resolution, or the Access Provider's confirmed proposed resolution, within the timeframes specified in clause 3.19,
 - the Access Seeker may escalate the matter under clause 3.24. If the Access Seeker does not do so within 15 Business Days after the time period stated in clause 3.18 or after being notified of the Access Provider's Revised Proposed Resolution under clause 3.19(e) or confirmed proposed resolution under clause 3.19(f) (or a longer period if agreed by the parties), the Access Seeker is deemed to have accepted the Access Provider's proposed resolution made under clause 3.18 or Revised Proposed Resolution under clause 3.19(e) or confirmed proposed solution under clause 3.19(f) and clauses 3.21 and 3.22 apply.
- 3.24 If the Access Seeker wishes to escalate a Billing Dispute, the Access Seeker must give the Access Provider a written notice:
 - a) stating why it does not agree with the Access Provider's Revised Proposed Resolution or confirmed proposed resolution; and
 - b) seeking escalation of the Billing Dispute.
- 3.25 A notice under clause 3.24 must be submitted to the nominated billing manager for the Access Provider, who must discuss how best to resolve the Billing Dispute with the Access Seeker's nominated counterpart. If the Parties are unable to resolve the Billing Dispute within five Business Days of notice being given under clause 3.24 (or such longer period as agreed between the parties) the Billing Dispute must be escalated to the Access Provider's nominated commercial manager and the Access Seeker's nominated counterpart who must

meet in an effort to resolve the Billing Dispute.

- 3.26 If the Billing Dispute cannot be resolved within five Business Days of it being escalated to the Access Provider's nominated commercial manager and the Access Seeker's nominated counterpart under clause 3.25 (or such longer period as agreed between the parties):
 - a) either party may provide a written proposal to the other party for the appointment of a
 mediator to assist in resolving the dispute. Mediation must be conducted in
 accordance with the mediation guidelines of the Australian Commercial Disputes
 Centre (ACDC) and concluded within three Months of the proposal (unless the parties
 agree to extend this timeframe); or
 - b) if the parties either do not agree to proceed to mediation within five Business Days of being able to propose the appointment of a mediator under clause 3.26(a) or are unable to resolve the entire Billing Dispute by mediation, either party may commence legal proceedings to resolve the matter.
- 3.27 The parties must ensure that any person appointed or required to resolve a Billing Dispute takes into account the principle that the Access Seeker is entitled to be recompensed in circumstances where the Access Seeker is prevented (due to regulatory restrictions on retrospective invoicing) from recovering from its end-user an amount which is the subject of a Billing Dispute (a Backbilling Loss), provided that:
 - a) such principle applies only to the extent to which the Billing Dispute is resolved against the Access Provider; and
 - b) such principle applies only to the extent to which it is determined that the Backbilling Loss was due to the Access Provider unnecessarily delaying resolution of the Billing Dispute.
 - c) Each party must continue to fulfil its obligations under this FAD while a Billing Dispute and the Billing Dispute Procedures are pending.
- 3.28 Each party must continue to fulfil its obligations under this FAD while a Billing Dispute and the Billing Dispute Procedures are pending.
- 3.29 All discussions and information relating to a Billing Dispute must be communicated or exchanged between the parties through the representatives of the parties set out in clause 3.25 (or their respective nominees).
- 3.30 There is a presumption that all communications between the Parties during the course of a Billing Dispute are made on a without prejudice and confidential basis.
- 3.31 If it is determined by the Billing Dispute Procedures, any other dispute resolution procedure, or by agreement between the parties, that three or more out of any five consecutive invoices for a given Service are incorrect by 5 per cent or more, then, for the purposes of clause 3.21, the interest payable by the Access Provider in respect of the

overpaid amount of the invoices in question is the rate set out in clause 3.6, plus 2 per cent. The remedy set out in this clause 3.31 is without prejudice to any other right or remedy available to the Access Seeker.

Schedule 4 - Creditworthiness and Security

4.1 Unless otherwise agreed by the Access Provider, the Access Seeker must (at the Access Seeker's sole cost and expense) provide to the Access Provider and maintain, on terms and conditions reasonably required by the Access Provider and subject to clause 4.2, the Security (as is determined having regard to clause 4.3 and as may be varied pursuant to clause 4.4) in respect of amounts owing by the Access Seeker to the Access Provider under this FAD.

4.2

- a) The Access Seeker acknowledges that unless otherwise agreed by the Access Provider, it must maintain (and the Access Provider need not release or refund) the Security specified in clause 4.1 for a period of six Months following (but not including) the date on which the last of the following occurs:
 - i. cessation of supply of the Service under this FAD, and
 - ii. payment of all outstanding amounts under this FAD.
- b) Notwithstanding clause 4.2(a), the Access Provider has no obligation to release the Security if, at the date the Access Provider would otherwise be required to release the Security under clause 4.2(a), the Access Provider reasonably believes any person, including a provisional liquidator, administrator, trustee in bankruptcy, receiver, receiver and manager, other controller or similar official, has a legitimate right to recoup or claim repayment of any part of the amount paid or satisfied, whether under the laws or preferences, fraudulent dispositions or otherwise.
- 4.3 The Security (including any varied Security) may only be requested where an Access Provider has reasonable grounds to doubt the Access Seeker's ability to pay for services, and must be of an amount and in a form determined reasonably by the Access Provider taking into account all the relevant circumstances. As a statement of general principle the amount of any Security is calculated by reference to:
 - a) the aggregate value of all Services likely to be provided to the Access Seeker under this FAD over a reasonable period; or
 - b) the value of amounts invoiced in respect of the Service but unpaid (excluding any amounts in respect of which there is a current Billing Dispute notified in accordance with this FAD).
 - For the avoidance of doubt, any estimates, forecasts or other statements made or provided by the Access Seeker may be used by the Access Provider in determining the amount of a Security
- 4.4 Examples of appropriate forms of Security, having regard to the factors referred to in clause 4.3, may include without limitation:
 - a) fixed and floating charges;

- b) personal guarantees from directors;
- c) Bank Guarantees;
- d) letters of comfort
- e) mortgages;
- f) a right of set-off;
- g) a Security Deposit; or
- h) a combination of the forms of security referred to in paragraphs (a) to (g) above.

If any Security is or includes a Security Deposit, then:

- i) the Access Provider is not obliged to invest the Security Deposit or hold the Security Deposit in an interest bearing account or otherwise; and
- j) the Access Seeker is prohibited from dealing with the Security Deposit or its rights to that Security Deposit (including by way of assignment or granting of security).

If any security is or includes a Bank Guarantee and that Bank Guarantee (Original Bank Guarantee) has an expiry date which is the last day by which a call may be made under a Bank Guarantee, the Access Seeker must procure a replacement Bank Guarantee for the amount guaranteed by the Original Bank Guarantee no later than two Months prior to the expiry date of the Original Bank Guarantee, such replacement Bank Guarantee to have an expiry date of no less than 14 Months from the date of delivery of the replacement Bank Guarantee.

If the Access Seeker fails to procure a replacement Bank Guarantee, then in addition to any other of the Access Provider's rights under this FAD, the Access Provider may, at any time in the Month prior to the expiry date of the Bank Guarantee, make a call under the Bank Guarantee for the full amount guaranteed. The amount paid to the Access Provider pursuant to a call on the Bank Guarantee will become a Security Deposit.

- 4.5 The Access Provider may from time to time where the circumstances reasonably require, request Ongoing Creditworthiness Information from the Access Seeker to determine the ongoing creditworthiness of the Access Seeker. The Access Seeker must supply Ongoing Creditworthiness Information to the Access Provider within 15 Business Days of receipt of a request from the Access Provider for such information. The Access Provider may, as a result of such Ongoing Creditworthiness Information, having regard to the factors referred to in clause 4.3 and subject to clause 4.7, reasonably require the Access Seeker to alter the amount, form or the terms of the Security (which may include a requirement to provide additional security), and the Access Seeker must provide that altered Security within 20 Business Days of being notified by the Access Provider in writing of that requirement.
- 4.6 The Access Seeker may from time to time request the Access Provider to consent (in writing) to a decrease in the required Security and/or alteration of the form of the Security. The Access Provider must, within 15 Business Days of the Access Seeker's request,

comply with that request if, and to the extent, it is reasonable to do so (having regard to the factors referred to in clause 4.3). The Access Provider may request, and the Access Seeker must promptly provide, Ongoing Creditworthiness Information, for the purposes of this clause 4.6.

4.7 If the Access Seeker provides Ongoing Creditworthiness Information to the Access Provider as required by this Schedule 4, the Access Seeker must warrant that such information is true, fair, accurate and complete as at the date on which it is received by the Access Provider and that there has been no material adverse change in the Access Seeker's financial position between the date the information was prepared and the date it was received by the Access Provider. If there has been a material adverse change in the Access Seeker's financial position between the date the information was prepared and the date it was received by the Access Provider, the Access Seeker must disclose the nature and effect of the change to the Access Provider at the time the information is provided.

4.8 For the purposes of this Schedule 4, **Ongoing Creditworthiness Information** means:

- a) a copy of the Access Seeker's most recent published audited balance sheet and published audited profit and loss statement (together with any notes attached to or intended to be read with such balance sheet or profit and loss statement);
- b) a credit report in respect of the Access Seeker or, where reasonably necessary in the circumstances, any of its owners or directors (Principals) from any credit reporting agency, credit provider or other third party. The Access Seeker must co-operate and provide any information necessary for that credit reporting agency, credit provider or other independent party to enable it to form an accurate opinion of the Access Seeker's creditworthiness. To that end, the Access Seeker agrees to procure written consents (as required under the *Privacy Act 1988* (Cth)) from such of its Principals as is reasonably necessary in the circumstances to enable the Access Provider to:
 - i. obtain from a credit reporting agency, credit provider or other independent party, information contained in a credit report;
 - ii. disclose to a credit reporting agency, credit provider or other independent party, personal information about each Principal; and
 - iii. obtain and use a consumer credit report;
- c) a letter, signed by the company secretary or duly authorised officer of the Access Seeker, stating that the Access Seeker is not insolvent and not under any external administration (as defined in the *Corporations Act 2001* (Cth)) or under any similar form of administration under any laws applicable to it in any jurisdiction; and
- d) the Access Seeker's credit rating, if any has been assigned to it; and
- e) any other information reasonably required to determine the ongoing creditworthiness of the Access Seeker, as agreed between the parties before the request under clause 4.5 is made.

- 4.9 The Access Seeker may require a confidentiality undertaking to be given by any person having access to confidential information contained in its Ongoing Creditworthiness Information prior to such information being provided to that person.
- 4.10 Subject to this Schedule 4, the parties agree that a failure by the Access Seeker to provide the warranties set out in clause 4.7 or to provide Ongoing Creditworthiness Information constitutes:
 - a) an event entitling the Access Provider to alter the amount, form or terms of the Security (including an entitlement to additional Security) of the Access Seeker and the Access Seeker must provide that altered Security within 15 Business Days after the end of the period set out clause 4.5; or
 - b) breach of a material term or condition of this FAD.

Any disputes arising out of or in connection with Schedule 4 must be dealt with in accordance with the procedures in Schedule 5. Notwithstanding that a dispute arising out of or in connection with Schedule 4 has been referred to the procedures in Schedule 5 and has not yet been determined, nothing in this clause 4.10 or Schedule 5 prevents the Access Provider from exercising any of its rights to suspend the supply of a Service under Schedule 7.

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Schedule 5 - General dispute resolution procedures

- 5.1 If a dispute arises between the parties in connection with or arising from the terms and conditions set out in this FAD for the supply of the Service, the dispute must be managed as follows:
 - a) in the case of a Billing Dispute, the dispute must be managed in accordance with the Billing Dispute Procedures; or
 - b) subject to clause 5.2, in the case of a Non-Billing Dispute, the dispute must be managed in accordance with the procedures set out in this Schedule 5.
- To the extent that a Non-Billing Dispute is raised or arises in connection with, or otherwise relates to, a Billing Dispute, then unless otherwise determined, that Non-Billing Dispute must be resolved in accordance with the Billing Dispute Procedures. The Access Provider may seek a determination from an independent third party on whether a dispute initiated by the Access Seeker as a Billing Dispute is a Non-Billing Dispute. If the independent third party deems the dispute to be a Non-Billing Dispute, the Access Provider may provide written notice to the Access Seeker to pay any withheld amount to the Access Provider on the due date for the disputed invoice or if the due date has passed, immediately on notification being given by the Access Provider.

For the purposes of this clause 5.2:

- a) the independent third party must be a person who:
 - has an understanding of the relevant aspects of the telecommunications industry (or have the capacity to quickly come to such an understanding);
 - ii. have an appreciation of the competition law implications of his/her decisions; and
 - iii. not be an officer, director or employee of a telecommunications company or otherwise have a potential for a conflict of interest;
- b) the independent third party may include an arbiter from the ACDC.
- 5.3 If a Non-Billing Dispute arises, either party may, by written notice to the other, refer the Non-Billing Dispute for resolution under this Schedule 5. A Non-Billing Dispute must be initiated only in good faith.
- 5.4 Any Non-Billing Dispute notified under clause 5.3 must be referred:
 - a) initially to the nominated manager (or managers) for each party, who must endeavour to resolve the dispute within 10 Business Days of the giving of the notice referred to in clause 5.3 or such other time agreed by the parties; and
 - b) if the persons referred to in paragraph (a) above do not resolve the Non-Billing Dispute

within the time specified under paragraph (a), then the parties may agree in writing within a further five Business Days to refer the Non-Billing Dispute to an Expert Committee under clause 5.11, or by written agreement submit it to mediation in accordance with clause 5.10.

5.5 If:

- a) under clause 5.4 the Non-Billing Dispute is not resolved and a written agreement is not made to refer the Non-Billing Dispute to an Expert Committee or submit it to mediation; or,
- b) under clause 5.10(f), the mediation is terminated; and
- c) after a period of five Business Days after the mediation is terminated as referred to in paragraph (b), the parties do not resolve the Non-Billing Dispute or agree in writing on an alternative procedure to resolve the Non-Billing Dispute (whether by further mediation, written notice to the Expert Committee, arbitration or otherwise)
 - either party may terminate the operation of this dispute resolution procedure in relation to the Non-Billing Dispute by giving written notice of termination to the other party.
- 5.6 A party may not commence legal proceedings in any court (except proceedings seeking urgent interlocutory relief) in respect of a Non-Billing Dispute unless:
 - a) the Non-Billing Dispute has first been referred for resolution in accordance with the dispute resolution procedure set out in this Schedule 5 or clause 5.2 (if applicable) and a notice terminating the operation of the dispute resolution procedure has been issued under clause 5.5; or
 - b) the other party has failed to substantially comply with the dispute resolution procedure set out in this Schedule 5 or clause 5.2 (if applicable).
- 5.7 Each party must continue to fulfil its obligations under this FAD while a Non-Billing Dispute and any dispute resolution procedure under this Schedule 5 are pending.
- 5.8 All communications between the parties during the course of a Non-Billing Dispute and in connection with that Non-Billing Dispute, are made on a without prejudice and confidential basis.
- 5.9 Each party must, as early as practicable, and in any case within 14 Calendar Days unless a longer period is agreed between the parties, after the notification of a Non-Billing Dispute pursuant to clause 5.3, provide to the other party any relevant materials on which it intends to rely (provided that this obligation is not intended to be the same as the obligation to make discovery in litigation).
- 5.10 Where a Non-Billing Dispute is referred to mediation by way of written agreement between

the parties, pursuant to clause 5.4(b):

- a) any agreement must include:
 - i. a statement of the disputed matters in the Non-Billing Dispute; and
 - ii. the procedure to be followed during the mediation, and the mediation must take place within 15 Business Days upon the receipt by the mediator of such agreement;
- b) it must be conducted in accordance with the mediation guidelines of the ACDC in force from time to time (ACDC Guidelines) and the provisions of this clause 5.10. In the event of any inconsistency between them, the provisions of this clause 5.10 prevail;
- c) it must be conducted in private;
- d) in addition to the qualifications of the mediator contemplated by the ACDC Guidelines, the mediator must:
 - i. have an understanding of the relevant aspects of the telecommunications industry (or have the capacity to quickly come to such an understanding);
 - ii. have an appreciation of the competition law implications of his/her decisions; and
 - iii. not be an officer, director or employee of a telecommunications company or otherwise have a potential for a conflict of interest;
- e) the parties must notify each other no later than 48 hours prior to mediation of the names of their representatives who will attend the mediation. Nothing in this subclause is intended to suggest that the parties are able to refuse the other's chosen representatives or to limit other representatives from the parties attending during the mediation;
- f) it must terminate in accordance with the ACDC Guidelines;
- g) the parties must bear their own costs of the mediation including the costs of any representatives and must each bear half the costs of the mediator; and
- h) any agreement resulting from mediation binds the parties on its terms.
- 5.11 The parties may by written agreement in accordance with clause 5.4(b), submit a Non-Billing Dispute for resolution by an Expert Committee (**Initiating Notice**), in which case the provisions of this clause 5.11 apply as follows:
 - a) The terms of reference of the Expert Committee are as agreed by the parties. If the terms of reference are not agreed within five Business Days after the date of submitting the Initiating Notice (or such longer period as agreed between the parties), the referral to the Expert Committee is deemed to be terminated.

- b) An Expert Committee acts as an expert and not as an arbitrator.
- c) The parties are each represented on the Expert Committee by one appointee.
- d) The Expert Committee must include an independent chairperson agreed by the parties or, if not agreed, a nominee of the ACDC. The chairperson must have the qualifications listed in paragraphs 5.10(d)(i), (ii) and (iii).
- e) Each party must be given an equal opportunity to present its submissions and make representations to the Expert Committee.
- f) The Expert Committee may determine the dispute (including any procedural matters arising during the course of the dispute) by unanimous or majority decision.
- g) Unless the parties agree otherwise the parties must ensure that the Expert Committee uses all reasonable endeavours to reach a decision within 20 Business Days after the date on which the terms of reference are agreed or the final member of the Expert Committee is appointed (whichever is the later) and undertake to co-operate reasonably with the Expert Committee to achieve that timetable.
- h) If the dispute is not resolved within the timeframe referred to in clause 5.11(g), either party may by written notice to the other party terminate the appointment of the Expert Committee.
- i) The Expert Committee has the right to conduct any enquiry as it thinks fit, including the right to require and retain relevant evidence during the course of the appointment of the Expert Committee or the resolution of the dispute.
- j) The Expert Committee must give written reasons for its decision.
- k) A decision of the Expert Committee is final and binding on the parties except in the case of manifest error or a mistake of law.
- Each party must bear its own costs of the enquiry by the Expert Committee including the
 costs of its representatives, any legal counsel and its nominee on the Expert Committee
 and the parties must each bear half the costs of the independent member of the Expert
 Committee.
- 5.12 Schedule 5 does not apply to a Non-Billing Dispute to the extent that:
 - a) there is a dispute resolution process established in connection with, or pursuant to, a legal or regulatory obligation (including any dispute resolution process set out in a Structural Separation Undertaking)
 - b) a party has initiated a dispute under the dispute resolution process referred to in clause 5.12(a), and

| c) | the issue the subject of that dispute | e is the same issue | in dispute in the N | on-Billing Dispute. |
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Schedule 6 - Confidentiality

- 6.1 Subject to clause 6.4 and any applicable statutory duty, each party must keep confidential all Confidential Information of the other party and must not:
 - a) use or copy such Confidential Information except as set out in this FAD; or
 - b) disclose or communicate, cause to be disclosed or communicated or otherwise make available such Confidential Information to any third person.
- 6.2 For the avoidance of doubt, information generated within the Access Provider's Network as a result of or in connection with the supply of the relevant Service to the Access Seeker or the interconnection of the Access Provider's Network with the Access Seeker's Network (other than information that falls within paragraph (d) of the definition of Confidential Information) is the Confidential Information of the Access Seeker.
- 6.3 The Access Provider must upon request from the Access Seeker, disclose to the Access Seeker quarterly aggregate traffic flow information generated within the Access Provider's Network in respect of a particular Service provided to the Access Seeker, if the Access Provider measures and provides this information to itself. The Access Seeker must pay the reasonable costs of the Access Provider providing that information.
- 6.4 Subject to clauses 6.5 and 6.10, Confidential Information of the Access Seeker may be:
 - a) used by the Access Provider:
 - i. for the purposes of undertaking planning, maintenance, provisioning, operations or reconfiguration of its Network;
 - ii. for the purposes of supplying Services to the Access Seeker;
 - iii. for the purpose of billing; or
 - iv. for another purpose agreed to by the Access Seeker; and
 - b) disclosed only to personnel who, in the Access Provider's reasonable opinion require the information to carry out or otherwise give effect to the purposes referred to in paragraph (a) above.
- 6.5 A party (**Disclosing Party**) may to the extent necessary use and/or disclose (as the case may be) the Confidential Information of the other party:
 - a) to those of the Disclosing Party's directors, officers, employees, agents, contractors (including sub-contractors) and representatives to whom the Confidential Information is reasonably required to be disclosed in connection with the provision of the Service to which this FAD relates;
 - b) to any professional person for the purpose of obtaining advice in relation to matters arising out of or in connection with the supply of a Service under this FAD;

- c) to an auditor acting for the Disclosing Party to the extent necessary to permit that auditor to perform its audit functions;
- d) in connection with legal proceedings, arbitration, expert determination and other dispute resolution mechanisms set out in this FAD, provided that the Disclosing Party has first given as much notice (in writing) as is reasonably practicable to the other party so that the other party has an opportunity to protect the confidentiality of its Confidential Information;
- e) as required by law provided that the Disclosing Party has first given as much notice (in writing) as is reasonably practicable to the other party, that it is required to disclose the Confidential Information so that the other party has an opportunity to protect the confidentiality of its Confidential Information, except that no notice is required in respect of disclosures made by the Access Provider to the ACCC under section 152BEA of the CCA;
- f) with the written consent of the other party provided that, prior to disclosing the Confidential Information of the other party:
 - i. the Disclosing Party informs the relevant person or persons to whom disclosure is to be made that the information is the Confidential Information of the other party;
 - ii. if required by the other party as a condition of giving its consent, the Disclosing Party must provide the other party with a confidentiality undertaking in the form set out in Annexure 1 of this Schedule 6 signed by the person or persons to whom disclosure is to be made; and
 - iii. if required by the other party as a condition of giving its consent, the Disclosing Party must comply with clause 6.6;
- g) in accordance with a lawful and binding directive issued by a regulatory authority;
- h) if reasonably required to protect the safety of personnel or property or in connection with an emergency;
- i) as required by the listing rules of any stock exchange where that party's securities are listed or quoted;
- j) in accordance with a reporting obligation, or in response to a request from a regulatory authority or any other Government body, in connection with the Access Provider's Structural Separation Undertaking where the party cannot comply with the reporting obligation or request without using or disclosing the Confidential Information, provided that:
 - i. prior to disclosing the Confidential Information of the other party the Disclosing Party informs the relevant person or persons to whom disclosure is to be made

that the information is the Confidential Information of the other party; and

- ii. unless prohibited by law, the Disclosing Party informs the other Party in writing as soon as reasonably practicable after receiving the request that the Disclosing Party will disclose Confidential Information to the regulatory authority or any other Government body to fulfil that reporting obligation or respond to that request.
- k) in response to a request from a regulatory authority or any other Government body in connection with interception capability (as that term is used in Chapter 5 of the *Telecommunications (Interception and Access) Act 1979* (Cth)) relating to access to a declared service, where the party cannot comply with the request without using or disclosing the Confidential Information, provided that:
 - i. prior to disclosing the Confidential Information of the other party the Disclosing Party informs the relevant person or persons to whom disclosure is to be made that the information is the confidential information of the other party; and
 - ii. unless prohibited by law, the Disclosing Party informs the other Party as soon as reasonably practicable after receiving the request that the Disclosing Party will disclose Confidential Information to the regulatory authority or any other Government body to respond to that request.
- 6.6 Each party must co-operate in any action taken by the other party to:
 - a) protect the confidentiality of the other party's Confidential Information; or
 - b) enforce its rights in relation to its Confidential Information.
- 6.7 Each party must establish and maintain security measures to safeguard the other party's Confidential Information from unauthorised access, use, copying, reproduction or disclosure.
- 6.8 Confidential Information provided by one party to the other party is provided for the benefit of that other party only. Each party acknowledges that no warranty is given by the Disclosing Party that the Confidential Information is or will be correct.
- 6.9 Each party acknowledges that a breach of this Schedule 6 by one party may cause another party irreparable damage for which monetary damages would not be an adequate remedy. Accordingly, in addition to other remedies that may be available, a party may seek injunctive relief against such a breach or threatened breach of this Schedule 6.

6.10 If:

- a) the Access Provider has the right to suspend or cease the supply of the Service under:
 - i. Schedule 7 due to a payment breach, or
 - ii. under clause 7.8

- b) after suspension or cessation of supply of the Service under this FAD, the Access Seeker fails to pay amounts due or owing to the Access Provider by the due date for payment,
 - then the Access Provider may do one or both of the following:
- c) notify and exchange information about the Access Seeker (including the Access Seeker's Confidential Information) with any credit reporting agency or the Access Provider's collection agent; and
- d) without limiting clause 6.10, disclose to a credit reporting agency:
 - i. the defaults made by the Access Seeker to the Access Provider; and
 - ii. the exercise by the Access Provider of any right to suspend or cease supply of the Service under this FAD.

Annexure 1 of Schedule 6

Confidentiality undertaking form

[Amend where necessary]

CONFIDENTIALITY UNDERTAKING

- I, of [employer's company name] ([undertaking company]) undertake to [full name of party who owns or is providing the confidential information as the case requires] ([Provider]) that:
- Subject to the terms of this Undertaking, I will keep confidential at all times the information listed in Attachment 1 to this Undertaking (Confidential Information) that is in my possession, custody, power or control.

2 I acknowledge that:

- (a) this Undertaking is given by me to [Provider] in consideration for [Provider] making the Confidential Information available to me for the Approved Purposes (as defined below);
- (b) all intellectual property in or to any part of the Confidential Information is and will remain the property of [Provider]; and
- (c) by reason of this Undertaking, no licence or right is granted to me, or any other employee, agent or representative of [undertaking company] in relation to the Confidential Information except as expressly provided in this Undertaking.

3 I will:

- (a) only use the Confidential Information for:
- (i) the purposes listed in Attachment 2 to this Undertaking; or
- (ii) any other purpose approved by [Provider] in writing;

(the Approved Purposes);

- (b) comply with any reasonable request or direction from [provider] regarding the Confidential Information.
- Subject to clause 5, I will not disclose any of the Confidential Information to any other person without the prior written consent of [Provider].
- I acknowledge that I may disclose the Confidential Information to which I have access to:
 (a) any employee, external legal advisors, independent experts, internal legal or regulatory staff of [undertaking company], for the Approved Purposes provided that:
 - (i) the person to whom disclosure is proposed to be made (**the person**) is notified in writing to [Provider] and [Provider] has approved the person as a person who may receive the Confidential Information, which approval shall not be unreasonably withheld;

- (ii) the person has signed a confidentiality undertaking in the form of this Undertaking or in a form otherwise acceptable to [Provider]; and
- (iii) a signed undertaking of the person has already been served on [Provider];
- (b) other persons, if required to do so by law, but then only:
 - (i) if I notify [Provider] of that request within 7 days of receiving the request;
 - (ii) to the person(s) to whom I am obliged to provide the Confidential Information;
 - (iii) to the extent necessary as required by law; and
 - (iv) if I notify the recipient of the Confidential Information that the information is confidential and is the subject of this Undertaking to the [Provider]; and
- (c) any secretarial, administrative and support staff, who perform purely administrative tasks, and who assist me or any person referred to in paragraph 5(a) for the Approved Purpose.
- I will establish and maintain security measures to safeguard the Confidential Information from unauthorised access, use, copying, reproduction or disclosure and will protect the Confidential Information using the same degree of care as a prudent person in my position would use to protect their own confidential information.
- Except as required by law and subject to paragraph 10 below, within 14 days after whichever of the following first occurs:
 - (a) termination of this Undertaking;
 - (b) my ceasing to be employed or retained by [undertaking company] (provided that I continue to have access to the Confidential Information at that time); or
 - (c) my ceasing to be working for [undertaking company] in respect of the Approved Purposes (other than as a result of ceasing to be employed by [undertaking company]);

I will destroy or deliver to [Provider] the Confidential Information and any documents or things (or parts of documents or things), constituting, recording or containing any of the Confidential Information in my possession, custody, power or control other than electronic records stored in IT backup system that cannot be destroyed or deleted.

- 8 Nothing in this Undertaking shall impose an obligation upon me in respect of information:
 - (a) that is in the public domain; or
 - (b) that has been obtained by me otherwise than from [Provider] in relation to this Undertaking;

provided that the information has not been obtained by me by reason of, or in circumstances involving, any breach of this Undertaking, any other confidentiality undertaking in favour of [Provider] for the Approved purpose, or by any other unlawful means.

- I acknowledge that damages may not be a sufficient remedy for any breach of this Undertaking and that [Provider] may be entitled to specific performance or injunctive relief (as appropriate) as a remedy for any breach or threatened breach of this Undertaking, in addition to any other remedies available to [Provider] at law or in equity.
- The obligations of confidentiality imposed by this Undertaking survive the destruction or delivery to [Provider] of the Confidential Information pursuant to paragraph 7 above.
- I acknowledge that this Undertaking is governed by the law in force in the State of [insert relevant state] and I agree to submit to the non-exclusive jurisdiction of the court of that place.

| Signed: |
|--------------------|
| Print name: |
| Dated: |
| Witness signature: |
| Witness name |

ATTACHMENT 1 Any document, or information in any document provided by [provider] to [undertaking company] which [provider] claims is confidential information for the purposes of this Undertaking.

| ATTACHMENT 2 | | | | | |
|-----------------------|--|--|--|--|--|
| [Approved purpose(s)] | | | | | |
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Schedule 7 - Suspension and Termination

- 7.1 The Access Provider may immediately suspend the supply of a Service or access to the Access Provider's Network, provided it notifies the Access Seeker where practicable and provides the Access Seeker with as much notice as is reasonably practicable:
 - a) during an Emergency; or
 - b) where in the reasonable opinion of the Access Provider, the supply of that Service or access to the Access Provider's Network may pose a threat to safety of persons, hazard to equipment, threat to Network operation, access, integrity or Network security or is likely to impede the activities of authorised persons responding to an Emergency;
 - c) where, in the reasonable opinion of the Access Provider, the Access Seeker's Network or equipment adversely affects or threatens to affect the normal operation of the Access Provider's Network or access to the Access Provider's Network or equipment (including for the avoidance of doubt, where the Access Seeker has delivered Prohibited Traffic onto the Access Provider's Network);
 - d) where an event set out in clauses 7.8(a) to (i) occurs
 - e) and is entitled to continue such suspension until (as the case requires) the relevant event or circumstance giving rise to the suspension has been remedied.

7.2 If:

- a) the Access Seeker has failed to pay monies payable under this FAD;
- b) a Court determines that (and the decision is not subject to an appeal) the Access Seeker's use of:
 - a. its Facilities in connection with any Service supplied to it by the Access Provider;
 - b. the Access Provider's Facilities or Network; or
 - c. any Service supplied to it by the Access Providers,

is in contravention of any law; or

- c) the Access Seeker breaches a material obligation under this FAD (Suspension Event) and:
- d) as soon as reasonably practicable after becoming aware of the Suspension Event, the Access Provider gives a written notice to the Access Seeker:
 - i. citing this clause;
 - ii. specifying the Suspension Event that has occurred;

- iii. requiring the Access Seeker to institute remedial action (if any) in respect of that event; and
- iv. specifying the action which may follow due to a failure to comply with the notice, (Suspension Notice) and:
- e) the Access Seeker fails to institute remedial action as specified in the Suspension Notice within 10 Business Days after receiving the Suspension Notice (in this clause 7.2, the **Remedy Period**), the Access Provider may, by written notice given to the Access Seeker as soon as reasonably practicable after the expiry of the Remedy Period:
- f) refuse to provide the Access Seeker with the Service:
 - i. of the kind in respect of which the Suspension Event has occurred; and
 - a request for which is made by the Access Seeker after the date of the breach, until
 the remedial action specified in the Suspension Notice is completed or the
 Suspension Event otherwise ceases to exist; and
- g) suspend the provision of the Service until the remedial action specified in the Suspension Notice is completed.
- 7.3 For the avoidance of doubt, subclause 7.2(a) does not apply to any monies payable that are the subject of a Billing Dispute that has been notified by the Access Seeker to the Access Provider in accordance with the Billing Dispute Procedures set out in this FAD.
- 7.4 In the case of a suspension pursuant to clause 7.2, the Access Provider must reconnect the Access Seeker to the Access Provider's Network and recommence the supply of the Service as soon as practicable after there no longer exists a reason for suspension and the Access Provider must do so subject to payment by the Access Seeker of the Access Provider's reasonable costs of suspension and reconnection.

7.5 If:

- a) an Access Seeker ceases to be a carrier or carriage service provider; or
- b) an Access Seeker ceases to carry on business for a period of more than 10 consecutive Business Days or
- c) in the case of an Access Seeker, any of the reasonable grounds specified in subsection 152AR(9) of the CCA apply; or
- d) an Access Seeker breaches a material obligation under this FAD, and:
 - i. that breach materially impairs or is likely to materially impair the ability of the Access Provider to deliver Listed Carriage Services to its customers; and

- ii. the Access Provider has given a written notice to the first-mentioned party within 20 Business Days of becoming aware of the breach (**Breach Notice**); and
- iii. the Access Seeker fails to institute remedial action as specified in the Breach Notice within 10 Business Days after receiving the Breach Notice (in this clause 7.5, the **Remedy Period**), or
- e) the supply of the Service(s) to the Access Seeker has been suspended pursuant to the terms and conditions of this FAD for a period of three Months or more, the Access Provider may cease supply of the Service under this FAD by written notice given to the first-mentioned party at any time after becoming aware of the cessation, reasonable grounds or expiry of the Remedy Period specified in the Breach Notice (as the case may be).
- 7.5A If an Access Provider ceases to carry on business for a period of more than 10 consecutive Business Days, the other party may cease acquisition of the Service under this FAD by written notice given to the Access Provider at any time after becoming aware of the cessation.
- 7.6 A party must not give the other party both a Suspension Notice under clause 7.2 and a Breach Notice under clause 7.5 in respect of:
 - a) the same breach; or
 - b) different breaches that relate to or arise from the same act, omission or event or related acts, omissions or events;

except:

- c) where a Suspension Notice has previously been given to the Access Seeker by the Access Provider in accordance with clause 7.2 in respect of a Suspension Event and the Suspension Event has not been rectified by the Access Seeker within the relevant Remedy Period specified in clause 7.2; and
- d) where an Access Seeker has not rectified a Suspension Event, then notwithstanding clause 7.5(d)(ii), the time period for the purposes of clause 7.5(d)(ii) will be 20 Business Days from the expiry of the time available to remedy the Suspension Event.
- 7.7 For the avoidance of doubt, a party is not required to provide a Suspension Notice under clause 7.2 in respect of a breach before giving a Breach Notice in respect of that breach under clause 7.5.
- 7.8 Notwithstanding any other provision of this FAD, either Party may at any time immediately cease the supply of the Service under this FAD by giving written notice of termination to the other Party if:
 - a) an order is made or an effective resolution is passed for winding up or dissolution without winding up (otherwise than for the purposes of solvent reconstruction or amalgamation) of the other Party; or

- b) a receiver, receiver and manager, official manager, controller, administrator (whether voluntary or otherwise), provisional liquidator, liquidator, or like official is appointed over the undertaking and property of the other Party; or
- a holder of an encumbrance takes possession of the undertaking and property of the other party, or the other party enters or proposes to enter into any scheme of arrangement or any composition for the benefit of its creditors; or
- d) the other party is or is likely to be unable to pay its debts as and when they fall due or is deemed to be unable to pay its debts pursuant to section 585 or any other section of the *Corporations Act 2001* (Cth); or
- e) as a result of the operation of section 459F or any other section of the *Corporations Act* 2001 (Cth), the other party is taken to have failed to comply with a statutory demand; or
- f) a force majeure event substantially and adversely affecting the ability of a party to perform its obligations to the other party, continues for a period of three Months; or
- g) the other party breaches any of the terms of any of its loans, security or like agreements or any lease or agreement relating to significant equipment used in conjunction with the business of that other party related to the supply of the Service under this FAD; or
- h) the other party seeks or is granted protection from its creditors under any applicable legislation; or
- i) anything analogous or having a substantially similar effect to any of the events specified above occurs in relation to the other party.
- 7.9 The cessation of the operation of this FAD:
 - a) does not operate as a waiver of any breach by a party of any of the provisions of this FAD; and
 - b) is without prejudice to any rights, liabilities or obligations of any party which have accrued up to the date of cessation.
- 7.10 Without prejudice to the parties' rights upon termination of the supply of the Service under this FAD, or expiry or revocation of this FAD, the Access Provider must refund to the Access Seeker a fair and equitable proportion of those sums paid under this FAD by the Access Seeker which are periodic in nature and have been paid for the Service:
 - a) for a period extending beyond the date on which the supply of the Service under this FAD terminates, or this FAD ceases to have effect, and/or,
 - b) as applicable, in respect of a Service which has been suspended for a period of 10 or more consecutive Business Days under Schedule 7 of this FAD, for the period extending

beyond that 10 Business Day suspension period to the extent the Service remains suspended under Schedule 7 of this FAD,

subject to any invoices or other amounts outstanding from the Access Seeker to the Access Provider. In the event of a dispute in relation to the calculation or quantum of a fair and equitable proportion, either party may refer the matter for dispute resolution in accordance with the dispute resolution procedures set out in Schedule 5 of this FAD.

Schedule 8 - Liability and Indemnity

- 8.1 Subject to clause 8.2, each Party's liability in respect of:
 - a) the 12 Month period commencing on the date of the first supply of the Service under this FAD is limited to the aggregate amount paid or payable by the Access Seeker to the Access Provider for the Service provided by the Access Provider in that initial 12 Month period;
 - b) any subsequent 12 Month period commencing on any anniversary of the date of the first supply of the Service under this FAD is limited to the aggregate amount paid or payable by the Access Seeker to the Access Provider for the Service provided by the Access Provider in the 12 Month period immediately prior to that anniversary.
 - For the purposes of this clause 8.1, Liability arises when the act or omission giving rise to the Liability occurs, not when any claim is made by a party under this FAD in connection with that Liability.
- 8.2 The liability limitation in clause 8.1 does not apply to the Access Seeker's liability to pay the Charges for the Service provided under this FAD, or the Parties' indemnification obligations under clauses 8.3 and 8.4.
- 8.3 Each Party indemnifies the other Party against all Loss arising from the death of, or personal injury to, a Representative of the other Party, where the death or personal injury arises from:
 - a) an act or omission that is intended to cause death or personal injury; or
 - b) a negligent act or omission;
 - by the first Party or by a Representative of the first Party.
- 8.4 Each Party indemnifies the other Party against all Loss arising from any loss of, or damage to, the property of the other party (or the property of a representative of the other Party), where the loss or damage arises from:
 - a) an act or omission that is intended to cause death or personal injury; or
 - b) a negligent act or omission;
 - by the first Party or by a Representative of the first Party.
- 8.5 Each Party indemnifies the other Party against all Loss arising from a claim by a third person against the Innocent Party to the extent that the claim relates to a negligent act or omission by the first Party or by a Representative of the first Party.
- 8.6 Subject to clauses 8.3 and 8.4, a Party has no Liability to the other Party for or in respect of

- any consequential, special or indirect Loss or any loss of profits or data.
- 8.7 A Party has no Liability to the other Party for or in relation to any act or omission of, or any matter arising from or consequential upon any act or omission of, any end-user of a Party or any other third person who is not a Representative of a Party.
- 8.8 The Indemnifying Party is not obliged to indemnify the Innocent Party under this Schedule 8 to the extent that the liability the subject of the indemnity claim is caused or contributed to by:
 - a) a breach of this FAD;
 - b) an act intended to cause death, personal injury, or loss or damage to property; or
 - c) a negligent act or omission;
 - by the Innocent Party.
- 8.9 The Indemnifying Party is not obliged to indemnify the Innocent Party under this Schedule 8 or for in respect of a claim brought against the Innocent Party by an end-user of the Innocent Party, or a third person with whom the Innocent Party has a contractual relationship, to the extent that the Loss under such claim could have been excluded or reduced (regardless of whether such a Liability actually was excluded or reduced) by the Innocent Party in its contract with the end-user or third person.
- 8.10 The Innocent Party must take all reasonable steps to minimise the Loss it has suffered or is likely to suffer as a result of an event giving rise to an indemnity under this Schedule 8. If the Innocent Party does not take reasonable steps to minimise such Loss then the damages payable by the Indemnifying Party must be reduced as is appropriate in each case.
- 8.11 A Party's liability to the other Party for Loss of any kind arising out of the supply of the Service under this FAD or in connection with the relationship established by it is reduced to the extent (if any) that the other Party causes or contributes to the Loss. This reduction applies whether the first Party's liability is in contract, tort (including negligence), under statute or otherwise.
- 8.12 The Indemnifying Party must be given full conduct of the defence of any claim by a third party that is the subject of an indemnity under clause 8.3 or 8.4, including, subject to the Indemnifying Party first obtaining the written consent (which must not be unreasonably withheld) of the Innocent Party to the terms thereof, the settlement of such a claim.
- 8.13 Nothing in this Schedule 8 excludes or limits a Party's entitlement to damages under Part 5 of the Telecommunications (Consumer Protection and Service Standards) Act 1999.

Schedule 9 - Communication with end users

- 9.1 The Access Provider may communicate and deal with an Access Seeker's end-users as expressly provided in clauses 9.2 to 9.4 and as otherwise permitted by law.
- 9.2 Subject to clause 9.3, the Access Provider may communicate and deal with the Access Seeker's end-users:
 - a) in relation to goods and services which the Access Provider currently supplies or previously supplied to the end-user provided that the Access Provider only communicates and deals through its retail division;
 - b) as members of the general public or a part of the general public or members of a particular class of recipients of carriage or other services;
 - c) where the Access Provider performs wholesale operations which require communications or dealings with such end-users, to the extent necessary to carry out such operations;
 - d) in a manner or in circumstances agreed by the Parties; or
 - e) in or in connection with an Emergency, to the extent it reasonably believes necessary to protect the safety of persons or property.

9.3 If:

- a) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Seeker, the Access Provider must advise the end-user that they should discuss any matter concerning the Access Seeker's goods and/or services with the Access Seeker and must not engage in any form of marketing or discussion of the Access Provider's goods and/or services;
- b) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Provider, the Access Provider may engage in any form of marketing or discussion of the Access Provider's goods and/or services; and
- c) an end-user of the Access Seeker initiates a communication with the Access Provider in relation to goods and/or services supplied to that end-user by the Access Provider and the Access Seeker, the Access Provider must advise the end-user that they should discuss any matter concerning the Access Seeker's goods and/or services, with the Access Seeker, but may otherwise engage in any form of marketing or discussion of the Access Provider's goods and/or services.
- 9.4 Where a Party communicates with the end-user of the other Party, that first mentioned Party must, where practicable, make and maintain records of that communication with the other Party's end-user in circumstances where that communication discusses anything concerning the other Party's goods or services with the end-user. For the avoidance of

- doubt, the obligation in this paragraph does not include a requirement to provide such records to the other Party (however such a requirement may arise pursuant to any dispute resolution procedure).
- 9.5 For the purposes of clauses 9.2 to 9.4, a "**communication**" shall include any form of communication, including without limitation telephone discussions and correspondence.
- 9.6 Neither Party may represent that:
 - a) it has any special relationship with or special arrangements with the other Party, including through the use of the other party's trade marks, service marks, logos or branding unless otherwise agreed;
 - b) there are no consequences for an end-user when an end-user signs an authority to transfer their accounts or services;
 - c) a Service has any characteristics or functionality other than as specified in a relevant standard form of agreement or the service description for the Service or in any specifications, collateral or brochures published in relation to the Service; or
 - d) the other Party participates in the provision of the first mentioned Party's services, provided that a Party may, upon enquiry by an end-user, inform the end-user of the nature of its relationship with the other Party.
- 9.7 Where a Party communicates with an end-user of either Party, the first mentioned Party shall ensure that it does not attribute to the other Party:
 - a) blame for a Fault or other circumstance; or
 - b) the need for maintenance of a Network; or
 - c) the suspension of a Service,
 - provided that this requirement does not require a Party to engage in unethical, misleading or deceptive conduct.
- 9.8 This Schedule 9 shall be subject to any applicable industry standard made by the ACMA pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) and any applicable industry code registered pursuant to Part 6 of the *Telecommunications Act 1997* (Cth) in relation to communications or dealings with end-users.

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Schedule 10 - Network modernisation and upgrade notice periods

Notice to be provided where Access Provider undertakes a Major Network Modernisation and Upgrade

- 10.1 Except where the parties agree otherwise, the Access Provider may make a Major Network Modernisation and Upgrade by:
 - a) providing the Access Seeker with notices in writing in accordance with clauses 10.2 and 10.4 (**General Notification**) and clauses 10.3 and 10.5 (**Individual Notification**); and
 - b) consulting with the Access Seeker, and negotiating in good faith, to address any reasonable concerns of the Access Seeker, in relation to the Major Network Modernisation and Upgrade.
 - This clause 10.1 does not apply to an Emergency Network Modernisation and Upgrade.
- 10.2 The period of notices given under a General Notification provided by the Access Provider to the Access Seeker:
 - a) must be an Equivalent Period of Notice; and
 - b) in any event, must not be less than 30 weeks before the Major Network Modernisation and Upgrade is scheduled to take effect.
- 10.3 An Individual Notification must be provided by the Access Provider to the Access Seeker as soon as practicable after the General Notification, taking account of all the circumstances of the Major Network Modernisation and Upgrade.

Information to be provided in the notices

- 10.4 A General Notification must include a general description of the proposed Major Network Modernisation and Upgrade, including the indicative timing for the implementation of the Major Network Modernisation and Upgrade.
- 10.5 An Individual Notification must include the following information in addition to the information provided in the relevant General Notification:
 - a) the anticipated commencement date for implementing the Major Network Modernisation and Upgrade
 - b) the anticipated amount of time it will take to implement the Major Network Modernisation and Upgrade;
 - c) details of the Access Seeker's activated Services, or Services in the process of being activated at the date of the notice, that are likely to be affected by the Major Network

Modernisation and Upgrade;

- d) the likely action required by the Access Seeker as a result of the Major Network Modernisation and Upgrade (including the possible impact of the Major Network Modernisation and Upgrade upon the Access Seeker's Service); and
- e) details of who the Access Seeker may contact to obtain further information about the Major Network Modernisation and Upgrade.
- 10.6 An Individual Notification only needs to be given where a Service has been activated or the Access Provider is in the process of activating a service as at the date of the Individual Notification, and:
 - a) the Major Network Modernisation and Upgrade will require the Access Seeker to take particular action in order to continue to use the Service; or
 - b) the Major Network Modernisation and Upgrade will result in the Service no longer being supplied or the Service being suspended for a period of no less than 20 Business Days.
- 10.7 Where the Access Provider has provided the Access Seeker with an Individual Notification, the Access Provider must provide the Access Seeker with:
 - a) updates about the Major Network Modernisation and Upgrade covered by the notice, including:
 - i. any update or change to the information provided in the Individual Notification;
 - ii. any new information available at the time of the update about:
 - 1. how the Access Seeker may be impacted by the Major Network Modernisation and Upgrade; and
 - 2. what steps the Access Seeker will be required to take to facilitate the Major Network Modernisation and Upgrade.
- 10.8 The updates referred to in subclause 10.7(a) must be provided regularly (which is not required to be any more frequently than Monthly) after the Individual Notification.

Emergency Network Modernisation and Upgrade

- 10.9 In the event of an Emergency, the Access Provider may conduct an Emergency Network Modernisation and Upgrade, and
 - a) must use its best endeavours to provide the Access Seeker with an Individual Notification prior to the Emergency Network Modernisation and Upgrade being implemented; or
 - b) where it is not practicable for prior notice to be given, the Access Provider must provide

the Access Seeker with an Individual Notification as soon as reasonably practicable after the Emergency Network Modernisation and Upgrade is implemented.

Negotiations in good faith

- 10.10 Except where the parties agree otherwise, the Access Provider must not commence implementation of a Major Network Modernisation and Upgrade unless:
 - a) it complies with clauses 10.1 to 10.8; and
 - b) it has consulted with the Access Seeker and has negotiated in good faith, and addressed the reasonable concerns of the Access Seeker in relation to the Major Network Modernisation and Upgrade.
- 10.11 Notwithstanding any continuing negotiations between the Access Provider and the Access Seeker pursuant to clauses 10.1 and 10.10, if the Access Provider has complied with this Schedule 10, a Major Network Modernisation and Upgrade may proceed within a reasonable time period, taking account of all the circumstances, after an Individual Notification has been issued, unless both parties agree otherwise.
- 10.12 In attempting to reach a mutually acceptable resolution in relation to a variation under clauses 10.1 and 10.10, the parties must recognise any need that the Access Provider may have to ensure that the specifications for the Services which the Access Providers supplies to more than one of its customers need to be consistent (including, without limitation having regard to the incorporation by the Access Provider of any relevant international standards).

Dispute Resolution

10.13 If a dispute arises in relation to a Major Network Modernisation and Upgrade, then the matter may be resolved in accordance with the dispute resolution procedures set out in Schedule 5 of this FAD.

Miscellaneous

- 10.14 A requirement for the Access Provider to provide information in written form includes provision of that information in electronic form.
- 10.15 Any information provided by the Access Provider in electronic form must be in a text-searchable and readable format.

Schedule 11 - Changes to operating manuals

- 11.1 Operational documents concerning the Service that have been provided to the Access Seeker by the Access Provider, or should be provided because they affect the supply of the Service including the technical and operational quality of the Service, or affect the rights and/or obligations of an Access Seeker, may be amended:
 - (a) by the Access Provider from time to time to implement or reflect a change to its standard processes, subject to:
 - i. giving 20 Business Days prior written notice to the Access Seeker including a documented list of all amendments, and a marked-up copy of the proposed new operational document that clearly identifies all amendments; and
 - ii. allowing the Access Seeker to provide comments during the notice period on the proposed amendments, and where provided, the Access Provider having reasonably considered those comments and implemented any such comments where the Access Provider considers it reasonable to do so; and
 - (b) otherwise, by agreement of the parties.
- 11.1A Operational documents referred to in this clause include ordering and provisioning manuals, fault management procedures and operational manuals.
- 11.1B For the purposes of 11.1(a)(ii), an Access Provider in considering whether it is reasonable for it to implement any comments may consider whether the changes reflect all Access Seeker and the Access Provider's interests.
- 11.2 Upon completion of the process set out in clause 11.1, the Access Provider must notify the Access Seeker and make available to the Access Seeker a copy of the new operational document
- 11.3 Where operational documents concerning the Service are amended in accordance with clause 11.1 and the Access Seeker believes that the amendments:
 - a) are unreasonable; or
 - b) deprive the Access Seeker of a fundamental part of the bargain it obtained under this FAD;

the Access Seeker may seek to have the matter resolved in accordance with the dispute resolution procedures set out in Schedule 5 of this FAD.

Schedule 12 - Recourse to regulated terms

- 12.1 Unless otherwise agreed by the parties, if
 - (a) an Access Agreement between an Access Provider and an Access Seeker is in force and the Access Agreement relates to access to the same Service which this FAD relates to;
 - (b) the ACCC makes or varies a Regulatory Determination in relation to the Service and the new Regulatory Determination or the variation deals with a matter other than price; and
 - (c) a party to the Access Agreement proposes, by written notice, to the other party to vary the Access Agreement to reflect the terms and conditions in the new or varied Regulatory Determination about that matter.
 - each party must:
 - (i) consider the proposed changes in good faith; and
 - (ii) negotiate the proposed changes in good faith for a reasonable period not exceeding 20 Business days unless a longer period of time is agreed in writing, including, if requested by the other party, to meet with the other party to discuss the other party's proposal.
- 12.1A If the process under clause 12.1 does not result in a variation to the Access Agreement, this is not a Non-Billing Dispute or Billing Dispute for the purposes of this FAD.
- 12.2 Unless otherwise agreed by the parties, if
 - (a) an Access Agreement between an Access Provider and an Access Seeker is in force and the Access Agreement relates to access to the same Service which this FAD relates to; and
 - (b) the ACCC makes or varies a Regulatory Determination in relation to the Service and the new Regulatory Determination or the variation deals with a matter other than price;
 - either party may terminate the Access Agreement in respect of that Service (but only in respect of that Service) by providing the other party with a written notice, and termination will take effect on the expiry of the period specified in the notice, which must be no less than 120 Business Days after the day that notice is provided.