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Draft Review of Mobile Termination Access Service (MTAS)

Draft decision on whether to commence an investigation under clause 1(3) of Schedule 3 of the Telecommunications Act

The Commission: Dr Stephen Gale

Elisabeth Welson

John Crawford

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Associated documents

Publication date	Reference	Title
23 September 2015	n/a	Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001
5 May 2011	ISBN 978-1-869451-48-6	Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM and short messaging services (SMS)
16 June 2010	n/a	Reconsideration Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specific services

Glossary

Table of abbreviations	
ACCC	Australian Competition and Consumer Commission
CPP	Calling party pays
EC	European Commission
FTF	Fixed-to-fixed
FTM	Fixed-to-mobile
IP	Internet Protocol
IPP	Initial Pricing Principle
MBSF	Mobile Black Spots Fund
MNO	Mobile Network Operator
MTAS	Mobile Termination Access Services
MTF	Mobile-to-fixed
MTM	Mobile-to-mobile
OTT	Over-the-top (services like voice and messaging)
RBI	Rural Broadband Initiative
SMS	Short-message-service
SSNIP	Small but significant non-transitory increase in price
STD	Standard Terms Determination
TRA	Telecommunications Regulatory Authority of Bahrain
UFB	Ultra-Fast Broadband
VoIP	Voice over Internet Protocol
VoLTE	Voice over Long Term Evolution

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Executive summary

1. The Commerce Commission (Commission) is required to decide if there are reasonable grounds to commence an investigation into whether to remove the Mobile Termination Access Services (MTAS) from the list of designated services in Schedule 1 of the Telecommunications Act 2001 (the Act) by 23 September 2020.

2. Our preliminary view is that there are not reasonable grounds to commence a Schedule 3 investigation into whether to omit MTAS from Schedule 1 of the Act at this time.

3. While we consider that there may be reasonable grounds to commence an investigation into omitting short-message-service (SMS) termination, we have considered the MTAS service description as a whole in the current review. Our preliminary view is that omitting SMS termination from the MTAS service description would amount to an amendment of the service description which is out of scope for this particular review. We note that under clause 1(1) of Schedule 3, we can initiate an investigation into whether a specified or designated service should be amended at any time. We do not intend to undertake such an investigation at this time but acknowledge we have the option to do so should we choose to before the next five-year review.

4. This document summarises the reasons for our preliminary view and seeks your comment. Submissions can be made via the Commission website and are due by 5pm Wednesday 1 July 2020.

Introduction

What is the Mobile Termination Access Service?

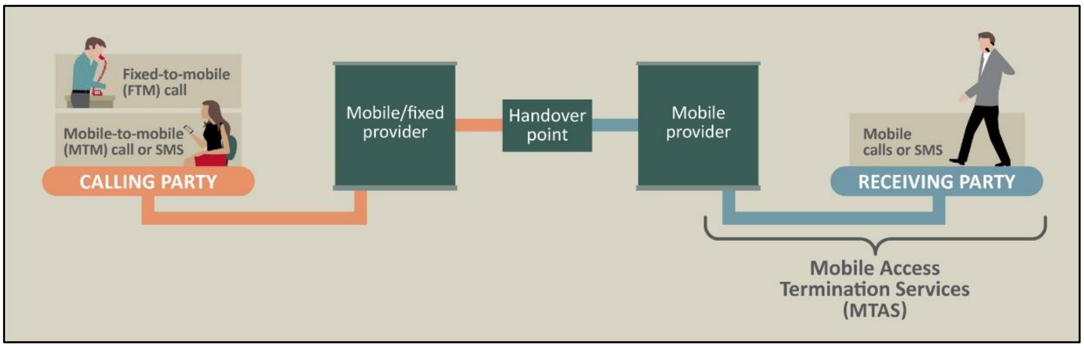
5. Retail mobile calling services, fixed-to-mobile (FTM) calling services and SMS are comprised of origination, conveyance, and termination elements:

    5.1 Where the call or SMS is between subscribers on the same network ('on-net'), all of these functions are undertaken (self-supplied) by the same network;

    5.2 Where the call or SMS is between subscribers on different networks ('off-net'), the network on which the call or SMS is originated must acquire a wholesale termination service (MTAS) for the call or SMS to be completed.

6. MTAS is a wholesale service supplied by a Mobile Network Operator (MNO) which allows subscribers on other networks to communicate (either by way of a voice call or an SMS) with subscribers of that MNO. MTAS is an input required in order to complete retail calling and messaging services between networks ('off-net' services). MTAS is illustrated in Figure 1 below.

Figure 1: Mobile Termination Access Service



7. MTAS became a designated service in Schedule 1 of the Act on 23 September 2010. We note that for designated services, both price and non-price terms are regulated.

8. Before MTAS became a designated service, mobile providers offered aggressive on-net discounts which meant there was a large difference between on-net and off-net retail prices. In our recommendation to the Minister in February 2010, we considered the combination of above cost termination rates and on-net discounting created a barrier for new entrants attracting subscribers to its network. This is because a new entrant would have a small 'on-net' customer base and may have to offer low retail prices for off-net calls to attract customers. This would likely lead to traffic imbalances in favour of the larger networks, and where termination rates are significantly above cost, this could hinder the ability of the new entrant to compete.[1]

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

We concluded in June 2010 that regulation would likely remove barriers to efficient entry and expansion in the retail markets.

9. Part 2 of Schedule 1 of the Act describes MTAS as:

> Termination (and its associated functions) on a cellular mobile telephone network of any or any combination, of the following:
>
> (a) voice calls originating on a fixed telephone network:
>
> (b) voice calls originating on another cellular mobile telephone network:
>
> (c) short-message-service (SMS) originating on another cellular mobile telephone network
>
> For the avoidance of doubt, these services include the termination of internationally originated voice calls and SMS, and Voice-over-Internet-Protocol-originated voice calls, where these are handed over at a mobile switching centre in New Zealand.

Legislative framework

10. This review is being undertaken in accordance with clause 1(3) of Schedule 3 of the Act. Clause 1(3) requires that the Commission consider, at intervals of not more than 5 years after the date on which a designated service or specified service comes into force, whether there are reasonable grounds for commencing an investigation into whether a service should be omitted from Schedule 1 of the Act.

11. In reaching our view on whether there are reasonable grounds for commencing an investigation, section 19 of the Act requires us to make the decision that will give, or is likely to best give, effect to the purpose set out in section 18 of the Act. The section 18 purpose is:

> to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers.

12. Section 18(2) and (2A) identify particular matters that we are required to consider when determining what promotes competition in telecommunications markets for the long-term benefit of end-users:

> (2) In determining whether or not, or the extent to which, any act or omission will result, or will be likely to result, in competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand, the efficiencies that will result, or will be likely to result, from that act or omission must be considered.
>
> (2A) To avoid doubt, in determining whether or not, or the extent to which, competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand is promoted, consideration must be given to the incentives to innovate that exist for, and the risks faced by, investors in new telecommunications services that involve significant capital investment and that offer capabilities not available from established services.

13. The High Court has observed that section 18(1) is the "dominant" provision in section 18, and subsections (2) and (2A) "are specified for the purpose of assisting analysis under section 18(1)".[2] In this sense, subsections (2) and (2A) are not isolated considerations on their own. Rather, they form part of the consideration of whether competition is promoted for the long-term benefit of end-users.

14. Put simply, we are required to make a decision that promotes competition for the long-term benefit of end-users, and as part of our assessments we must consider the impact of our decisions on efficiencies as well as investment in capital intensive new telecommunications services.

15. The Commission's last decision under clause 1(3) of Schedule 3 was released on 23 September 2015.[3] Therefore, the current 5-year interval for the MTAS ends on 23 September 2020.

16. Under clause 1(3) of Schedule 3 of the Act, we are required to consider whether there are reasonable grounds for commencing an investigation into whether the service should be removed from Schedule 1. It does not provide for us to consider introducing a new service or amending an existing service.

17. If the Commission decides that there are reasonable grounds for commencing an investigation into whether a designated service or specified service should be omitted from Schedule 1 under section 66(b), the Commission must commence a Schedule 3 investigation not later than 15 working days after making that decision.[4]

18. Separately, under clause 1(1) of Schedule 3, we are able to initiate at any time an investigation into whether a new service should be added to Schedule 1, or whether an existing service should be altered or omitted.

19. Additionally, under section 30R, we have a separate power to initiate a review the terms of the Standard Terms Determination (STD)[5] which sets out the price and non-price terms that apply to MTAS.

What are considered reasonable grounds to investigate?

20. We consider that reasonable grounds to investigate whether MTAS should be omitted from Schedule 1 will exist where the evidence before us suggests that circumstances have changed since the service was last reviewed in such a way that:

    20.1 continued regulation of all three of the component parts of the service may no longer be necessary to best promote competition; or

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2 *Chorus Ltd v Commerce Commission* [2014] NZHC 690 at [34].

3 Commerce Commission "Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001" (23 September 2015).

4 Telecommunications Act, Schedule 3, clause 1(5).

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

20.2 existing regulation of the service as a whole may be having a negative impact such that removing the regulation of it may best promote competition for the long-term benefit of end-users.

21. As discussed in the following section, our last review of MTAS under clause 1(3) of Schedule 3 was completed on 23 September 2015. Therefore, our current review focuses on developments that have occurred since our last review in 2015.

22. When considering whether there may be reasonable grounds to investigate, we first look at competitive developments that have occurred since 2015 at the retail level, as this is where services using MTAS as an input are supplied to end-users. We consider how competition has developed at the retail level, any changes in how consumers use mobile services, and technological developments that have supported the emergence of new services. We consider competitive constraints in the relevant markets and assess those which we consider are most likely to constrain MNOs from profitably increasing MTAS rates in the absence of regulation. Ultimately, this consideration informs our decision about whether omitting the service from Schedule 1 might best promote section 18.

23. We then consider the competitive constraints that might exist specifically in respect of MTAS. This includes the following:

23.1 The existence of any direct substitutes for MTAS. For example, where a network originating a call or SMS relies on MTAS, we examine whether there are substitutes at the wholesale level that they can switch to if the price of MTAS increases;

23.2 The existence of any indirect constraints on MTAS that might operate through the retail level (from which demand for MTAS is derived).[6] For example, an increase in the price of MTAS may be passed through to the retail price of the off-net voice call or SMS that is supplied to end-users using MTAS. If such an increase in retail prices were to induce end-users to switch to other retail services that do not rely on MTAS, such switching of demand away from MTAS may indirectly constrain the MNO who supplies MTAS.

24. Lastly, we consider the likely costs and benefits of regulation in light of our assessment of the competitive constraints of MTAS.

Background to MTAS

25. MTAS was added to Schedule 1 of the Act as a designated service on 23 September 2010, following a recommendation by the Commission to the Minister for Communications.[7]

[6] The relevant retail services which rely on MTAS include off-net FTM calls, MTM calls, and SMS.

[7] The Commission had initially recommended that undertakings from Telecom and Vodafone be accepted as an alternative to regulation (22 February 2010). The undertakings offered a quicker reduction in MTAS rates, but MTAS rates would have remained higher than would likely have been the case under

26. The recommendation was the culmination of a Schedule 3 investigation conducted by the Commission into whether to regulate MTAS. During the investigation, the Commission had identified competition concerns in the downstream markets in which MTAS is used to offer retail services. In particular, 2degrees had recently entered the retail mobile services market as a third MNO, and the Commission was concerned that the combination of high wholesale prices for MTAS and significant discounting of retail prices for calls and SMS that remain on the same network ('on-net') would restrict the ability of the new entrant to compete.

27. We concluded in June 2010 that regulation would likely remove barriers to efficient entry and expansion in the retail markets. This would allow 2degrees to compete for retail mobile subscribers. Regulation of MTAS would also promote competition in the retail market in which FTM calls were supplied, by allowing fixed-only providers to compete more effectively with integrated providers.

28. Following our recommendation to the Minister in June 2010, MTAS was added to Schedule 1 of the Act as a designated access service on 23 September 2010. By including MTAS as a designated access service, we could set both price and non-price terms for the MNOs to terminate calls and SMS on their networks.

29. In May 2011, we finalised a STD which set the price and non-price terms for MTAS.[8] The STD set prices according to the Initial Pricing Principle (IPP) for MTAS. MTAS rates are cost-based and are determined by benchmarking against cost-based prices in comparable countries.

30. In September 2015, we completed the first 5-yearly review of MTAS.[9] We concluded there were not reasonable grounds to commence an investigation into whether MTAS should be omitted from Schedule 1. We considered that:

    30.1 MNOs still had the ability and incentive to set excessive MTAS rates in the absence of regulation due to their monopoly over termination under the calling party pays (CPP) principle.

    30.2 We found that in the absence of regulation, Over-The-Top (OTT) calling or messaging services were unlikely to be an effective constraint.

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regulation. Following the launch by Vodafone of new retail on-net plans, the Commission recommended that MTAS become a designated access service. See Commerce Commission "Reconsideration Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specified services" (16 June 2010).

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

9 Commerce Commission "Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001" (23 September 2015).

30.3 We also noted that investigations in Australia, the EU and the UK had drawn similar conclusions that OTT services were not at that stage an effective substitute for traditional mobile calls and SMS.

Market developments since 2015

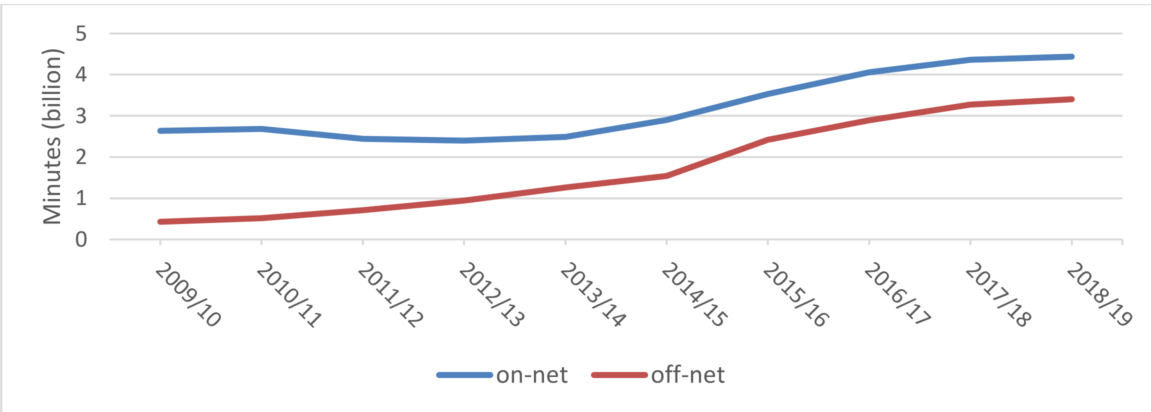
Competition at the retail level

31. We discuss developments in the retail markets since our last review in 2015 as it is useful to understand the impact that regulated MTAS has had on retail competition.[10]

32. Since regulated prices were introduced in the MTAS STD in 2011,[11] competition in the downstream retail markets has continued to improve. This is partly due to MTAS rates being brought closer to MTAS costs through a glide path which has reduced the difference in the cost of supplying on-net and off-net calls/SMS, lowering the barrier to expansion faced by a smaller entrant such as 2degrees.

33. In the retail mobile market, mobile providers have moved away from offering aggressive on-net discounts to predominantly offering bundles with unlimited minutes/SMS to any number on any network (as well as data). This has led to relatively strong growth in off-net calls and SMS between networks, resulting in a convergence in on-net and off-net traffic. Figure 2 shows that the volume of off-net calls has doubled between 2015 and 2019.[12]

Figure 2: Mobile-to-mobile traffic



Source: Commerce Commission Annual Monitoring data

34. 2degrees appears to have become a more established and independent competitor in the mobile market. As noted in our mobile market study, 2degrees has continued

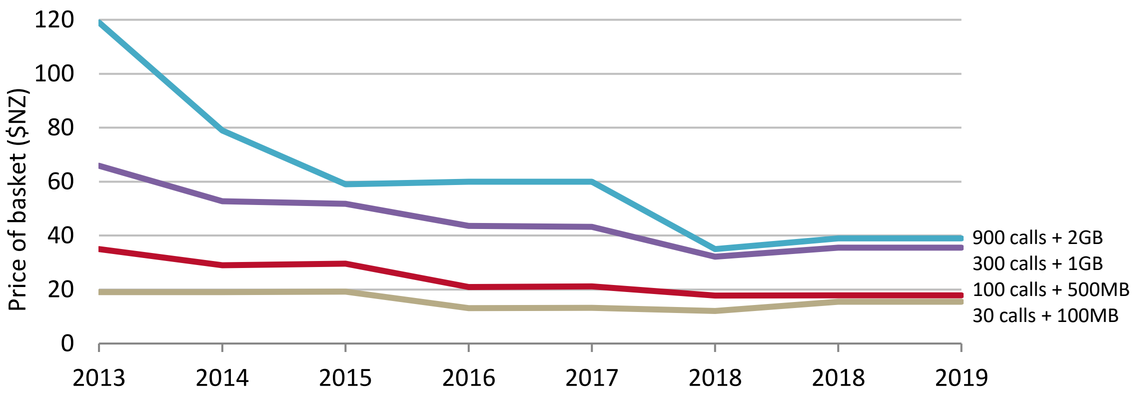
10 All figures and references to data exclude MVNOs.

11 See Attachment 1 for a summary of MTAS rates in New Zealand since 2008.

12 The Commission stopped collecting on-net and off-net SMS in 2013. However, during the period between 2010 and 2013, the volume of off-net SMS grew by approximately 370%, while the volume of on-net SMS dropped by -31%.

to expand its network coverage to reach similar levels as Spark and Vodafone.[13] Although 2degrees' aggregate market share by subscribers has remained broadly stable since 2015, 2degrees has in recent years been gaining market share in the higher value on-account residential segment.[14] 2degrees has contributed to declines in the prices of mobile plans. Figure 3 shows that the average price of mobile plans has fallen by 34% since 2015.

Figure 3: $NZ price of mobile plans[15]



Source: Strategy Analytics - Teligen benchmarking results (2013-2019)

35. Competition in the retail market for FTM calls has also continued to improve. Since 2015, as shown in Table 1, the average price per minute for a FTM call has fallen by almost a third and there is now no difference between fixed-only and integrated providers' average retail prices. This indicates that fixed-only providers continue to be able to compete on price with integrated providers.

Table 1: Average integrated and fixed-only retail FTM prices ($ per minute)

Average retail FTM price ($ per minute)	2015	2019
Integrated provider	$0.26	$0.17
Fixed-only provider	$0.25	$0.17

Source: Commerce Commission Annual Monitoring data5689

Usage

36. We discuss how usage of voice calls and SMS has developed as this indicates how important these services are to consumers. We also review how access to and use of

13 Commerce Commission "Mobile Market Study – Findings" (26 September 2019), paragraph 5.12. Available at https://comcom.govt.nz/regulated-industries/telecommunications/projects/mobile-market-study

14 Ibid, paragraph 3.14.

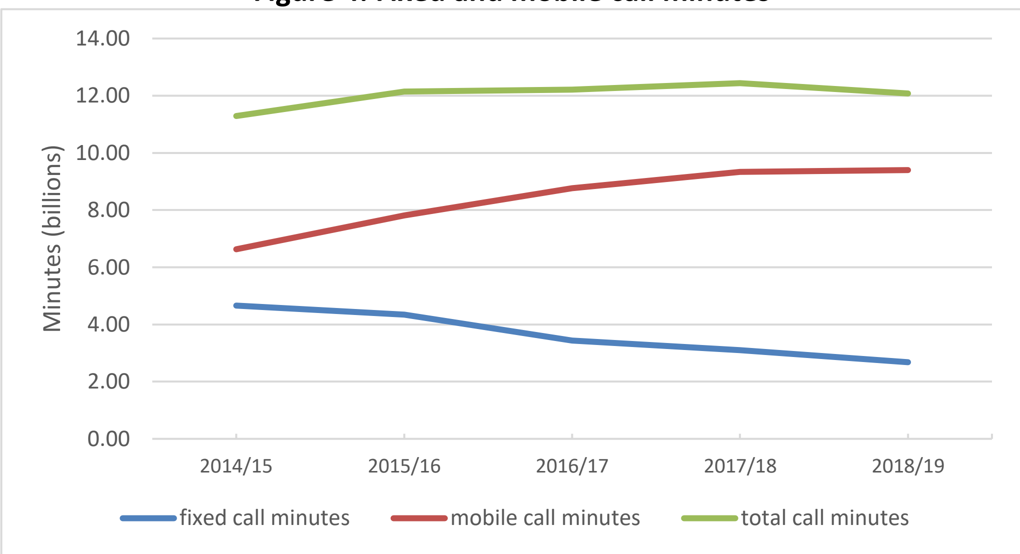
15 Teligen's benchmarking captures the cheapest mobile bundles from the largest MNOs. Therefore, Vodafone, Spark and Skinny's (from 2018) mobile plans are captured in Figure 3.

potential demand side substitutes has developed as these could indirectly constrain MNOs from profitably increasing MTAS rates in the absence of regulation.

37. In particular, we review OTT services as potential substitutes for traditional mobile voice calls and SMS. In our 2015 review of MTAS, we noted that OTT calling and messaging services do not rely on MTAS, and therefore potentially could provide an indirect constraint on MTAS.[16] We referred to a number of overseas regulators (European Commission, Ofcom, and the Australian Competition and Consumer Commission (ACCC)) who had concluded that OTT services were not at that stage an effective constraint. We concluded that there was insufficient evidence "to indicate that OTT services are an effective substitute for mobile and fixed services at this time."[17]

38. Since 2015, the total volume of mobile call minutes has increased relative to the total volume of fixed call minutes as shown in Figure 4. The average volume of call minutes per subscriber per month is summarised in Figure 5, which shows that the average volume of mobile minutes per subscriber per month has increased by 63%. This indicates that the ability to make phone calls independent of location is important to subscribers. This is consistent with Consumer NZ survey results discussed below, which indicate that call minutes remain an important feature when choosing a mobile plan. Over the same period the volume of fixed call minutes per access line per month has declined by 16%. We note that several subscribers may use a fixed access line (as a fixed line subscription is typically associated with a household). This explains why call fixed minutes per access line are higher than mobile call minutes per subscriber.

Figure 4: Fixed and mobile call minutes

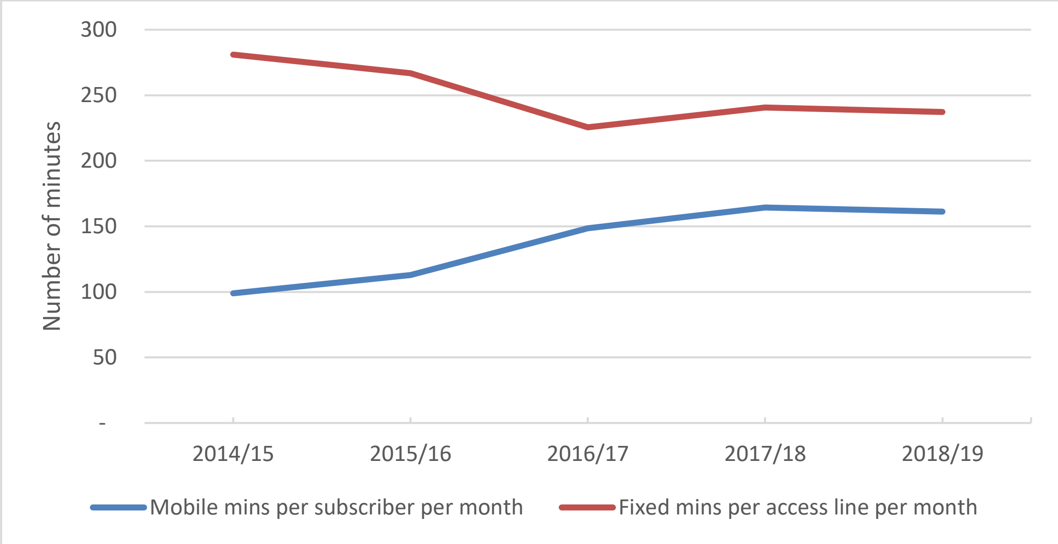


Source: Commerce Commission Annual Monitoring data

[16] Commerce Commission "Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001" (23 September 2015), paragraph 43 and 45.

[17] Ibid, paragraph 49.

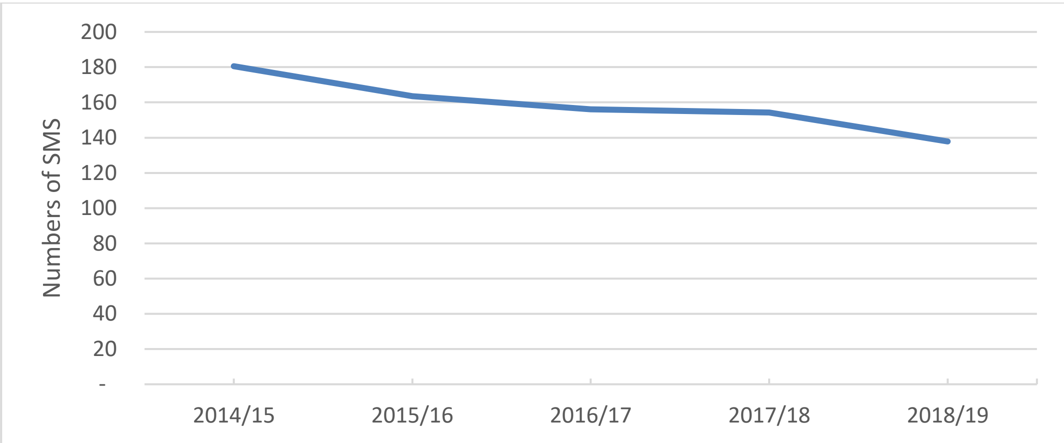
Figure 5: Mobile minutes per subscriber per month and fixed minutes per access line per month



Source: Commerce Commission Annual Monitoring data

39. Since 2015, SMS volumes have continued to decline. Figure 6 shows that the average volume of SMS messages per subscriber per month has fallen by 24% between 2015 and 2019.

Figure 6: SMS messages per subscriber per month



Source: Commerce Commission Annual Monitoring data

40. OTT services are communications services which are initiated and delivered over a internet connection. The use of these services is dependent on both parties having the OTT application installed on their device. It is important to note that OTT services do not rely on MTAS and use Wi-Fi or mobile data. Therefore, any competitive constraint arising from OTT services on MTAS (and on services that rely on MTAS) is likely to continue in the absence of MTAS regulation.

41. The increasing popularity and penetration of smartphones has resulted in a high proportion of mobile subscribers with internet-capable devices. These can support a

proliferation of OTT services that can substitute MTAS-originated services, such as WhatsApp, Skype, Viber, Facebook Messenger, and Instagram among others.

42. In recent years, more evidence has emerged on the access to and use of OTT services in New Zealand. This includes the following:

42.1 Consumer NZ's survey of mobile subscribers:

42.1.1 in 2019, 90% of respondents owned a smartphone, and 96% of respondents subscribed to a retail mobile plan which included mobile data;

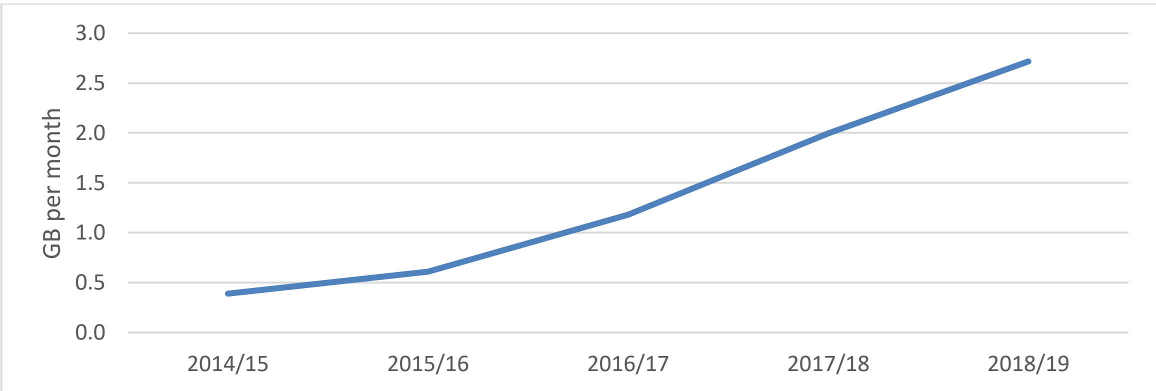
42.1.2 in 2019, respondents rated mobile data (32%) and call minutes (26%) as the two most important features when choosing a mobile plan. Only 12% of respondents rated the number of SMS as the most important.[18]

42.2 Commerce Commission Annual Monitoring:

42.2.1 It was reported in 2018 and 2019 that the 4G networks cover 97% of the population.[19] This shows that mobile data is accessible to most New Zealanders.

42.2.2 Average data used per month has increased by nearly six times since 2015. This is shown in Figure 7. In addition, the popularity of mobile plans with a data component has increased significantly. In 2015, 86% of subscribers' tariffs provided data and in 2019, 90% of subscribers' tariffs provide data.[20]

Figure 7: Average data used per month



Source: Commerce Commission Annual Monitoring data

[18] Consumer NZ "Telco Survey – 2019 Mobile Service Providers summary of results"

[19] Commerce Commission annual telecommunications monitoring data for 2018 and 2019.

[20] Commerce Commission annual telecommunications monitoring data for 2015 and 2019.

42.3 Analysys Mason's 'Connected Consumer' survey of OTT usage in New Zealand in 2019 reports:[21]

42.3.1 72% of respondents in New Zealand use OTT communications apps. Analysys Mason notes there is greater potential for growth in penetration of OTT services in New Zealand than Australia. Respondents reported that quality of service, ease of use and lack of friends or family who use OTT services are not significant barriers for adoption.

42.3.2 More smartphone owners use OTT services for messaging than for voice calls. In New Zealand, 89% of smartphone users use OTT services for messaging and 47% use OTT services for free voice calls.

43. The evidence summarised above indicates that there may not be significant barriers to accessing OTT services and that OTT services for messaging are more popular than OTT services for voice calls. We discuss the potential implications of this for MTAS from paragraph 48.

Technological developments since 2015

44. It is useful to discuss developments in technology since 2015 which affect consumers' use of voice and SMS, and availability of potential supply and demand side substitutes. These changes may influence the extent to which demand and supply side substitutes can constrain MNOs from profitably increasing their MTAS rates in the absence of regulation.

45. Since our last review of MTAS in 2015, the ongoing investment in and evolution of the mobile networks in New Zealand has resulted in an increase in the availability and use of internet-based applications. As we noted in our mobile market study in 2019, the emergence of 4G mobile network technologies has supported the delivery of mobile broadband connectivity and OTT services.[22] New Zealand's 4G/LTE population coverage has increased from approximately 65% in 2014,[23] to 97% in 2019.[24] Over this period, there has been an increase in the ownership of smartphones, providing mobile end-users with the ability to access a wide range of services beyond traditional voice calling and SMS. As noted earlier, 90% of respondents to Consumer NZ's survey of mobile users owned a smartphone in 2019.

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21 Data was taken from a sample of 1000 consumers with access to broadband recruited for a mainly desktop-based questionnaire.

22 Commerce Commission "Mobile Market Study – Findings" (26 September 2019), paragraph 2.16. This information is reported in the Annual Telecommunications Monitoring Questionnaire 2019.

23 Stuff "Spark and Vodafone both claim to have the largest 4G network" (February 2015). Available at https://www.stuff.co.nz/technology/digital-living/65686117/spark-and-vodafone-both-claim-to-have-largest-4g-network

24 Commerce Commission "Annual Telecommunications Monitoring reports from 2019" (March 2020). Available at https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/annual-telecommunications-market-monitoring-report

This is an increase as Research New Zealand found that around 70% of New Zealanders had access to a smartphone in 2015 (up from 49% in 2014).[25]

46. Developments in 4G and broadband have improved consumers' access and quality of OTT services. 79% of New Zealanders can now access UFB (Ultra-Fast Broadband) and in the next few years we expect the deployment of 5G and fibre to further improve consumers' access and quality of OTT services.[26] The second phase of the Rural Broadband Initiative (RBI) and the Mobile Black Spots Fund (MBSF) aims to extend broadband to 99.8% of the population by 2022.[27]

47. Developments in technology have improved the quality of mobile voice calls. In 2019 and 2020, MNOs introduced VoLTE (Voice over Long Term Evolution) and in 2018 2degrees introduced Wi-Fi calling. VoLTE allows calls made with mobiles that support VoLTE in 4G areas to be delivered over 4G networks, and Wi-Fi calling allows calls made with mobiles that support Wi-Fi calling technology to be delivered over Wi-Fi. Mobile calls using VoLTE and Wi-Fi calling are higher quality and do not use up consumers' data allowances.

Our assessment of the competitive constraints on MTAS

48. In this section, we consider the relevant markets for MTAS. This enables us to assess if there are any constraints in those markets which could limit MNOs' ability and incentive to profitably increase MTAS in the absence of regulation.

    48.1 We first consider whether there are any direct substitutes for MTAS at the wholesale level (as per paragraph 23.1).

    48.2 We then examine any indirect constraints on MTAS that might operate through the retail level, where end-users might switch to other retail services that do not rely on MTAS (as per paragraph 23.2).

49. The findings inform our preliminary views on whether there are reasonable grounds to commence a Schedule 3 investigation to deregulate MTAS.

50. We consider mobile and fixed retail markets to be relevant downstream markets, as MTAS is a wholesale input used to supply retail services in these markets. An attempt by an MNO to increase the wholesale price of MTAS may induce consumers of downstream services to switch to alternatives. This is because termination rates contribute to the cost of making a call to a mobile number or sending an SMS, and these costs are reflected in retail prices.

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25 Research New Zealand "A Report on a Survey of New Zealanders' Use of Smartphones and other Mobile Communication Devices 2015".

26 MBIE "Quarterly connectivity update 1 July to 30 September 2019," (July 2019). page 5. Available at https://www.mbie.govt.nz/science-and-technology/it-communications-and-broadband/fast-broadband/quarterly-updates-on-broadband-deployment/

27 Crown Infrastructure "Press release announcement on the expansion of Rural Broadband Initiative phase 2 and Mobile Black Spots Fund," (December 2018). Available at https://www.crowninfrastructure.govt.nz/wp-content/uploads/2018/12/Media-release-RBI2-MBSF-expansion-announcement-18-Dec-2018-FINAL.pdf

51. We also consider wholesale termination services provided by each MNO's network as a relevant market. This is because each MNO has monopoly power over access to its customers under CPP. The calling party's network requires termination services to make a call or SMS to the receiving party, and the termination service is only provided by the receiving party's network.

52. The extent to which MNOs may be constrained from profitably increasing their MTAS rates will depend on the available demand and supply side substitutes in the relevant markets. We use the following criteria to identify demand and supply side substitutes to assess this constraint in more detail.

    52.1 The possibility for consumers to switch to alternative services, and the possibility of other firms to supply substitute services which allow consumers to contact their intended recipient in a similar way to making a call or sending an SMS.

    52.2 Those services must be accessible and available at a price and quality level that would incentivise enough consumers to switch to the alternative service, or other firms must be able to supply a close enough alternative service to constrain MNOs from profitably increasing MTAS rates.

Direct substitutes for MTAS

53. In the wholesale termination market, MNOs could be constrained from profitably increasing MTAS rates if the calling party's network provider finds an alternative way to connect callers to the receiving party of the call or SMS.

54. Under the CPP principle used in New Zealand, the calling party's network provider is charged for termination by the receiving party's network provider.

55. The calling party has little influence on the receiving party's choice of network and has little visibility of wholesale termination rates. This is because wholesale termination rates are paid by the calling party indirectly through mobile plans. Furthermore, number portability means that the calling party cannot identify which network is being called. These two factors limit downward pressure on mobile termination rates.

56. Under CPP, the receiving party's network provider has monopoly power over access to its mobile subscribers. It has the power to set high prices to terminate calls or SMS messages on its network and can impose unreasonable terms for calling parties to access its customers. The receiving party's network has the ability and incentive to do so because it does not risk losing customers under CPP.

57. We are not aware of technological developments in relation to the way calls or SMS messages are terminated since our last review in 2015.

58. However, direct substitution could occur if MNOs could compete to offer call termination to the number called. We consider this is unlikely to happen because:

58.1 the CPP means that the receiving party's network provider charges a termination fee to the calling party's provider to connect two people; and

58.2 in the absence of regulation, the receiving party's network provider is unlikely to have an incentive to allow other competitors to terminate calls on their number range. This would mean giving up their monopoly position.

59. We therefore do not consider there to be any direct substitutes for MTAS at the wholesale level.

Indirect substitutes for MTAS

60. MNOs could be constrained from increasing MTAS rates if consumers in the retail markets for mobile-to-mobile (MTM) and fixed-to-mobile (FTM) services respond to increases in retail prices by contacting the intended recipient in a different way.

61. We have identified the following alternative ways consumers could contact their intended recipient:

61.1 One option is to contact the recipient on their fixed number. This could be by making a fixed-to-fixed (FTF) or mobile-to-fixed (MTF) call.

61.2 Another option is contacting the recipient through their mobile number where the caller uses an OTT out service like Skype or Viber. 'OTT out' services have also risen in popularity. OTT out services originate on the internet and are delivered to New Zealand telephone numbers. For example, a calling party calls its intended recipient using their telephone number through Skype. In this instance, Skype might be charged for MTAS, although this depends on the commercial arrangement between Skype and the receiving party's network. The details of commercial arrangements are not publicly available as they are commercially sensitive.

61.3 A further option is to contact the recipient through their mobile number where the recipient uses an OTT in service like Skype or Viber. For example, a calling party dials its intended recipient's mobile number and the recipient picks up the call using an OTT in app like Skype. MTAS charges depend on the commercial arrangement between the app and MNO.

61.4 Finally, the calling party could contact the recipient via an OTT service which does not rely on MTAS as calls and SMS messages originate and are delivered over broadband or data. Examples include Skype, Zoom and WhatsApp.

62. We do not consider calling a recipient on their fixed number to be an effective substitute for calling a mobile. This is because the recipient may not have a landline, and even if they have a landline, the recipient party may not be at home. Figure 4 shows the volume of fixed calls has fallen by 42% since 2015.

63. We also do not consider OTT out services to be an effective substitute for calling a mobile. Current adoption levels of OTT out services have remained low and have fallen for the last two years. Analysys Mason's consumer survey in 2018 and 2019

found that the adoption rate for Viber was 11% in 2018 and it fell to 8% in 2019. For Skype, the adoption rate was 16% in 2018 and it fell to 13% in 2019.[28] Relative to other OTT services, Viber and Skype were ranked the second and third least popular out of eleven OTT communications services in 2019.[29] In addition, OTT out services rely on MTAS. This means an increase in MTAS rates may deter consumers from switching to these services. Therefore, we consider it unlikely enough customers would switch to OTT out services to constrain MNOs from profitably increasing MTAS rates.

64. We also do not consider OTT in services to be an effective substitute for calling a mobile because the supply and use of OTT in services is low as it is logistically difficult and potentially expensive for applications to assign telephone numbers to their users. We expect adoption rates to remain low as there may be little incentive for MNOs to enter commercial arrangements with competitors too. In addition, OTT in services rely on MTAS. This means an increase in MTAS rates may deter consumers from switching to these services. Therefore, we consider it unlikely enough consumers would be able to switch to OTT in services to constrain MNOs from profitably increasing MTAS rates.

65. We consider OTT services are the most likely direct substitutes for traditional voice calls and SMS in the downstream markets. This is to the extent that OTT services are rising in popularity and offer similar functionality to traditional voice calls and SMS. Furthermore, access to OTT services is possible for the majority of New Zealander's due to high smartphone ownership, data coverage and internet access. We discuss the indirect competitive constraints of OTT services on MTAS in the following section.

Our assessment of the indirect constraints on MTAS

66. In this section, we assess whether OTT services are likely to be effective constraints for traditional voice and SMS termination. This is based on our assessment above of OTT services being the most likely constraint against MNOs profitably increasing MTAS in the absence of regulation.

67. Any competitive constraint from OTT services on MTAS will operate indirectly through the retail level. To reach an overall view on whether OTT services are an effective constraint for voice and SMS MTAS, we focus on the following steps.[30] We then consider the potential costs and benefits of regulation.

68. For OTT services to be an effective constraint on voice and SMS MTAS termination, the following is required:

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28 Analysys Mason "Connected Consumer Survey 2019: OTT communication services in Australia and New Zealand" (April 2020); "Connected Consumer Survey 2018: OTT communication services in Australia and New Zealand" (February 2019).

29 Analysys Mason "Connected Consumer Survey 2019: OTT communication services in Australia and New Zealand" (April 2020).

30 As noted in Attachment 2, a number of overseas regulators have undertaken similar reviews of MTAS in recent years.

68.1 MNOs have an incentive to increase MTAS rates in the absence of regulation;

68.2 The calling party's network provider passes through increases in MTAS rates to its retail prices;

68.3 The calling party responds to increases in retail prices by switching to OTT services; and

68.4 Enough customers switch to OTT services, so an increase in MTAS charges would be unprofitable due to the reduction in call volumes.

69. Under the CPP principle, the calling party pays and so we will look at the caller's response to an increase in MTAS rates.

MTAS for voice calls

Incentive to increase MTAS rates in the absence of regulation

70. We consider that MNOs are likely to have an incentive to increase voice MTAS rates in the absence of regulation. This is because under CPP, an MNO can increase the MTAS rate for terminating calls on its network without fear of losing subscribers on its network, as its subscribers do not pay to receive calls.

71. Where traffic between networks is balanced, the incentive for an MNO to increase MTAS rates may be reduced by the threat of retaliation by other MNOs. However, it is likely that traffic flows are asymmetric in the mobile and fixed retail markets as there are more than two providers, and Spark and Vodafone have higher subscriber market shares than other providers.

72. We consider it is unlikely that MNOs would continue to set MTAS rates at the regulated level if MNOs have different traffic flows. Under the CPP, an MNO with a net inflow of calls from other networks would benefit from raising MTAS rates, even if its competitors matched the increase in MTAS rates. This is because the MNO with a net inflow of traffic would earn higher termination revenues. It would also benefit because increases in rivals' wholesale costs would make rivals less competitive.

73. Conversely, for an MNO with a net outflow of calls to other networks, the increase in MTAS payments to other networks would exceed any increase in MTAS revenues. These MNOs may have an incentive to respond by increasing their MTAS rates to offset their termination costs.

The calling party's network provider passes through increases in MTAS rates to its retail prices (FTM and MTM)

74. We consider that increases in MTAS rates are likely to be passed through into retail offers for MTM and FTM calls, for example either by reducing the minutes allowances in mobile bundles, or though increasing the retail price per minute for pay-as-you-go plans.

75. Providers with net inflows of calls from other networks may have an incentive to pass increased MTAS costs into off-net retail prices. This would increase rivals' wholesale costs which would make them less competitive.

76. In response, rivals could raise their retail prices or maintain retail prices which would mean accepting lower profits. We'd expect rivals to eventually raise their retail prices to remain in the retail market.

The calling party responds to increases in retail prices by switching to OTT services

77. We consider that some consumers would switch to OTT voice services in response to any increase in retail prices that does occur. We explain below that some consumers' choice may also be influenced by differences in functionalities. In addition, there may be some barriers to switching due to difficulties in comparing relative prices and stickiness in consumer switching between mobile providers.

78. We consider that some consumers may substitute voice minutes for OTT services if voice minutes become relatively more expensive. However, it may be difficult for consumers to compare the relative prices of calls to OTT services. Most mobile plans provide bundles of minutes, texts and data which makes it hard for subscribers to understand the cost of each service.

79. We note that usage levels of OTT services and voice calls are different despite that the average cost per minute is low enough for both that price differences may not drive consumers' choices very strongly. This suggests that price is not the only factor influencing consumers' decisions. Analysys Mason's consumer survey in New Zealand found that 47% of people use OTT services for voice calls in 2019. This level of usage is considerably lower than for OTT messaging services (89%). Traditional mobile voice calls are still important to subscribers, with the average mobile subscriber making 161 mins of calls per month in 2019 (as shown in Figure 5). As noted earlier (paragraph 42.1.2), consumers continue to value mobile minutes as an important feature when choosing a mobile plan.

80. It is possible that non-price differences might be driving consumers' preferences for voice calls over OTT services. This could be due to differences in functionality such as call quality, or access. A study into consumer behaviour found that OTT services are often used as a complement to traditional mobile voice calls which may reflect non-price factors such as differences in functions and quality of service.[31]

81. Furthermore, in our mobile market study, we found that consumer switching between mobile providers is sticky. We found that consumers do not compare mobile plans very often and there is a large proportion of consumers who have remained with their current supplier for five years or more.[32]

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31 Arnold, R., Schneider, A., & Hildebrandt, C. "All communications Services Are Not Created Equal – Substitution of OTT Communications Services for ECS from a Consumer Perspective" (September 2016). Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2756395

32 Commerce Commission "Mobile Market Study – Findings" (26 September 2019), page 96.

Enough customers switch to OTT services, so an increase in MTAS rates would be unprofitable due to the reduction in call volumes

82. Given the above evidence on the usage of OTT services and the importance of mobile calling, we are not convinced that enough consumers would switch to OTT services to make an increase in MTAS charges unprofitable. This is because consumers' decision to use voice calls or OTT services may be influenced by differences in functionality. We also consider that consumers response to price changes may be limited due to difficulties in comparing relative prices, and evidence of stickiness in switching between mobile providers.

Conclusion

83. We consider that OTT services are not at this stage an effective constraint against MNOs profitably raising MTAS rates for voice services. Each MNO continues to have a monopoly over wholesale access to its mobile subscribers and has an incentive to raise MTAS rates due to differences in voice traffic.

84. Our findings suggest that OTT services are unlikely to exert an effective indirect competitive constraint on MTAS for voice services. This is because there is some doubt that enough consumers using mobile calling services would switch to OTT services to constrain MNOs from profitably increasing MTAS rates. In this case, ongoing regulation of MTAS for voice services is likely to benefit consumers by preventing MNOs from passing increases in MTAS rates through to retail prices.

MTAS for SMS

Incentive to increase MTAS rates in the absence of regulation

85. We consider that MNOs may have an incentive to increase SMS MTAS rates in the absence of regulation, for similar reasons that apply for voice MTAS. However, the incentive to raise MTAS rates may be lower for SMS than for voice. SMS messages are generally reciprocal, and so the volumes of off-net traffic are usually more balanced. This may mean the expected gain in profit from increasing MTAS rates is likely to be smaller than for voice calls which are usually one way.

The messaging party's network provider passes through increases in MTAS rates to its retail prices (SMS)

86. We consider it is unlikely that an increase in MTAS rates from a single provider will significantly increase retail prices for SMS. This is due to low and declining volumes of SMS messages, and low MTAS rates per SMS.

87. MNOs are less likely to pass through smaller increases in SMS MTAS rates into retail prices than for voice MTAS.

88. This is because MNOs can expect lower termination revenues for SMS than voice. This is due to traffic flows being more balanced and cost-based MTAS rates set out in the STD are lower for SMS than voice. SMS MTAS rates are 0.06 cents per SMS and voice MTAS rates are 3.56 cents per minute.

The messaging party responds to increases in retail prices by switching to OTT services

89. We consider that consumers may be more likely to switch to OTT messaging services in response to any increase in retail prices than is the case for voice services.

90. OTT messaging services may be a more effective substitute for SMS because they provide greater functionality. For example, subscribers using OTT messaging services such as WhatsApp and Instagram can send videos, voice clips and pictures at no additional cost.

91. Analysys Mason's consumer survey of New Zealanders found that 89% of smartphone users surveyed use OTT services for messaging in 2019. The popularity of OTT-based messaging services is likely to have contributed to the decline in SMS volumes that we have observed in New Zealand for a number of years now. We have previously commented that "despite many mobile plans now offering unlimited texting, this decline is expected to continue given the increasing popularity of various OTT messaging services like Facebook Messenger, iMessage and Viber. Text volumes per subscriber have been declining for both prepaid and on-account subscribers."[33]

92. We note that there may be some businesses (for example, GP practices) who may rely on SMS to contact their customers. Businesses may not regard alternatives such as OTT services as close substitutes. Understanding different customer groups is an area that could be further explored in a Schedule 3 investigation to amend the MTAS service description.

Enough customers switch to OTT services, so an increase in MTAS charges would be unprofitable due to the reduction in SMS messages.

93. We consider that MNOs may increase MTAS rates in the absence of regulation but would not be able to do so profitably as it is likely that enough customers have already switched to OTT services. We expect MNOs to be constrained further as we expect SMS volumes to continue falling and OTT usage to continue growing.

Conclusion

94. In our view, there is growing evidence that OTT services have become an effective constraint against MNOs profitably raising SMS MTAS rates. Although each MNO continues to have a monopoly over the termination of SMS sent to its mobile subscribers, each MNO is likely to be indirectly constrained by substitution at the retail level. OTT messaging services have become popular and are increasingly being used as an alternative to SMS. An attempt by an MNO to increase SMS MTAS rates could lead to increased switching at the retail level.

Costs and benefits of regulation

95. In this section, we assess the costs and benefits of regulating MTAS in light of our assessment of the indirect constraints on MTAS. This informs our view of whether

[33] Commerce Commission "2017 Annual Telecommunications Monitoring Report – Key facts" (December 2017). page 25. Available at https://comcom.govt.nz/__data/assets/pdf_file/0020/63821/2017-Annual-Telecommunications-Monitoring-Report-20-December-2017.PDF

continued regulation of MTAS may no longer necessary to promote competition, and if existing regulation has a negative impact such that removing regulation may best promote competition for the long-term benefit of end-users.

96. Regulation imposes a cost on MNOs to administer the regulation, and a cost on the Commission in terms of implementation and monitoring. Consumers pay indirectly for regulation through mobile plans and taxes.

97. Regulation can also impose an opportunity cost when it is applied to a market which is effectively competitive. For example, in the case of MTAS, deregulation might lead to better outcomes for consumers than regulation if OTT services can constrain MNOs from profitably increasing MTAS rates. This is because in the absence of information asymmetry, competition is likely to drive MTAS rates closer to actual costs. MTAS rates are also likely to adjust to costs without a lag.

98. However, a benefit of MTAS regulation when there is a termination monopoly, is that it prevents the harms to consumers' long-term interests which were apparent before 2010. Before MTAS was regulated, mobile providers offered aggressive on-net discounts which meant there was a large difference between on-net and off-net retail prices. In our recommendation to the Minister in February 2010, we considered the combination of above cost termination rates and on-net discounting created a barrier for new entrants attracting subscribers to its network. This is because a new entrant would have a small 'on-net' customer base, and may have to offer low retail prices for off-net calls to attract customers. This would likely lead to traffic imbalances in favour of the larger networks, and where termination rates are significantly above cost, this could hinder the ability of the new entrant to compete.[34]

99. The harm arising from network providers setting excessive MTAS rates is that the services available to consumers may be limited and competition in retail markets may be distorted. These outcomes were apparent before MTAS was added to Schedule 1 in 2010 and have been a key reason for *ex-ante* regulation of MTAS in other jurisdictions.

100. The inclusion of MTAS as a designated service in Schedule 1 of the Act has increased consumer surplus by reducing barriers to competition in the retail markets which has contributed to lower retail prices. Regulation has brought MTAS rates closer to costs, as shown in Attachment 1. This has reduced MNOs' incentives to charge more for off-net calls and SMS messages under CPP. The price of the cheapest bundles of call minutes and SMS messages has fallen significantly since 2013, as shown in Figure 3. Fixed-only providers can also compete on price with integrated providers, as shown in Table 1.

101. For voice MTAS, our preliminary view is that the costs of deregulation are likely to outweigh the benefits. This is due to our view that OTT services are not yet an

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

effective constraint for voice services, which is consistent with recent experience overseas. We note that stakeholders did not comment on the cost of regulating MTAS in our last review in 2015.

102. We consider that the benefits of continuing to regulate voice MTAS are likely to be significant. This is because many subscribers would be affected given the popularity of traditional voice calls.

103. In the case of SMS MTAS, to the extent that OTT-based messaging services are now an effective constraint, the benefits of ongoing regulation are likely to be small. There is likely to a regulatory cost and an opportunity cost from forgoing the benefits of deregulation mentioned above.

104. We do not consider the regulatory and opportunity costs of continuing to regulate SMS MTAS to be significant in the short run. This is because relatively few subscribers would be affected due to the declining popularity of SMS messaging and availability of OTT services.

105. In conclusion, we consider the benefits of continuing to regulate MTAS as a whole are likely to outweigh the costs of regulation.

Does regulation remain necessary to best promote competition in telecommunications markets for the long-term benefit of end-users?

Voice MTAS

106. We consider that regulation of voice MTAS remains necessary to best promote competition in telecommunications markets for the long-term benefit of end-users.

107. We consider that MNOs have the ability to increase MTAS rates due to their monopoly on termination access on their networks and we think MNOs have an incentive to profitably increase MTAS rates for voice. This is due to our view that OTT services are not yet an effective constraint on traditional mobile calling services. This supports with our view that the benefits of regulation outweigh the costs of deregulation which were apparent before MTAS was regulated.

SMS MTAS

108. We consider that regulation of SMS MTAS may no longer be necessary to best promote competition in telecommunications markets for the long-term benefit of end-users.

109. We consider that MNOs have the ability to increase MTAS rates due to their monopoly on termination access on their networks, but MNOs may no longer have an incentive to profitably increase MTAS rates for SMS. This is based on our view that OTT services are likely to be an effective constraint in the absence of regulation. This informs our view that the benefits of deregulation outweigh the costs of regulation due to the regulatory and opportunity costs of regulation.[35]

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35 As noted in Attachment 2, a number of other regulators have recently de-regulated SMS termination.

Our preliminary view

110. Our preliminary view is that there are not reasonable grounds to start a Schedule 3 investigation into whether to remove the MTAS service from Schedule 1 of the Act at this time.

111. The reasons for our preliminary view are outlined below:

111.1 The definition of MTAS in Schedule 1 includes voice (FTM and MTM) and SMS termination. Our preliminary view is that there are not reasonable grounds to commence an investigation into whether to omit voice MTAS from Schedule 1 of the Act. Our assessment is that regulation remains necessary to best promote competition in telecommunications markets for the long-term benefit of end-users. Omitting MTAS from Schedule 1 would likely result in higher retail prices and distortions in the retail markets which were apparent before MTAS was regulated.

111.2 While we consider that there may be reasonable grounds to commence an investigation into omitting SMS termination, this would amount to an amendment of the current MTAS service description.

111.3 We consider there are benefits to not commencing an investigation into whether MTAS should be omitted from Schedule 1 at this time. We note that under clause 1(1) of Schedule 3, we can initiate an investigation into whether a specified or designated service should be altered at any time. We do not intend to undertake such an investigation at this time but acknowledge we have the option to do so should we choose to before the next five-year review. We welcome submissions and evidence on when this would be an appropriate time to reconsider this.

Information for interested parties on making a submission

112. We are seeking submissions on our draft decision by 5pm, Wednesday 1 July 2020.

113. Please make your submission via the MTAS review project page by 5pm on Wednesday 1 July 2020. The project page will direct you to a form with instructions on how to upload your submission.

114. When including commercially sensitive or confidential information in your submission, we offer the following guidance:

114.1 Provide a clearly labelled confidential version and public version. We intend to publish all public versions on our website;

114.2 Provide reasons alongside any information in the confidential version as to why it is commercially sensitive or confidential information; and

114.3 The responsibility for ensuring confidential information is not included in a public version of a submission rests entirely with the party making the submission.

115. If we consider information disclosed in the confidential version to be in the public interest, we will consult with the party that provided the information before any such disclosure is made.

Next steps

116. After considering the submissions, we will publish our final decision on whether there are reasonable grounds to commence an investigation into whether to omit MTAS from Schedule 1 of the Act before 23 September 2020.

Attachment 1: MTAS rates in New Zealand

Effective from	April 2008	April 2009	April 2010	April 2011	April 2012	April 2013	April 2014	April 2015 to April 2020
Voice (cpm)	16	15	14.2	7.48	5.88	3.97	3.72	3.56
SMS (cpSMS)			9.5	0.06	0.06	0.06	0.06	0.06

Source: Commerce Commission "Final report on whether the mobile termination access services (incorporating MTM voice termination, FTM voice termination and SMS termination) should become designated services" (22 February 2010); Commerce Commission "Standard Terms Determination for the designated services of the mobile termination access services (MTAS) fixed-to-mobile voice (FTM), mobile-to-mobile voice (MTM) and short messaging services (SMS)) Decision 724" (5 May 2011).

Attachment 2: Experience overseas

117. MTAS for voice has been regulated by most jurisdictions with CPP due to each network provider's monopoly over termination access. Several jurisdictions have also regulated MTAS for SMS.

118. It is relevant to consider other jurisdictions in this review. In the last two years, the ACCC, Ofcom and the Telecommunications Regulatory Authority of Bahrain (TRA) have undertaken market reviews of MTAS to see whether regulation of MTAS remains appropriate.

119. The ACCC, Ofcom, and TRA all regulated voice MTAS prior to their recent reviews, and all decided to continue regulating voice MTAS. Only the ACCC and TRA had previously regulated SMS MTAS. Both have decided to deregulate SMS MTAS.

120. All jurisdictions agreed that MNOs have the ability to increase MTAS rates in the absence of regulation. This is described under termination monopoly above.

121. A key part to each jurisdiction's decision was whether OTT services were an effective constraint against MNOs' incentive to profitably increasing MTAS rates in the absence of regulation.

122. We also note that the European Commission (EC) is due to publish an updated list of markets it recommends that should be subject to ex-ante regulation by December 2020. The EC recommended in 2014 that 'wholesale voice call termination on individual markets' should be subject to ex-ante regulation and information presented at a stakeholder event in March 2019.

123. We summarise each jurisdiction's decisions below.

The ACCC

124. The ACCC reviewed whether to deregulate MTAS for voice and SMS in June 2019.[36]

125. The ACCC concluded that regulation ('declaration') should continue for voice MTAS, but not for SMS MTAS.[37]

126. In its final report, the ACCC stated that a key question was whether OTT services were now effective retail substitutes for mobile voice and/or SMS services such that regulatory intervention in the wholesale market is no longer required to promote the long-term interests of end-users.[38]

127. The ACCC did not consider OTT services to be a complete substitute for voice calls and concluded that OTT services would not constrain MNOs from profitably increasing MTAS rates in the absence of regulation. Regulating voice MTAS would promote competition in the retail market, promote any to any connectivity and the

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36 ACCC "Domestic Mobile Terminating Access Service Declaration Inquiry Final Report" (June 2019).
37 Ibid, pages 2-3.
38 Ibid, pages 2, 6.

efficient use and investment in infrastructure. Lastly, all submissions to the ACCC's draft paper supported regulation of voice MTAS.

128. In the case of SMS, the ACCC considered OTT services were an effective substitute at the retail level and would constrain MNOs from increasing MTAS rates in the absence of regulation. This was due to the increasing penetration of smartphones and increasing use of OTT messages for person-to-person messaging.[39] For business-to-person messaging, the ACCC found there were multiple different ways businesses could communicate with consumers such as in-app notifications and emails.

Ofcom

129. The UK regulator, Ofcom reviewed whether to deregulate MTAS for voice in 2018.[40] Ofcom concluded there were still grounds to continue regulating voice MTAS.

130. Ofcom did not consider OTT services to be a close enough substitute to voice calls. Some notable reasons are as follows:

130.1 Ofcom found that consumers had limited awareness in changes on retail prices for calls to mobiles, so MNOs were likely to be able to profitably increase MTAS in the absence of regulation.

130.2 Jigsaw research for the Narrowband Market Review 2017 found that only 11% of residential survey respondents said they would be certain or very likely to switch some calls to Voice over Internet Protocol (VoIP)[41] in response to a small but significant and non-transitory increase in price (SSNIP) for landline calls.

130.3 While OTT volumes are increasing, only a minority of consumers use it on a smartphone, and fewer use it frequently. Therefore, with low demand for OTT voice relative to "traditional" voice, the required level of switching of mobile voice calls to use of OTT voice calls in response to a price rise would imply a large proportional increase in demand for OTT. Only around 16% of those who have ever used the internet to make voice or video calls do so daily while only 27% of mobile phone users made voice or video calls using VoIP in the past week. On the other hand, 70% of mobile phone users make telephone voice calls at least daily with 92% making a telephone voice call at least once a week.

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[39] Ibid, page 28.

[40] Ofcom "Mobile Call Termination Market Review 2018-2021 Final Statement" (28 March 2018).

[41] VoIP refers to calls originating over the internet and terminating on a mobile or landline number, or calls over the internet.

Bahrain

131. TRA reviewed whether to deregulate MTAS in February 2019.[42] TRA concluded that there were grounds to continue regulating voice MTAS but decided to deregulate SMS MTAS.

132. TRA did not consider OTT services to be a close enough substitute to voice calls. Some notable reasons are as follows:

132.1 A residential survey found that 65% of local calls are made through mobile phones, while only 29% are made through OTT services.

132.2 The survey showed that mobile phone subscribers reported 84% satisfaction with the ability to make calls without dropping. The satisfaction for OTT calls is lower at 76%.

132.3 There are functional differences between voice calls and OTT calls. If a call is made via OTT services, the calling party needs to know if the receiving party can receive the call. The receiving party must have the right app and internet access.

133. In the case of SMS, TRA considered OTT services to be an effective substitute for the following reasons:

133.1 Since 2015, 88% of messaging in Bahrain has been by way of OTT services. Over that period, SMS volumes have significantly reduced.

133.2 OTT messaging services offer more functions than SMS messages.

133.3 A survey in 2017 by Nielson found that mobile phone subscribers reported higher satisfaction with OTT-based messaging services. This suggests there are no significant differences in quality to SMS messages.

133.4 TRA expects OTT services to increasingly constrain the ability of mobile providers to profitably increase MTAS rates over time.

European Commission

134. The EC periodically issues a recommendation on communications markets which it considers are susceptible to ex-ante regulation. The current recommendation was published in 2014, and includes “wholesale voice call termination on individual mobile networks”.[43]

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42 TRA “Determination of Dominance in the Mobile Termination Markets Final Determination” (7 February 2019).

43 The EC recommendation and defined markets, along with an explanatory statement, are available at https://ec.europa.eu/digital-single-market/en/news/commission-recommendation-relevant-product-and-service-markets-within-electronic-communications

135. In 2014, the EC concluded that each provider has the ability to raise MTAS rates for voice calls due to each provider having a monopoly on their own network under the CPP.

136. The EC also found each provider had an incentive to raise MTAS rates in the absence of regulation. This is because providers would have an incentive to negotiate with each other to set MTAS rates at marginal cost. However, the EC considered that successful negotiation was unlikely due to several barriers for negotiations: asymmetric cost structures, asymmetric preferences of end-users, different sizes of networks, and some providers operate in the fixed and mobile market, while some only operate in only one market. The first two barriers pose a co-ordination problem, and the last two barriers mean it is likely that some providers can profit from unilaterally increasing MTAS rates.

137. The EC did not recommend ex-ante regulation for SMS termination. It concluded that the mutual bargaining positions of the providers was more balanced for SMS termination than voice termination. SMS traffic is MTM which means there are fewer asymmetries in cost structures, and traffic is more balanced as SMS messages are usually reciprocal. This meant that MNOs' incentives to profitably increase MTAS rates are lower.

138. The EC also noted that OTT services were not yet an effective substitute for SMS messages as they were used as an additional channel of communication or a substitute for a select group of users.

139. The EC is currently reviewing its list of markets should be subject to ex-ante regulation.[44] It will publish its final list of markets by December 2020. Information presented at a stakeholder workshop in March 2020 suggests that mobile voice termination could be regulated through Eurorates which would set a uniform price cap across the EU. The EC comments that voice termination may not meet the criteria for its list of recommended markets subject to ex-ante regulation based on there being suitable alternatives and that the Eurorate price cap would continue to address the termination bottleneck.[45]

[44] Information on the EC's current review is available at https://ec.europa.eu/digital-single-market/en/news/consultation-revision-recommendation-relevant-markets

[45] EC "WIK presentation at the Stakeholder workshop on the Recommendation on relevant markets" (March 2020). Available at https://ec.europa.eu/digital-single-market/en/news/stakeholder-workshop-recommendation-relevant-markets