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Final decision on Mobile Termination Access Services (MTAS)

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

Decision No. [2020] NZCC 16

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Associated documents

Publication date	Reference	Title
10 June 2020	ISBN 978-1-869458-26-3	Mobile termination access service review – Draft review
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	
A2P	Application to Person
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
LRIC	Long-Run Incremental Cost
MBSF	Mobile Black Spots Fund
MCMC	Malaysian Communications and Multimedia Commission
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 e.g. WhatsApp; Skype)
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
TSLRIC	Total Service Long-Run Incremental Cost
TUANZ	Technology Users Association of New Zealand
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 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 final view is that there are not reasonable grounds to commence a Schedule 3 clause 1(3) investigation into whether to remove MTAS from Schedule 1 of the Act at this time.

3. In coming to our final view, we have considered submissions that we received on our draft review. Our final view is that regulation of MTAS remains necessary to best promote competition in telecommunications markets for the long-term benefit of end-users. Since our last review of MTAS in 2015, over-the-top (OTT) services have increasingly been used by consumers, although we do not consider these to yet be an effective constraint on MTAS, particularly in relation to voice services. 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.

4. We also agree with submissions that commencing a Schedule 3 clause 1(3) investigation at this time is unlikely to be proportionate, as the industry is currently experiencing other regulatory pressures and there are likely to be ongoing benefits to retaining regulation of MTAS at this stage.

5. Our next review of whether there are reasonable grounds to commence an investigation into whether to omit MTAS from Schedule 1 must be no later than five years' time on 2 September 2025. We note that we can initiate an investigation into whether a specified or designated service should be amended under clause 1(1) of Schedule 3 at any time within the next five years.

6. We also note that we may consider future work on MTAS rates which would be conducted by way of a s30R review of the MTAS Standard Terms Determination (STD). We have had little visibility over actual MTAS rates since the price path in the MTAS STD ended in 2015. As a result, we do not know if MTAS rates have moved in line with the likely costs of providing this service. To better understand how actual MTAS rates charged in New Zealand compare against relevant benchmarks, we will collect more detailed information on MTAS revenues and traffic in our annual monitoring questionnaires from 2020. In a competitive market, we would expect to see prices move in line with costs. As the cost-based benchmarks used to set prices in the MTAS STD have been dropping, we would view MTAS rates below the regulated price cap as evidence of some competitive constraint, which may support the potential deregulation of the service in the future.

7. This document responds to submissions on our draft and summarises the reasons for our final view.

Introduction

What are Mobile Termination Access Services?

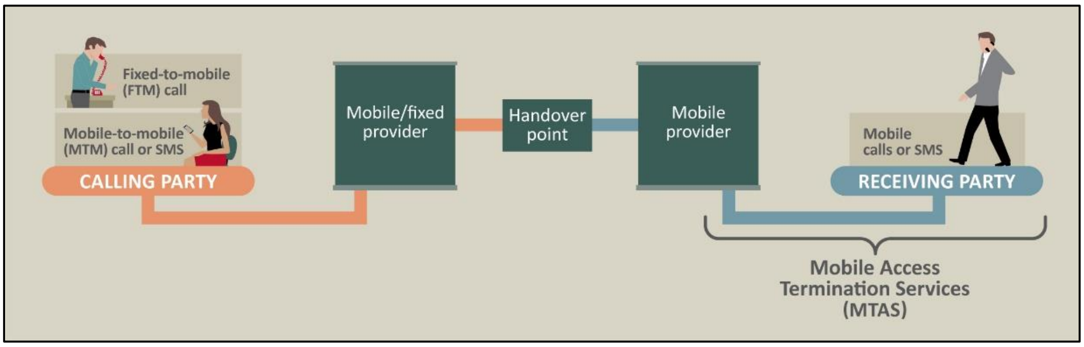
8. Retail mobile calling services, fixed-to-mobile (FTM) calling services and SMS are comprised of origination, conveyance, and termination elements:

    8.1 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;

    8.2 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.

9. 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 Services



10. 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.

11. 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.

12. 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

13. 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 five 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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. We refer to this type of investigation as a "Clause 1(3) Investigation." It does not provide for us to consider introducing a new service or amending an existing service.

20. 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 clause 1(3) investigation not later than 15 working days after making that decision.[4]

21. 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. We refer to this type of investigation as a "Clause 1(1) Investigation."

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

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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). Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/63531/Review-of-MTAS-as-a-designated-service-2.PDF

[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).

What are considered reasonable grounds to investigate?

23. 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:

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

    23.2 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.

24. 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.

25. 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.

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

    26.1 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;

    26.2 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 which supplies MTAS.

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

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

Summary of our draft decision

28. Our preliminary view was there are not reasonable grounds to commence a Schedule 3 clause 1(3) investigation to omit MTAS from Schedule 1 at this time. In coming to this view, we considered the MTAS service description as a whole. We noted that while there may be reasonable grounds to commence an investigation to remove SMS from Schedule 1, this would amount to an amendment of the service description, which would be outside the scope of the current five-year review. We found that for voice MTAS, there are not yet effective substitutes or competitive constraints, and that the service should therefore remain in Schedule 1.

Overview of submissions

29. We published our draft decision on 10 June 2020 and invited interested parties to submit on the draft by 3 July 2020. We received eight submissions on our draft decision from 2degrees, Chorus, Modica Group Limited, Nova Energy Limited, Spark NZ, Technology Users Association of New Zealand (TUANZ), Vodafone and Kordia Limited.[7] All submissions are available on our website.

30. All submissions supported the draft decision that there are not reasonable grounds to commence an investigation to remove MTAS from Schedule 1 at this time. Spark, Vodafone, and 2degrees submitted that the Commission should revisit MTAS within the next five years. For example:

    30.1 Spark submitted that MTAS could be reviewed once the fibre access regime is in place after 2022;[8]

    30.2 2degrees noted that there may be a case to look at amending MTAS to remove SMS, although this is not a priority and ongoing regulation is not causing harm;[9]

    30.3 Vodafone submitted that regulation of MTAS may no longer be required but ongoing regulation is not causing harm, and the industry is facing more pressing challenges (such as a new regulatory programme and responding to Covid-19).[10]

31. Chorus was most supportive of the Commission undertaking further work now. According to Chorus, the Commission should at least consider amending the definition of MTAS to exclude SMS, which would support investor confidence and

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7 We note that Kordia submitted a cross submission, but we have treated it as a submission because it proposed new arguments to which other submissions did not have a chance to respond.

8 Spark NZ "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 15. Available at https://comcom.govt.nz/__data/assets/pdf_file/0013/220072/Spark-NZ-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

9 2degrees Mobile Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/220068/2degrees-Mobile-Limited-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

10 Vodafone "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0015/220074/Vodafone-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

best give effect to section 18 of the Act. Chorus considered that backstop regulation should not be retained for a service which can be provided by alternative technologies and was supportive of the Commission prioritising the consideration of deregulation where it has concluded that regulation may longer be necessary.[11]

32. TUANZ[12], Nova Energy[13], Modica[14], and Kordia[15] supported our draft decision to retain MTAS in Schedule 1 as they considered MNOs would still have the ability and incentive to raise MTAS rates in the absence of regulation. Ongoing regulation could prevent the harms apparent before MTAS was regulated in 2010 appearing and ensure fair competition.

33. Two submissions made further requests. Modica requested the Commission undertake an investigation into the charges imposed by MNOs for Application to Person (A2P) messaging services,[16] and Kordia was concerned that 0800 mobile termination is an example of a non-regulated service where consumers are penalised by paying higher prices under deregulation.[17]

34. We explain what A2P messaging is, as we did not consider A2P messaging in our draft paper. A2P providers deliver automated SMS messages from a software application to mobile subscribers, using an internet connection and access to a mobile network. A2P are often used by businesses to contact customers or to provide password verification. For example, GP surgeries often use A2P services to communicate with patients. A2P providers generally negotiate commercial agreements with MNOs which deliver the A2P provider's SMS messages. The MNO incurs termination charges if it delivers a message to a user on another network and so MTAS costs are likely to be included in commercial agreements between A2P providers and MNOs.

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11 Chorus "Submission on draft Mobile termination access service review" (3 July 2020) page 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0019/220069/Chorus-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

12 Technology Users Associate of New Zealand "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0014/220073/Technology-Users-Association-of-New-Zealand-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

13 Nova Energy Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 6. Available at https://comcom.govt.nz/__data/assets/pdf_file/0012/220071/Nova-Energy-Limited-Submission-on-draft-Mobile-termination-access-service-review-1-July-2020.pdf

14 Modica Group Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0011/220070/Modica-Group-Limited-Submission-on-Mobile-termination-access-service-review-Draft-review-3-July-2020.pdf

15 Kordia Limited "Cross submission on draft Mobile termination access service review" (8 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0023/221099/Kordia-Limited-Cross-submission-on-draft-Mobile-termination-access-service-review-8-July-2020.pdf

16 Modica Group Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 5. Available at https://comcom.govt.nz/__data/assets/pdf_file/0011/220070/Modica-Group-Limited-Submission-on-Mobile-termination-access-service-review-Draft-review-3-July-2020.pdf

17 Kordia Limited "Cross submission on draft Mobile termination access service review" (8 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0023/221099/Kordia-Limited-Cross-submission-on-draft-Mobile-termination-access-service-review-8-July-2020.pdf

35. We have not considered Modica's and Kordia's requests in our decision on whether to commence an investigation under clause 1(3) of Schedule 3 of the Act. This is because the scope of the current review is limited to whether there are reasonable grounds to investigate omitting MTAS from Schedule 1. This review does not cover amending an existing regulated service, or whether we should investigate regulating charges for a specific group of customers.

Background to MTAS

36. 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.[18]

37. The recommendation was the culmination of a Schedule 3 clause 1(1) 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 service 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.

38. 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.

39. 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.

40. In May 2011, we finalised an STD which set the price and non-price terms for MTAS.[19] The STD set prices according to the Initial Pricing Principle (IPP) for MTAS.

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18 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 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). Available at https://comcom.govt.nz/__data/assets/pdf_file/0031/59935/Mobile-Termination-Access-Services-Reconsideration-Report-16-June-2010-public-version.pdf

19 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). Available at https://comcom.govt.nz/__data/assets/pdf_file/0038/87968/Final-MTAS-STD-Decision-Document-5-May-2011-Public-version.pdf

MTAS rates are cost-based and are determined by benchmarking against cost-based prices in comparable countries.

41. In September 2015, we completed the first 5-yearly review of MTAS.[20] We concluded there were not reasonable grounds to commence an investigation into whether MTAS should be omitted from Schedule 1. We considered that:

41.1 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.

41.2 We found that in the absence of regulation, over-the-top (OTT) calling or messaging services were unlikely to be an effective constraint.

41.3 We also noted that investigations in Australia, the European Union (EU) and the United Kingdom (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

42. We discuss developments in the retail markets since our last review in 2015 as regulated MTAS impacts competition at the retail level. We note that other factors will also have contributed to changes in retail competition. [21]

43. Since regulated prices were introduced in the MTAS STD in 2011,[22] 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.

44. 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.[23]

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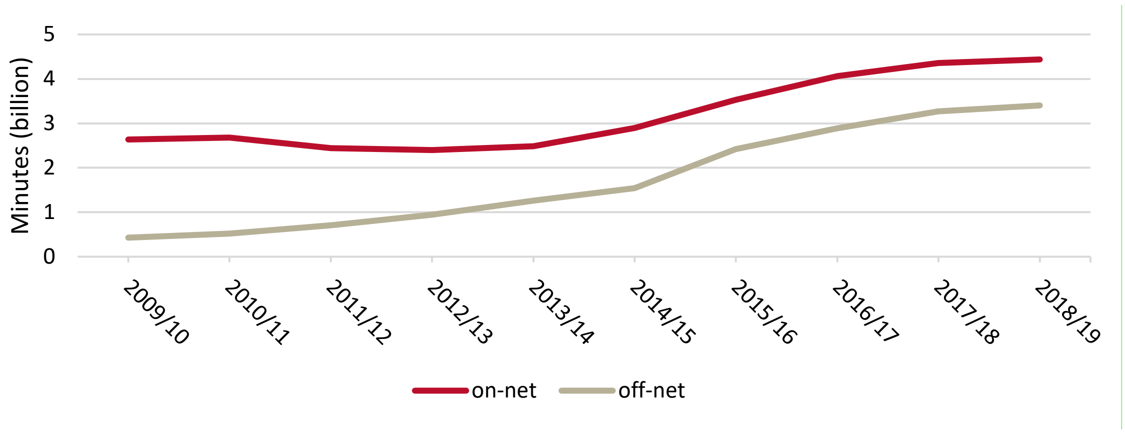
20 Commerce Commission "Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001" (23 September 2015). Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/63531/Review-of-MTAS-as-a-designated-service-2.PDF

21 All figures and references to data exclude MVNOs.

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

23 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%.

Figure 2: Mobile-to-mobile traffic

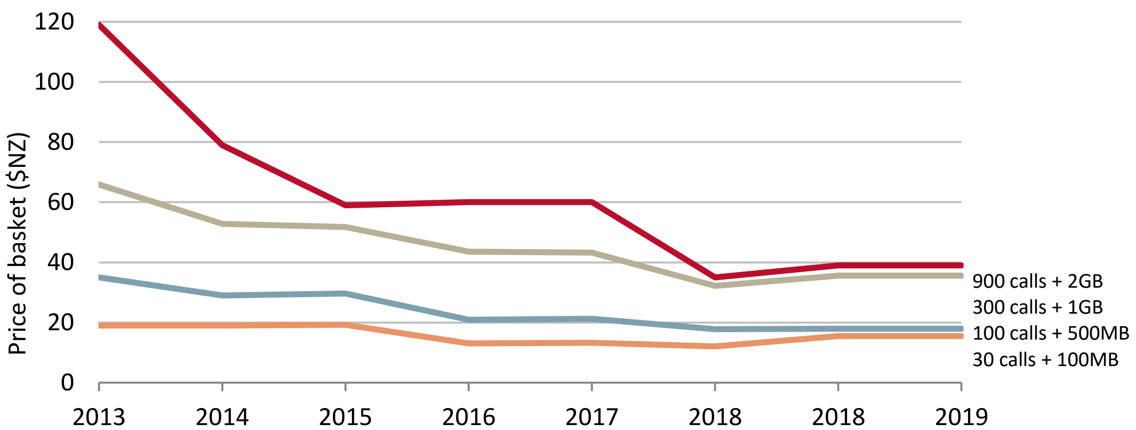


Source: Commerce Commission Annual Monitoring data

45. 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 to expand its network coverage to reach similar levels as Spark and Vodafone.[24] 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.[25]

46. As competition in the mobile market has developed, consumers have benefitted from lower prices for mobile services. Figure 3 shows that the average price of mobile plans has fallen by 34% since 2015.

Figure 3: $NZ price of mobile plans[26]



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

47. 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 an FTM call has fallen by

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24 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

25 Ibid, paragraph 3.14.

26 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 Annual monitoring link.

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 data

Usage

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

49. 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.[27] We referred to a number of overseas regulators (European Commission, Ofcom, and the Australian Competition and Consumer Commission (ACCC)) which 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."[28]

50. 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.

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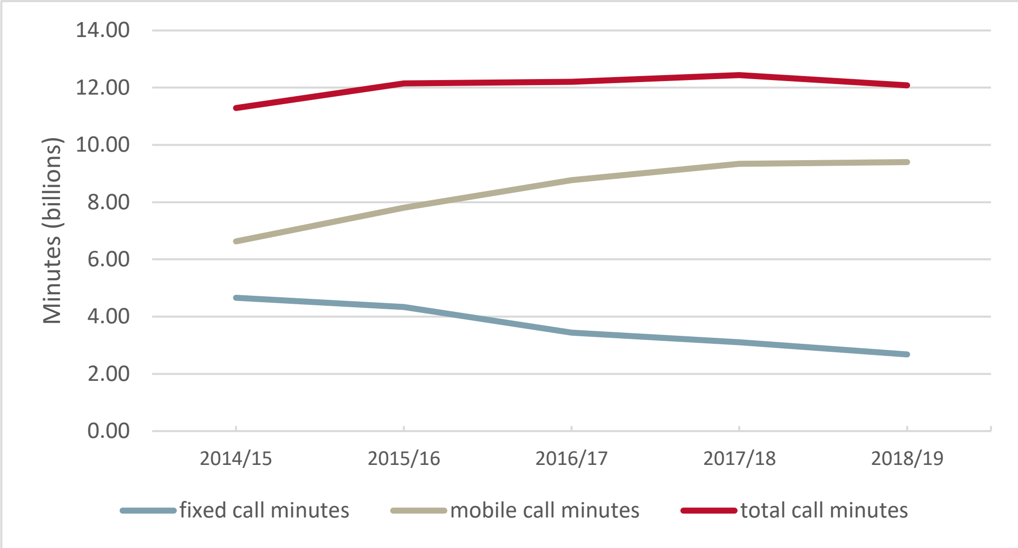
[27] Commerce Commission "Consideration of whether to commence an investigation into whether to omit the Mobile Termination Access Services from Schedule 1 of the Telecommunications Act 2001" (23 September 2015), paragraph 43 and 45. Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/63531/Review-of-MTAS-as-a-designated-service-2.PDF

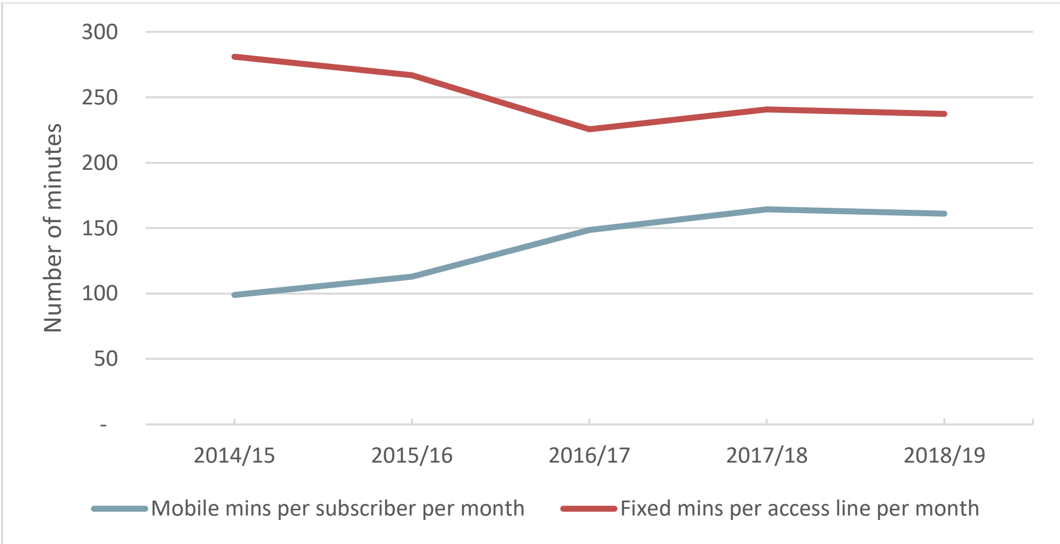
[28] Ibid at paragraph 49.

Figure 4: Fixed and mobile call minutes



Source: Commerce Commission Annual Monitoring data

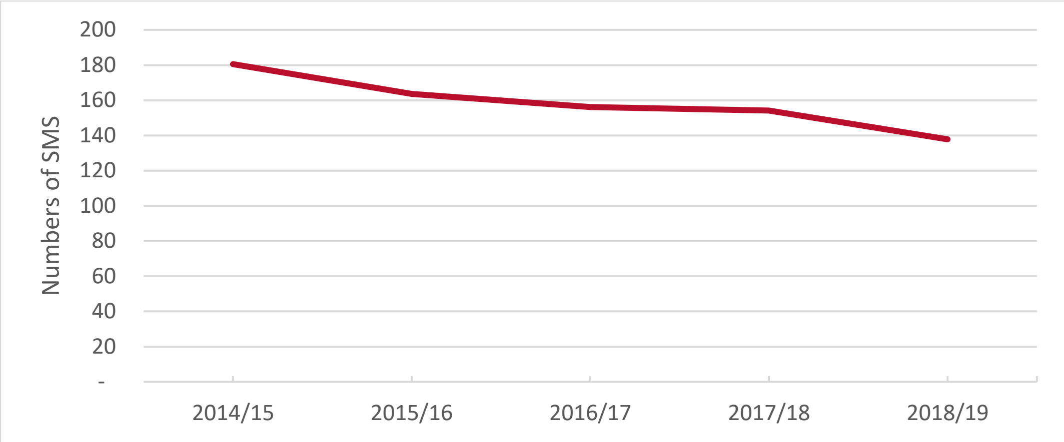
Figure 5: Mobile minutes per subscriber per month and fixed minutes per access line per month



Source: Commerce Commission Annual Monitoring data

51. 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

52. OTT services are communications services which are initiated and delivered over an 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.

53. 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.

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

54.1 Consumer NZ's survey of mobile subscribers:

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

54.1.2 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.[29]

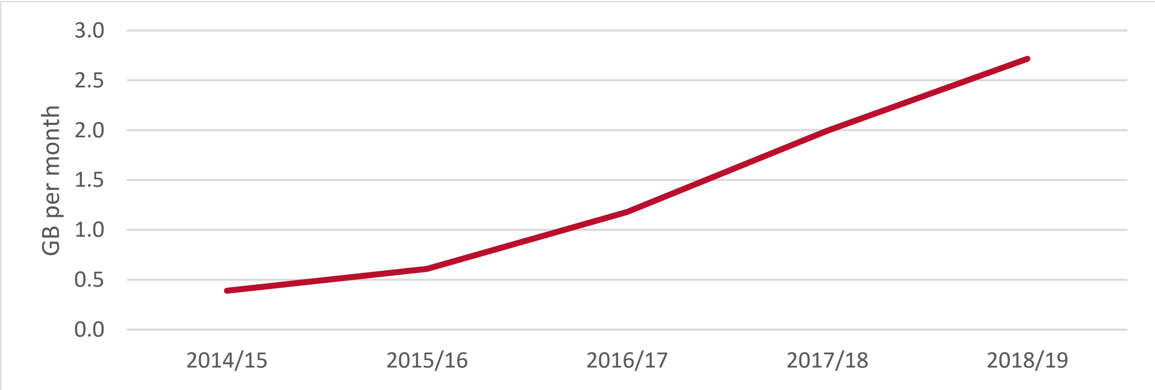
[29] Consumer NZ "Telco Survey – 2019 Mobile Service Providers summary of results"

54.2 Commerce Commission Annual Monitoring:

54.2.1 It was reported in 2018 and 2019 that the 4G networks cover 97% of the population.[30] This shows that mobile data is accessible to most New Zealanders.

54.2.2 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.[31]

Figure 7: Average data used per month



Source: Commerce Commission Annual Monitoring data

54.3 Analysys Mason's 'Connected Consumer' survey of OTT usage in New Zealand in 2019 reports:[32]

54.3.1 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.

54.3.2 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.

55. 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

30 Commerce Commission annual telecommunications monitoring data for 2018 and 2019.

31 Commerce Commission annual telecommunications monitoring data for 2015 and 2019.

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

OTT services for voice calls. We discuss the potential implications of this for MTAS from paragraph 60.

Technological developments since 2015

56. 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.

57. 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.[33] New Zealand's 4G/LTE population coverage has increased from approximately 65% in 2014,[34] to 97% in 2019.[35] 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. 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).[36]

58. 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.[37] 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.[38]

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[33] Commerce Commission "Mobile Market Study – Findings" (26 September 2019), paragraph 2.16. This information is reported in the Annual Telecommunications Monitoring Questionnaire 2019. Available at https://comcom.govt.nz/__data/assets/pdf_file/0022/177331/Mobile-Market-Study-Findings-report-26-September-2019.PDF

[34] 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

[35] 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

[36] Research New Zealand "A Report on a Survey of New Zealanders' Use of Smartphones and other Mobile Communication Devices 2015". Available at https://docplayer.net/23081866-A-report-on-a-survey-of-new-zealanders-use-of-smartphones-and-other-mobile-communication-devices-2015.html.

[37] 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/

[38] 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

59. 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

60. 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;

    60.1 We first consider whether there are any direct substitutes for MTAS at the wholesale level (as per paragraph 26.1).

    60.2 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 26.2).

61. The findings inform our final view on whether there are reasonable grounds to commence a Schedule 3 clause 1(3) investigation to deregulate MTAS.

62. 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.

63. 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.

64. 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.

    64.1 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.

    64.2 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

65. 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.

66. 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.

67. 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.

68. 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 may be able to impose unreasonable terms for calling parties to access its customers. The receiving party's network may have the ability and incentive to do so to the extent that it does not risk losing customers under CPP.

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

70. 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:

    70.1 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

    70.2 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.

71. We note that Nova supported our preliminary view that there are not any direct substitutes for MTAS at the wholesale level.[39] We retain our draft position that we do not consider there to be any direct substitutes for MTAS as we are not aware of new evidence to suggest otherwise.

[39] Nova Energy Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 4. Available at https://comcom.govt.nz/__data/assets/pdf_file/0012/220071/Nova-Energy-Limited-Submission-on-draft-Mobile-termination-access-service-review-1-July-2020.pdf

Indirect substitutes for MTAS

72. 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.

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

    73.1 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.

    73.2 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.

    73.3 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.

    73.4 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.

74. 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.

75. 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.[40] Relative to other OTT services, Viber and Skype were ranked the second and third least popular out of eleven OTT communications services in 2019.[41] In addition, OTT out services

[40] 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).

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

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.

76. 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.

77. Our final position is that we consider OTT services (referred to in paragraph 73.4 above) are the most likely direct substitutes for traditional voice calls and SMS in the downstream markets, and that such constraints in the downstream markets may indirectly constrain MTAS at the wholesale level. 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.

Submissions on indirect constraints on MTAS

78. Modica was concerned that if SMS MTAS were deregulated, the wholesale costs of terminating A2P messages could rise. This could result in users of A2P services using 'grey routes' which could increase the likelihood of bulk spam messages and fraudulent activity.[42]

79. We note that SMS messages sent by grey routes are routed via multiple hops instead of being sent directly to mobile networks and can be used to avoid higher charges. There is a risk that grey routes could be closed by MNOs and the likelihood of routes being closed could increase with the number of SMS messages sent over such routes. We consider grey routes provide a lower quality of service relative to other alternatives.

80. Modica also submitted that OTT services are not an effective substitute for SMS for A2P providers, for the following reasons:

80.1 OTT services are not available on all mobile phones;

[42] Modica Group Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0011/220070/Modica-Group-Limited-Submission-on-Mobile-termination-access-service-review-Draft-review-3-July-2020.pdf

80.2 some business such as GP practices rely on SMS because not all customers use OTT services such as the elderly;

80.3 when pre-paid users run out of credit, they do not receive OTT messages, but they do receive SMS messages and;

80.4 when mobile networks are congested, accessibility to end-users is easier using SMS because MNOs prioritise SMS messages.

81. We have not assessed the potential constraints on MNOs raising MTAS rates in relation to A2P providers as part of our final decision. This is because we are assessing whether there are reasonable grounds to commence an investigation to omit MTAS from Schedule 1 as a whole. We reiterate our draft position that understanding different customer groups is an area that could be further explored in a Schedule 3 clause 1(1) investigation to amend the MTAS service description.

Our assessment of the indirect constraints on MTAS

82. 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.

83. 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.[43] We then consider the potential costs and benefits of regulation.

84. To assess whether OTT services represent an effective constraint on voice and SMS MTAS, we consider what would likely occur in the event that an MNO were to increase the MTAS rates it charges in the absence of regulation:

84.1 Whether the calling party's network provider passes through increases in MTAS rates to its retail prices;

84.2 Whether the calling party responds to increases in retail prices by switching to OTT services; and

84.3 Whether enough customers from the calling party's network switch to OTT services, such that the increases in MTAS rates would be unprofitable due to the reduction in call volumes.

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

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

MTAS for voice calls

Incentive to increase MTAS rates in the absence of regulation

86. 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. We note that Nova agreed with our draft view that MNOs are likely to have an incentive to increase voice MTAS rates in the absence of regulation.[44]

87. 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. This is evidenced by annual telecommunications monitoring report data, which shows that the ratio of inflows to outflows is not the same across MNOs.

88. 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.

89. 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.

90. According to submissions from Spark and Vodafone, MNOs would not have an incentive to raise MTAS rates for voice services in the absence of regulation for the following reasons.

    90.1 Vodafone disagreed with the draft position that traffic flows are asymmetric for voice calls because market share on its own is not sufficient to create asymmetric traffic flows. If people are distributed randomly across any number of networks, then inflows and outflows of calls will be symmetric, irrespective of market share.[45]

[44] Nova Energy Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 4. Available at https://comcom.govt.nz/__data/assets/pdf_file/0012/220071/Nova-Energy-Limited-Submission-on-draft-Mobile-termination-access-service-review-1-July-2020.pdf

[45] Vodafone "Submission on draft Mobile termination access service review" (3 July 2020) page 2 – 4. Available at https://comcom.govt.nz/__data/assets/pdf_file/0015/220074/Vodafone-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

90.2 Spark submitted that it is unclear how any operator could increase MTAS rates given the number of existing termination agreements and operators in the sector.[46]

90.3 Vodafone did not consider there was an incentive for an MNO to offer on-net discounting. The MNO would need to move away from offering unlimited minutes on post-paid plans which could result in a loss of market share, and customers on pre-paid plans would use OTT services instead or spend less which would reduce revenues.[47]

91. In respect of Vodafone's comment on traffic flows, there are likely to be a number of factors which influence traffic flows between networks. This is evidenced by annual telecommunications monitoring report data, which shows that the ratio of inflows to outflows is not the same across MNOs. In addition, even if traffic between MNOs were to be broadly in balance, MTAS is also relevant for calls which originate on fixed networks (i.e. FTM calls). In the absence of regulation, MNOs may have an incentive to raise MTAS rates for FTM calls, leading to higher costs for fixed line operators.

92. In response to Spark, we consider MNOs' incentive to increase MTAS rates in the absence of regulation is likely to depend on the net benefit. We acknowledge that there may be some costs to MNOs if they were to change termination agreements and the cost of updating termination agreements could increase with the number of operators. However, it is likely that costs would be weighed against the benefits of increasing MTAS rates which could depend on the net inflows voice traffic, as explained above.

93. We do not consider on-net discounting to be the only harm that could arise from deregulation. On-net discounting is a mechanism which led to barriers to entry and expansion before MTAS was regulated. We are less concerned with barriers to entry as 2degrees is now an established player and competition is working well in the retail mobile market. There may be other harms from deregulation which are independent to on-net discounting such as MNOs increasing MTAS rates. We would be concerned with this behaviour as it could lead to higher mobile retail tariffs.

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

94. 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.

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46 Spark NZ "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 10. Available at https://comcom.govt.nz/__data/assets/pdf_file/0013/220072/Spark-NZ-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

47 Vodafone "Submission on draft Mobile termination access service review" (3 July 2020) page 3 – 4. Available at https://comcom.govt.nz/__data/assets/pdf_file/0015/220074/Vodafone-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

95. 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.

96. 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

97. 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.

98. We consider that some consumers may substitute voice minutes for OTT services if voice services become relatively more expensive. However, we consider that price differences for voice calls may not drive consumers' choice very strongly. This is because it may be difficult for consumers to compare the relative prices of calls to OTT services as most mobile plans provide bundles of minutes, texts and data which makes it hard for subscribers to understand the cost of each service. We also consider the average cost per minute for voice calls and OTT calls is low enough that price differences may not drive consumers' choice very strongly. In addition, mobile plans are increasingly offering unlimited minutes and data which can reduce the price difference.

99. We note that usage levels of OTT services and voice calls are different despite low relative price differences and difficulties for consumers to compare prices. 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[48]. 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 54.1.2), consumers continue to value mobile minutes as an important feature when choosing a mobile plan.

100. 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.[49] In addition,

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

[49] 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

Vodafone mentioned it is a struggle to compete on price against OTT services as they are free and MNOs can only compete on service quality and functionality.[50]

101. 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 which have remained with their current supplier for five years or more.[51]

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

102. 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

103. Submissions from Spark and Vodafone considered that OTT services are an effective constraint on traditional mobile voice services. 2degrees and Nova did not consider OTT services to be an effective constraint on voice MTAS at this time, although 2degrees mentions anecdotal evidence of significant increases in the use of OTT services and expects MTAS regulation to become less relevant as the world moves towards OTT services and data.[52]

104. Our final position is that we consider that OTT services are currently not at this stage an effective constraint against MNOs profitably raising MTAS rates for voice services. Our findings suggest that OTT services are currently 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 at this time is likely to benefit consumers by preventing MNOs from passing increases in MTAS rates through to retail prices.

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50 Vodafone "Submission on draft Mobile termination access service review" (3 July 202) page 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0015/220074/Vodafone-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

51 Commerce Commission "Mobile Market Study – Findings" (26 September 2019), page 96. Available at https://comcom.govt.nz/__data/assets/pdf_file/0022/177331/Mobile-Market-Study-Findings-report-26-September-2019.PDF

52 2degrees Mobile Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/220068/2degrees-Mobile-Limited-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

MTAS for SMS

Incentive to increase MTAS rates in the absence of regulation

105. 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.

106. Spark and Vodafone highlighted that with further investigation, the Commission could reasonably conclude that both SMS and voice MTAS could be removed from Schedule 1. This is because the mobile market is competitive, and the harms that existed before MTAS was regulated in 2010 do not exist anymore. In the absence of regulation, they considered there is unlikely to be an incentive for MNOs to increase MTAS rates. 2degrees and Chorus also appeared to support our draft assessment of SMS, given their support for undertaking further work to amend the service description of MTAS to remove SMS.[53]

107. Modica disagreed with our draft conclusion due to MNOs having the ability and incentive to raise SMS MTAS rates. Modica submitted that OTT services are not a constraint on SMS MTAS from the perspective of an A2P provider.[54] Similarly, Nova did not consider there were reasonable grounds for removing SMS from the MTAS service description.[55]

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

108. 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.

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

110. 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

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53 2degrees Mobile Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/220068/2degrees-Mobile-Limited-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf; Chorus "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0019/220069/Chorus-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

54 Modica Group Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0011/220070/Modica-Group-Limited-Submission-on-Mobile-termination-access-service-review-Draft-review-3-July-2020.pdf

55 Nova Energy Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 4. Available at https://comcom.govt.nz/__data/assets/pdf_file/0012/220071/Nova-Energy-Limited-Submission-on-draft-Mobile-termination-access-service-review-1-July-2020.pdf

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.[56]

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

111. 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.

112. 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.

113. Analysys Mason's consumer survey of New Zealanders found that 89% of smartphone users surveyed use OTT services for messaging in 2019[57]. 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 pre-paid and on-account subscribers."[58]

114. We note that there may be some businesses (for example, GP practices) which 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 clause 1(1) 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.

115. 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

116. Spark, Vodafone, 2degrees and Chorus were supportive of our draft position. Only Modica provided reasoning for why OTT services may not be a substitute for SMS in relation to A2P providers. We consider that an assessment of constraints on SMS MTAS for customer groups such as A2P providers is better suited to a Schedule 3 clause 1(1) investigation.

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56 See Attachment 1 for MTAS rates in New Zealand.

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

58 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

117. Our final position is that 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

118. 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 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.

119. 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.

120. Submissions commented that the cost of regulatory change at this time are high. Spark and Vodafone mentioned other priorities such as the fibre regime and responding to Covid-19.[59]

121. 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. Chorus commented that backstop regulation should not be retained for a service that can now be provided by alternative technologies and services as this does not promote innovation or efficiency[60]. Vodafone and 2degrees both submitted that current regulation of MTAS is not causing consumer or competition harm.

122. 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

59 Spark NZ "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 14. Available at https://comcom.govt.nz/__data/assets/pdf_file/0013/220072/Spark-NZ-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf; Vodafone "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0015/220074/Vodafone-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

60 Chorus "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0019/220069/Chorus-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

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.[61]

123. Modica and TUANZ supported continued regulation in order to prevent the harms apparent before 2010 from appearing again.[62] Kordia noted that regulation ensures fair competition in the mobile market and Nova commented that existing regulation has helped promote fair competition in the FTM market.[63] These views agree with 2degrees which considered that regulation is a backstop and acts as a check on MNOs with market power. 2degrees also supported continued regulation as it promotes certainty and stability at a time of significant regulatory change.[64]

124. 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.

125. 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.

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61 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).

62 Modica Group Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 2. Available at https://comcom.govt.nz/__data/assets/pdf_file/0011/220070/Modica-Group-Limited-Submission-on-Mobile-termination-access-service-review-Draft-review-3-July-2020.pdf; and Technology Users Associate of New Zealand "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0014/220073/Technology-Users-Association-of-New-Zealand-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

63 Kordia Limited "Cross submission on draft Mobile termination access service review" (8 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0023/221099/Kordia-Limited-Cross-submission-on-draft-Mobile-termination-access-service-review-8-July-2020.pdf; and Nova Energy Limited "Submission on draft Mobile termination access service review" (3 July 2020) paragraph 3. Available at https://comcom.govt.nz/__data/assets/pdf_file/0012/220071/Nova-Energy-Limited-Submission-on-draft-Mobile-termination-access-service-review-1-July-2020.pdf

64 2degrees Mobile Limited "Submission on draft Mobile termination access service review" (3 July 2020) page 1. Available at https://comcom.govt.nz/__data/assets/pdf_file/0018/220068/2degrees-Mobile-Limited-Submission-on-draft-Mobile-termination-access-service-review-3-July-2020.pdf

126. For voice MTAS, our final 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 effective constraint for voice services, which is consistent with recent experience overseas.

127. 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.

128. 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.

129. 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.

130. We acknowledge that according to most submissions, the costs of regulatory change are likely to be significant at this time, while the cost of continued regulation is likely to be low and there are benefits to continuing to regulate MTAS.

131. 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

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

133. 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

134. 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.

135. 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.[65]

Our final view

136. We have retained our draft position. Our final view is that there are not reasonable grounds to start a Schedule 3 clause 1(3) investigation into whether to remove the MTAS service from Schedule 1 of the Act at this time.

137. In making our final decision we have considered submissions we received on our draft decision.

138. The reasons for our final view are outlined below:

138.1 The definition of MTAS in Schedule 1 includes voice (FTM and MTM) and SMS termination. Our final view is that there are not reasonable grounds to commence an investigation into whether to omit voice MTAS from Schedule 1 of the Act. Since our last review of MTAS in 2015, OTT-based services have been increasingly been used by consumers, although we do not consider these to yet be an effective constraint on MTAS, particularly in relation to voice services. Our assessment is that regulation therefore 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.

138.2 Our next review of whether there are reasonable grounds to commence an investigation into whether to omit MTAS from Schedule 1 must be no later than five years' time on 2 September 2025. We note that we can initiate an investigation into whether a specified or designated service should be amended under clause 1(1) of Schedule 3 at any time.

138.3 In addition, we consider that it may not be proportionate to undertake further work at this time. This is because the industry is currently experiencing other regulatory pressures, and we consider there are benefits to ongoing regulation.

139. We also note that we may consider future work. In particular we may consider further work on MTAS rates. This would be through a s30R review of the MTAS STD. We have had little visibility over actual MTAS rates since the price path in the MTAS STD ended in 2015. As a result, we do not know if MTAS rates have moved in line with likely costs of providing MTAS. We consider that MTAS rates may be departing from costs as the terms of the MTAS STD have not been reviewed since 2011, and we do not know if MTAS rates have moved in line with the likely costs of providing MTAS. To better understand actual MTAS rates charged in New Zealand, we will

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

collect more detailed information on MTAS revenues and traffic in our annual monitoring questionnaires from 2020.

Future work

140. As discussed earlier, the current review has been undertaken in accordance with clause 1(3) of Schedule 3 of the Act, which requires us to consider, at least every 5 years, whether there are reasonable grounds to investigate whether a service should be omitted from Schedule 1 of the Act.

141. A number of issues have been raised in submissions that are outside of the scope of this review. These include:

141.1 whether and when the terms of the MTAS STD should be reviewed;

141.2 whether to amend the existing MTAS service description (to include the termination of services such as A2P messages);

141.3 whether the Commission should consider A2P pricing;

141.4 whether the Commission should consider 0800 termination and;

141.5 whether to amend the existing MTAS service description to remove SMS.

142. Vodafone and Spark submitted on when the Commission should review the STD for MTAS. Vodafone strongly opposed reviewing the terms of the MTAS STD, due to its view that MTAS regulation is no longer necessary. Vodafone submitted that the draft decision shows the current terms have delivered the market outcomes sought from regulation. Spark advised the Commission not to review the STDs before doing a full investigation as the costs of adjusting to new incentives and structures are significant.

143. The review of the terms of the MTAS STD is not part of this review, and any such review would be undertaken under s30R of the Act. However, we have little visibility of actual MTAS rates since the regulated price path ended in 2015. We consider that it would be helpful to better understand how actual MTAS rates charged in New Zealand have moved in relation to the likely cost of supplying MTAS over the period since MTAS rates came off the path set in the MTAS STD. In a competitive market, we would expect to see prices move in line with costs.

144. In this regard, we will be monitoring actual MTAS rates in New Zealand by collecting more detailed information in our annual monitoring questionnaire from 2020. This information will allow us to see if MTAS rates are below the regulated price caps for MTAS.

145. Submissions from Modica and Kordia argue that regulation should be extended to include services such as A2P messaging and ‘0800 mobile termination’.

146. Modica’s and Kordia’s submissions on the scope of regulated MTAS relate to amending the existing MTAS or adding a new service. This could be considered as

part of any investigation commenced under clause 1(1) of Schedule 3 of the Act. As noted above, the scope of the current review is limited to whether there are reasonable grounds to investigate omitting MTAS from Schedule 1.

147. An investigation under clause 1(1) of Schedule 3 could also consider whether to remove SMS termination from the MTAS service description. As discussed above, there may be reasonable grounds to investigate the removal of SMS termination, although this would amount to an amendment of the regulated MTAS.

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

148. 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.

149. 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.

150. 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.

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

152. 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.

153. 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. On 25 August 2020, the EC published its draft Recommendation on Relevant Markets, in which it proposed to remove the wholesale termination markets.

154. We summarise each jurisdiction's decisions below.

The ACCC

155. The ACCC reviewed whether to deregulate MTAS for voice and SMS in June 2019.[66]

156. The ACCC concluded that regulation ('declaration') should continue for voice MTAS, but not for SMS MTAS.[67]

157. 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.[68]

158. 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

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[66] ACCC "Domestic Mobile Terminating Access Service Declaration Inquiry Final Report" (June 2019).

[67] Ibid, pages 2-3.

[68] Ibid, pages 2, 6.

promote competition in the retail market, promote any to any connectivity and the efficient use and investment in infrastructure. Lastly, all submissions to the ACCC's draft paper supported regulation of voice MTAS.

159. 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.[69] 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

160. The UK regulator, Ofcom reviewed whether to deregulate MTAS for voice in 2018.[70] Ofcom concluded there were still grounds to continue regulating voice MTAS.

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

161.1 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.

161.2 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)[71] in response to a small but significant and non-transitory increase in price (SSNIP) for landline calls.

161.3 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.

69 Ibid, page 28.

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

71 VoIP refers to calls originating over the internet and terminating on a mobile or landline number or calls over the internet.

Bahrain

162. TRA reviewed whether to deregulate MTAS in February 2019.[72] TRA concluded that there were grounds to continue regulating voice MTAS but decided to deregulate SMS MTAS.

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

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

163.2 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%.

163.3 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.

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

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

164.2 OTT messaging services offer more functions than SMS messages.

164.3 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.

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

European Commission

165. 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”.[73]

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

73 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

166. 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.

167. 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.

168. 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.

169. 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.

170. The EC is currently reviewing its list of markets susceptible to ex-ante regulation. On 25 August 2020, the EC published its draft Recommendation on Relevant Markets,[74] in which it proposes that the wholesale termination markets are no longer susceptible to ex-ante regulation. The EC noted that under CPP, network operators are likely to remain unconstrained in setting termination rates in the absence of regulation. However, the introduction of uniform European Union-wide termination rates under Article 75 of the European Electronic Communications Code will address the ability of terminating operators to set excessive charges. As a result, the EC proposes that it is no longer necessary to include the wholesale termination markets in its list of markets susceptible to ex-ante regulation.

171. The EC will publish its final list of markets by December 2020.

[74] European Commission "Recommendation on Relevant Markets" (25 August 2020). Available at https://ec.europa.eu/digital-single-market/en/news/recommendation-relevant-markets