



SUBMISSION TO THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

Discussion document on the Market Inquiry into Mobile
Broadband Services in South Africa

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(<https://www.icasa.org.za/legislation-and-regulations/inquiries/mobile-broadband-services-inquiry>)

1. INTRODUCTION

- 1.1. The Independent Communications Authority of South Africa (“**ICASA**” or “**the Authority**”) published the discussion document on the Market Inquiry into Mobile Broadband Services in South Africa (“**the Discussion Document**”) on 29 November 2019. The Authority requested written comments on the discussion document.
- 1.2. Telkom notes that this inquiry is unfolding alongside a process for licensing additional international mobile telecommunications (“**IMT**”) spectrum, which is also being undertaken by the Authority. Decisions in that process will have long-lasting impacts on market structure and competition. Telkom wishes to emphasise the importance of the Authority making every effort to ensure that these impacts are pro-competitive and positive for the market and consumers. This objective can be promoted by ensuring that the competition assessment made by the Authority in this Market Inquiry into Mobile Broadband Services in South Africa is accurate, adopts a pro-competitive view of the role spectrum can play in determining market structure, competition and in mobile broadband, and that these views are factored into the design of the spectrum licensing process.
- 1.3. Telkom also welcomes the fact that the Authority is presently engaging the Competition Commission over the final recommendations of the Data Services Market Inquiry (“**DSMI**”). Telkom agrees with several of the findings in the final report of the DSMI and some of its recommendations.
- 1.4. Telkom’s submission, contained herein, is structured as follows:
 - 1.4.1. The executive summary contains an overview of Telkom’s response to the substantive views expressed in the Discussion Document
 - 1.4.2. The next section summarises Telkom’s answers to the nine questions posed in the Discussion Document.
 - 1.4.3. The last section contains a chapter by chapter evaluation of the Discussion Document, in the “*ad paragraph*” style requested by the Authority.

2. EXECUTIVE SUMMARY

2.1. The Discussion Document appears to be uncertain or indecisive on three foundational issues.

2.2. Chapter 4 contains no finding that Vodacom or MTN are dominant in the national mobile retail market. It instead adopts an unusual approach: it defines local geographic markets, assesses market shares and competition in the national market and each local market, but assesses dominance only by counting the number of local geographic markets in which each operator possesses at least 45% share at the retail level. The Authority makes no dominance finding on the national retail market.

2.2.1. Telkom is of the view that defining local geographic markets at the retail level is incorrect. This market is national, and the possibility that some local or municipal markets may be more concentrated than the national average is not relevant to any subsequent analysis in the Discussion Document nor to any of the proposed remedies. To further underscore this point, neither the distribution of spectrum, which has a direct impact on mobile broadband, nor the pricing of services are done on a municipal level. Telkom is also of the view that a finding that Vodacom and MTN are dominant in the national retail market is supported by most of the evidence reviewed in the Discussion Document, as well as by the findings of the final report of DSMI.

2.2.2. To the extent that the Discussion Document's failure to make a finding of dominance in the national retail market is driven by the fact that no operator has 45% or more of total subscribers, Telkom makes the following observations:

2.2.2.1. Dominance is defined in the Electronic Communications Act ("**ECA**")¹ with reference to section 7 of the Competition Act. Section 7 of the Competition Act states that any firm with market power is dominant including firms with less than 35% market share. It also states that firms with between 35% and 45% market share are dominant unless they can show they have no market power.

2.2.2.2. The Discussion Document contains plenty of evidence showing that Vodacom and MTN have market power at the retail level. This evidence is backed up by the findings of the final DSMI report concerning the nature and ineffectiveness of retail price competition in mobile broadband, particularly the ability of Vodacom and MTN to set prices independently of their

¹ Full title: Electronic Communications Act No. 36 of 2005, as amended.

competitors.

2.2.2.3. Furthermore, subscriber shares are only one way of measuring market shares in South Africa and they tend to understate market power because they do not reflect prices. Revenue shares do reflect prices and pricing power. In South Africa, Vodacom's share of service revenue is approximately 47% while MTN's is approximately 33%.² A retail market in which two firms account for 80% of total revenue suggests an extremely high HHI (approximately 3,500 in this case) and therefore a high probability that the two largest firms have market power. The Discussion Document itself calculates an HHI for the national retail market of 3,173 based on subscriber shares, which is also extremely high.

2.2.2.4. The Discussion Document correctly observes that the retail market has been highly concentrated for a number of years and that this level of concentration is unlikely to decline in the near future. In fact, if Cell C's difficulties continue, its shares of subscribers and service revenue can be expected to decline, which will further enhance the dominant positions of Vodacom and MTN in the retail market. In other words, the durability of the market positions of Vodacom and MTN is likely to not only persist, but to increase.

2.2.3. Telkom is accordingly of the view that the Authority should define the geographic market as being national in scope and that Vodacom and MTN are dominant in that market. The Authority adds nothing to this finding by assessing local geographic markets or dominance in each of them.

2.3. Chapter 2 appears to lean towards a view that effective wholesale regulation and service-based entry into the retail market are, or will become, important ways to improve competition in South Africa. This view is conflated with the potential benefits of facilities sharing (also referred to by the Authority as network sharing) between competing mobile operators.

2.3.1. While certain types of limited wholesale market regulation are warranted, new services-based entry into the retail market is unlikely to introduce effective competitive constraints on Vodacom and MTN. Their market power derives principally from the fact that they are the only two operators with ubiquitous national networks and the only two national wholesalers.

² This is based on service revenue numbers reported for the 2019 financial year ends of Vodacom, Cell C and Telkom Mobile, and MTN's half year service revenue multiplied by two (this half year figure is for the six months to June 2019; MTN's financial year ends in December and its 2019 financial year end results are not available yet). These financial years end at different times.

Moreover, *ex ante* wholesale market regulation would never be able to replicate the outcomes that would emerge from effective wholesale market competition.

2.3.2. Telkom is of the view that the focus of all pro-competitive regulatory efforts should be on promoting infrastructure-based competition on a national basis at the wholesale level. This is likely to provide the most effective competitive constraint on the existing duopoly of Vodacom and MTN at the wholesale and retail levels.

2.3.3. It is in this context that the issue of facilities or network sharing should be viewed. The ability of smaller operators to efficiently expand their own networks depends to a significant degree on the extent to which they can access the mobile sites of dominant operators, and the quality and competitiveness of that access. This is particularly true if smaller operators are also later entrants, as is the case with Telkom Mobile. The market power that Vodacom and MTN possess over their sites materially inhibits Telkom's ability to develop its own network, and *ex ante* regulatory interventions that relate to site access should reflect this core fact.

2.4. This is also the appropriate context in which to assess the issue of spectrum licensing in South Africa. Chapter 5 of the Discussion Document appears to express doubt as to whether the differences in access to spectrum across competing vertically integrated operators materially affect market structure and competition. The Discussion Document appears to hold the view that merely increasing the total amount of spectrum licensed will increase competition and lead to lower prices regardless of how access to spectrum at the individual operator level changes.

2.4.1. Telkom's submission to the Authority on the IM sets out in considerable detail the reasons why this view is incorrect. Differences in access to spectrum across competing vertically integrated operators have a material impact on competition and market structure. Telkom's lack of sub-1 GHz spectrum is a particularly significant barrier to Telkom's ability to expand efficiently in the market.

2.4.2. Telkom also points out that the primary reason why Vodacom and MTN maintain high prices is that they have market power and pricing power, and not because an alleged spectrum constraint raises their costs or limits their capacity. Their unit costs are already significantly lower than Telkom's due to their much larger scale, yet their prices are significantly higher than Telkom's. Indeed, Vodacom and MTN have historically been charging customers high prices before the claims of 'network congestion and lack of spectrum' were raised.

2.4.3. In Telkom's view, the Authority's market inquiry into mobile broadband

should clearly and unequivocally link the Authority's assessment of competition to its policy and proposals in respect of future spectrum licensing – the latter must be rooted in a clear understanding of the need to address concentration, market structure, and competition problems at the wholesale and retail levels. The final findings of this market inquiry should guide the Authority's work on spectrum licensing to ensure that it promotes, and does not inhibit or prevent improvements in, competition going forward.

2.5. Telkom's views may be summarised as follows:

- 2.5.1. Competition in retail and wholesale mobile broadband markets is ineffective, has been ineffective for a long period of time, and is likely to remain ineffective into the near future.
- 2.5.2. Vodacom and MTN possess durable market power in the national retail market and in the relevant national wholesale markets. This dominance has directly resulted in higher prices to consumers. Assessing dominance or market power in sub-national mobile markets is of limited probative value.
- 2.5.3. Regulatory effort should focus on promoting infrastructure-based competition at the wholesale level on a national basis. This can be achieved by focusing on the following key issues:
 - 2.5.3.1. Ensuring spectrum licensing does not further entrench the existing dominance of the incumbent mobile operators
 - 2.5.3.2. Ensuring spectrum licensing promotes, rather than inhibits, future competition between vertically integrated operators.
 - 2.5.3.3. Ensuring that wholesale market regulation follows from findings of significant market power ("**SMP**"), is applicable only to operators found to have SMP, and is designed to promote the ability of non-SMP operators to compete in wholesale markets. This includes requiring SMP operators to adopt accounting separation for all relevant wholesale services.
 - 2.5.3.4. Ensuring that wholesale market regulation is practical and reflective of current market realities.

3. SUMMARY ANSWERS TO THE NINE QUESTIONS IN THE DISCUSSION DOCUMENT

- 3.1. This section of the submission provides summary answers to the nine questions posed in the Discussion Document. The following section contains the requested paragraph-by-paragraph responses and adds relevant details to these summary answers.
- 3.2. Since the nine questions do not cover all of the substantive issues raised in the Discussion Document, these summary answers must be read in conjunction with the issues raised in the preceding section and the additional details provided in the following section of this submission.

Question 1: In your opinion, is the above approach to market definition adopted by the Authority appropriate in defining the relevant markets? Motivate your response by providing reasons and any supporting evidence or data, as far as possible.

- 3.3. Telkom considers that the approach to market definition adopted by the Authority is broadly correct. That is, it is acceptable to consider supply-side substitution factors in the assessment of competition rather than in the definition of relevant markets, which is the prior step. However, Telkom does not agree with several of the key conclusions on market definition that the Authority has reached, particularly in the area of geographical market definition.

Question 2: Do you agree with the Authority's approach to the evaluation of effective competition? If not, motivate your response by providing comprehensive reasoning thereof.

- 3.4. The approach described in the Discussion Document appears to meet the requirements of the ECA for assessing the effectiveness of competition (see the response to Question 3, below, for further details on what these requirements are). In Telkom's view, these requirements are comprehensive. Telkom agrees with the approach described in section 3.1.1 of the Discussion Document and is further of the view that the Authority needs to be more conclusive on its findings.

Question 3: Are there other factors that the Authority should take into account when determining whether there is effective competition in the identified relevant markets?

- 3.5. The Discussion Document correctly states that section 67(4A) of the ECA lists the factors that must be considered when determining whether competition in a market is effective, namely:
 - 3.5.1. Barriers to entry;
 - 3.5.2. Market structure;
 - 3.5.3. Market shares and competitive dynamics; and

- 3.5.4. A forward-looking assessment of market power.
- 3.6. Telkom is of the view that the Authority also needs to consider whether existing and future regulation will reduce or entrench competition in the market.
- 3.7. However, Telkom emphasises the need for coherence between the assessment of competition in this Discussion Document and the spectrum licensing process currently underway, which is described in the Authority’s Information Memorandum (“IM”) published on 1 November 2019.³ Telkom’s submission to the Authority on the IM has pointed out that the IM contains a very limited assessment of competition and, more importantly, contains virtually no assessment of how the proposals in the IM will affect market structure and competition in future.⁴ This is of concern given that spectrum licensing outcomes are major determinants of future market structure and competitive dynamics.
- 3.8. Telkom also recently requested the Authority to investigate the concluded or to-be-concluded spectrum arrangements between Vodacom and MTN on the one hand and smaller licensees on the other. These arrangements require proper regulatory scrutiny because they have the potential to pre-empt or negate important impacts that the anticipated licensing process hopes to achieve and entrench a market structure that the Competition Commission has already found to be anti-competitive.
- 3.9. Telkom welcomes the Authority’s announcement that it is engaging the Competition Commission over the final recommendations of the DSMI.⁵ While the Authority and the Competition Commission are independent regulators, both are concerned with competition in the mobile telecommunications industry in South Africa and alignment between regulators would reduce regulatory uncertainty and risk.

Question 4: Do you agree with the Authority’s approach to aggregate the retail market for mobile services, which includes voice, SMS and data services? If not, motivate your response by providing comprehensive reasoning thereof.

- 3.10. Telkom broadly agrees that the relevant retail product market includes voice, SMS and data services.
- 3.11. Telkom would like greater clarity on why mobile data bundles larger than 5GB appear to have been excluded from the relevant retail product market and reserves

³ Notice on the Licensing Process for International Mobile Telecommunications Spectrum, Inviting Comments in respect of the Provisioning of Mobile Broadband Wireless Open Access Services for Urban and Rural Areas Using the Complimentary Bands, IMT700, IMT800, IMT2300, IMT2600 and IMT3500, Government Gazette No 42820, 1 November 2019.

⁴ Telkom’s written submission on the Authority’s Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

⁵ See, for example, <https://www.itweb.co.za/content/lwrKxv3JyxRqmg1o>. Last accessed 05 February 2020.

comment until then.

Question 5: Do you agree with the Authority’s preliminary view on the retail mobile services market? Please provide reasons for your response.

- 3.12. Telkom broadly agrees with the Authority’s preliminary assessment of the barriers to entry and expansion in the South African retail mobile services market. Telkom agrees that competitive access to spectrum, sites and national roaming are amongst other prerequisites for successful infrastructure-based competition.
- 3.13. Telkom agrees that the retail mobile services market in South Africa is concentrated, regardless of how geographic markets are defined, and that the high levels of concentration observed in the market are persistent.
- 3.14. Telkom disagrees with the finding of local geographic markets at the retail level. Telkom also questions why the Authority has made no finding of dominance in the national retail market, and why it has chosen instead to count the number of municipal-level retail markets in which each operator has 45% share or higher. The ECA defines dominance in terms of section 7 of the Competition Act, which does not define dominance solely in terms of the 45% market share threshold. A 35% threshold also indicates dominance unless a firm can show it has no market power, and firms with market shares lower than 35% are dominant if found to have market power. There is no question that Vodacom and MTN have market power in the national mobile retail market and nothing stops the Authority from making this finding. Quite the contrary, the absence of a clear finding on this will undermine the validity of this report.
- 3.15. Making a finding of dominance in the national market would align to the findings in the final report of the DSMI: *“The retail mobile market has remained stubbornly concentrated despite the entry of two challenger networks over time. Vodacom has a share in mobile services more generally, and data services specifically, that exceeds the thresholds used in the Competition Act for a conclusive determination of dominance. MTN has constantly skirted around the threshold level where there is a rebuttable presumption of dominance. These shares have barely changed over time, and even the most recent estimates confirm this scenario with the two incumbents collectively holding at least 70% of data revenue and 80% of total subscriber service revenue.”*⁶
- 3.16. Telkom agrees that competition problems in the voice segment affect competition in the mobile data segment. Telkom has consistently argued that the incumbents, Vodacom and MTN, have been able to leverage their initial duopoly position in 2G voice and messaging services into the data market.
- 3.17. Telkom also agrees that the Authority should initially focus on remedying competition problems in upstream markets and only consider retail market

⁶ Final report of the DSMI, 02 December 2019, paragraph 20.

interventions if these remedies do not generate the desired outcomes.

- 3.18. However, given the extent of competition problems in the retail market, Telkom would still urge the Authority to consider ways to strengthen the ability of smaller market players to effectively challenge the dominance of Vodacom and MTN in the retail market.

Question 6: Do you agree with the Authority's preliminary view on spectrum market? Please provide reasons for your response.

- 3.19. The approach taken by the Authority to define a product and geographic market for spectrum is, to the best of Telkom's knowledge, unusual. The Discussion Document does not indicate whether the Authority is aware of another regulator having adopted this approach, or whether doing so has materially affected the analysis or proposed remedies.

3.19.1. Telkom is concerned that referring to "spectrum market" may be construed to mean spectrum secondary markets where spectrum licensees have obtained spectrum property rights and where there is active trading, leasing, sub-letting, etc. of spectrum licences between licensees.

3.19.2. In South Africa, although transfer of spectrum licences or transfer of control of spectrum licences, etc. are allowed, regulatory approval is required. There is no "spectrum market" in South Africa at present – notwithstanding the current arrangements between Vodacom, MTN, Liquid Telecom and Cell C, discussed below. Telkom also notes that Ofcom refers to "spectrum shares" when referring to the relevant spectrum holdings of licensees without defining a spectrum market.

- 3.20. Whether or not a spectrum product market can or should be defined, what matters is how access to spectrum across operators affects market structure and competition.

3.21. Telkom disagrees with the Authority's suggestion that asymmetric spectrum assignments across competing operators do not necessarily affect market structure or competition. In this regard, the Authority references a view expressed by Ofcom. Telkom notes that, unlike the situation analysed by Ofcom wherein the UK provider EE has limited holdings of sub-1 GHz spectrum, Telkom does not have any sub-1 GHz spectrum licensed to it. As the Authority notes, Ofcom deliberately ensured that all four national wholesalers had at least some sub-1 GHz spectrum. In fact, applying asymmetric spectrum assignments or obligations between those with SMP and smaller payers is a valuable tool to readdress the skewed market and to allow more effective competition by smaller players.

3.22. Telkom disagrees with the Discussion Document's view that licensing additional spectrum would automatically lead to price reductions in the short term by Vodacom or MTN. Indeed, Vodacom and MTN have historically been charging

customers exorbitantly high prices before the claims of ‘network congestion and lack of spectrum’ were raised. The way in which spectrum is licensed and the outcome of the licensing process are important factors to consider in this, as explained in Telkom’s submission on the IM.⁷ Telkom would like to draw the Authority’s attention to the DSMI final report in which it is correctly pointed out that Vodacom and MTN already have significantly lower unit costs than Telkom, yet charge significantly higher prices for mobile data (33% higher when comparing headline prices for a pre-paid 1GB monthly bundle). Vodacom and MTN possess market power, allowing significant mark-ups over their costs. Assigning more spectrum to Vodacom and MTN would not reduce their market power and may enhance it.⁸

- 3.23. Finally, Telkom is concerned that the Discussion Document only touches upon one of the current arrangements in the market that grant Vodacom and MTN access to the spectrum of Liquid Telecom, Cell C, or RAIN (depending on the arrangement). Telkom is of the view that these spectrum agreements are not merely roaming arrangements but provide Vodacom and MTN with access to additional spectrum albeit indirectly. These agreements require regulatory scrutiny and must also be considered when assessing competition. Telkom is particularly concerned about the impact on future competition in the provision of 5G services with Vodacom having signed an agreement with Liquid Telecom involving their 58 MHz of 3.5 GHz spectrum. This will give them first mover advantage; in the context of the Authority not yet having conducted a 5G study as per the Minister’s Policy Directions to the Authority. Further, MTN will have a substantial competitive advantage if they have access to all the spectrum licenced to Cell C; i.e. they will have double the bandwidth in the 900 MHz, 1800 MHz and 2100 MHz frequency bands. This spectrum can easily be monetised on their existing network and, although Cell C will use some of the capacity provided through their spectrum, most of this capacity will be available to MTN for serving their customers.

Question 7: Do you agree with the Authority’s preliminary view on site access market? Please provide reasons for your response.

- 3.24. Telkom broadly agrees with the Authority’s finding with respect to the relevant product market definition. Telkom also agrees with the Authority’s assessment of competition in the context of a national geographic market. Vodacom and MTN have SMP in this market because they are the only operators with ubiquitous national networks.
- 3.25. Telkom does not agree with the Authority’s additional finding that dominance should be assessed in local or municipal geographic markets. It should be assessed in the national market. Telkom also notes that the Authority’s proposed

⁷ Telkom’s written submission on the Authority’s Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

⁸ Final Report of the DSMI, 02 December 2019, paragraph 482.2.

remedies in this market apply nationally.

- 3.26. Notwithstanding this, the Authority's findings on dominance at the local market level are incorrect. Telkom is not dominant in the 11 municipalities identified by the Authority. This implies that the dominance findings in other municipalities may also be incorrect.
- 3.27. Telkom disagrees with the Authority's suggestion that Openserve's national fixed network affords Telkom's mobile division an advantage in site development and network expansion. Openserve treats all wholesale customers on a non-discriminatory basis. Telkom's mobile division receives no preferential treatment vis-à-vis any competitors that also purchase backhaul services from Openserve.
- 3.28. Telkom is of the view that regulation should focus on securing better-quality access to the mobile sites of SMP operators for non-SMP competitors. The enduring duopolistic structure of the South African market warrants an approach which seeks to promote the ability of non-SMP vertically integrated operators to compete and to become national wholesale competitors. The facts do not support a regulatory regime on site access that applies generally to both SMP and non-SMP operators.
- 3.29. Telkom notes the Authority's proposal to require operators with SMP in the site access market to adopt accounting separation for their sites. Telkom believes the simpler remedy would be for operators found to have SMP in the national retail market to adopt accounting separation for all wholesale services.
- 3.30. Lastly, Telkom encourages the Authority to give special consideration to indoor sites enabled by Distributed Antenna Systems ("**DAS**"). These venues are strategically important to competition, and access to DAS installations of other operators is typically prohibitively expensive due to *de facto* exclusivity or exclusivity imposed by landlords.

Question 8: Do you agree with the Authority's preliminary view on roaming market? Please provide reasons for your response.

- 3.31. Telkom agrees with the Authority's product market definition. It also agrees with the Authority's assessment that, historically, prices for national roaming have been high and competition in the provision of this service has been ineffective. It also agrees with the Authority's conclusion that these problems have affected competition in the retail market.
- 3.32. The concern over the spectrum agreements between Vodacom or MTN and smaller players is also relevant to roaming agreements. Whereas these agreements are generally labelled as non-exclusive agreements, the fact that the roaming agreement is generally tied with facilities leasing agreements may create an advantage to Vodacom or MTN in accessing roaming services through these agreements compared to other operators obtaining such roaming services. This

should be considered carefully by the Authority in its assessment of competition and in its thinking about the way in which future spectrum assignments are likely to affect competition.

- 3.33. Telkom disagrees with the Authority's geographic market definition. This market is national. Dominance findings can be made in the national market and coherent and effective remedies can be proposed on the basis of this national market. There is no value in assessing dominance at the municipal market level.
- 3.34. Assessing dominance at the municipal market level has also generated an impractical proposed remedy.
 - 3.34.1. Smaller operators might be forced to negotiate roaming agreements with both Vodacom and MTN in order to ensure they have national coverage, because the Discussion Document proposes that SMP operators should be required to offer roaming services in "... *particular geographic areas*" rather than on a national basis. The wording in the Discussion Document suggests that operators would only be required to offer services in municipalities in which they have SMP.
 - 3.34.2. Additionally, by limiting the roaming obligation to municipalities in which an operator has SMP, the Authority's recommendation would exclude the 99 municipalities in which the Discussion Document finds no operators to have SMP.
 - 3.34.3. Both outcomes would create considerable complexity and risk for smaller operators seeking national roaming services.
 - 3.34.4. Quality of service will be severally impacted if roaming must be obtained from different operators in different localities.
 - 3.34.5. Telkom believes it is more appropriate to define a national geographic market and to find that Vodacom and MTN have SMP in that market.
- 3.35. That said, Telkom does not believe that regulation needs to be introduced that requires national roaming services to be offered, because they are already being offered in the market. Moreover, the prices and quality of these services have improved in recent years, as the Discussion Document correctly notes. This market is currently changing, and the Authority should adopt a "wait and see" approach and monitor the market as the conditions may change in future.
- 3.36. In line with the view expressed above, Telkom supports the proposal to require SMP operators to adopt accounting separation to ensure transparency between costs, prices and profit margins – this should be done for all wholesale services.

Question 9: Do you agree with the Authority's preliminary view on MVNO and APN services market? Please provide reasons for your response.

3.37. Telkom agrees with the Authority's preliminary view on the MVNO and APN market.

4. CHAPTER BY CHAPTER EVALUATION OF THE DISCUSSION DOCUMENT

- 4.1. This section contains Telkom's assessment of the contents of each chapter of the Discussion Document. These assessments add further details to the views set out in the preceding sections of this submission including responses to issues not covered by the Authority's nine questions. They also contain Telkom's questions of clarity to the Authority.
- 4.2. To avoid repetition, this submission does not assess the Executive Summary of the Discussion Document.
- 4.3. This section is structured according to the Chapters in the Discussion Document. *Ad paragraph* responses are provided on a chapter by chapter basis.

Discussion Document Chapter 2: Introduction

Ad paragraphs 2.4 to 2.11

- 4.4. Telkom notes the Authority's comments that network sharing arrangements can streamline investment and reduce costs, and that trends in technology, consumer preferences and competition are forcing competing operators to find ways to cut costs, including different forms of network sharing. The Authority includes passive network sharing (i.e. site access), active network sharing, national roaming as well as MVNO and APN access in its list of the different types of network sharing arrangements possible in South Africa.
- 4.5. Telkom also notes the Authority's discussion of Ofcom's views.
 - 4.5.1. The first is that Ofcom believes in the need for effective competition at the wholesale level. It is not stated explicitly in the Discussion Document, but Ofcom is referring here to effective infrastructure-based competition among national wholesalers (of which the United Kingdom had four at the time).
 - 4.5.2. The second is that barriers to entry into the retail market are reduced when access to national wholesale networks is competitive.
- 4.6. Based on this, the Authority concludes that, "... *wholesale services relating to network sharing including site access, roaming, and MVNO and APN services play an important role in this inquiry.*"⁹
- 4.7. Telkom makes the following observations.
 - 4.7.1. The benefits of any cost savings from network sharing arrangements are

⁹ Discussion Document, paragraph 2.10.

not likely to be passed on to most consumers in South Africa unless there is effective infrastructure-based competition at the wholesale level. Vodacom and MTN already possess far lower unit costs than Telkom, and yet charge far higher prices.¹⁰ The primary problem in South Africa is the market power of Vodacom and MTN, which derives largely from the fact that they are the only two operators with their own national networks.

- 4.7.2. It is not feasible to mimic competitive wholesale market outcomes by regulating the prices that Vodacom and MTN set in the wholesale markets for site access, roaming and MVNO or APN access. Indeed, the Discussion Document does not propose price regulation in any of these markets, and Telkom agrees that this is the correct approach.
- 4.7.3. Therefore, it is not clear what role the Ofcom view on entry into the retail market (by entrants that lack any presence in wholesale markets) may play in the Authority's analysis. Such entry in South Africa will have very little impact on competition and market outcomes, even if wholesale markets are regulated in the ways proposed in the Discussion Document.
- 4.7.4. Accordingly, it is important for the Authority to be clear on the central objective of the proposals made in the Discussion Document. In Telkom's view this objective ought to be the promotion of effective and sustainable infrastructure-based competition at the wholesale level on a national basis. This will provide the most effective constraint on the market power of Vodacom and MTN.
- 4.7.5. The best way to promote this objective is to provide quality regulated access to the sites of SMP operators, with pricing being negotiated on commercial terms; and to adopt an approach to spectrum licensing that explicitly seeks to promote the ability of smaller operators to compete on an equal footing with Vodacom and MTN.
- 4.7.6. These two measures would directly promote infrastructure-based competition. Regulating national roaming services or MVNO or APN access services would promote service-based competition. Yet greater services-based competition would not necessarily constrain the market power of Vodacom or MTN. Without a reduction in wholesale market concentration, greater services-based entry at the retail level will have limited impacts on consumer outcomes.
- 4.7.7. There is thus a qualitative distinction between regulated access to sites, and regulated access to national roaming services or MVNO or APN access. The former is more valuable than the latter two considering that the greatest gains to competition would arise from the emergence of

¹⁰ Final report of the DSMI, 02 December 2019, paragraph 482.2.

effective infrastructure-based competition.

- 4.7.8. The Authority refers to the BEREC-RSPG report on infrastructure and spectrum sharing in mobile/wireless networks and notes that passive sharing occurs in all EU member states whereas active sharing is used in some member states. However, a more critical element of this report is the importance of assessing the possible effects on competition in the relevant wholesale and retail markets due to any form of sharing (see for example para 32 of the report). To this extent, Telkom has requested the Authority to investigate the recently concluded or to-be-concluded spectrum arrangements between Vodacom and MTN on the one hand with others namely Cell C, Liquid Telecom and Rain as they will have an impact on competition and market dynamics.

Discussion Document Chapter 3: Approach

Ad paragraphs 1 to 8

- 4.8. Telkom broadly agrees with the approach outlined in these paragraphs.
- 4.9. However, as explained below, Telkom does not agree with the way in which the Authority has applied this approach to geographic markets at the retail and wholesale levels.

Ad paragraphs 9 to 19

- 4.10. The approach described in the Discussion Document to the evaluation of effective competition appears to meet the requirements of the ECA for assessing the effectiveness of competition. The Discussion Document correctly states that section 67(4A) of the ECA lists the factors that must be considered when determining whether competition in a market is effective, namely:
- 4.10.1. Barriers to entry;
 - 4.10.2. Market structure;
 - 4.10.3. Market shares and competitive dynamics; and
 - 4.10.4. A forward-looking assessment of market power.
- 4.11. Telkom does not consider that there are any other material factors that ought to be considered. In Telkom's view, these requirements are comprehensive.
- 4.12. However, Telkom emphasises the need for coherence between the assessment of competition in this Discussion Document and the spectrum licensing process currently underway. Telkom's submission to the Authority on the IM has pointed

out that the IM contains a very limited assessment of competition and, more importantly, contains virtually no assessment of how the proposals in the IM will affect market structure and competition in future.¹¹ This is of concern given that spectrum licensing outcomes are major determinants of future market structure and competitive dynamics.

- 4.13. Telkom also highlights the importance of assessing the spectrum arrangements between Vodacom and MTN on the one hand and the smaller players involving the spectrum licenced to the latter and its potential on competition.
- 4.14. Telkom welcomes the Authority's announcement that it is engaging the Competition Commission over the final recommendations of the DSMI.¹² While the Authority and the Competition Commission are independent regulators, both are concerned with competition in the mobile industry and a common understanding and consistent approach between the two authorities will assist in creating certainty in the industry.

Discussion Document Chapter 4: Retail markets

Ad paragraphs 22 to 28.

- 4.15. Telkom agrees that the relevant retail product market includes mobile voice, SMS and data services.
- 4.16. Telkom also agrees that chains of substitution across mobile data bundles of different sizes exist and that this warrant placing mobile data bundles of different sizes into the same relevant retail product market.
- 4.17. Telkom notes the Authority's conclusion that chains of substitution link mobile data bundles up to 5GB in size. Telkom would like more clarity on this finding – has the Authority excluded mobile data bundles of sizes larger than 5GB from the relevant retail product market? If so, what are the reasons for applying this particular cut-off? None are provided in the Discussion Document.

Ad paragraph 29

- 4.18. Telkom notes the contents of this paragraph.

Ad paragraphs 31 to 35

- 4.19. Telkom disagrees with the Authority's preliminary finding that there are narrow

¹¹ Telkom's written submission on the Authority's Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

¹² See, for example, <https://www.itweb.co.za/content/lwrKxv3JyxRqmq1o>. Last accessed 05 February 2020.

geographic markets for mobile services for several reasons.

- 4.20. Firstly, the Authority’s decision to define narrow geographic markets is, in Telkom’s view, unusual. Internationally, competition authorities and regulators usually define mobile markets in national terms, not least because mobile licences are usually national in scope and operators compete nationally.¹³ Mobile licenses in South Africa are issued on a national basis.
- 4.21. Secondly, regulators have typically found it appropriate to assess a national market even when the application of a small but significant and non-transitory increase in price (“**SSNIP**”) test may indicate narrow geographic markets. They have done so on the basis that the competitive characteristics of each narrow market are similar (i.e. the supply conditions and choices facing customers in each are similar).¹⁴ Regulators also guard against the impractical outcome suggested by narrow geographic markets, i.e., the possibility of having to regulate hundreds of local markets.
- 4.21.1. According to the Federal Communications Commission (“**FCC**”): *“We conclude that when a group of point-to-point markets exhibit sufficiently similar competitive characteristics (i.e. the same set of carriers offer the same set of choices to customers on those point-to-point routes), we will examine that group of markets using aggregate data that encompasses all point-to-point markets in the relevant area, rather than each individual point-to-point market separately.”*¹⁵
- 4.21.2. Other commentators have observed that the FCC has typically aggregated these kinds of local geographic markets to a national US market.¹⁶
- 4.21.3. Similar points have been made by the Body of European Regulators for Electronic Communications.¹⁷
- 4.21.4. In South Africa all mobile operators offer national coverage. SIM cards and airtime from all operators are distributed widely and customers generally face similar supply conditions, choices, and competitive dynamics. It should therefore be the case that the Authority defines and

¹³ There are a few exceptions to this – usually in very large countries such as the USA.

¹⁴ In Europe, debates over sub-national geographic markets focus on fixed wireline technologies. See for example BEREC 2018, “BEREC Report on the application of the Common Position on geographic aspects of market analysis”.

¹⁵ FCC, 1997. FCC Record: A Comprehensive Compilation of Decisions, Reports, Public Notices, and Other Documents of the Federal Communications Commission of the United States, Volume 13. See digital page 14100 on the Google Books digital edition.

¹⁶ Buigues, P., and P. Rey, 2004. “The economics of antitrust and regulation in telecommunications: perspectives for the new European regulatory framework.” See digital page 56 on the Google Books digital edition.

¹⁷ BEREC 2014, “BEREC Common Position on geographical aspects of market analysis (definition and remedies).”

assesses a national geographic market, rather than local geographic markets.

- 4.22. Thirdly, there appears to be no point to defining narrow geographic markets. No evidence is presented in the Discussion Document to demonstrate that retail market outcomes (prices) are significantly worse in municipalities with higher than average HHIs. Indeed, this is not the case since all operators follow national pricing strategies – headline retail prices are the same everywhere in the country.
- 4.23. Similarly, at the wholesale level, where the Authority also finds local geographic markets, the finding that some wholesale municipal markets are more concentrated than others does not lead anywhere. The Authority has not recommended stronger wholesale remedies for municipalities in which the HHI is higher than the national average.
- 4.24. Telkom disagrees with the Authority’s suggestion that the local geographic dimension of the retail market is apparent from the variation in prices, usage and costs between areas. Headline prices do not vary across different locations in the country. Average “effective” prices vary between people within and across different locations in the country. This is not because of headline price variation but because incomes, bundle purchase patterns and usage patterns vary between people.
- 4.25. For example, customers that purchase large data bundles pay lower effective rates than customers who purchase smaller bundles, but this type of variation is just as likely to occur within a municipality as it is between municipalities. Indeed, two individuals on the same network in the same household may have different levels of monthly expenditure on mobile services and different usage patterns resulting in different effective prices per MB. It would be strange to suggest that they were in different geographic markets.
- 4.26. Telkom disagrees with the Authority’s suggestion that “*Differences in demographics and cost factors by region are likely to result in differences in prices...*”¹⁸ Differences in household income and usage patterns will naturally result in differences in average “effective” prices, but as discussed above, variation in usage patterns – and therefore variation in “effective” prices can occur within a municipality as well as between municipalities.

Ad paragraphs 36 to 39

- 4.27. Telkom broadly agrees with the Authority’s preliminary findings in respect of barriers to entry.

Ad paragraphs 40 to 45

¹⁸ Discussion Document, paragraph 34.

4.28. Telkom notes the following in relation to the Authority's analysis of market shares.

4.28.1. Firstly, it is surprising that the Authority makes no finding on dominance at the national level, based on national market shares. Figure 4 of the Discussion Document shows that Vodacom and MTN's market shares account for nearly 75% of total mobile subscribers in South Africa. They account for even more when market share is measured by services revenue (roughly 80% based in 2019 figures for Vodacom, MTN, Cell C and Telkom).

4.28.1.1. Dominance is defined in the ECA with reference to section 7 of the Competition Act. Section 7 of the Competition Act states that any firm with market power is dominant including firms with less than 35% market share. It also states that firms with between 35% and 45% market share are dominant unless they can show they have no market power.

4.28.1.2. The Discussion Document contains plenty of evidence showing that Vodacom and MTN have market power at the retail level. This evidence is backed up by the findings of the final DSMI report concerning the nature and ineffectiveness of retail price competition in mobile broadband, particularly the ability of Vodacom and MTN to set prices independently of their competitors.¹⁹

4.28.1.3. Furthermore, subscriber shares are only one way of measuring market shares in South Africa and they tend to understate market power because they do not reflect prices. Revenue shares do reflect prices and pricing power. In South Africa, Vodacom's share of service revenue is approximately 47% while MTN's is approximately 33%.²⁰ A retail market in which two firms account for 80% of total revenue suggests an extremely high HHI (approximately 3,500 in this case) and therefore a high probability that the two largest firms have market power. The Discussion Document itself calculates an HHI for the national retail market of 3,173 based on subscriber shares, which is also extremely high.

4.28.1.4. The Discussion Document also correctly observes that the retail market has been highly concentrated for a number of years and that this level of concentration is unlikely to decline in the near

¹⁹ Final report of the DSMI, 02 December 2019, chapter 4.

²⁰ This is based on service revenue numbers reported for the 2019 financial year ends of Vodacom, Cell C and Telkom Mobile, and MTN's half year service revenue multiplied by two (this half year figure is for the six months to June 2019; MTN's financial year ends in December and its 2019 financial year end results are not available yet). These financial years end at different times.

future. In fact, if Cell C's difficulties continue, its shares of subscribers and service revenue can be expected to decline, which will further enhance the dominant positions of Vodacom and MTN in the retail market. In other words, the powerful market positions of Vodacom and MTN are likely to not only persist, but to increase.

4.28.1.5. Telkom is accordingly of the view that the Authority should find a national retail market and that Vodacom and MTN are dominant in that market. The Authority adds nothing to this finding by assessing local geographic markets or dominance in each of them.

4.28.2. Secondly, the Discussion Document does not explain how market shares have been measured at the municipal level, including whether they are based on subscriber numbers or revenue.

4.28.3. Thirdly, the Discussion Document does not explain why an analysis of market shares at the municipal level is relevant or what a finding of dominance at this level achieves: given that headline prices are set nationally and determined by nationwide competitive dynamics.

Ad paragraphs 46 to 61

4.29. Telkom broadly agrees with the international comparative analysis presented in the Discussion Document, particularly the need to compare South Africa to appropriate "peer" countries and the importance of taking account of differences in network quality. Telkom considers that very few sub-Saharan countries are likely to provide relevant benchmarks.

4.30. However, Telkom requests clarity on certain elements on this analysis in the Discussion Document.

4.30.1. Figures 12 and 14 of the Discussion Document suggest that 1GB of mobile data in South Africa cost US\$ 100 in Q1 2019. This is approximately 10 times higher than the price charged by Vodacom and MTN for a prepaid 1GB bundle with a one-month validity at that time, and about 15 times higher than the Telkom price for the same product.

4.30.2. The source data for Figures 12 and 14 suggest a price in South Africa of US\$ 7.14 in Q1 2019.

4.30.3. Figure 9 also shows prices for a 1GB bundle in Q1 2019, quoting the same source used for Figures 12 and 14. While the title of Figure 9 states that the prices are quoted in US \$, the label on the Y-axis of the chart indicates Rands (ZAR). This suggests that Figure 9 shows the price of a 1GB bundle in South Africa to be ZAR 100, which is accurate.

- 4.30.4. On the assumption that Figures 12 and 14 are also measuring prices in ZAR and not US \$, Telkom believes that the titles of Figures 12 and 14 require correction.

Ad paragraphs 62 to 66

- 4.31. Telkom notes the Authority's view that, *"If operators with inadequate spectrum assignments are struggling to meet data capacity requirements from their existing customers, this lowers their incentive to reduce prices as lower prices will lead to higher volumes which could result in declining network quality. There are therefore a number of reasons why spectrum assignment is critical to achieving cheaper and higher quality mobile broadband."*
- 4.32. Telkom also notes that the Discussion Document does not test this view against any evidence. There are a few important reasons to doubt that it may be a major factor explaining Vodacom's and MTN's high data prices.
- 4.32.1. Vodacom and MTN were both eager to sign new national roaming deals with Telkom and Cell C, respectively. These deals were signed recently. If Vodacom or MTN were spectrum capacity constrained, they would have shown more circumspection.
- 4.32.2. Vodacom and MTN have market power. This is the primary reason why they can charge prices that are 50% higher than Telkom's (based on headline prices for a 1GB prepaid monthly bundle).
- 4.32.3. Vodacom and MTN have gained access to additional spectrum through market arrangements yet have not reduced headline prices for data bundles.
- 4.32.4. The Authority itself admits, in paragraph 64, that the evidence it reviews does not establish a causal link between the quantity of licensed spectrum and prices in a given country.
- 4.33. With regards to Figure 17, Telkom notes that the 80 MHz licensed to Rain in the 3.7 GHz frequency band and 2x5 MHz licensed to Liquid Telecom in the 850 MHz have been omitted. Figures 18 and 19 should also be amended accordingly.
- 4.34. Telkom notes the regression analysis conducted by the Authority to detect whether the total quantity of licensed spectrum can explain cross-country differences in retail prices. Telkom notes the following concerns.
- 4.34.1. The market structure explanatory variable is statistically insignificant and changes sign depending on the model specification. This is a major concern given the emphasis on market structure in the Discussion

Document, the DSMI, the Authority's Priority Markets final findings document, and in all competition assessments of mobile mergers.

4.34.2. The overall fit of these models to the data is relatively low as measured by the R^2 statistic.

4.34.3. The model takes no account of the structure of spectrum assignments (i.e. 'spectrum inequality') across operators within each country. This matters since the structure of spectrum assignments influences market structure, competitive dynamics and prices, not merely the total amount licensed.

4.34.4. There are also examples not explained by the hypothesis that the total quantity of licensed spectrum is inversely and causally related to retail mobile prices. For example, Saudi Arabia has licensed almost as much spectrum as the UK, but retail prices are much lower in the latter. It would have been useful if the Discussion Document had included a chart comparing retail prices and total licensed spectrum across countries.

4.35. For these reasons, and those above, the Discussion Document does not demonstrate persuasively that the total volume of spectrum licensed to mobile operators is causally and inversely related to retail mobile prices.

Ad paragraphs 67 to 68

4.36. Telkom broadly agrees with the Authority's conclusions in respect of the international price comparisons.

4.37. Telkom disagrees that the Discussion Document shows that lower levels of spectrum assignment are associated with higher prices, and that the main reason to license additional spectrum is the hope that doing so will reduce retail prices. There is little evidence to suggest that this will occur unless the structure of the market also changes significantly.

Ad paragraphs 69 to 70

4.38. Telkom agrees with the Authority's view that competition constraints in voice affect competition in mobile data. Network effects in voice, along with a range of first mover advantages, provide Vodacom and MTN with significant market power. They have leveraged this into the mobile data segment since many customers buy data as part of a bundle of services that includes voice and SMS.

4.39. Telkom agrees that competition problems in the voice market must be addressed in order to promote competition in mobile data. This includes striving for best-practice regulation of number portability and mobile call termination rates.

Ad paragraph 71

4.40. The Discussion Document does not explain what an analysis of market shares at

the municipal level is intended to achieve in the context of assessing significant market power. Mobile services are by their very nature not bound to a fixed geographical location. It is conceivable that a subscriber may purchase a SIM card in one municipality, reside in a second and work in a third. Additionally, headline retail prices are set nationally.

- 4.41. The fact that an operator is “dominant” in a municipality based on market share does not imply that it has any power to raise prices within that municipality relative to the prices elsewhere in the country.
- 4.42. Additionally, as mentioned earlier, it is not clear to Telkom why the Authority has not assessed dominance in the national retail market.

Ad paragraphs 72 to 76

- 4.43. Telkom broadly agrees with the Authority’s view that concentration in wholesale markets is linked to concentration in the retail market.

Ad paragraphs 77 to 78

- 4.44. Telkom agrees in principle with the Authority’s stated preference for regulatory intervention in upstream markets. However, given the extent of the competition bottlenecks in the South African mobile market and the persistence of the duopoly, Telkom urges the Authority to consider additional pro-competitive interventions aimed at reducing the strategic barriers to entry and expansion in the retail market. The Authority acknowledges at paragraph 38 of the Discussion Document that strategic barriers are relevant and then states at paragraph 70 that: “...*remedies affecting retail voice service, such as mobile termination rate regulation and number portability, are likely important interventions where markets for mobile services are concerned.*”²¹ Telkom agrees with the Authority’s stance in this regard.
- 4.45. Number Portability - Despite the correct identification of number portability placing a constraint on competition, the Discussion Document does not include any recommendations aimed at addressing problems with number portability. The Authority should consider steps to make the number portability regime more effective. Several issues were addressed by the new 2018 Number Portability Framework, which has yet to come into effect. The port process must remain Recipient Operator lead, which Telkom supports. RICA has not been properly applied by Recipient Operators to safeguard subscribers against unauthorised porting. The prohibition on winback for 2 months has also been removed by the 2018 framework, which Telkom believes should have been retained in the 2005 framework, in the interest of promoting competition by smaller operators.

²¹ Discussion Document, paragraph 70, emphasis added.

Discussion Document Chapter 5: Upstream market 1: Spectrum

Ad paragraph 79

- 4.46. The Authority has defined a relevant product market for spectrum. In so doing it concludes that, “... *the dynamics of competition across the various spectrum bands are similar and, therefore, it is not necessary to define narrower markets for the purposes of understanding competition.*”
- 4.47. Internationally, it is unusual to define a product market for spectrum in this way or analyse market shares and market power based on spectrum holdings. Telkom also does not understand the purpose of doing so.
- 4.48. Spectrum is not produced by operators or licensees but is licensed to them by regulatory authorities. The prices paid by operators are set by regulators or via competitive auctions. Operators do not set these prices and can influence them only through their willingness to pay in an auction.
- 4.49. Spectrum trading provides the only context in which an operator or licensee can act as a seller of spectrum and may have the ability to influence the selling price. However, in South Africa, although transfer of spectrum licences or transfer of control of spectrum licences, etc. are allowed, regulatory approval is required. There is no “spectrum market” in South Africa at present – notwithstanding the current arrangements between Vodacom, MTN, Liquid Telecom and Cell C, discussed below. This is concerning given that the idea of a “spectrum market” could be construed to mean an active market for trading, leasing, sub-letting, etc. of spectrum licences between licensees, which does not exist in South Africa.
- 4.50. A number of extant arrangements between operators appear to entail the granting of some form of access to spectrum to operators that do not own that spectrum themselves. Vodacom has secured access to Liquid Telecom’s spectrum in the 3.5 GHz band, and to RAIN’s spectrum in the 1800 MHz and 2.6 GHz bands. MTN has secured access to all of Cell C’s spectrum, and to Liquid Telecom’s spectrum in 1800 MHz band. The Authority announced in November 2019 that it would review the MTN-Cell C deal, which Telkom supports. The other spectrum deals should also be investigated for their impact on the mobile market.
- 4.51. These arrangements are commercial and are likely to have been agreed pursuant to a price of some kind, paid by the operator seeking access to spectrum to the licensee providing access. Nevertheless, the concern with these arrangements is not whether the providers of access to spectrum have market power in determining the price of the access to spectrum. The concern is that these arrangements may have negative impacts on the dynamics of the mobile market, market structure and competition. It is not necessary to define a relevant product market for spectrum in order to analyse what the impacts of access to spectrum might be or to determine appropriate remedies. We discuss this further, below.

- 4.52. Telkom is also unsure what the Authority means by the statement, “... *the dynamics of competition across the various spectrum bands are similar...*” in the context in which the statement has been made (i.e. a product market definition context). To the extent that it suggests that the Authority believes that all spectrum bands are interchangeable in application, Telkom disagrees.
- 4.53. Spectrum is an essential input into the provision of mobile services. Differences in spectrum holdings across competing mobile operators are important determinants of market structure and the effectiveness of competition across the various mobile services enabled by spectrum. In particular, operators lacking access to low-frequency spectrum (i.e. spectrum in bands below 1 GHz) are disadvantaged by the fact that they have to build more sites to cover the same population as an operator with access to low-frequency spectrum, and also by the fact that high quality in-building coverage is difficult to provide with high-frequency spectrum.
- 4.54. The impact of access to various spectrum bands on competition can differ, depending on operator holdings in each band. In this context, it is not the case that “... *the dynamics of competition across the various spectrum bands are similar...*”. These and related issues have been explained in detail in Telkom’s response to the Authority’s IM.²²
- 4.55. Telkom would add in this submission the observation that Liquid Telecom possess significant amounts of IMT spectrum yet does not participate directly in the mobile market – it has chosen instead to allow Vodacom and MTN access to its spectrum. This indicates that merely having been licensed spectrum in specific bands does not promote successful entry.
- 4.56. Successful entry and expansion, and the ability to compete effectively depend on what kinds of spectrum an operator possesses, in addition to the quantity. It is well known that a mobile operator requires access to both low (below 1 GHz) and high band (above 1 GHz) spectrum to be able to provide a national network effectively. Also, with the advent of 5G, it is well known that a provider of 5G services requires access to three spectrum ranges to provide the full bouquet of services namely sub 1 GHz, mid-band (1-6 GHz) and high band (above 6 GHz). Even then, successful entry depends on the competitiveness or otherwise of key wholesale and retail markets– a licensee that already owns spectrum may be deterred from attempting entry when these markets are concentrated and barriers to entry are high.
- 4.57. As stated above, regulators do not need to define a product market for spectrum and analyse the ‘shares’ of this market in order to recognise the issues outlined above and factor them into their decision-making on future spectrum licensing processes, or on the need to review extant commercial arrangements involving

²²

Telkom’s written submission on the Authority’s Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

access to spectrum.

- 4.58. It is common for regulators to assess spectrum holdings at the operator level prior to a new auction (or other regulatory process for assigning additional IMT spectrum). They do so in order to determine whether and in what ways the potential outcomes of a new auction may affect market structure and competition. This assessment feeds into decisions on auction design, the need for spectrum caps, reserve prices, and so on.²³ The spectrum deals are therefore also important in this context as they have direct bearing on spectrum holdings. As indicated before, this issue is also addressed in the BEREC-RSPG report on infrastructure and spectrum sharing.
- 4.59. That is to say, when regulators find competition constraints at the wholesale or retail level, they do not need to also define a market for spectrum in order to conclude that current spectrum holdings or changes to them could affect competition.
- 4.60. For example, in a hypothetical three-operator mobile market, if one operator held 90% of available IMT spectrum, one may reasonably expect this to significantly distort competition at the wholesale and retail levels.
- 4.60.1. One of the obvious remedies in that context would be to address the imbalance in spectrum holdings through spectrum caps and other means in future auctions. Ofcom carries out such exercises before commencing new spectrum auctions.
- 4.60.2. Alternatively, a regulator could facilitate spectrum leasing or trading between operators. Neither of these actions would require a finding that the operator with 90% of the spectrum has SMP in a spectrum “market”.
- 4.61. In another example, if an operator that has SMP in the retail market gains access to spectrum that is well-suited to the deployment of a new technology before other operators gain similar access, it is reasonable to expect the SMP operator to be able to bring the new technology to the market ahead of its competitors (first mover advantage). Such an eventuality would enhance that operator’s dominance, increase its lead over rivals, and weaken the ability of other operators to compete effectively. Accordingly, a regulator would have grounds to review or intervene in such arrangements.
- 4.62. This is exactly the approach outlined by Ofcom when it introduced spectrum trading in the UK, it stated the following:

“Ofcom will seek to ensure that competition is not distorted as a result of spectrum trading transactions. As a competition Authority, Ofcom could take action against

²³ Telkom’s written submission on the Authority’s Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

anti-competitive behaviour under the Competition Act, which provides wide powers to prohibit the abuse of a dominant position. However, in practice particular features of spectrum may make abuses hard to identify and to remedy. Furthermore, the Competition Act could not prevent the acquisition of positions of market power through spectrum trading. In most markets, the merger provisions of the Enterprise Act prevent firms from acquiring positions of market power. Where these can apply to spectrum trading, they will apply. However, because in most cases spectrum would not be considered an 'enterprise', the Enterprise Act may often not apply to spectrum trades. Therefore, Ofcom proposes to adopt a specific set of rules on the acquisition of rights to use spectrum to ensure that competition distortions do not emerge as a result of trading. Ofcom proposes to adopt an approach that is similar to the rules on mergers of enterprises. When certain threshold criteria are met, Ofcom proposes to consider whether a trade might result in a substantial lessening of competition within any market.²⁴

Ad paragraph 80

4.63. To the extent that a geographic market for spectrum can be defined, Telkom agrees that it is national in scope.

Ad paragraph 81

4.64. To the extent that a relevant product market for spectrum can be defined, Telkom agrees that spectrum assignment and spectrum licensing process is a barrier to entry into this market.

4.65. Telkom also agrees that the spectrum licensing process should be conducted in a pro-competitive manner but not solely to enable efficient new entry. It should be assigned in a pro-competitive manner to enable efficient expansion by smaller operators. The Authority provides no basis for limiting the importance of this issue to new entry.

Ad paragraphs 82 to 87

4.66. It is not clear why the Authority has excluded the IMT 2600 MHz band from its analysis. RAIN holds 20 MHz in this band. Factoring this into the analysis shows that RAIN's share of total assigned IMT spectrum is over 22%, not 20% as stated in the Discussion Document. The shares of all other operators are accordingly lower than stated in the Discussion Document.

4.67. Furthermore, it is not clear why the Authority has taken no account of the spectrum access arrangements between operators when calculating total amounts of spectrum. For example, under the Vodacom-Liquid Telecom arrangement it is probable that Vodacom has access to most, if not all, of the 56 MHz of the 3.5 GHz

²⁴ Ofcom 2003, Spectrum Trading Consultation, paragraph 1.15. Available at https://www.ofcom.org.uk/data/assets/pdf_file/0019/41275/pdf_version.pdf.

spectrum licensed to Liquid Telecom. Factoring that in would increase Vodacom's share of total spectrum to almost 23% of the total spectrum assigned to industry. If Vodacom's other spectrum sharing and "roaming" deals are included, this share would increase. Similarly, the spectrum arrangement between MTN and Cell C involves all spectrum licensed to Cell C and will therefore double the amount of spectrum assigned to MTN in the 900 MHz, 1800 MHz and 2100 MHz frequency. Even if these agreements do not provide 100% access to the spectrum of the other licensee, it is conceivable that it gives access to a substantial or majority of the bandwidth or capacity provided through such spectrum.

4.68. Telkom's 23.5% share of total assigned IMT spectrum is of limited probative value in this context, and Telkom believes the Authority is correct to mention, in the context of its analysis of spectrum shares, that Telkom has no sub-1 GHz spectrum. With regards to Telkom's 3.5 GHz assignment, this is not a national assignment.

4.69. However, the Authority's view of the significance of this fact to analyses of competition problems in the mobile market is not clear.

4.69.1. On the one hand, the Authority cites an Ofcom view that asymmetric holdings of spectrum across operators does not necessarily affect competition, that EE has been able to compete effectively with limited sub-1 GHz holdings, and that operators lacking sufficient sub-1 GHz holdings can do other things to provide quality indoor coverage.

4.69.2. On the other hand, the Authority notes that Ofcom has ensured that all operators have access to some sub-1 GHz spectrum and that Ofcom placed caps on an 800 MHz auction because some operators had no sub-1 GHz at the time of that auction.

4.70. The Authority should recognise that Telkom's challenge does not arise from limited sub-1GHz being assigned to it, but from no such assignment whatsoever. Added to that is the fact that Telkom is the smallest operator and entered long after the market leaders. Providing sub-1 GHz spectrum is a superior solution to the suggestion that Telkom should invest in small cells, femtocells, repeaters and so on in order to provide quality indoor coverage with the spectrum it has available. Further, it should not be assumed that landlords always allow operators to make these sorts of investments on their properties.

Ad paragraphs 88 to 89

4.71. The Authority makes the point that while no operator has an 'unmatchable advantage' in spectrum currently, future assignments must guard against a single operator gaining an advantage in spectrum that may allow it to launch new services that competitors cannot match. Telkom disagrees with the first part of this point but agrees with the second part.

- 4.72. The Authority has taken no account of the spectrum access arrangements in the market. Certain of these are clearly intended to provide Vodacom and MTN with the high frequency spectrum needed for 5G, particularly Vodacom's arrangement with Liquid Telecom on 3.5 GHz. Liquid Telecom owns 56 MHz in this band. This is sufficient for it to launch a 5G service, which would be significantly improved if Vodacom obtained a further 20 MHz-30 MHz in the proposed auction. Telkom has stated in public that 'true 5G' requires an operator to have access to 80 MHz-100 MHz of 3.5 GHz spectrum. Similarly, with MTN having access to all of Cell C's spectrum, it means that MTN has double the amount of spectrum in 900 MHz, 1800 MHz and 2100 MHz, which could also be re-farmed for other technologies or to provide superior services.
- 4.73. Seen in this light, the Vodacom-Liquid Telecom arrangement already provides Vodacom with an unmatched advantage in 5G spectrum, which will only be strengthened if the auction proceeds as proposed in the IM. This will prevent the development of effective competition in 5G. Telkom's holdings in this band are significantly smaller, and in any event Telkom's 3.5GHz license limits the geographic area in which this spectrum may be deployed. No other operator holds any spectrum in this band.
- 4.74. The Authority is obligated to manage the licensing of 5G spectrum in a pro-competitive manner, and this includes reviewing arrangements that threaten that objective.
- 4.75. These are some of the reasons why Telkom argued in its response to the IM that spectrum appropriate for 5G should be managed according to the proper procedures. The Authority needs to conduct the required 5G study concerning the uses of the 3.5 GHz band and remove it from the proposed auction until this study has been completed. The study would be based on the Minister's policy direction on 5G. Until such time, it should be removed from any proposed auctions.²⁵ Commercial arrangements that grant Vodacom or MTN access to this spectrum should also be reviewed.

Ad paragraphs 90 to 93

- 4.76. The Authority notes two different submissions on the effect that licensing more spectrum might have.
- 4.76.1. Cell C argues that it will reduce unit costs, while it and Vodacom added that increased data volumes will promote economies of scale.
- 4.76.2. Vodacom claimed that additional spectrum capacity would allow it to reduce prices, which they cannot do currently for fear of not being able to

²⁵ Telkom's written submission on the Authority's Notice on the licensing process for international mobile telecommunications (IMT) spectrum, 31 January 2020.

cater for the corresponding increase in demand.

- 4.77. Telkom agrees that licensing more spectrum has the potential to reduce operators' costs, but Telkom again refers to the point made in the DSMI final report that Vodacom and MTN already have far lower unit costs than Telkom or Cell C due to their scale advantage.²⁶ Cost reductions will not necessarily translate into price reductions if the market structure continues to be essentially duopolistic in nature.
- 4.78. Telkom disagrees strongly that an alleged lack of spectrum capacity prevents Vodacom from reducing its data prices (because it allegedly needs to maintain high prices in order to preserve service quality by limiting data volumes). Vodacom maintains high data prices because it has market power. The Authority shows no evidence from Vodacom or any other source that alleged spectrum capacity constraints force Vodacom to maintain high prices.
- 4.79. Telkom agrees with the Authority's statement in paragraph 93 that, "... *the main issue impacting competition from a spectrum perspective is that more spectrum needs to be assigned for mobile spectrum in a pro-competitive manner.*" However, based on the points above, Telkom is concerned that the Authority has not fully appreciated what this means in practice.
- 4.80. Finally, Telkom disagrees with the Authority's finding that the arrangement between Vodacom and RAIN is merely a roaming arrangement. Telkom believes it is highly likely that Vodacom has *de facto* control over at least some or most of the RAIN spectrum included under this arrangement. Vodacom recently announced that the agreement has been extended nationally.

Ad paragraphs 94 to 96

- 4.81. As mentioned earlier, Telkom is unsure of the purpose of assessing whether a licensee possesses significant market power in the spectrum market.
- 4.82. Telkom disagrees that competition problems can arise only from spectrum being concentrated in the hands of one operator. Asymmetric holdings are equally problematic in the context of vertical integration and first mover advantages. Telkom's ability to maximise the benefits of its vertical integration is more limited due to its late entry and its lack of sub 1 GHz spectrum.
- 4.83. The Authority's final paragraph in this chapter reads as follow: "*While the Authority has not identified any operators with significant market power, how spectrum is assigned can have a major impact on competition in downstream markets. It can be a bottleneck and a barrier to entry if not assigned in a timely fashion. The Authority therefore considers it vital that spectrum is assigned as soon as possible in a pro-competitive manner.*"

²⁶

Final report of the DSMI, 02 December 2019, paragraph 482.2.

4.84. Telkom agrees with the sentiment but again expresses concern that the Authority has not fully appreciated what this means in practice, especially when considering the IM.

4.84.1. It is not clear why the Authority is specifically concerned about the potential impact of failing to assign new spectrum in a timely fashion on entry when there are already four competitors in the market, but its structure effectively resembles a duopoly. The priority should be to promote the ability of existing vertically integrated infrastructure-based competitors to be able to place more effective constraints on Vodacom and MTN.

4.84.2. Most importantly, the Discussion Document should have been more specific and more forceful on the key issue of how to ensure that spectrum licensing promotes competition. As the final findings of this Market Inquiry are being drafted, the Authority has an opportunity to ensure that the sentiment expressed in this Discussion Document concerning the need to ensure that spectrum licensing is pro-competitive is converted into practice under the upcoming Invitation to Apply (“ITA”) for new spectrum licenses.

Discussion Document Chapter 6: Upstream market 2: Site access

Ad paragraphs 99 to 103

4.85. Telkom broadly agrees with the Authority’s findings that a separate relevant wholesale product market for site access exists.

Ad paragraphs 104 to 105

4.86. Telkom disagrees with the Authority’s approach to geographic market definition. The relevant geographic market for site access is national in scope (the same applies to the market for national roaming).

4.87. As the Authority mentions, the decisions to build new sites, access the sites of other operators, or make use of national roaming, are all linked.²⁷ They all depend on the overall commercial and network strategies of an operator that does not have a national network of its own. These strategies are predicated on nationwide competition – Telkom has never and could not consider a commercial strategy that does not include the ability to offer coverage and service anywhere in the country. Telkom requires and has required since its launch either its own sites, access to other sites, or national roaming.

²⁷

Discussion Document, paragraphs 102-103.

4.88. Furthermore, as explained in our assessment of the Authority's geographic market definition at the retail level, above, regulators such as the FCC usually do not define local geographic markets even if those are indicated by the application of a SSNIP test. They aggregate these local markets into a national market on the basis that the competitive characteristics of each local market are similar. In Telkom's experience of the market for site access this is indeed the case for most locations where Telkom seeks site access.

4.89. In any event:

4.89.1. Taking the Authority's logic to its natural conclusion would yield a finding that every site exists in its own separate geographic market. This would yield thousands of local markets.

4.89.2. The Authority's proposed remedies apply nationally. The Authority has not recommended stronger remedies in municipalities in which the HHI is higher than the national average.

4.89.3. A national set of *ex ante* regulations which apply equally to all local markets is no less effective than a regulatory regime that varies by local market would be, even if the latter could be managed efficiently.

4.90. In Telkom's view, the Authority's assessment of effective competition based on a national geographic market avoids these concerns and should therefore provide the sole basis for subsequent findings on dominance and proposed remedies.

Ad paragraphs 106 to 108

4.91. Telkom broadly agrees with the assessment in these paragraphs.

Ad paragraphs 109 to 113

4.92. Telkom agrees with the market share analysis that is based on the national market. It shows clearly that Vodacom and MTN are the only dominant players in this market.

4.93. In line with the comments above, this finding is not enhanced or affected in any way by the assessment the Authority makes of market shares in each municipal market.

Ad paragraph 114

4.94. Telkom is surprised by the Authority's finding that Telkom is dominant in site access in 11 municipalities.

4.95. Telkom believes that the Authority is mistaken in this regard. Telkom has no sites in seven of the 11 municipalities indicated in Figure 25 of the Discussion

Document.²⁸ In the other four municipalities, Telkom is confident that Vodacom has a significantly higher number of sites.

4.96. Furthermore, Figures 25 and 27 of the Discussion Document purports to represent the same underlying data (i.e. dominance based on share of sites in each municipality; in Figure 27, share of sites is used to proxy shares in the market for national roaming). However, the two figures indicate different conclusions. Figure 25 suggests that Telkom is dominant in the market for site access in 11 municipalities. Figure 27 suggests that Telkom is dominant in none of those 11 municipalities or any others.

4.97. Accordingly, the facts underpinning Figure 25 and the market share analysis at the municipal level are in doubt and should be disregarded.

Ad paragraphs 115 to 116

4.98. Telkom disagrees with the Authority's suggestion that Openserve's national fixed network affords Telkom's mobile business an advantage in site development and network expansion. Openserve treats all wholesale customers equivalently. Telkom's mobile division receives no preferential treatment vis-à-vis any competitors that also purchase backhaul services from Openserve, as Telkom explained in an earlier submission to the Authority.

Ad paragraph 117

4.99. Telkom agrees that the market for site access is highly concentrated but disagrees that this finding should be based on the results of the dominance assessment at the local geographic market level. The assessment of the national market provides a more reliable view.

4.100. Telkom also emphasises that despite any recent market developments in terms of site sharing arrangements, access to sites remains a critical barrier to expansion for Telkom. Telkom also refers the Authority to its earlier comments on the MTN-Cell C arrangement – in Telkom's view this arrangement amounts to more than a site sharing deal.

Ad paragraphs 118 to 122

4.101. Telkom does not understand the discussion in these paragraphs or the data in Table 4. The Authority is encouraged to explain what costs it has included in its estimates of site capex and opex, and to share its calculations. The Authority is also encouraged to explain why it has assumed that all sites are used by at least two operators.

4.102. For example, paragraph 121 states that the Authority uses "... *these estimates of*

²⁸ These seven municipalities being Engcobo, Kareeberg, Mbhashe, Mier, Port St Johns, Thembelihle, and Emalahleni.

capex and opex...,” but there is no discussion in preceding paragraphs concerning capex estimates provided by operators. All that can be inferred is that Telkom’s site capex submissions were also disregarded, despite Telkom having provided estimates of total site capex. No explanation is provided as to why Telkom’s capex estimates were disregarded.

4.103. The Authority submitted a questionnaire to Telkom on the 15th of July 2019. Question 4.1 of the questionnaire was as follows:

4. The Authority further requests Telkom to provide responses to the following questions of clarity on Telkom’s initial and follow-up responses:

Q6 initial RFI, Q14 follow-up

4.1 Please disaggregate the capex figures provided into their component parts, e.g. civil works, power supply, access road, radio equipment etc.

Telkom provided a breakdown of the capex in response to the Authority’s questionnaire on the 7th of August 2019. The information was provided in excel format (RFI-3_Q4.1_capex...).

4.104. Accordingly, Telkom reserves comment on paragraph 122.

Ad paragraphs 123 to 125

4.105. Telkom broadly agrees with the finding that dominance in site access correlates to dominance in retail markets, at least in as far as this applies to Vodacom and MTN. This does not apply to Telkom.

Ad paragraphs 126 to 129

4.106. The Discussion Document does not specify whether the proposed remedies are intended to apply to all operators equally. If this is the intention, the Discussion Document does not explain why the proposed remedies ought to apply to non-SMP operators.

4.107. While it might be the case that some countries in Europe apply a general obligation on all operators to share passive infrastructure, some do not. For example: *“In Norway, infrastructure sharing obligations have been imposed on the SMP operator following a market review – the dominant mobile operator has been subjected to infrastructure sharing obligations including national roaming.”*²⁹

4.108. The extent and durability of the competition problems in the South African market warrant consideration of the Norwegian approach. That is, there is a good case to

²⁹

BEREC Report on infrastructure sharing, June 2018, pg. 7.

be made that site sharing obligations should be imposed on SMP operators only.

4.109. In line with this, Telkom notes that, in their current form, the facilities leasing regulations exempt non-SMP operators from only two provisions of those regulations – the non-discrimination requirement and the unbundled pricing requirement.³⁰ Telkom does not see a basis to apply any part of these regulations to non-SMP mobile operators. In revising the facilities leasing regulations, the Authority should ensure that they apply only to mobile operators with SMP.

4.110. Adopting this approach would align to the fundamental competition problem plaguing the South African mobile market, which is that smaller operators are unable to compete on an equal footing with larger operators. This is partly due to their first mover advantages including network effects, and partly due to a lack of pro-competitive regulation.

4.111. In any event, *ex ante* remedies on mobile sites should follow from and be responsive to findings of dominance in the relevant mobile market. The remedies should also apply to the relevant mobile market only.

4.112. Accordingly, Telkom supports the proposal to review facilities leasing regulations on condition that they apply only to SMP operators in the relevant mobile market.

4.113. Telkom agrees with the proposal to impose accounting separation – and believes this should be applied to all of the wholesale products of operators found to have SMP in the retail market.

4.114. Finally, Telkom would like to draw the Authority's attention to the specific challenges faced in large, strategically important indoor sites such as large shopping centres, hospitals, indoor entertainment arenas, indoor transport and transit hubs, and the like.

4.114.1. These locations and venues carry special importance to competition due to the large number of consumers of mobile services who congregate or spend time in these venues, and the extensive use of mobile data services that occurs. It is common to see traffic on sites around indoor arenas spike during entertainment events, for example.

4.114.2. Indoor coverage in these venues is typically enhanced by the deployment of DAS installations. Landlord restrictions often result in only one operator being allowed to build a DAS. Where these restrictions don't apply, *de facto* exclusivity exists at many of these sites, which could only be overcome by building an additional DAS. It is not clear that doing so would be economically feasible or efficient.

4.114.3. Accordingly, access to sites where indoor coverage and service quality

³⁰

Electronic communications facilities leasing regulations, paragraph 12.

depend on DAS installations is necessary for an operator to compete effectively in these sites. These sites are strategically important for the reasons explained above.

4.114.4. In Telkom's experience, access to DAS installations made by other operators is prohibitively expensive, and much more problematic than access to other sites.

4.114.5. There are strong grounds to consider specific regulations for sites served by DAS installations, including cost-oriented price regulation. Being able to access DAS-enabled sites on reasonable terms and conditions, at competitive prices, would greatly enhance Telkom's ability to compete on quality in these strategically important sites.

Discussion Document Chapter 7: Upstream market 3: Roaming

Ad paragraphs 138 to 147

4.115. Telkom agrees with the Authority's preliminary findings in relation to product market definition.

Ad paragraphs 148 to 152

4.116. Telkom disagrees that the geographic market necessarily has to be defined as sub-national. Telkom faces the same two options (MTN or Vodacom) when seeking national roaming services for any part of the country where it does not have its own network, suggesting that competitive characteristics and supply conditions of any putative sub-national market are sufficiently similar to warrant aggregation.

4.117. Also, as above, defining sub-national markets adds nothing to the conclusion that Vodacom and MTN hold a duopoly position in the provision of national roaming.³¹

4.118. Telkom also notes the Authority's observation that the Australian competition Authority has defined a national market for national roaming.

4.119. Lastly, the Authority's proposed remedy is not practicable, as explained below, and the reason for this is that the Authority appears to have attempted to apply the remedy to the sub-national markets which it has defined.

Ad paragraphs 153 to 158

³¹

Discussion Document, paragraph 165

4.120. Telkom agrees with the Authority's assessment of barriers to entry into this market.

Ad paragraphs 159 to 165

4.121. Telkom broadly agrees with the Authority's assessment of market shares. There are only two providers of national roaming services in South Africa and so the market is concentrated regardless of the geographic market definition applied.

4.122. The analysis of market shares at the municipal level adds no further insight.

Ad paragraphs 166 to 170

4.123. Telkom is of the view that prices and quality of national roaming services have improved in recent years. Telkom is, however, alert to the fact that renegotiation of national roaming contracts occurs periodically, and that the strength of smaller operators' bargaining power may differ in future. Incentives and competitive dynamics between Vodacom and MTN may also differ in future.

Ad paragraphs 171 to 183

4.124. Telkom agrees with the Authority's three key conclusions concerning countervailing power.

4.125. It is true that customers in this market have little countervailing power.

4.126. It is also true that competition between Vodacom and MTN for national roaming customers has improved in recent years, leading to price reductions and quality improvements. This should enable Telkom to compete more effectively than it could under previous national roaming agreements.

4.127. Telkom therefore agrees that regulatory intervention at this current juncture should be carefully considered.

Ad paragraphs 184 to 185

4.128. Telkom notes that Figure 27 which purports to represent the same underlying data (i.e. dominance based on share sites in each municipality) as Figure 25 in the preceding chapter dealing with national roaming, indicates different conclusions.

4.129. Telkom refers to the comments made above on this issue. Figure 27 is more likely to be correct at least in as far as it applies to Telkom. As stated previously, the data in Figure 25 seems to be incorrect.

Ad paragraphs 186 to 188

4.130. Telkom does not believe that regulations to facilitate national roaming agreements are necessary at this current juncture. Telkom believes this market should be monitored by the Authority. It is possible that future conditions may warrant the

introduction of the sort of regulations described by the Authority.

4.131. There may be significant problems with the Authority's proposal that an operator should be mandated to offer roaming services in the "... *particular geographic areas*"³² in which they have SMP.

4.131.1. Firstly, this may mean that customers in this market are forced to negotiate roaming agreements with multiple providers in order to ensure they have national coverage. This would create considerable complexity and costs. The Discussion Document has itself recognised this problem: "*A second barrier to new entry lies in switching costs and the length of contractual agreements. From an access seeker perspective, switching roaming providers or contracting with multiple providers is possible and occurs. However, it is generally not cost free as many contracts have minimum spend amounts and are often negotiated over multi-year periods.*"³³

4.131.2. Secondly, it is not clear based on the recommendation whether mandated roaming would apply to the 99 municipalities in which the Authority determined that no operator has SMP. Smaller operators would still require roaming services in some of these municipalities

4.132. Telkom agree with the proposal to impose accounting separation – and believes this should be applied to all of the wholesale products of operators found to have SMP in the retail market.

Discussion Document Chapter 8: Upstream market 4: MVNO and APN services

Ad paragraphs 189 to 203

4.133. Telkom notes the Authority's decision not to conclude definitively on relevant markets, the effectiveness of competition, significant market power or potential remedies. Telkom broadly agrees that competition problems in this market are likely to be linked to competition problems in the wholesale markets for site access and national roaming.

Discussion Document Chapter 9: Conclusion

Ad paragraph 204.1

4.134. Telkom agrees with the product market finding but not with the finding of narrow

³² Discussion Document, paragraph 188.1.

³³ Discussion Document, paragraph. 157.

geographic markets. The retail market is national in scope, as are wholesale markets.

- 4.135. Telkom agrees that Vodacom and MTN are dominant and have SMP no matter the geographic market definition but would urge the Authority to focus on analysis at the national level in the next stage of this inquiry.
- 4.136. Telkom agrees that barriers to infrastructure-based or services-based entry into the retail market are high, and that this is partly due to a lack of effective competition in wholesale markets, although, as the Authority notes, the wholesale market for national roaming is showing signs of greater dynamism.
- 4.137. Telkom agrees that remedies should focus on wholesale markets initially but urges the Authority to consider pro-competitive interventions to reduce strategic barriers in the voice market. Specific areas of concern were detailed in the earlier in this submission.

Ad paragraph 204.2

- 4.138. Telkom suggests reconsideration of the Authority's approach to assessing spectrum and the associated conclusions. Spectrum markets do not need to be defined in order to take pro-competitive decisions and actions with respect to future licensing and current market arrangements. Telkom is concerned that the Discussion Document contains no guidance on the proposed auction of new IMT spectrum, and no substantive commentary on most of the arrangements in the market currently that grant Vodacom and MTN access to additional spectrum. These arrangements enhance their market power and threaten to prevent effective competition emerging in 5G.

Ad paragraph 204.3

- 4.139. Telkom agrees that a wholesale product market for site access exists. Telkom disagrees with the finding of narrow geographic markets and has noted that the Authority's analysis of site market shares at the municipal level is incorrect. Telkom urges the Authority to analyse this market on a national basis. In any event the proposed remedies apply nationally and do not vary by local market.
- 4.140. Telkom also believes that special consideration must be given to ways of promoting cheaper and more effective access to DAS-enabled indoor sites given the special characteristics of these sites.

Ad paragraph 204.4

- 4.141. Telkom agrees with the finding of a product market for national roaming but again disagrees that the geographic market is sub-national. The geographic market for national roaming is national and the Authority is urged to focus on the national market going forward.

4.142. Doing so will avoid the practical problems implied by the Authority's proposed remedy that operators with SMP in municipal markets must offer national roaming services in those markets. This creates the possibility that Vodacom or MTN may not be required to offer national roaming in municipalities where they lack SMP (as per the approach in this Discussion Document), which would create problems for smaller networks.

4.143. In any event, Vodacom and MTN both do offer national roaming services, so the proposed remedy to mandate them to do so is redundant. The willingness of Vodacom and MTN to do offer these services indicates that they have the capacity to do so and a considerable opportunity cost associated with not doing so.

Ad paragraph 204.5

4.144. Telkom agrees with the Authority's analysis of the MVNO and APN access market.

END OF SUBMISSION