Non-confidential

MTN Submission

Second Information Memorandum on the Licensing Process for International Mobile Telecommunications in Respect of the Provision of Mobile Broadband Wireless Access Services for Urban and Rural Areas Using the Complimentary Bands, IMT700, IMT800, IMT2600 and IMT3500, For Public Consultation Published in Government Gazette No. 45496 on 16 November 2021.

30 November 2021

Contents

1. Introduction

MTN would like to thank the Independent Communications Authority of South Africa ("the Authority") for an opportunity to comment on the Second Information Memorandum on the Licensing Process for International Mobile Telecommunications ("IMT") in Respect of the Provision of Mobile Broadband Wireless Access Services for Urban and Rural Areas Using the Complimentary Bands, IMT700, IMT800, IMT2600 and IMT3500 ("the Second IM").

MTN welcomes the publication of the Second IM, although we remain of the view that the Authority should publish the ITA for comment in order to enhance the transparency of the ITA process. MTN believes that the licensing of this spectrum is an important milestone in initiating a broadband revolution to the benefit of all South Africans. South Africa is unfortunately behind compared to her peers in making available permanent spectrum needed to support the continuously growing data demand. Therefore, we submit that this licensing process ought to be the last attempt at licensing high demand frequency and it is of utmost importance that it succeeds.

MTN's submission is set out as follows:

- Section A – Second Information Memorandum
- Section B – Reasons Document for the Second Information Memorandum

2. Legal issues pertaining to the Second Information Memorandum ("Second IM")

2.1. Publication of a draft Second IM

MTN has noted the Authority's contention that, in following a comment procedure in respect of the Notice regarding Information Memorandum on Licensing of Spectrum in the IMT700, IMT800, IMT2600 and IMT 3500 Bands published in Government Gazette 45255 on 1 October 2021 ("IM Notice"), it has sufficiently complied with section 4(3) of the Promotion of Access to Administrative Justice Act 3 of 2000 ("PAJA"). While it is correct that the Authority is required to conduct the notice and comment process in respect of the Information Memorandum Notice, in accordance with the procedures set out in PAJA, we remind the Authority that its obligations under PAJA are not limited to compliance with the provisions of section 4(3) of PAJA. It is trite that in the conduct of the licensing process contemplated in the IM Notice, the Authority exercises public powers. Its acts of course constitute administrative action under PAJA.[1] As a result, the Authority is obliged to comply with the following minimum legal requirements:

i. It must act within the limit of the powers conferred by the ICASA Act and the Electronic Communications Act ("ECA");

ii. It must follow a rational process prior to making any decisions relating to the licensing process contemplated in the IM Notice;

iii. It must ensure that its decisions are substantively rational;

iv. It must comply with the provisions of PAJA and avoid any defects or irregularities that may result in its decisions being reviewable in terms of section 6(2) of PAJA; and

v. In general, it must act to advance the public interest in terms of section 192 of the Constitution, as well as the objects of the ECA in terms of section 2 of the ECA.

[1] Promotion of Administrative Justice Act, 3 of 2000.

The Authority must therefore remain mindful of its obligations under PAJA and should take care in ensuring that, in its attempts to expedite the licensing process, it does not compromise the process. In particular, the Authority must balance expediency with the need to carry out a just and effective consultation process that takes all relevant factors into account. In this regard, the Authority should not hastily traverse the consultation process in order to arrive at its end result of licensing the IMT spectrum. Rather, the Authority should, in its management of the truncated timelines set out in IM Notice, ensure that it nevertheless gives due and proper consideration to the submissions of interested parties.

The publication of a Second IM as opposed to a draft ITA may not be sufficient to remedy the concern around surprises appearing in the final ITA. From MTN's reading of the Second IM and the Second IM Reasons Document it appears as if the Authority has not properly considered all the issues raised by mobile operators in response to the first IM (published on 1 October 2021 in Government Gazette No. 45255) ("the first IM"). For example, the Authority failed to consider the RBB Economics report which was attached to MTN's submissions on the first IM in support of MTN's submission and submissions by MTN and other stakeholders which indicate that South Africa will not be able to support a 4+1 operator market.

2.2. Interpretation of the court order

While the Authority is correct in its assertion that the court order of 15 September 2021 ("Court Order") does not make any pronouncements on the validity of the decisions taken by the Authority in the ITA, it is important to note that the Court Order was arrived at pursuant to the settlement of the litigation matters relating to the ITA. The decisions taken by the Authority in relation to the licensing of radio frequency spectrum (as captured in the ITA) have not been tested by the Court and the Court Order should in no way give the Authority comfort around the appropriateness and legality of the decisions taken by it under the ITA. Should the Authority fail to take proper consideration of the facts presented to it and again make any decisions that are unreasonable or irrational following the completion of the consultation process contemplated in the IM Notice, MTN will be well within its rights to challenge these decisions taken by the Authority, regardless

of the terms of the Court Order. In particular, MTN reserves the right to challenge the Tier 1 and Tier 2 Operator Classifications.

3. Commentary on introductory section of the Second IM

The manner in which the Authority has determined the assigned spectrum base of 609MHz in section 2.1 of the introductory paragraph in the Second IM requires further clarification.

MTN notes that the Authority intends to auction 326MHz of spectrum. The Authority refuses to include the 80MHz of "high demand spectrum" which was assigned to Rain on a secondary basis, this amount should not form part of the 609MHz referenced by the Authority. The exclusion of Rain's spectrum band would reduce the total bandwidth assigned substantially. Additionally, operators have returned unusable spectrum in order to minimize the impact of the spectrum cap. MTN calculates that the actual total spectrum assigned is as low as 504MHz, which makes a total of 105MHz unaccounted for. This would move South Africa even further down the rankings of available spectrum. Thus, with the licensing of additional spectrum through this auction process the value of total bandwidth in the hands of operators increases to 830MHz. Comparing this to other markets indicates South Africa's relative assignments as reflected in figure 1 below.

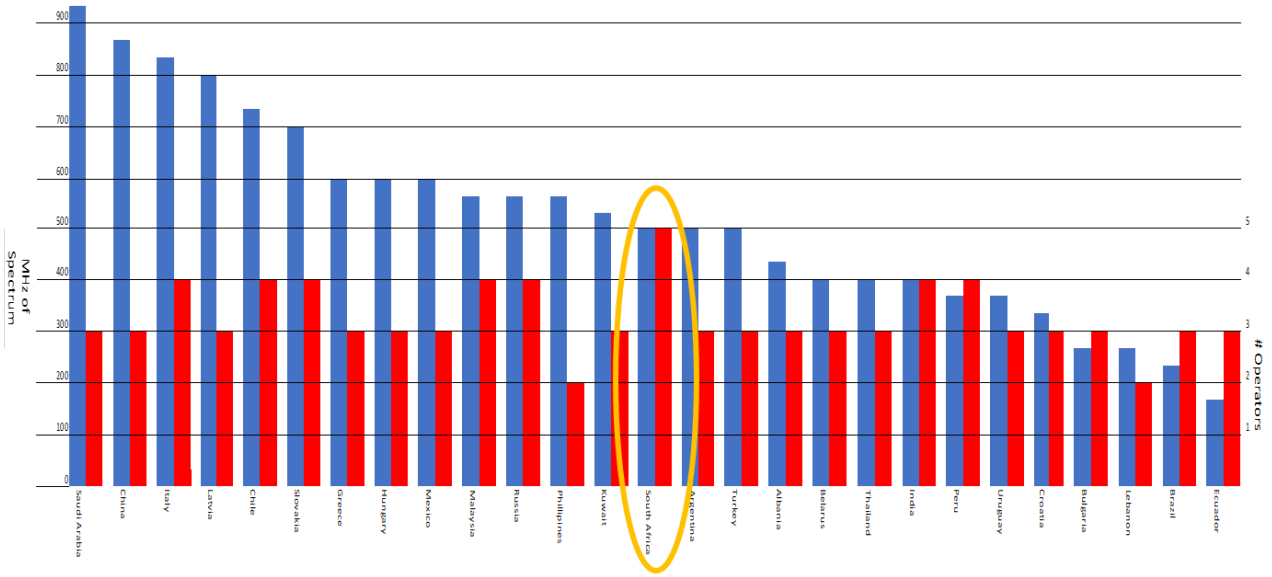

Figure 1

Given the number of operators supported within South Africa compared to other markets, the amount of spectrum is significantly less. By way of example China has 3 operators with a total nearly 900MHz, indicating 300MHz assigned to each operator whereas Ecuador also has 3 operators, with around 180MHz in total indicating approximately 60MHz per operator. South Africa having 504MHz with 5 operators indicates that each operator has about 100MHz, even though in reality the fixed line incumbent has nearly double the amount of spectrum with 142MHz compared to 76MHz assigned to MTN.

4. Commentary on the Objectives as outlined in the Second IM

Paragraph 3.1 of the Second IM sets out the objectives of the ECA. One of the objectives outlined in that section is to "develop and promote SMMEs and cooperatives". To address this objective, the Authority proposes obligations to enable SMMEs access to infrastructure to compete at a retail level.

This is aligned to MTN's strategy and the capability to access infrastructure has already been implemented. However, the Authority should note that there are technical constraints that limit the number of Public LAN Mobile Network ("PLMN's") that can be used on LTE and 5G technologies. In addition, there are also limitations on the core network in terms of the number of network nodes new partners can integrate with. This type of implementation is expensive since the SMME must have their own core network and other network elements to operate their network. These network elements are expensive and SMME's therefore need to overcome these financial barriers which would be especially difficult in the current economic circumstances. MTN proposes the use of the MVNO model to achieve the open access objective.

Moreover, MTN proposes that a private/hybrid network should be considered as an alternative as costs are lower and is specific to the area of coverage required.

MTN also enables wholesale access to fixed infrastructure services providers for the purposes of either provisioning self-enabling services or reselling to the downstream retail market. This is another viable alternative to achieve the objectives set out in the

ECA. As a result, the Authority is requested not to be prescriptive in how this is achieved lest there be unintended consequences

MTN notes the objective to "*Ensure efficient use of the radio frequency spectrum*" outlined in the Second IM. We are of the view that the Opt-In-Round may work against this objective, as it does not guarantee that spectrum will necessarily be assigned to licensees that value it most. Paragraph 11.6.2 of the Second IM, in cases where the spectrum is not fully utilized by the licensee within 5 years, the Authority will initiate the process to share unused spectrum. Five years is a long time to let a scarce resource such as spectrum be unused or inefficiently used. The Authority should explain the rationale for waiting for five years to intervene when an undertaking in this process is that the pre-qualification criteria will ensure that spectrum will be assigned to licensees that will value it most.

MTN welcomes spectrum sharing, through commercially negotiated agreements which should enable licensees to leverage their spectrum for economic benefit and other larger operators to provide better coverage and quality of service to their subscribers. MTN believes that concepts such as spectrum trading should also be encouraged to ensure efficient use of spectrum. Spectrum sharing and spectrum trading should not be time bound but should be left for commercial negotiations between operators. In any event is seems problematic that an operator could be assigned spectrum, do nothing with that spectrum and then be obliged to share the spectrum after a 5-year period. The use it or lose it principle enunciated by the Authority should be applied.

5. Commentary on the Definitions as outlined in the Second IM

5.1. Tier 1 and Tier 2 Operators

Tier-1 Operator has been defined to mean: *"a Wholesale National Operator that has a retail market share in excess of 45% in at least 1 Region"*. A Region is in turn defined as: *"a rural or urban geographic retail market in each province of South Africa"*. The phrase "retail market share" has not been defined. It is not clear how the Authority will determine the "retail market share" (e.g., will this be determined on subscriber numbers or revenue,

voice (interconnect), data, traffic including fixed and mobile or will this be based on the determinations made in the Mobile Broadband Services Inquiry).

The definition of Tier-1 Operator is based on (an unknown calculation methodology) retail market share in a Region. The use of a 45% threshold in a Region, where the definition of Region is unclear, appears to be entirely arbitrary. There is nothing in the Second IM or the Second IM Reasons Document which explains the basis for the Authority's decision to use a Region, nor is it explained whether dominance is calculated as a cumulative 45% in rural and urban markets or whether dominance can be established in either a rural or urban market. The irrational use of the definition of "Region" then gives rise to the arbitrary formulation of Tier-1 and Tier-2 Operators.

MTN notes with great concern that it continues to be classified as Tier 1 operator based on an analysis of market shares in an arbitrarily narrow geography. MTN will be prevented from bidding for national spectrum licences during the Opt-In-Round based on its 2019 market share in rural Eastern Cape and urban Free State. These two areas represent less than 10% of South Africa's population. MTN cannot see the logical link between retail market shares in these two areas, and the licensing of national spectrum during the Opt-In Round.

MTN does not have access to the methodology used by the Authority to calculate market shares in the MBSI. However, a quick look at this prior analysis shows MTN was deemed dominant in 5 Regions in 2018; by 2019, this had reduced to just two Regions. Looking at this trend, it is perfectly plausible that MTN might not be dominant in any Region as of 2021. Yet, the Authority does not seem to take this relevant factor into consideration.

Notwithstanding the above, MTN disputes the current MBSI findings as (i) the Authority defines narrow geographic markets at the retail and site access infrastructure levels of the supply chain resulting in MTN being dominant in these narrowly defined geographic markets; and (ii) the findings of the MBSI are untested and are not based on sound economic analysis. The Authority has once again failed to provide any additional context to the categorisation of Tier 1 and Tier 2 and the methodology behind it. The arbitrary nature of the classification has no rational basis in law and in fact. Moreover, there have been no similar findings of dominance in relation to the Competition Act.

5.2. National Capacity

The Second IM defines National Capacity as follows: "*Capacity = average data traffic speed (measured in megabits per second (Mbps)) per cell/base station at any given time offered by the WOAN using the high demand spectrum assigned to the WOAN. National Capacity = Total capacity offered nationally irrespective of technology used.*"

This definition is vague and requires refinement as it should align to the throughput obligations methodology to define capacity at cell edge and should not be theoretical. Alternatively, the Authority should be more specific and state that the definition should be a throughput measure in megabits per second at the cell edge with 30% cell load (or CSIR recommended) capacity.

6. Spectrum for the award

Inclusion of the IMT700 and IMT800 bands

MTN supports the inclusion of the IMT700 and IMT800 bands in the forthcoming ITA. MTN submits that any delay in the digital migration project should necessarily lead to delayed payments and delayed obligations (Coverage and Quality of Service ("QoS")).

MTN submits that the deadlines for all coverage and QoS obligations should be set from the date of full IMT 700/800 availability, rather than from the date of license issue. This latter point is consistent with the Authority's provisional conclusions at para 9.3 of the Second IM Reasons Document[2], but does not appear to have been captured in the Second IM, where obligations must be met "within 5 years of issuance of the license" (see Second IM para. 11.1.1, 11.2.2.1 and 11.2.2.3).

[2] "*It is reasonable to measure compliance against obligations related to the IMT700 and IMT800 spectrum bands from date the digital migration process is completed*".

Related to the availability of these bands is the ability to meet the requisite coverage obligations which need to be adjusted accordingly. The accessibility of this spectrum and the progress of the digital migration will determine the deployment of infrastructure and thus the Authority must take into consideration how this would impact the requirement of outside-in rollout requirements, as targets and obligations should be set for the betterment of subscribers as and when the spectrum becomes available. To this end the Authority should publish information of areas where analogue transmitters have been switched off each month so that operators can utilise the spectrum freely and without hinderance.

MTN urges the Authority to clearly define "proportional payment". It is not clear to what extent auction fees will be adjusted. Will the proportional payment, for example, result in lower Reserve Prices for the Lots available in the IMT700 and IMT800 bands? Will these proportional considerations be communicated to bidders prior to them bidding on the bands and/or Lots? These details need to be clarified so that potential applicants can consider the valuation of the bands and / or Lots affected.

Spectrum set aside for WOAN

MTN proposes the spectrum in the IMT2300 band be set aside for the WOAN, so the full 116MHZ IMT3500 spectrum available may be awarded during this ITA.

MTN notes that the IMT2300 and IMT2600 spectrum bands are expected to be amongst the first bands to be re-farmed from 4G to 5G, meaning that the WOAN would still be able to offer 5G services in future.

Spectrum in the IMT3500 band

MTN furthermore disagrees that "*there is sufficient spectrum in the IMT3500 band to ensure that all national wholesale operators can bid for it*" (see paragraph 6.19 of the Second IM Reasons Document). The Authority's 2021 annual report on the current status

of 5G in South Africa[3] recommends a minimum contiguous assignment per operator of 80-100 MHz of spectrum in the mid-band [3.3-4.2GHz]. Accordingly, MTN submit that these statements contained in two different documents published by the Authority are therefore misaligned.

Moreover, a recent study by the GSMA[4] moreover suggests wider channels are critical to cost-effective deployment of 5G, calculating a reduction from the recommended 100MHz contiguous channel size to 60MHz in the mid-band increases required cell sites by 64%, significantly increasing capex and opex needed for 5G deployment:

> *"Sufficient channel bandwidth plays a vital role. Wider channels lower network density and this is an important factor in determining the cost of 5G services to consumers. However, it also has other advantages including less base stations sites and lower environmental impact. The number of sites is inversely proportional to channel bandwidth: narrower channels mean more sites. Decreasing channel size from 100 MHz to 60 MHz in the 3.5 GHz range will require increasing the number of cell sites by 64%."*

The study also calculates data speeds almost triple when the IMT3500 assignment goes from 40MHz to 100MHz. There are clear QoS and cost to communicate benefits in maximising the IMT3500 spectrum assignments. MTN urges the Authority to consider releasing all the IMT3500 spectrum available for licensing in this ITA so more South Africans can enjoy the benefits of 5G while the WOAN policy and WOAN ITA are being clarified.

7. Opt-in lots and spectrum floors

MTN stands by its previous submission that the Opt-In Round should be abandoned and replaced by simpler, more effective rules to meet the Authority's policy objectives. MTN believes a well-designed caps regime should be sufficient to meet the policy objectives of

[3] The State of 5G in South Africa, From Readiness to Recommendations. ICASA, 2021.
[4] 3.5 GHz in the 5G Era, GSMA, October 2021

spectrum credibility and protect competition. Our previous arguments are therefore to be read as incorporated herein.

Should the Authority decide to continue with its Opt-In proposals, MTN has the following submissions on the Opt-In Round:

7.1. Spectrum floors

MTN does not see the need for the proposed distinction between MSP 1 and MSP 2 and proposes that the two MSPs offered at the Opt-In Round be mapped on MSP 1, as this is the MSP that requires least overall spectrum to achieve wholesale credibility, and in particular the least sub1-GHz spectrum (the scarcest spectrum band on offer during the ITA). See table 1 below.

Table 1

	Telkom	Cell C	Rain	Liquid
20 MHZ <1GHZ	0+**20**	22	0+**20**	10+**10**
60 MHZ >1GHz	142	54+**10**	54+**10**	80
TOP-UP TO MSP1 (MHZ)	**20**	**10**	**30**	**10**

	Telkom	Cell C	Rain	Liquid
30 MHZ <1GHZ	0+**30**	22+**10**	0+**30**	10+**20**
40 MHZ >1GHz	142	54	54	80
TOP-UP TO MSP2 (MHZ)	**30**	**10**	**30**	**20**

Source: own elaboration. + denotes the spectrum top-up require to meet the MSP requirement.

If the Authority's objective is to guarantee two national wholesale operators via the set-aside of spectrum away from the price discovery process of an open auction, it should do so in the most efficient manner possible, and at the least cost to the South African Treasury: the two portfolios on offer during Opt-In should be based on MSP1 (20MHz sub1GHZ and 60MHz mid-band). This proposal also significantly simplifies the operation of the Opt-In Round, as the Authority would only need to select the two highest bids for MSP1.

MTN welcomes the Authority's confirmation that there will be at most, two winners of spectrum that will "make good" their minimum spectrum portfolios (see paragraph 6.1). It is important for Tier 1 applicants to understand how much spectrum will be available to bid on.

With respect to paragraphs 6.2 and 6.3, the Second IM contradicts itself in so far as it sets out the criteria for qualified bidders to participate in the Opt-In Round. In paragraph 6.2 the Second IM provides that bidders who do not already meet either MSP 1 or MSP 2 will be qualified to Opt-In. This may be contrasted with paragraph 6.3 which states that bidders qualified to participate in the Opt-In round are those who do not meet the spectrum requirement for both portfolio 1 and 2. This contradiction again underscores the importance of there being an opportunity to comment on a draft ITA. As stated above, MTN is of the view that MSP-2 be removed, but should the Authority wish to continue with two different MSPs, an operator should only be allowed to bid at the Opt-In Round if it fails to meet *both* MSPs. By definition, an operator is already a credible national wholesaler if it meets either of the two MSPs.

7.2. Opt-in Lots

MTN welcomes the exclusion of IMT3500 in the Opt-In Round. This is a significant improvement in this auction process which reduces bias towards Tier 2 operators. MTN also supports the clarification that the Opt-In Round should only include IMT700, IMT800 and IMT2600. MTN agrees that it is in the interest of fairness and transparency to specify the bands that will be made available at Opt-In Round in the ITA.

7.3. Spectrum caps and roaming spectrum

MTN notes all IMT spectrum holdings will be used for the purpose of determining the overall cap and the MSP floor.

MTN submits the proposed sub1-GHz sub-cap is sufficient to materially achieve the Authority's objective of securing additional credible wholesalers. The 42MHz sub-cap limits MTN's and Vodacom's sub-1GHz acquisition to 2x10MHz each, leaving 60MHz of spectrum to be acquired by so-called Tier 2 operators protected from Tier 1 competition. MTN believes this is the central objective of the Opt-In Round, and questions whether the "*belts and braces*" approach chosen by the Authority with the Opt-In Round is consistent with the principle of regulatory proportionality.

Given the scarcity of spectrum and assignment events MTN believes it is essential to take a forward-looking view when setting spectrum caps. It is common cause the 3600MHz-3800MHz band is already being deployed alongside 3500MHz for mass-market 5G application throughout the world. Given the widely expected conversion of the 3600MHz-3800MHz band to IMT3700 at the forthcoming WRC, MTN urges the Authority to clarify which process will be used "*to assess the spectrum assignment to ensure the spectrum cap is not exceeded by all licensees*" (see paragraph 8.8. of the Second IM Reasons Document). To leave it at such a bland statement does not serve any rational regulatory purpose.

MTN supports the Authority's view on the competitive impact of roaming agreements and supports the conclusion that roaming relationships should not and in fact cannot be included in the operator's spectrum holdings as these roaming agreements are substantially different to spectrum licences.

8. Licence duration

Paragraph 7 of the Second IM provides that a licence issued pursuant to the ITA will be valid for 20 years from the date of issue, taking into consideration that the residual analogue and digital television broadcasting service migration below 694 MHz is targeted for completion on 31 March 2022.

The Authority is required to clarify whether the duration of the licence will be extended beyond the 20 years as a consequence of the delays occasioned in completing the digital migration.

9. Obligations

9.1. Uplink and throughput obligations

Paragraph 11 of the Second IM states that the obligations for the sub 1GHz spectrum will be measured from the date the digital migration process is complete, whilst paragraph 11.1.1 requires a minimum downlink single user throughput of 5Mbps at the at edge of the cell within five (5) years of licence issue.

Consistent with paragraph 9.3 of the Second IM Reason Document, MTN urges the Authority to set QoS obligations from the date the digital migration process is completed. MTN submits the Authority should also reword paragraph 11.1.1 as it seems to exclude IMT700/800 bands from bands that can be used to discharge of the QoS obligation: "*This obligation must be achieved with IMT bands (i.e., IMT2600, and IMT3500) assigned through this licensing process and any other assigned IMT spectrum prior to this process*." MTN proposes it should read instead: "*This obligation must be achieved with any IMT bands assigned through this licensing process and any other assigned IMT spectrum prior to this process." L*icensees ought to be able to use any frequency in its portfolio to discharge a QoS obligation and it, in fact, would be an efficient utilization of frequency assignment. Requiring otherwise would be irrational and against one of the objects of the ECA.

As paragraph 11.1.1 is currently drafted, the obligation becomes time sensitive from the date of issue of the licence and not the availability of the spectrum, creating an underlying risk that should the digital migration not be completed prior to the licensing of the spectrum, the obligation will not be met due to the unavailability of said spectrum.

9.2. Coverage

The Authority has so far failed to publish the parameters it will use to measure coverage. South African operators appear to be using different metrics and could thus discharge the obligation in an uneven or dissimilar manner.

MTN submits spectrum licenses should attract reasonable roll-out obligations to avoid regulatory failure. In particular, MTN urges the Authority to reconsider the 99.8% obligation allocated to Lot 9.

[redacted] MTN urges the Authority to reduce Lot 9's obligation to a more reasonable level to make it attractive to bidders.

MTN also request the Authority to clarify what it means at paragraph 11.2.2.3 when it suggests all operators must acquire one 2x10MHz 800MHz lot with 99.8% obligation: "*Tier 1 and Tier 2 operators will be required to have one 2x10MHz (on IMT800) Coverage Lot carrying a coverage obligation of at least 99.8% of the population within 5 years of issue of radio frequency spectrum licence [...]*". This requirement is clearly impossible to fulfil for all operators.]

9.3. Open access obligations

With respect to the requirements for MVNOs in paragraph 11.3.3, the Authority states that licensees will be required to provide open access to MVNOs. MTN already provides capabilities, through standard interfaces access, for any MVNO to integrate with MTN and operate as an MVNO. MTN sells capacity on an actual use basis which allows the MVNOs to repackage and bundle products as they choose to support their specific goals in the market segments they are addressing. The model by default, gives the MVNO access to national coverage and all technologies depending on their needs. The only requirement is

that the MVNO needs to have their own BSS and charging capabilities or use the services of a Mobile Virtual Network Enabler ("MVNE") to enable their services.

9.4. Social obligations

Paragraph 11.5.1 requires that licensees who are assigned spectrum through the auction process will be required to zero-rate all the Mobile Content provided by Public Benefit Organizations including .gov.za websites. It is not feasible to require licensees to zero rate URLs into perpetuity with no limitation on the number of URL's, fair use policies and the ability for licensees to protect themselves from excessive use and Data Tunneling. MTN has been zero rating URLs in compliance with its Temporary Licence Conditions and the Covid-19 ICT National Disaster Regulations, 2020. MTN has experienced high levels of Data Tunnelling as a result.

Data Tunnelling is to exploit data usage by disguising the IP address / URL of the traffic being used, through a zero-rated URL, thereby avoiding being charged for the data usage. For example, a data user will freely browse YouTube, Facebook, check emails and browse the internet, disguising the traffic as https://sacoronavirus.co.za, and as the disguised website is zero rated, the customer will not be charged for the data sessions.

There are many street-smart individuals in the public who are using mobile applications, such as "HA Tunnel" and preparing complex configuration files for these applications to set up the re-routing settings. Once the data user activates the App and the settings, they are then able to use the data network for free. The data user will often enable tethering (Mobile Hotspot) to extend the benefit to other devices. Information is freely available on how to tunnel, for example, we have discovered tutorials that are freely available on YouTube and Telegram. See the example from YouTube below.

Figure 2 Data Tunneling Video

It is clear that certain individuals or groups of individuals are responsible for Data Tunnelling. The figure below illustrates that a single handset used 24 sim cards in the space of three days, using of 24.45GB of data for free.

Open Time Abusers

IMEI	Handset Make	Handset Model	Count of MSISDN	Min of Date	Max of Date	First MSISDN	Last MSISDN	Total GB
[redacted]	HUAWEI	P30 LITE (MAR-LX1M)	24	20211001	20211003	[redacted]	[redacted]	24.45
	HUAWEI	Y5P (DRA-LX9)	19	20210929	20211005			19.91
	SAMSUNG	GALAXY A02S (SM-A025F/DS)	16	20210929	20211005			16.23
	SAMSUNG	GALAXY A21S (SM-A217F/DS)	13	20210929	20211004			14.06

Figure 3 Data Users by Device

**IMEI and MSISDNs have been redacted in compliance with the Protection of personal Information Act no 4 of 2013.*

Suspending the SIM cards of top abusers is not effective since data users merely activate a new SIM card. It would be more effective to blacklist the handset, however this is not legally permissible.

The problem is further compounded by the use of sophisticated technology and methods to mask Data Tunnelling. For example, the use of HTTPS (secure connection) and other network protocols to mask the traffic.

MTN proposes that the following protection measures form part of the social obligations to protect licensees (and legitimate users) from abuse and fraud:

i. Only static IP address can be zero rated
    a. No cloud-based URLs
    b. No URLs that make use of dynamic IPs
ii. The implementation of a daily fair use cap of 150mb per user (legitimate usage seldom exceeds 100mb per day)
iii. 1 GB monthly fair use cap to be implemented for the use of Open Time and Disaster Management URLs
iv. Suspension of URLs that show high levels of Data Tunnelling and abuse

MTN also proposes that a process must be agreed with the Authority as to the approval process of which URL's are legitimate for zero rating purposes.

9.5. Spectrum sharing

MTN supports spectrum sharing based on a commercial negotiation. Spectrum sharing has created a secondary market which enabled licensees to leverage their spectrum for economic benefit and assist other operators to provide better coverage and quality of service to their subscribers.

Firstly, it is not clear what is meant by "fully utilised" in 11.6.2. The Authority is requested to provide more clarity in this regard. If this means national rollout using population coverage as measure, the implication is that if large parts of South Africa are not covered, the Authority may cancel and allocate the spectrum elsewhere. This will lead to coordination problems and interference if there are too many entities providing services. MTN proposes that the Authority consider a simpler process whereby spectrum that is not fully utilised can form part of national roaming agreements with entrepreneurial SMMEs in sparsely populated areas.

MTN proposes that the Authority amend the wording in 11.6.2.2 and 11.6.2.6 below as follows:

"*11.6.2.1 to share unused spectrum in all areas to ECNS licensees who may, inter alia, combine licensed spectrum in any innovative combinations in order to address local and rural connectivity in some municipalities including by entrepreneurial SMMEs; or*

11.6.2.2 to surrender the radio frequency spectrum licence or portion of the unused assigned spectrum in accordance with Radio Frequency Spectrum Regulations, 2015; ~~or~~ and

11.6.2.3 the Authority has the power to cancel the issued radio frequency spectrum licence in accordance with the Radio Frequency Spectrum Regulations, 2015."

10. Empowerment provision for the industry

Paragraph 13.2 of the Second IM states: "A licensee would have to, *within 12 months of being issued with a radio frequency spectrum licence, reach a Level 1 contributor (BBBEE status) in terms of the Codes of Good Practice, applicable to the ICT Sector, published in*

terms of Section 9 (1) of the BBBEE Act and maintain such status for the period of the licence." Notwithstanding the fact that MTN is a Level 1 contributor, MTN submits that the 12-month period required for a licensee to achieve Level 1 B-BBEE is not a reasonable timeframe. There is considerable effort and budget required to achieve this milestone. MTN proposes that an improvement plan be required from the licensee to achieve Level 1 within a reasonable time.

The B-BBEE Codes contemplates gradual progression over time, given its B-BBEE rating matrix. The B-BBEE Codes are meant to address the existing transformational gaps thus the need to be relevant to the prevailing conditions, resulting in the continuous evolvement of the regulatory landscape. Case in point is what we understand to be the imminent gazetting of the draft Amended ICT Sector Code, 2020 for public comments by the Minister of Trade, Industry and Competition as well as the recent Companies Amendment Bill, 2021 and Employment Equity Amendment Bill, 2021 which is aimed to be fully enacted by March 2022.

A very static Level 1 obligation therefore does not take into consideration that the Codes do change from time to time and may in fact lead to some licensees or (worst case scenario) all licensees losing their Level 1 BBBEE status if the Codes change substantially.

11. The award process of the spectrum

11.1. Entities that are eligible to submit an application

The Authority is requested to define in detail what information will be required as part of the application process. This is just another example of MTN's argument contained in this submission that publication of a Second IM as opposed to a draft ITA may not be sufficient to remedy the concern around surprises appearing in the final ITA. MTN and other interested licensees should not be confronted with new information in a final ITA without having had the ability to comment on such requirements.

It is already apparent from the Second IM and the Second IM Reasons Document that the Authority has not considered all the issues raised by mobile operators in response to the first IM.

12. Auction stage

12.1. Overview

Paragraph 15.1.4 of the Second IM sets out a frequency assignment. Since the bids in the main auction are for specific Lots, the Authority is requested to explain why an assignment stage is necessary. Previously, it was understood that if a bidder bids for a lot the Authority would allocate the block to as far as possible provide contiguous blocks. Looking at paragraph 15.1.7 does it mean that bidders must now select (in a separate process) a contiguous block? The value of anticipating a contiguous block cannot be factored into the bid as it remains uncertain. Furthermore, would main auction bidders select blocks prior to MSP Opt-In Round bidders or vice versa?

12.2. Bid options

The assignment of Eligibility Points to each type of Lot results in Substitution Risk. Once a bidder switches to Lot 9 its eligibility falls, and it cannot return to bid on other Lots. This creates substitution risk and may result in inefficient outcomes. MTN recommends that the Eligibility Points are revised so that bidders can switch back and forth between Lots in the sub 1 GHz categories.

12.3. Eligibility points-based Activity Rule

12.3.1. Substitution Risk in the Main Auction

The Second IM highlights that achieving an economically efficient assignment of spectrum is one of the ECA objectives that has underpinned the design of the award

process (Section 3.1 of the Second IM). The Second IM then goes on to state that (i) an efficient award is one where the spectrum is assigned to those that value it most highly (ii) assigning spectrum to those with the highest values is consistent with maximising the public socio-economic benefits of the spectrum, provided the post-auction mobile market is competitive.

In order to ensure that spectrum is assigned to those that value it most highly, the auction must be well-designed and efficient. A well-designed auction is one that allows bidders to respond to changing auction price levels on different Lots on an ongoing basis. The current auction design does not allow for this to happen and could therefore result in an inefficient allocation of spectrum. The potential inefficiency arises due to the choice of the eligibility points assigned to the different Lots, that restrict bidders' ability to move their demand across Lots that they regard as substitutes.

Consider a bidder that wants to acquire at least 2 x 10 MHz of spectrum in the sub 1 GHz. Spectrum caps mean that some bidders cannot acquire more than 2 x 10 MHz. On the other hand, acquiring only 2 x 5 MHz is not commercially viable as the capital expenditure required to deploy the new band is high but 2 x 5 MHz does not provide sufficient capacity to justify the expense. Many bidders will therefore be seeking to acquire 2 x 10 MHz of spectrum.

A bidder can acquire 2 x 10 MHz of spectrum by either acquiring two lots of 2 x 5 MHz each within Lots 1 to 8 or by acquiring Lot 9. Both of these alternatives allow the bidder to obtain its required amount of spectrum in the sub 1 GHz. The total Eligibility Points required to bid on two Lots in Lot categories 1 to 8 is four points per Lot and therefore eight points in total. The Eligibility Points associated with bidding on Lot 9 is four points.

Suppose a bidder begins by bidding on two Lots in the category 1 to 8 in order to obtain 2 x 10 MHz of spectrum and therefore has a total Eligibility of eight points. Then, in response to increased auction prices on these Lots, he stops bidding for the two Lots in the range 1 to 8, and bids for 2 x 10 MHz through a bid for Lot 9 instead. The choice of eligibility points does allow the bidder to execute this switch. However, bidding for Lot 9 may increase the price for this Lot, while prices for Lots in the range 1 to 8 remains unchanged. As a result, the bidder may prefer to switch back to bidding on two Lots in the range 1 to 8. Notice that this scenario is extremely likely: bidders seeking to acquire 2 x 10 MHz of

spectrum in the sub 1 GHz will probably switch their demand from Lots 1-8 to Lot 9 if competition raises the relative price of Lots 1-8, but this will result in an increase of the relative price of Lot 9.

The choice of eligibility points, however, does not allow the bidder to execute the desired switch from Lot 9 to two Lots in the range 1-8 because, in switching to Lot 9 the bidder's total eligibility falls to 4 points. As eligibility can never increase, the reduced eligibility means that the bidder can no longer acquire 2 x 10 MHz of spectrum by bidding on two Lots in the range Lots 1 to 8; it is restricted to bidding on only one Lot in the range 1-8, which, as previously highlighted, is not technically or economically efficient.

Therefore, the current allocation of eligibility points implies that if a bidder wants to acquire 2 x 10 MHz of spectrum, then once they switch their bids to Lot 9, they can never switch back to two Lots in the range 1 to 8. Of course, an analogous problem arises if a bidder starts by bidding on Lot 9, and then wants to switch to two Lots in the range 1-8. As a result, bidders are likely to deviate from a straightforward bidding strategy, that requires them to always bid for the combination of Lots that maximizes the difference between their value and the current auction prices, and that ensures an efficient allocation of the spectrum on sale (under reasonable conditions).

The inability to respond to differences in the relative prices between Lots 1 to 8 and Lot 9 means that bidders may be prevented from winning their most valuable spectrum. As a result, the efficiency of the auction design is compromised, and the final award could be inefficient which would not support the Authority's attainment of its own objectives.

MTN recommends that the Authority amend the eligibility points to allow bidders to respond to auction price levels and allow the ability to switch between Lot 9 and two Lots in the range 1 to 8. This can be achieved by setting the Eligibility Points of Lot 9 to eight.

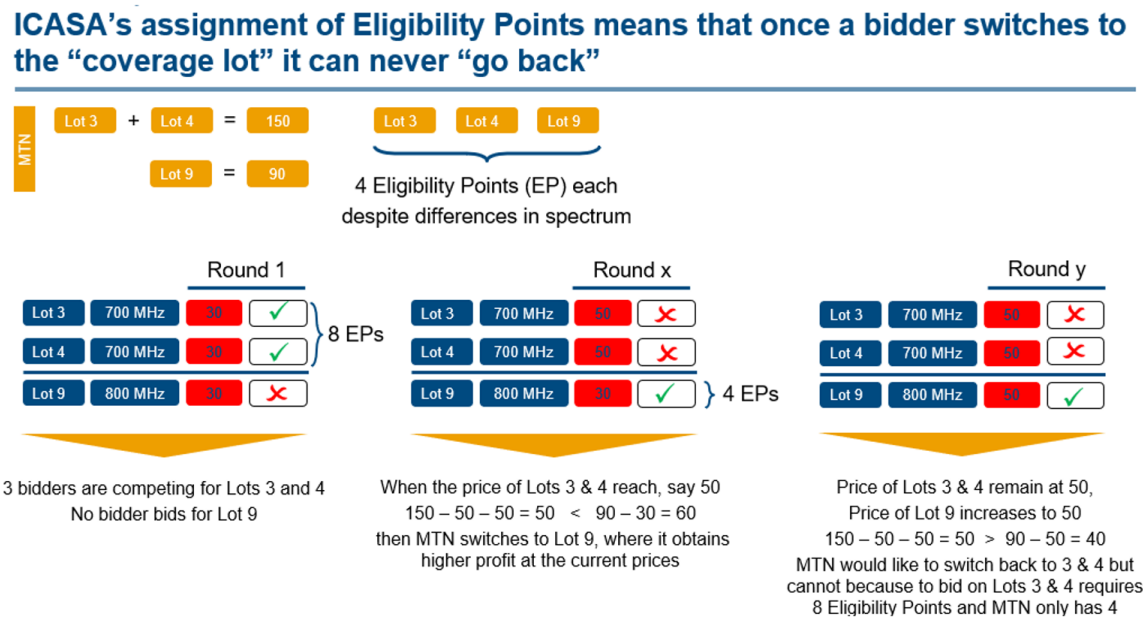

Figure 4 Eligibility points

Source: Coleago Consulting

12.4. Waivers

Paragraph 15.5.3 (b) states: *"...will lose eligibility if it does not place at least one new bid*;" and "*For the avoidance of doubt, a bidder that submits a waiver is not permitted to also submit new bids at the same time*." This seems contradictory. Paragraph 15.6.5 states: "*When a Waiver is used, the Bidder retains the same level of Eligibility for the next Round as it had in the current Round*".

MTN requests the Authority to clarify these paragraphs.

12.5. Frequency assignment phase

12.5.1. Specific versus Generic Lots

The Second IM describes an auction process where bidders can bid on specific Lots where they may be designated the standing highest bidder. This indicates that the Lots are specific rather than generic. This is most evident in Lot 9 which has different coverage

obligations versus the other Lots. If bidders are bidding on specific Lots, then there is no requirement for an Assignment stage. We request that the Authority clarify the nature of the Lots to be auctioned and whether an Assignment Stage will be included. What is the purpose of the Assignment Stage and how will the Assignment Stage be organized? This is critical because bidders will need to gain approval for their bidding strategies in order to apply and therefore need clarity over the assignment mechanism.

13. Licensing stage

13.1. Payment of the auction fee

The Authority should consider offering a deferred payment alternative in order to alleviate the burden of high spectrum fees and the costs of meeting the coverage obligations. The price for spectrum in the planned auction could potentially be high. The requirement to pay a high, single lump-sum amount for the spectrum could place smaller operators in financial distress and may limit their ability to invest in the spectrum and their networks. In order to encourage auction participation, MTN invites the Authority to consider offering successful auction participants the option to pay the spectrum auction fees over a period of five years or longer in equal annual instalments.

Additionally, for Lots acquired from the IMT700 and IMT800 bands, the Auction Fee must be paid into the Authority's bank account within thirty (30) working days after the public announcement of the award process results by the Authority proportionate to the geographic or population coverage as determined by the Authority. The Authority is requested to explain how the proportionate payment will be determined. Based on previous submissions that payment would be delayed until the spectrum is available for use, the 30-day rule should not and in fact cannot be applied and a proposed calculation for a payment schedule is proposed.

SECTION B – SECOND IM REASONS DOCUMENT

14. Publication of the draft ITA

MTN reiterates its comments regarding the Authority's refusal to publish a daft IMT ITA. It is not clear why the Authority has elected to conduct two consultation processes in relation to the Information Memorandum but has not published a draft IMT ITA for public consultation. Releasing a draft ITA for comment is critical to prevent surprises to potential applicants or interpretive issues in the final ITA (which applicants would not have previously seen or been afforded an opportunity to comment on). This may once again result in litigation and further delays in the release of high-demand spectrum, which the industry and South Africa cannot afford.

While various stakeholders have participated in the consultation process concerning the IM, the Authority may, despite submissions received from the stakeholders, take any decision it deems fit in relation to the ITA. Without an opportunity to consider the position the Authority takes in the ITA, it will be opening itself up to litigation and delays similar to those previously brought by the mobile operators in 2021.

15. Categorisation of Tier 1 and Tier 2 operators

Paragraph 4.28 - Categorisation of Tier 1 and Tier 2 Operators: a Tier 1 operator is now one that is dominant in at least 1 Region. In terms of paragraph 4.28.2 of the Second Reasons Document a Tier 2 operator is one that is classified as a Tier 1 operator. These definitions are confusing. MTN submits that the Authority appears to have erred as the definition of Tier 2 Operators in the Second IM Reasons Document does not align with the definition in the Second IM, where a Tier 2 operator is defined as one that is not classified as a Tier 1 operator (emphasis added).

Notwithstanding, MTN assumes these definitions are based on the geographic market findings of the retail mobile broadband market in the MBSI. While the definitions have

been revised from the first IM and Reasons document, the implication that MTN and Vodacom are classified as Tier 1 operators, with all other operators falling under the Tier 2 category remains the same.

The "regions" considered in the MBSI findings are simply "*segmented into rural and urban areas, by province*" (with no rural areas in Gauteng or the Western Cape), i.e., a total of 16 regions.[5] As noted in section 5.1 above, the Authority's methodology in assessing dominance is not transparent. Nonetheless, MTN is classified as a Tier 1 operator on the basis that it was found to be dominant in 5 regions in 2018 and just 2 regions in 2019.[6] Notably, the Authority does not provide an updated assessment of operators' dominance in any regions during 2020 or 2021.

The Second IM and Reasons document set out the Authority's intention to include an Opt-In Round for the ITA, from which Tier 1 operators are excluded. This Opt-In Round takes place before the main auction and provides an opportunity for Tier 2 operators to bid for spectrum lots. The Authority notes that this approach and the relevant spectrum lots available were designed "*to ensure that South Africa is left with at least five (5) credible wholesale national operators after the spectrum assignment process (including the WOAN). This is to ensure that the third and fourth national wholesale operators have enough spectrum to be credible competitors*."[7]

It is not clear on what basis the Authority concludes that a mobile operator having 45% or more market share in approximately 6% of the national market should be excluded from the Opt-In Round. Moreover, it is not justified why the Authority concludes that MTN is dominant in 1 or more Region in 2020/2021 based on data from 2018/2019. Moreover, as discussed in more detail below, MTN previously noted that its market share had dropped significantly between 2011 and 2020, from 40% to less than 30% (i.e., below the dominance threshold contained in the Competition Act). To what extent has the Authority considered dominance under the Competition Act or has it opted to create its own criteria to measure dominance and, if so, on what basis may the Authority deviate from the criteria set out in the Competition Act?

[5] The MBSI Findings, paragraph 67, page 29
[6] The MBSI Findings document, paragraph 94, page 27
[7] The Second IM, paragraph 6.8, page 22

MTN reiterates its position that this finding is irrational and arbitrary. The Authority appears to have merely adjusted the definition of Tier 1 and Tier 2 operators according to the geographic market definitions contained in the MBSI Findings Document. However, the Authority continues to fail to provide any justification for the tiered operator definitions. Merely substituting Regions for municipalities does not remedy the fact that the definitions are irrational and based on arbitrary criteria.

The Second IM Reasons document relies on an assessment of dominance in regional markets in order to define Tier 1 and Tier 2 operators on a national basis and proposes to discriminate against Tier 1 operators in obtaining spectrum, which is a national resource. Not only is this extrapolation of a putative local dominance assessment to a national level not justified by the Authority, but there is simply no logical linkage between shares of regional retail market activity and national shares of spectrum allocation. This disconnect between regional dominance and access to spectrum is clearly evidenced by the fact that Telkom has long held far more spectrum than either Vodacom or MTN, and yet Telkom does not have a retail market share above 45% in any region.

Separately, the approach of assessing concentration at a regional level is inconsistent with the very nature of mobile services, which are, by definition, provided to a single consumer as he or she moves across different regions, and which connect that consumer either to consumers in other regions, or to access information located in other regions appears. Assessing competition on a local level also disregards other critical decisions that operators make at a national level, such as spectrum planning, national pricing, promotions, coverage, and technology layer planning. Indeed, spectrum is used on a national basis, and therefore it makes little sense to base spectrum allocations on concentration at sub-national levels.

MTN and Vodacom have almost 100% national coverage, as do Cell C, Telkom, and other operators (under their roaming and other network sharing arrangements). This means that it is very likely that any one of these operators would be able to respond to a retail price change by any other operator in any province or sub-provincial area. Notably, such supply-side substitution would not require MNOs to expand their operations from adjacent geographic areas since multiple MNOs (particularly MTN and Vodacom) already have national coverage and a national presence. The ease with which operators can

respond to each other's retail pricing behaviour across the country means no single province or sub-provincial area is insulated from exterior competitive forces.

Accordingly, when properly accounting for the role of supply-side substitution, and indeed the fundamental nature of the supply of mobile services throughout South Africa, the only logical conclusion is that there is a national market for retail mobile services. This is explained more fully in MTN's response to the MBSI findings, dated 28 May 2021.

In addition, even if the Authority were correct to define sub-national markets, and even if MTN was found to have a market share of more than 45% in one or more of these sub-national markets, this would still not be sufficient to conclude that competition is ineffective or justify MTN being disadvantaged in the auction process. This is because competition is indeed effective, and, as discussed in more detail below, would likely be made even more effective if MTN was not discriminated against in the auction process.

In summary, there appears to be no rational basis on which to classify MTN as a Tier 1 operator or to deny it equal access to spectrum by excluding it from the Opt-In Round in the ITA. The Authority's conclusion in this regard rests on an outdated and irrational assessment of competition at a regional, rather than national, level.

16. Competition assessment, the MBSI and DSMI findings

The Authority has stated that in addition to the competition assessment from the MBSI, it has also considered the DSMI findings related to the licensing process which focus on competition in the mobile sector. MTN submits that both the MBSI and the DSMI reports are outdated, highly contested and do not consider the current market dynamics.

These reports are based on data from 2017 to 2019 data. MTN and other mobile operates have provided empirical evidence, based on more recent information (i.e., the years 2020 and 2021), however the Authority ignores this evidence and does not explain why it is not sufficient to be included in the assessment of competition matters. The Authority did not produce any evidence that contradicts the findings of effective competition (especially post-2019), nor does it produce any calculations using MTN's evidence in the RBB Economics report that contradict findings of an effectively competitive market. MTN

submits that if the Authority does not deal with the evidence and submissions provided, it is opening itself up for administrative law challenges, threatening to delay the ITA process yet again. In effect, the Authority has not taken relevant empirical evidence into consideration but bases its findings on outdated empirical evidence.

MTN has previously provided submissions on the state of competition throughout the MBSI process, and this spectrum allocation process. For completeness, in the following paragraphs, MTN considers the competition assessment relied upon by the Authority in the formulation of the Second IM and Reasons document. MTN then presents its own views on the state of competition as well as on developments in the market that have occurred since the Authority's MBSI assessment. Finally, MTN considers the categorisation of Tier 1 and Tier 2 operators and the implications of this on the Authority's proposed ITA.

16.1. Reliance on the MBSI and DSMI

The Authority's position on the state of competition, as discussed in the Second IM Reasons document, is primarily based on the findings in respect of its MBSI and, to a lesser degree, on the Competition Commission's DSM.[8] [9]

> As the Second IM Reasons document notes, the MBSI *"found Vodacom and MTN to be dominant in three markets, namely Retail Market, Wholesale Infrastructure Access Market and Wholesale National Roaming Service Market"*. [10]

The main claims made by the Authority regarding the state of competition are as follows:

i. Barriers to entry in the market are high (at both the retail and wholesale/site infrastructure level).[11] [12]

[8] The Second IM Reasons document, paragraphs 5.19, page 29
[9] FINDINGS DOCUMENT ON MOBILE BROADBAND SERVICES INQUIRY ("The MBSI Findings"), Government Gazette No. 443337, 26 March 2021.
[10] The Second IM Reasons document, paragraphs 3.7
[11] The MBSI Findings, paragraph 73, page 21
[12] The MBSI Findings, paragraph 144, page 38

ii. The MBSI findings, which considered concentration at a regional level (i.e. provincial, with a rural/urban split) for the retail market, are cited. Here the Authority found that Vodacom was dominant (i.e. had a market share of more than 45%) in 7 regions in 2018 and 2019, and that MTN was dominant in 5 regions in 2018 and 2 regions in 2019. [13]

iii. With respect to the market for site access, the Authority found that MTN was dominant in 8 municipalities, while Vodacom was dominant in 39.[14] (How a site access market is relevant to a frequency auction process is never explained by the Authority).

iv. The level of competition at the retail level is strongly linked to that of the wholesale level and *"vertical relationships between … upstream site infrastructure and downstream activities … could harm competition, since each operator has a reduced incentive to provide access to its site infrastructure, as this would result in lower downstream market shares and profit margins"*.[15] High roaming costs and limited infrastructure sharing are also cited as evidence of this. [16]

v. Mobile data prices are neither extremely high nor low in relation to other comparable countries, and South Africans enjoy a higher quality of data services compared to other African countries. South Africa is also found to perform reasonably well compared to similar countries that would be considered its peers (e.g. Brazil, Peru, Mexico, Thailand, and Malaysia). [17]

vi. South Africa's overall spectrum assignments are relatively low compared to those of BRICS countries and the countries classified as "Advanced" by the ITU. [18]

vii. When the number of subscribers on each network is taken into account, Vodacom and MTN are more spectrum constrained compared to Cell C and Telkom. [19]

To the extent that the Second IM Reasons document relies on the findings of the Authority's MBSI, many of these findings are not based on a sound economic assessment

[13] The MBSI Findings, paragraph 94, page 27
[14] The MBSI Findings, paragraph 152, page 43
[15] The MBSI Findings, paragraph 153, page 45
[16] The MBSI Findings, paragraph 192, page 53
[17] ICASA Discussion Document On The Market Inquiry Into Mobile Broadband Services ("The Discussion document"), 29 November 2019, paragraphs 67, page 51. Available: https://www.icasa.org.za/legislation-and-regulations/discussion-document-on-the-market-inquiry-into-mobile-broadband-services. See also the MBSI Findings, paragraph 90, page 35
[18] The Discussion document, paragraph 64, pages 47 to 48
[19] The First Reasons document, Government Gazette no. 43970, 4 December 2020, paragraph 29, page 94

and are denied by MTN. The reasons for this view are set out more fully in MTN's submission to the Authority on 28 May 2021, in response to the MBSI findings.

To the extent that the Second IM and Reasons Document rely on the DSMI findings, MTN notes that not only are these findings highly contested, but the DSMI produced non-binding recommendations. Accordingly, it was not legally necessary for MTN to review the Commission's findings. Additionally, although a "settlement" was not legally necessary (as the DSMI produced non-binding findings), the Competition Commission and MTN entered into a "settlement" through a consent agreement under which MTN agreed to (further) drop its pre-paid data prices (MTN had already dropped its effective data prices for pre-paid customers dramatically and continuously for over a decade before the "settlement"). Finally, MTN's settlement agreement with the Competition Commission explicitly states that MTN does not acknowledge the correctness or accuracy of the Commission's findings and recommendations.

Importantly, both the MBSI and DSMI findings are based on a view of the market from 2017 to 2019, and therefore do not provide an up-to-date assessment of the state of competition. Although the final MBSI findings were published in March 2021, the analysis contained in it is based on data from 2018 and 2019. In MTN's view, not only is this is an insufficient amount of data on which to draw accurate conclusions, but these data points are now outdated and do not account for significant changes in the market since 2019. Similarly, while the Competition Commission reiterated in its presentation to the Authority in October 2020 that its view of the market had not changed since the findings of the DSMI were published, such a position was not made based on any updated assessment of the market or consideration of market developments since 2018/2019.[20]

In a fast-paced industry such as mobile data services where market dynamics and outcomes are constantly shifting, it is vital to base any regulatory interventions on up-to-date data and accurate assessments of those data.

For example, total mobile data volumes in South Africa consistently showed double-digit annual growth in the five years leading up to 2020, growing a total of 738% (312 petabytes

[20] Competition Commission submission to ICASA MBSI public hearings, 27 October 2020, available: https://www.icasa.org.za/legislation-and-regulations/competition-commission-presentation-on-mobile-broadband-services-inquiry

in 2016 to 2,615 petabytes in 2020).[21] MTN's total mobile data traffic grew [redacted]% from April 2020 to date, increasing from [redacted] petabytes in January 2020 to [redacted] petabytes in October 2021. At the same time, MTN's effective price per MB has fallen 77% since 2016. Vodacom's traffic has also more than quadrupled since 2016.[22] During this period, Telkom superseded both MTN and Vodacom in terms of annual mobile data traffic, becoming the largest carrier of mobile data traffic in the country since 2017.[23]

MTN sets out a more detailed updated view of competition in the market below, but these significant shifts in the market indicate how much the market has changed since the MBSI and DSMI assessments and the need for an updated view of competition in considering the best way forward for the ITA.

16.2. An Updated View of Competition

The view of competition relied upon in the Second IM Reasons document fundamentally misrepresents the state of competition in market. Not only is the Reasons document based on outdated data (as noted above), but it ignores substantial evidence that competition in the market is effective and intense.

Even on the basis of the Authority's own conclusions from its international benchmarking exercise in the MBSI (as set out in the Discussion document), its high-level description of competitive outcomes should not raise serious competition concerns.[24] The Discussion documents states that mobile data prices are neither extremely high nor low in relation to other comparable countries, that South Africans enjoy a higher quality of data services compared to other African countries, and that South Africa also performs reasonably well compared to similar countries that would be considered its peers.[25] South Africa's overall spectrum assignments are relatively low compared to other countries, and Vodacom and

[21] Africa Analysis South African 5G Market Outlook Report, February 2021, page 12
[22] Africa Analysis South African 5G Market Outlook Report, February 2021, page 12
[23] Telkom SA SOC Ltd Integrated Report for the year ended 31 March 2021, page 40
[24] The MBSI Findings, paragraph 90, page 62
[25] ICASA Discussion Document on The Market Inquiry Into Mobile Broadband Services ("The Discussion document"), 29 November 2019, paragraph 67, page 51. Available: https://www.icasa.org.za/legislation-and-regulations/discussion-document-on-the-market-inquiry-into-mobile-broadband-services

MTN are more spectrum constrained compared to Cell C and Telkom.[26] The MBSI findings also set out that pro-competitive outcomes at the roaming level have been observed, such as falling prices and improving quality.

On the basis of these high-level observations alone, not only is it clear that competition in South Africa is effective, but also that the obvious constraint that prevents South African operators from offering better quality services, at even lower prices, is the failure of the Authority to allocate sufficient spectrum. The obvious and logical solution is to allow operators with the ability and incentive to invest in bidding for and applying additional spectrum to access more, rather than less spectrum. However, the Authority comes to the opposite conclusion, i.e. that "there are competition issues in the mobile market as provided in the MBSI".[28]

There have been a number of significant changes in the market since 2019, including the roll-out of 5G services, and Telkom's significant and rapid growth in the market (discussed further below). MTN has already outlined these to the Authority in its submission in response to the first IM, submitted on 2 November 2021, as well as in its response to the MBSI findings, dated 28 May 2021.

Although the Authority references MTN's submission (as well as those of other stakeholders) in the Second IM Reasons document, it does not substantively engage with the more up-to-date data provided to it by MTN. Instead, the Authority simply chooses to favour the outdated MBSI findings, noting that "*[d]espite the market developments, the Authority still finds that there are competition issues in the mobile market as provided in the MBSI [...] The Authority's interventions in promoting competition are aimed at addressing the MBSI* findings."[29]

It makes very little sense for the Authority to seek to "address the MBSI findings" when those findings are out of date, and significantly flawed as a matter of economics. The Authority does not defend or justify its position in this regard, nor does it seek to provide any assessment to support this conclusion. For example, the Authority provides no

[26] The Discussion document, paragraph 64, pages 47-48. See also Government Gazette number 43970 ("the First Reasons document"), 4 December 2020, paragraph 29, page 96
[27] The MBSI Findings, paragraph 189, page 61
[28] The Second IM Reasons document, paragraph 5.21, page 30
[29] The Second IM Reasons document, paragraph 5.21, page 30

evidence of its own that might contradict the evidence submitted by MTN, or that it interprets the evidence submitted by MTN differently. The Authority does not provide any explanation of why it might believe MTN's updated information to be insufficient, irrelevant, or incorrect. The Authority also does not provide any reason to believe that the outdated 2018 and 2019 data relied upon by the MBSI might be more relevant or reliable than the more recent evidence provided by MTN.

Instead, the Authority simply dismisses the evidence provided by MTN, and plainly states its decision to rely on the findings presented in the MBSI. As such, by ignoring the impact of such market developments, the Authority explicitly chooses to consider an outdated reflection of the state of competition in informing its proposed spectrum auction. We therefore reiterate these market developments below. The Authority is therefore not taking relevant information into consideration at all.

As we discuss in the remainder of this section, the Authority's analysis of the state of competition is simply inconsistent with the facts of this market, and the Authority repeatedly fails to consider the intensity of competition between each group of operators.

16.2.1. Competition between MTN and Vodacom

In South Africa, there is intense competition between MTN and Vodacom. The claim that MTN is dominant, or somehow dominant on a combined basis with Vodacom overlooks the vigorous competition that exists between these two players as different and independent rivals.

The strong competition between MTN and Vodacom has driven these two operators to invest heavily in their network infrastructure, in the order of tens of billions of Rands per annum on a sustained (and even accelerating) basis. MTN and Vodacom have effectively kept each other in check, despite no other operators investing in providing mobile infrastructure and coverage at a national level or investing nearly as heavily in their networks.

This competitive dynamic has been the source of substantial pro-competitive outcomes for more than 25 years. These outcomes include the expansion of mobile connectivity

coverage in deep rural areas, the exponential growth in mobile data volumes, substantial improvements in network speeds and quality, drastic decreases in effective data prices, the repeated introduction of improved technology layers (such as 3G, 4G, and 5G) at shorter and shorter time intervals, and broadening geographic coverage with each of these technology layers on a more and more rapid basis for each subsequent technology. As noted in the MBSI, and reiterated in the Reasons document, the Authority itself found that South African consumers have enjoyed the benefits of these high-quality services.

16.2.2. Differences between MTN and Vodacom

The Reasons document also ignores the substantial differences between Vodacom and MTN. In FY2020, Vodacom (SA) generated revenues of around R70 billion, which is approximately 53% higher than the MTN (SA) revenues of R45 billion in FY2020. Vodacom (SA) also had an EBITDA value approximately 64% higher than that of MTN (SA) in FY2020, indicating that Vodacom is significantly more profitable than MTN.

Moreover, MTN's market share dropped significantly between 2011 and 2020, from 40% to less than 30% (i.e. below the dominance threshold contained in the Competition Act). In contrast Vodacom has enjoyed a relatively steady market share of around 40% to 45% over the same period.

16.2.3. MTN and Telkom

In many respects, MTN shares more in common with its other rivals than it does with Vodacom. By way of example:

[30] See MTN's Annual Financial Statement for the year end 31 December 2020. Pages 39 and 42. Available: https://www.mtn.com/wp-content/uploads/2021/04/MTN-Annual-Financial-Statements.pdf. Also see Vodacom's Annual Financial Statement for the year end 31 March 2020. Pages 44 and 45. Available: http://vodacom-reports.co.za/integrated-reports/ir-2020/documents/consolidated-annual-financial-statements-2020.pdf

[31] South African Competition Act. Section 7

[32] See the MTN presentation on the ICASA broadband services market inquiry, dated October 2020, slide 5. Available: https://www.icasa.org.za/legislation-and-regulations/mtn-presentation-on-mobile-broadband-services-inquiry. This information is based on https://businesstech.co.za/news/mobile/319378/mobile-market-share-2019-vodacom-vs-mtn-vs-cell-c-vs-telkom/ and https://mybroadband.co.za/news/business-telecoms/357205-mobile-subscribers-in-south-africa-vodacom-vs-mtn-vs-telkom-vs-cell-c.html

i. The Telkom Integrated Report (for the year ended 31 March 2021) showed that, at a group level, Telkom generated over R43 billion of turnover in this period, which is similar to the approximately R45 billion of MTN (SA).[33] Telkom is also significantly outpacing MTN (SA) in terms of overall revenue growth. Between FY2018 and FY2020, Telkom's revenue grew by approximately 8.5% (a compound annual growth rate of around 4.2%). In contrast, the revenues of MTN (SA) grew by just approximately 1.8% over this period (a compound annual growth rate of around 0.9%).

ii. The results from Telkom's Mobile division show an even clearer picture of its growth. For example, Telkom Mobile grew its annual mobile data revenues by over 41% in its 2021 financial year, to over R12.2 billion, comparable to the roughly R14.6 billion earned by MTN (SA), for the year ending 31 December 2020.[34] Telkom is also outpacing MTN in terms of data revenue growth more generally. Between FY2019 and FY2021, Telkom's data revenues grew by more than 106% (a compound annual growth rate of around 44%). In contrast, between FY2018 and FY2020, the data revenues of MTN (SA) grew by only approximately 12.89% (a compound annual growth rate of around 6.25%).

iii. Moreover, in the year ending 31 March 2021, Telkom served a significantly higher volume of data traffic than MTN (SA) (1011 versus 468,2petabytes).[35]

16.2.4.Competition between MTN, Rain and Liquid

MTN experiences significant competitive constraints from rival operators other than Vodacom, such as Liquid and Rain.

Rain was established in 2017, following the rebranding of Wireless Business Solutions ("WBS"), which itself was acquired by Multisource Telecoms in 2015 (a company backed by billionaire Paul Harris and former FNB CEO Michael Jordaan). Rain also has the backing of JSE-listed African Rainbow Capital Investments Ltd ("ARC"), which is in turn owned by billionaire Patrice Motsepe, and holds a 20.7% shareholding in Rain. Rain is the largest contributor to ARC's intrinsic portfolio value of R12.8 billion. In September 2020,

[33] Telkom Integrated Report 2021, page 43 and MTN Data Sheets 2020, page 158
[34] Telkom Integrated Report 2021, page 42 and MTN Data Sheets 2020, page 162
[35] Telkom Integrated Report 2021, page 40.
[36] IT Web (2015). Multisource gets WBS' spectrum licences. Available: https://www.itweb.co.za/content/mraYAyMoZLk7J38N
[37] ARC (2020). Condensed Unaudited Interim Results for the six-month period ended 31 December 2020. Available: https://arci.mu/wp-content/uploads/2021/03/IResults21.pdf

ARC valued its share of Rain at R3.1 billion, giving the operator a total valuation of R15 billion (which, at the time, exceeded Telkom's market capitalization valuation of R13.4 billion). In its interim results for the six months ending December 2020, ARC revalued its shareholding in Rain to R3.5 billion, bringing Rain's valuation to nearly R17 billion. ARC also provides Rain with substantial financial backing. In a business update webinar held in September 2021, ARC explained that Rain was "fully funded" to achieve its objective of deploying 1500 5G sites by December 2021, following a funding boost raised by the ARC Fund in mid-2020.

Liquid was established in 2005 and operates in 12 countries. Its parent company, Econet Global ("Econet"), operates in Africa, Europe, South America, and the East Asian Pacific Rim. Liquid built Africa's first terrestrial fibre network stretching between Cape Town and Cairo and remains Africa's largest terrestrial fibre network operator. In February 2021, Liquid raised R12 billion in a bond sale, in order to refinance debt and fund their expansion across Africa.

16.2.5. Conclusion on the State of Competition

These observations refute any allegation that might be raised that MTN (and Vodacom) enjoy a ("collective") position of dominance. They are entirely inconsistent with the notion that MTN is "dominant" in the provision of mobile services, when considering the proper economic definition of substantial market power, which requires firms to be able to act appreciably independently of their rivals. Finally, these observations also refute any claim that the mobile services space is duopolistic in nature.

In summary:

i. the Authority's approach to assessing competition at a regional level is inconsistent not only with the very nature of mobile services, but also with the conclusions and outcomes

[38] ARC (2020). Condensed Unaudited Interim Results for the six-month period ended 31 December 2020. Available: https://arci.mu/wp-content/uploads/2021/03/IResults21.pdf

[39] ARC (2020). Annual financial results announcement for the period to 30 June 2020 – 15 September 2020. Available: https://presentations.corpcam.com/webcast16x9_delayed.aspx?id=ARC15092020

[40] See https://www.liquid.tech/about-us/our_story

[41] US Dollar value converted to Rands using the R14.18/$ exchange rate as at 29 April 2021. See Bloomberg (2021). Africa's Largest Fiber Company Raises $840 Million in Bond Sale. Available: https://www.bloomberg.com/news/articles/2021-02-25/africa-s-largest-fiber-company-raises-840-million-in-bond-sale

that it determines on a national basis (including the discrimination against Tier 1 operators in regard to the national allocation of spectrum).

ii. The notion that MTN and Vodacom are somehow dominant on a collective or combined basis fundamentally fails to acknowledge the vigorous competition that exists between these two players as different and independent rivals. MTN has acted as an important challenger to Vodacom and has invested tens of billions of Rands in its network on an annual basis to compete for subscribers and to provide better quality services to consumers.

iii. It is this competition that has resulted in national data connectivity coverage, the delivery of data volumes that have grown exponentially, network quality that has continuously improved, and pricing that has fallen materially each year. The Authority itself notes that the quality of mobile services in South Africa is better than that of other African countries.

iv. MTN competes on a more equal footing with some of its other rivals than it does with Vodacom, and is competitively constrained by these other well-resourced rivals (such as Liquid, Rain and Telkom). Telkom in particular has grown significantly since 2019, when the MBSI (and DMSI) was concluded.

v. The Authority itself acknowledges that the amount of spectrum allocated in South Africa is low compared to other jurisdictions, and that MTN and Vodacom are more spectrum constrained than other operators.

vi. There is therefore no rational justification for designating MTN as a Tier 1 operator, nor for applying differential treatment to MTN (in favour of smaller operators) in the spectrum auction process.

17. Spectrum Constraints and 5 National Wholesale Operators

The Authority acknowledges that MTN and Vodacom are spectrum constrained in paragraph 5.22 of the Reasons Document however, the Authority states that "*...the Opt-In Round is meant to ensure that two sub-national wholesale players become credible by acquiring the minimum spectrum portfolios without compromising the needs for Tier 1 operators.*" It is not clear how the Authority proposes that the Opt-In Round will ensure that the ITA process will maximize government revenues, in particular, given the current economic environment and economic recovery sought by South Africa. MTN submits that

the ITA is the ideal opportunity to ensure there are enough lots of spectrum for operators to compete vigorously as possible to maximize government revenues.

In the First Reasons document, the Authority set out its intention to sustain five national wholesale operators (including the WOAN), stating its position that "*competition between more rather than fewer competitors is likely to be the most effective means of enhancing competition, particularly in a concentrated market with high barriers to entry*".

The Authority appears to maintain this position in the Second IM and Reasons document, where it explains that the auction was designed "*to ensure that South Africa is left with at least five (5) credible wholesale national operators after the spectrum assignment process (including the WOAN).*"[43] The Authority specifically notes that "*the Opt-In round is meant to ensure that two sub-national wholesale players become credible by acquiring the minimum spectrum portfolios without compromising the needs for Tier 1 operators.*"[44] In addition, the Authority imposes the following spectrum caps for the ITA "*to ensure that the spectrum is not concentrated in [the] hands of few players*":[45]

- a sub-1GHz spectrum cap of no more than 2 x 21MHz (including existing sub-1GHz holdings); and
- an overall spectrum cap of 187MHz (which allows all Tier 2 operators to add at least 40MHz of spectrum to their current holdings).

Consistent with its objective to support five national wholesale players, the Authority notes that "*The overall spectrum cap of 187 MHz is to ensure that any individual licensee must not acquire more than approximately 20% of the 935 MHz of high-demand spectrum that will be assigned at the auction stage and the spectrum set-aside for the WOAN.*"[46]

The Authority's fatal flaw is that it provides no robust economic assessment to demonstrate that competition would be more effectively enhanced if operators such as MTN and Vodacom were disadvantaged in the spectrum auction process.

[42] The first Reasons document, paragraph 37, page 97
[43] The Second IM, paragraph 6.8, page 20
[44] The Second Reasons document, paragraph 5.22, page 28
[45] The Second IM Reasons document, paragraphs 5.20.2, page 27 and the Second IM, paragraphs 6.9 to 6.9.2, pages 20 to 21
[46] The Second IM, paragraph 6.4, page 21

The Authority does not provide any evidence or justification to support its view that the South African market can sustain five (or more) national wholesale operators (including the WOAN). As highlighted by both MTN, Telkom and Vodacom, this goes against recent international trends, where efficient consolidation to three or four players has been seen in a number of jurisdictions, leading to vigorous and effective competition.[47] As submitted by Telkom, "*international experience in both developed and developing countries suggests that sunk investment costs and economies of scale limit how many firms can viably participate in the market*" and "*it is unaware of any regulator that currently is committed to five facilities-based players in the market*".[48]

The Authority's response to this, as stated in its entirety in the Second IM Reasons document, is that "*Although five national wholesale operators are higher than international standards that suggest a three to four national wholesale operator market, this does not preclude each economy to consider its own unique circumstances in prescribing the number of national wholesale operators.*"[49]

MTN agrees that the optimal number of operators required to ensure effective competition, and deliver timeous pro-competitive benefits to consumers, is likely to logically depend on several country-specific factors. However, the Authority has made no attempt to conduct any such assessment of how many operators may be optimal in the South African context, nor has it considered its objectives and outcomes under, for example, a 3+1 scenario (as also highlighted by Telkom and Vodacom).[50] Instead, the Authority appears to simply adopt the stance that "more is better". This runs the risk of depriving operators (and ultimately consumers) from benefitting from economies of scale.

In MTN's view, there are a number of characteristics of the South African market that likely suggest fewer national operators may be optimal.

Economic principle indicates that in markets with homogenous products, or contestable markets, the competitive threat of just one vigorous outside option may be sufficient to maintain effective competition. More generally, too many competitors may be

[47] The Second IM Reasons document, paragraph 5.17.3 and 5.17.4, page 25. See also RBB's response to the First IM, paragraphs 49 and 50, page 17 and 18 and Telkom's response to the First IM, paragraphs 183 to 184, page 61
[48] Telkom's response to the First IM, paragraph 184, page 61
[49] The Second IM Reasons document, paragraph 5.28, page 31
[50] The Second IM Reasons document, paragraph 5.17.1, page 25

unsustainable in any market where there is material, ongoing fixed costs to operation, and thus significant economies of scale. Mobile services clearly fits the mould of such a market, where operators are required to make ongoing fixed investments in their networks.

South Africa is a geographically large country with a relatively low population density, where most consumers are poor. A large proportion of mobile customers do not use data, and instead still rely on 2G and 3G technologies exclusively, which are less efficient in terms of spectrum usage, and are more costly to serve. This means that, in a country like South Africa, more spectrum is required per operator for the whole population to be served, yet South African mobile network operators already have far less spectrum per operator compared to most other countries. Combined with the low disposable incomes of domestic customers, and the higher cost of providing coverage, this indicates that even fewer national infrastructure competitors may be optimal compared to international comparators, as set out below. Indeed, both Vodacom and Telkom appear to share this view, with Telkom CEO, Sipho Maseko, stating "*consolidation is inevitable at some point in this market*" and "*whether it will pan out as a three-player market in the long term, or it will consolidate into a two-player market" remains to be seen*.[51]

Separately, and of most relevance to the current assessment, there is a limit to the total amount of spectrum available. Accordingly, while it is true that operators do require sufficient spectrum to be able to credibly compete, if spectrum is reserved for each additional operator, this directly removes the available spectrum for existing operators. The more operators there are in the market, the less spectrum each of them is able to obtain. As such, by spreading limited spectrum resources more thinly, each additional operator in the market dramatically increases the investments all operators are required to make in their networks, thereby reducing the critical economies of scale.

The Authority itself acknowledges that the overall amount of spectrum that has been licensed in South Africa is significantly lower than that in comparable countries.[52] This has forced South African operators, and MTN and Vodacom in particular, to invest

[51] The Second IM Reasons document, paragraphs 5.17.1 and 5.17.3 to 5.17.5, page 25. See also interview with Sipho Maseko, 9 November 2021, available: https://www.moneyweb.co.za/moneyweb-radio/safm-market-update/telkom-in-talks-with-strategic-partners-for-it-business/

[52] The first Reasons document, paragraph 31, page 97

significant amounts of money in their networks in order to compensate for spectrum constraints (and typically vastly in excess of the investments of other mobile operators). The extent of these investments is shown in the figure below.

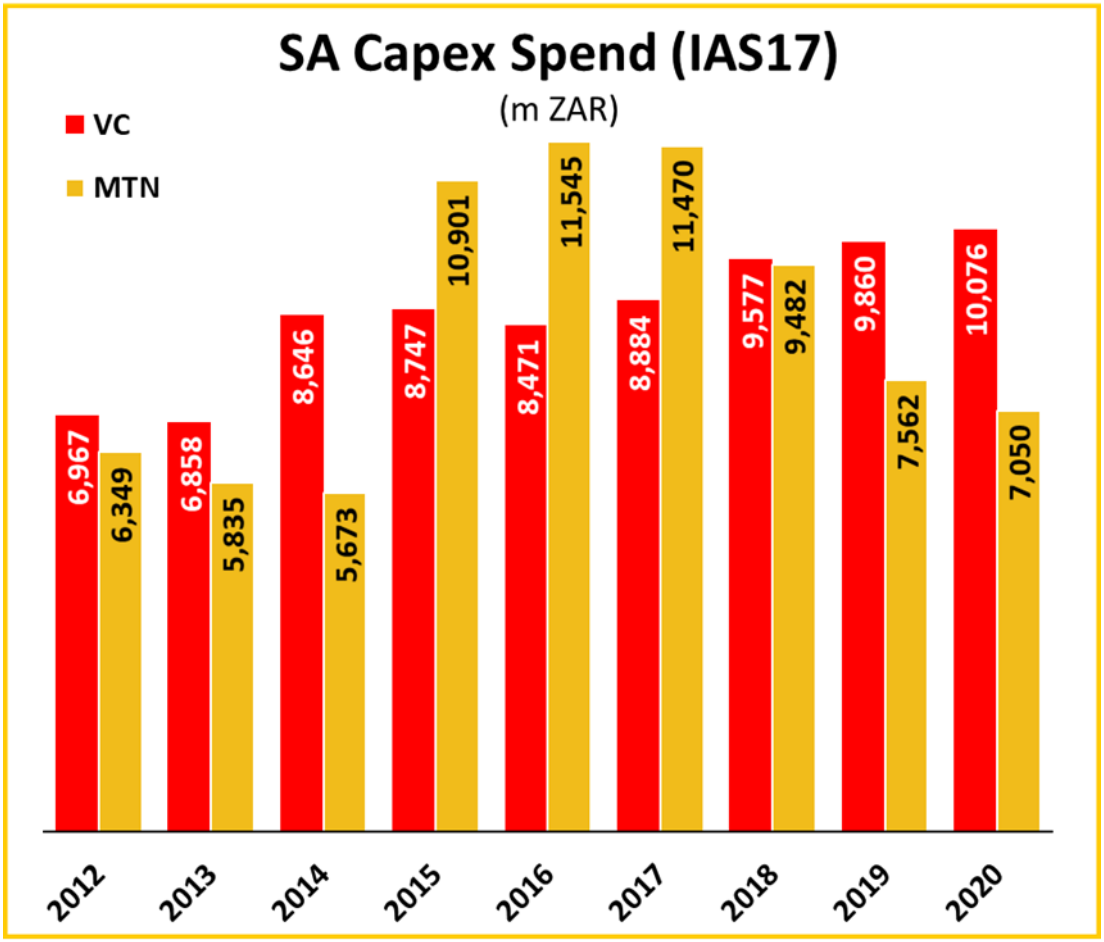

Figure 5 ***Vodacom and MTN's capital expenditure, 2012 - 2020 (R' millions)***

Source: MTN

Note: Also see the MTN submission in respect of the Competition Commission's provisional report on the data services market inquiry, dated 19 June 2019, Figure 11. Available: http://www.compcom.co.za/wp-content/uploads/2019/08/2019-06-14-MTN-to-CC-Non-Confidential.pdf

MTN agrees with the Authority that it is important that spectrum be allocated in a way that preserves or enhances competition. However, international experience indicates that this should be achieved through the efficient allocation of spectrum to a limited number of sustainable and efficient operators and will not necessarily be achieved by sharing scarce spectrum across numerous operators.

There are likely to be far more substantial benefits to competition by allocating spectrum to sustainable and efficient operators that have the ability and incentive to invest to apply those spectrum allocations effectively, and that can better deliver technological progress

to the market. In addition, it is likely to be more beneficial for competition and consumers if spectrum is allocated to a limited number of competitors that might efficiently use that spectrum. This view is widely accepted. By way of example:

i. Coates (2012) explains that regulators should avoid "*overly restricting the incumbents' potential for acquiring spectrum for themselves*". The author also notes that "*one must [take] a realistic view on the prospect of new entry ... [it] would be inefficient in that case to impose protective measures for potential new entrants who do not exist, leading to unused spectrum that could be better utilised by the incumbents for improving their services*".[53]
ii. The 2012 Ofcom study on future mobile competition and the award of 800MHz and 2.6GHz spectrum (to which the Authority also refers in the First Reasons document) notes that the goal of efficient spectrum allocation is to "*promote competition, rather than protect individual competitors*". It goes on to explain that *"[t]he benefits of greater competition [through the participation of smaller operators] may need to be weighed up against other considerations, such as potential economies of scale enjoyed by large firms*".[54]
iii. Similarly, in its report concerning the UK 4G spectrum auction in early 2013, KPMG explains that "*ensuring the smallest market players or new entrants obtain spectrum is not necessarily an efficient outcome, [because] competition is not just about the number of players in the market but how effectively they compete with each other*".[55]

As noted above, while in some countries four operators might still exist, the overwhelming global experience of the past few decades has been a move towards an efficient number of rivals. Competition can be much more effective with fewer operators. Indeed, even in more developed countries, where operators benefit from consumers with higher disposable incomes, smaller geographic areas, and higher population densities, competition is commonly effective with only two, three or four networks – and crucially in these situations the operators with the greatest ability and incentive to invest in bidding for and applying spectrum have had access to far more spectrum than any of the South African operators.

[53] John Coates (2012), Pro-competitive measures in spectrum auctions. Available: http://www.dotecon.com/publications/pro-competitive-measures-in-spectrum-auctions/
[54] Ofcom (2012), Assessment of future mobile competition and award of 800 MHz and 2.6 GHz. Footnote 32, page 24. Available: https://www.ofcom.org.uk/__data/assets/pdf_file/0031/46489/statement.pdf
[55] KPMG (2014), What can we learn from the UK 4G auction? Page 6. Available: https://assets.kpmg/content/dam/kpmg/pdf/2015/10/spectrum-uk-4g-auction.pdf

Considering the evolution of mobile telephony markets internationally, the changes occurring in these markets have been about finding ways for competition to work more effectively, at lower costs, and providing more benefit to consumers, with fewer national networks, rather than some state-sponsored fantasy to imagine that five or six operators might be a sustainable possibility, let alone pro-competitive. For example:

i. In May 2020, the General Court of the European Union annulled the European Commission's decision to block the proposed acquisition of Telefonica UK ("O2") by Hutchison 3G UK ("Three Mobile"). This decision therefore allowed a merger that would not only reduce the number of operators in the UK from four to three (with the other rivals being Vodafone and EE), but also create a market leader with a market share of between 30% and 40%.
ii. Similarly, Austria saw a four-to-three merger between its second- and fourth-largest operators cleared in 2012, and Germany's four-to-three merger between its third- and fourth-largest MNOs was also cleared in 2014.
iii. More recently, both the Australian and US courts cleared mergers between these countries' third and fourth largest operators, and found that it is unlikely that numerous competitors could be efficiently sustained in the market, and that competition would remain vigorous and effective with three national networks.

The Authority's view to support at least five national wholesale operators is therefore unrealistic and ignores the obvious evolution of competition in mobile telephony that has been observed globally, without any evidence or justification for why the South African context might differ from such international markets. By spreading limited spectrum resources amongst so many operators (which is only exacerbated by the reservation of spectrum for the WOAN), the Authority is likely to undermine the benefit of economies of scale, thus inhibiting the market from operating efficiently, and preventing operators from being able to deliver better outcomes to consumers.

Indeed, the allocation of temporary spectrum during the Covid-19 pandemic has illustrated that competition is well-served, and consumers hugely benefitted, when operators such as MTN are not denied access to an efficient allocation of spectrum. The temporary spectrum allocations have intensified competition among operators, leading to lower prices, high levels of investment, and the rolling out of new technologies. All of this indicates that competition is made more

effective when spectrum is allocated to operators that can make efficient use of that spectrum and provides further support for operators such as MTN not to be discriminated against in the spectrum auction process.

18. Spectrum caps

MTN had previously raised concerns that the Authority would not be considering Rain's 3700 MHz spectrum assignment when calculating the spectrum cap. MTN's contention arose from the fact that it expected the ITU to declare 3700 MHz spectrum as IMT spectrum in 2023, meaning that Rain could end up with a lasting competitive advantage where it holds 264 MHz while other operators are constrained to the cap of 184 MHz. While the Authority acknowledges the possibility that bands such as 3600 - 3800 MHz could be identified for IMT by the ITU, it suggests that at such a time, it will undertake a process to assess the spectrum assignments in the band to ensure that the spectrum cap is not exceeded by all licensees. It is not a mere possibility, but highly probable as the frequency band 3600- 3800 MHz has been allocated to the mobile service in Region 1 on a co-primary basis in the European Common Allocations (ECA) Table additionally the Radio Spectrum Policy Group (RSPG) identified the 3400-3800 MHz band to be one of the pioneer bands suitable for the introduction of 5G based services in Europe and the primary band for the introduction of those services[56].

The Authority is requested to clarify what action it proposes to take where a licensee has exceeded the spectrum cap as a result of the 3600 - 3800 MHz bands being identified as IMT spectrum. Will the Authority recall spectrum previously assigned in the 3600 - 3800 MHz band and re-allocate in accordance with a competitive assignment processes or will it look at reducing spectrum holdings in other bands so that the total holdings fall under the spectrum cap of 187 MHz?

[56] Electronic Communications Committee of CEPT "Harmonised frequency arrangements and least restrictive technical conditions for mobile and fixed communications operating in the band 3400MHz to 3800MHz." Available at: https://docdb.cept.org/download/1589

19. Conclusion

The Authority's view on the state of competition, as reflected in the Second IM Reasons Document, is based on an outdated and flawed competition assessment. It fails to consider the significant shifts that have occurred in the market subsequent to the conclusion of the MBSI. This is particularly problematic given the dynamic and fast-paced nature of the mobile services market.

MTN notes the Authority's attempts to justify the Second IM in the Reasons Document. However, the Authority did not consider the evidence provided by MTN in the first IM submission. This is concerning because it seems that the Authority's consultation process is merely to comply with its truncated timelines rather than apply its mind to the comments made by interested parties.

Moreover, the Authority's approach of using regional competition to inform the allocation of the national resource of spectrum is unjustified and irrational. It is on this outdated and flawed assessment that MTN is categorized as a Tier 1 operator and is denied equal access to spectrum by being excluded from the Opt-In Round of the ITA.

There are still contradictions contained in the Second IM of important issues which need to be ventilated in a public forum so that the public does not get surprises when the Authority resolves these issues on its own without them being seen by the public prior to the publication of the ITA. This negates the purpose of the Second IM and does not add appropriate value to the consultation process if issues are left unresolved as is the case. For example, MTN is still concerned how the Authority will resolve the Tier 1 and Tier 2 issues given the arbitrary nature of the definitions.

MTN's submission on this Second IM indicates that there is a serious gap in the auction rules and auction design. It is concerning that at this stage of the process MTN does not have confidence in the auction rules and what the final rules in the ITA will look like, and that there will be no surprises that it did not anticipate.

In as much as this auction process is overdue, it is crucial that the above issues are resolved before the auction takes place.