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Representations to Independent Communications Authority of South Africa (ICASA) Review of ICT Covid-19 National Disaster Regulations

7 May 2021

Preamble

The Free Market Foundation (“FMF”) submits a written representation outlined in this document following the invitation by the Independent Communications Authority of South Africa (“ICASA”) “**NOTICE INVITING WRITTEN REPRESENTATIONS, Review of the ICT COVID-19 National Disaster Regulations (“the Notice”)**”, published in Notice No. 226 (Government Gazette No. 44488) dated 23 April 2021, to make written representation on the issues which the Authority should consider regarding the review of the ICT COVID-19 National Disaster Regulations published in Notice No. 238 (Government Gazette No. 43207) dated 6 April 2020, as amended by Government Notice No. 252 (Government Gazette No. 43279) of 5 May 2020, Government Notice No. 500 (Government Gazette No. 43707) of 11 September 2020, Government Notice No. 678 (Government Gazette No. 43945) of 27 November 2020, and Government Notice No. 165 (Government Gazette No. 44374) of 31 March 2021.

EXECUTIVE SUMMARY

The FMF submits in the written representation that, as an intermediary measure, ICASA should convert the COVID-19 emergency spectrum temporarily assigned until 31 May 2021 into indefinitely assigned spectrum until such time the design of the auction has been determined and the auction can be carried out. This will give MNOs, in particular MTN and Vodacom, who have invested significantly in radio

infrastructure in the emergency frequency bands, the possibility to continue operating their networks at higher capacity for the sake of South African consumers. The FMF submits further that ICASA should convert all spectrum currently assigned on a temporary and fixed basis into privately owned and fully tradeable spectrum to its current users. The users include MNOs as well as broadcasters and public and private users. The FMF puts forward four lines of reasoning—(a1), (a2), (a3) and (a4)—to support its call for spectrum privatisation, which will benefit South African consumers and end the long, costly period of spectrum withholding by SA regulators.

Introduction

The emergency Information and Communications Regulations framed by ICASA gazetted on 20 April 2020 state that specific spectrum bands are made available on that date for assignment to incumbent licensees and others, temporarily, until three months after termination of the Covid national state of disaster or 30 Nov 2020 (whichever occurred first).¹ In light of the fact that the auctioning of the high demand spectrum was envisaged to occur in March 2021, ICASA approved the amendment of the ICT COVID-19 National State of Disaster Regulations in order to extend the validity period of the temporary assignment of radio frequency spectrum to no later than 31 March 2021. Following the indefinite postponement of the envisaged spectrum auction, ICASA granted a further extension of the temporary assignment of emergency spectrum for another two months—from 31 March to 31 May 2021.

In conjunction with the extension of the validity period to 31 May 2021, in a public statement ICASA chairman Keabetswe Modimoeng indicated the Authority's intention to conduct a review of the temporary spectrum regulations during this two-month period: "As mobile network operators continue to provide services while deriving commercial value from this high-value spectrum resource, we need to delicately apply ourselves on these extensions in a manner that is justifiable and primarily beneficial to the South African public. ... We will be doing so over the next two months, while expediting our appeal processes on the formal licensing court interdict. Industry needs to dig deep and assist the process further by modelling the best pro-consumer offerings on the back of these temporary licences."²

The Notice inviting public representations formalised ICASA's intention to conduct a "Review of the ICT COVID-19 National Disaster Regulations".

¹ https://www.gov.za/sites/default/files/gcis_document/202004/43207gen238.pdf.

² <https://techcentral.co.za/icasa-extends-temporary-spectrum-assignments/106061/>.

Scope of the Submission by FMF

In section “Issues for consultation” of the Notice, point 8 “**Temporary radio frequency spectrum licenses**”, ICASA explains in 8.6 “The period of two months interim extension was informed, inter alia, by the need for the Authority to conduct a comprehensive review of the Covid-19 Regulations, including the radio frequency spectrum extensions, local television content obligations waiver, competition impact, pro-consumer offerings and the impact of the National State of Disaster, while expediting ICASA’s appeal process on the formal spectrum licensing court interdict – during the two months’ extension period.”

In 8.7, ICASA states that it “does not intend to further extend the expiry date of the temporary radio frequency spectrum licences beyond 31 May 2021 due to the issues raised in the pending litigation and the interim interdict which has been granted against it under the Pretoria High Court case number: 66778/2020”.

Before making such a far-reaching decision, however, ICASA follows constitutional procedure as established in Section 154 (2)³ by engaging in a public consultation process for such a decision to take into account and be informed by the concerns of the stakeholders of society. Accordingly, in subsection 8.9, ICASA asks for written representations to address the following points:

- (a) Whether the Authority should consider further extending the duration of temporary radio frequency spectrum licences beyond 31 May 2021 despite the issues raised in the pending litigation and the interdict which has been granted against it.
- (b) The appropriate extension period.
- (c) The spectrum fees which should be applicable to the extension period.
- (d) Competition impact and proposed remedies, if any, of the further extension of temporary radio frequency spectrum licences.
- (e) Consumer benefits in respect of spectrum obligations that the Authority should consider regarding further extension.

Under section 9 “**Spectrum pooling arrangements**”, subsection 9.2, ICASA asks for written representations to address, inter alia, the following:

- (a) Spectrum sharing/pooling arrangements on a temporary basis which ICASA should consider.

³ “Draft national or provincial legislation that affects the status, institutions, powers or functions of local government must be published for public comment before it is introduced in Parliament or a provincial legislature, in a manner that allows organised local government, municipalities and other interested persons an opportunity to make representations with regard to the draft legislation.”

<https://www.justice.gov.za/legislation/constitution/saconstitution-web-eng.pdf>.

- (b) Competition impact and proposed remedies, if any, which ICASA should consider regarding the spectrum sharing arrangements.
- (c) Consumer benefits in respect of spectrum obligations that the Authority should consider regarding the spectrum sharing arrangements. [SEP]

Under section 10 “**Obligations relating to IMT Radio Frequency Spectrum licensees**”, subsection 10.2, ICASA asks for written representations to address the following:

- (a) Consumer benefits in respect of spectrum obligations, including reducing cost to communicate, which the Authority should consider regarding further extension.

Under section 14 “**Deployment of Electronic Communications Facilities**”, subsection 14.2, ICASA asks for written representations to address the following:

- (a) Timelines for submission of notifications to ICASA regarding new installations of electronic communications facilities.

The subsequent chapters of this representation address above points 8.9 (a-e), 9.2 (a-c), 10.2 (a) and 14.2 (a) in sequential order.

Written Representations

Temporary radio frequency spectrum licences (Sub-section 8.9)

(a) Further extension of duration of temporary spectrum

As to the matter whether ICASA should consider further extending the duration of temporary radio frequency spectrum licences beyond 31 May 2021 despite the issues raised in the pending litigation and the interdict which has been granted against it, the FMF submits that the consideration of extending the duration of temporary radio frequency spectrum licences is to be supported. Further, the FMF submits that an extension of the temporary spectrum licence is not so much to be supported *despite* the issues raised in the pending litigation and the interdict but *because* of these issues. Apart from the concrete issues raised in the interdict, on which this submission comments below, the FMF submits to extend the duration of temporary radio frequency spectrum licences for an indefinite period and turn the emergency spectrum currently assigned temporarily on an exclusive basis into regular spectrum to be assigned permanently on a non-exclusive use basis. FMF supports its submission with the subsequent four lines of reasoning (a1), (a2), (a3) and (a4).

(a1) The principal temporal uncertainty of legal proceedings imposes a high level of uncertainty on MNOs with regard to their investments in radio network infrastructure that they have made based on the use of temporary spectrum in frequency bands in which they had not operated before. This in particular applies to the 240 MHz of spectrum assigned to MTN, Vodacom and Telkom in the 2.6 and 3.5 GHz bands (see below Table 1). It is important to understand that at the time when MNOs applied for and received temporary spectrum, they began to invest in new network infrastructure in good faith of ICASA’s announcement that the same spectrum would be made available through a public auction process by the end of December 2020. The assignment of permanent spectrum through the planned competitive auction process by end of 2020 would have coincided with the then-established validity period of 30 November 2020.⁴

It is important to understand that MNOs began to invest in infrastructure operating on temporarily assigned spectrum in the reasonable expectation that the auction design would not exclude them from competitively bidding for the same—or at least a significant portion of—the spectrum amounts in the frequency bands in which they have been awarded spectrum on a temporary basis. This expectation turned out to be unwarranted when the ITA for the auction process was published and the provisions of the opt-in scheme were fully understood, notably the possibility of only receiving 20MHz in the 2.6GHz band and of not receiving any spectrum in the 3.5GHz band, on which the submission comments in detail in the SEIA addendum 1.

The consequences are particularly far-reaching for MTN and Vodacom because for self-evident reasons they were the two operators that the emergency decree targeted. In other words, the objective of ICASA “to deal with the anticipated rise in demand for network capacity or data services”⁵ at the national level could only be pursued by awarding temporary spectrum to MTN and Vodacom, because these two operators serve approximately 75% of the market. The spectrum assignments then made by ICASA corroborate this view. In a statement, ICASA councillor Modimoeng said: “The authority exercised extreme care in the assignment of this temporary spectrum to existing licensees in order to achieve the objectives of the Covid-19 regulations, which are aimed at alleviating network challenges, easing congestion and ensuring good quality of service for consumers.”⁶

With regard to the above quote, two points are notable. First, in the context of the objectives pursued with the allocation of emergency spectrum ICASA councillor Modimoeng explicitly refers to consumers, implying that MTN and Vodacom automatically had to play the main roles in achieving the goals due to

⁴ Sub-section (7) under section 6 “Temporary assignment of Radio Frequency Spectrum”, Notice 238 of 2020, dated 6 April 2020, Gazette 43207.

⁵ Sub-section (1) under section 6 “Temporary assignment of Radio Frequency Spectrum” Notice 238 of 2020, dated 6 April 2020, Gazette 43207.

⁶ <https://www.engineeringnews.co.za/article/icasa-assigns-temporary-spectrum-2020-04-17>.

their market reach. Second, by assigning generous amounts of spectrum to MTN and Vodacom, the regulator acknowledges the importance of these two carriers in achieving the objectives set out in the ICT COVID-19 National Disaster Regulations. It is worthwhile noting that ICASA's Market Inquiry into Mobile Broadband Services argued that MTN and Vodacom are dominant and thus harm the consumer, which was the finding that informed ICASA's decision to categorize the six SA carriers into two tiers and led to the specific auction design. When the pandemic hit South Africa and swift action was required to alleviate capacity constraints, it were the "dominant" MTN and Vodacom that suddenly received generous amounts of spectrum, contradicting their previous policy decisions. It is paradoxical to now withhold spectrum from MTN and Vodacom in the ordinary course of things due to their alleged consumer-harming dominance while in a state of national disaster the same MNOs are chosen to come to the rescue for the benefit of consumers.

The conclusion of sub-section (a1) of this submission is that MTN and Vodacom have the most significant investments based on temporary spectrum in frequency bands in which they have not operated radio infrastructure before. The possibility of not receiving any or insufficient spectrum in the 2.6 and 3.5GHz bands could render these investments not only uneconomic from the MNOs' financial perspective but also would come with high socioeconomic cost for the consumer. The temporal uncertainty of legal proceedings, the uncertain nature of the outcome of Telkom's interdict and, consequently, the uncertainty created in respect of the planned auction of high-demand spectrum keeps mobile markets in limbo thus causing significant harm to the average South African consumer of mobile data service.

(a2) When in April 2020, ICASA invited operators to apply for temporary radio frequency spectrum assignments in the 700 MHz, 800 MHz, 2 300 MHz, 2 600 MHz and 3 500 MHz bands to unlock connectivity for all during South Africa's National State of Disaster period, applicants were mostly granted the temporary spectrum they applied for. Where applicants did not receive the amounts they applied for, ICASA has demonstrated a good sense of proportion.

- In the 700/800 MHz band, MTN, Telkom and Vodacom have been each assigned 40 MHz.
- In the 2 300 MHz band, Telkom has been temporarily assigned 20 MHz, adding to the 60 MHz it already has in this band. Vodacom has been assigned 20 MHz.
- MTN and Vodacom were assigned 50 MHz each in the 2 600 MHz band, while Telkom received 40 MHz and Rain received 30 MHz in addition to the 20 MHz it already has.
- In the 3 500 MHz band, Vodacom has been temporarily assigned the 50 MHz it applied for, while MTN has been temporarily assigned 50 MHz out of the 70 MHz it applied for. Liquid Telecoms was assigned 4 MHz, which adds to the 56 MHz it already has in this band while Telkom has been temporarily assigned 12 MHz out of the 32 MHz for which it it applied.

Since the available spectrum of 116 MHz in the 3.5 GHz band was not sufficient to assign the amount applicants applied for, the spectrum assignment had to follow common sense, as demonstrated by ICASA councillor Modimoeng in a public statement: “It is important to note that Telkom is currently assigned 28 MHz in the 3 500 MHz band and was assigned 12 MHz to afford it adequate capacity spectrum to meet the demand occasioned by the pandemic during this period.”⁷

The resulting assignment of temporary spectrum is depicted in Table 2:

Table 1: Fixed Spectrum Assignment (IMT Bands)	700/800	900	1800	2100	2300	2600	3500	Total
VODACOM		22	24	35		--		81
MTN		22	24	40				86
CELLC		22	24	30				76
TELKOM			24	30	60		28	142
RAIN			34			20	80	134
LIQUID	10		24				56	90
TOTAL	10	66	154	135	60	20	164	609

*Icasa_Discussion-document-on-the-market-inquiry-into-mobile-broadband-services.pdf

Table 2: Emergency Spectrum Assignment (IMT Bands)	700/800	900	1800	2100	2300	2600	3500	Total
VODACOM	40				20	50	50	160
MTN	40					50	50	140
CELLC								0
TELKOM	40				20	40	12	112
RAIN						30		30
LIQUID							4	4
TOTAL	120	0	0	0	40	170	116	446

frequency bands with dirty, i.e. unusable, spectrum

frequency bands in which MNOs did not operate

frequency bands in which MNOs did operate

Table 3: Planned Assignment Spectrum Auction (Mar 2021)	700/800	900	1800	2100	2300*	2600	3500	Total
Tier-1/Tier-2 Carriers	100				0	140	86	326
WOAN	20				0	30	30	80
TOTAL	120	0	0	0	0	170	116	406

*2300 band excluded from spectrum auction (see ICASA announcement 30/09/2020)

It is notable that the 406 MHz of assigned emergency spectrum in the four bands of 700/800 MHz, 2.6 GHz and 3.5 GHz is equivalent to the spectrum that was foreseen to be assigned through the spectrum auction planned for March 2021. The difference lies in the 40 MHz in the 2.3 GHz band which ICASA decided to exclude from the auction. The second difference is due to government’s plans to establish a wireless open

⁷ <https://www.engineeringnews.co.za/article/icasa-assigns-temporary-spectrum-2020-04-17>.

access provider (“WOAN”) for which it reserved 80 MHz of spectrum (20 MHz in 700/800 MHz, 30 MHz in 2.6 GHz and 30 MHz in 3.5 GHz).

The FMF’s submission to turn the temporarily assigned emergency spectrum into “regular” permanently assigned spectrum rests on the two-tiered argument that the application for emergency spectrum is reflective of the MNOs’ true spectrum needs in order to improve their services and that ICASA’s decision of assigning emergency spectrum in such bands where the availability of spectrum was limited have been guided by intelligible technical reasons by having taken into account the spectrum amounts that MNOs had been previously assigned. The decision to complement Liquid Telecoms’ 56 MHz with an additional 4 MHz and Telkom’s 28 MHz with an additional 12 MHz has been sound in that ICASA’s assignment of additional spectrum was geared towards ensuring efficient spectrum utilisation by increasing channel bandwidth to the next higher technically meaningful level.

ICASA councillor Modimoeng stated at the time that “there are a few exceptional cases where the authority had to apply practical and non-discriminatory principles to ensure that no licensee is prejudiced.” The FMF supports this reading.

To repeat, the FMF argues that the applications for emergency spectrum made at the time are the best available reflection of the true spectrum needs of South Africa’s mobile carriers. It is rather astonishing that ICASA had to rule in only three cases in which arguably only the 12 vs. 32 MHz are contentious. In fact, it would have been equally meaningful had ICASA decided to grant Telkom the 32 MHz while assigning to MTN and Vodacom 40 MHz each instead of the 50 MHz granted. Irrespective of this, it is noteworthy that the decisions made at the time were widely supported by the wider public, including the six South African MNOs.⁸

The FMF’s submission is thus to turn the emergency spectrum in the frequency bands 2.3 GHz, 2.6 GHz and 3.5 GHz assigned on a temporary basis into permanently assigned spectrum to create legal and investment certainty for the benefit of consumers. This would also be the fastest way to end the spectrum crunch.

With respect to the 120 MHz of emergency spectrum in the 700/800 MHz band assigned to MTN, Telkom and Vodacom, the FMF supports Telkom’s and etv’s line of reasoning as put forward in their interdict (case

⁸ The exception relates to the 20 MHz in the 2.3GHz granted to Vodacom which Telkom considered to have been already assigned to them. ICASA rebuffed claims made by Telkom that ICASA had erroneously assigned spectrum already licensed (<https://www.itweb.co.za/content/KWEBb7yZPkWMmRjO>). In the greater scheme of things these 20 MHz are unimportant for various reasons, not least due to the fact that ICASA has excluded spectrum in the 2.3 GHz band from the auction process which will prevent Vodacom from investing in this band.

number 66778/2020, dated 8 March 2021) that the assignment was irrational for two reasons set out by judge Sutherland J., which the interdict quotes in paragraph 59:

“In summary, we conclude that, first, the assignment already assigned to other operators is of questionable validity and secondly, to assign now and defer access to an unknown future date, which is dependent on a host of process-dependent happenings is an irrational decision”.

In analogy to the spectrum in the 2.3, 2.6 and 3.5 GHz bands, the FMF recommends to confer ownership upon the users of the current spectrum in the 700/800 MHz band and allow for full tradeability. Likewise, the FMF also recommends to assign ownership to all users in all other radio frequency bands and allow full tradeability. This would ensure that the SA regulator’s protracted process of concluding the digital migration—a dismal failure that has been inflicting great harm on SA’s consumers—would be entrusted to market reason. Since the 700/800 MHz spectrum is used for broadcasting services that render a fraction of the value that its employment for mobile telecommunication services would render, the current spectrum holders would have a great incentive to trade it off against cheaper spectrum in the lower, more efficient digital broadcasting frequency bands below 600 MHz. The beneficial side effect of such a policy would be that broadcasters, in particular the technically bankrupt public broadcasters, could recapitalise and use the proceeds for the technical equipment needed to migrate to digital broadcasting channels.

(a3) Legal implications of the public assignment of rights of resource use

(a3) Legal implications of the public assignment of rights of resource use

ICASA, as an organ of state, is duty-bound by the spirit, purport, and values of the Constitution to always conduct itself in good faith. Section 195(1)(a) and (b) of the Constitution require all organs of state to maintain a high standard of professional ethics and to promote the efficient, economic, and effective use of resources. Under no circumstances may any government official or entity use their position opportunistically, self-interestedly, or maliciously. This means that the reasonable expectations of the MNOs must be respected.

Section 195 also demands good faith consultation, that is consultation that is not merely a formality, but influences and informs all policies and laws.

ICASA neither consulted nor informed Vodacom or MTN that their substantial investments in infrastructure to utilise emergency spectrum would be for nothing, costing these operators a great deal of money for no net benefit.

This reality also amounts to a deprivation of property rights in terms of section 25(1) of the Constitution and must therefore satisfy the requirements of being a law of general application and non-arbitrariness. We submit that the effective revocation of emergency spectrum from the MNOs is not a law of general application, and is arbitrary and discriminatory.

The two MNOs have a strong case to the effect that ICASA would be constructively expropriating resources and property from Vodacom and MTN by not respecting the security of their investment. Vodacom and MTN invested in property they rationally expected would remain theirs, and that ICASA would not take their property without reimbursement.

In addition to sections 195 and 25, there are other obligatory sections which the summary removal of spectrum would violate, especially §1, §8, §9, §22, §23 and §33. These must spontaneously be understood, considered and complied with by ICASA and all organs of state. Section 24 which demands that all administrative action, such as this must be fair and reasonable must be respected by ICASA.

The regulatory act of temporarily assigning rights of resource use to alleviate network capacity constraints, which require tailored investments in technology that amortises over five or ten years amounts to an economic contradiction if subsequent regulatory policies terminate or repeal such rights before the end of the period known to be required until amortisation.

As stated above, ICASA made available spectrum in the of 2.6 GHz and 3.5 GHz frequency bands to MTN and Vodacom with the express expectation of investments in new technology whose amortisation period extends far beyond the expected COVID-19 regulation period set to end by 30 November 2020. In the ordinary course, no rational investor would make long-term investments in productive assets when the resource required for amortisation (ie spectrum) will or may be withdrawn arbitrarily and reassigned with long-term security to competitors who made no such investment.

When the regulator assigned temporary spectrum in April 2020, MTN and Vodacom, in particular, and less so other carriers, started rolling out infrastructure in the usable bands in good faith of ICASA's publicly

declared plan to conduct a public spectrum auction in which the MNOs expected to be able to bid for the spectrum amounts they would be employing to alleviate COVID-induced network capacity constraints.

Common sense dictated that this alleviation task could fall primarily, if not only, to MTN and Vodacom given their key role of serving three-quarters of the population with higher proportions in rural areas, and with coverage, financial strength and operational skills to act swiftly, decisively and effectively to alleviate the impending catastrophe.

The realised emergency spectrum assignment that was approved by ICASA is an expression of this common sense. As illustrated in above Table 2, MTN and Vodacom received 220 MHz of the total of 326 MHz in the 2.3, 2.6 and 3.5 GHz bands (excluding “dirty” spectrum in the 700/800 MHz bands).

Given the fact that MTN and Vodacom successfully prevented network crunches despite very high increases in data traffic, they fulfilled their duty to serve consumers.

That that they rose to the challenge and played their part in alleviating the pandemic’s impact, for a regulator to act in good faith requires giving the users of the temporary spectrum that spectrum permanently, or at least the right to acquire the rights to continued use of the same spectrum beyond the application of the ICT COVID-19 National Disaster Regulations.

MTN and Vodacom relied on the good faith of the regulator given the promise to conduct a fair spectrum auction in which MNOs could bid for the permanent allocation of the spectrum they have been assigned temporarily.

ICASA’s announced the postponement of the auction for three months to March 2021 with an extension of the of emergency spectrum period to 31 March 2021, which would have ensured a seamless transition from temporary to fixed spectrum, typically allocated for 15 years.

When in late 2020, ICASA published the ITA (including subsequent specifications with the regard to the opt-in scheme), in which the details of the spectrum auction were laid out, MTN and Vodacom came to realise that this was not to be. The details of the opt-in scheme foresaw that “Tier-2” carriers (Cell C, Liquid Telecom, Rain and Telkom) would have pre-emptive rights to obtain 100 MHz of the combined 226 MHz of spectrum in the bands of 2.6 GHz (140 MHz of spectrum) and 3.5 GHz (86 MHz of spectrum).

Depending on the opt-in bids chosen by Tier-2 carriers, the extreme outcomes could either leave MTN and Vodacom with 0 MHz spectrum in the 3.5 MHz band or with a meagre 40 MHz in the 2.6 GHz band.

The possibility of zero spectrum in the 3.5 GHz band implies that ICASA deliberately accepts an outcome in which the two carriers, crucial for data services to the large majority of South Africans, would not get spectrum in the most important frequency band for the next ten years.⁹

Should Tier-2 carriers decide to use the 100 MHz set aside to opt-in for 2.6 GHz spectrum, then MTN and Vodacom would be left with 40 MHz to bid for, which again comes with severe ramifications. Firstly, the 100 MHz in the 2.6 GHz band was the spectrum that was immediately employed by MTN and Vodacom to prevent a network capacity crunch. By the time of submission, MTN and Vodacom will have rolled out around more than 1000 radio base stations in dense urban areas utilising the 50 MHz in the 2.6 GHz band each have been assigned.

If MTN and Vodacom have only 20 MHz, the existing network performance will deteriorate, or disproportionate investments will be required to maintain performance levels, both of which will inevitably impose higher costs and reduced service on consumers.

Secondly, an even graver consequence is that. due to the artificially low 40 MHz that is left for Tier-1 carriers, one might receive no spectrum at all. This could deprive the losing MNO of the ability to provide cost-effective broadband 4G services and to employ carrier aggregation techniques in dense-urban areas that lead to better network performance and thus better service and lower effective prices.¹⁰

With (a3) of this written representation, the FMF submits that the opt-in scheme as set forth in the ITA should be revoked, and instead spectrum licences should be assigned in all frequency bands to the highest bidder.

Apart from all the general benefits, this will maximise government revenue. Regarding the opt-in scheme applying to 3.5 GHz spectrum, FMF submits that consumers will be harmed if ICASA allows the possibility that the two mobile operators, which are critical to providing services to the vast majority of the South African population, will not receive spectrum in the band that is widely believed to host the key technological and commercial innovations necessary for a modern telecommunication sector for the sake of the South African population.

⁹ MTN's interdict (Case No: 3619/2021) with respect to the auction design precisely refers to the possible outcome of zero-spectrum (or non-utilisable low amounts of spectrum) in the 3.5GHz band. For a detailed discussion of The opt-in scheme with respect to the 3.5GHz-spectrum, please refer to section 5.3 in the SEIA study, Addendum 1. For a discussion of the future of 5G mobile telecommunications and associated IoT services see chapter 6 "An Outlook on Future Requirements of Spectrum Utilisation."

¹⁰ The use of spectrum in the 700/800 MHz digital dividend band (which is not usable in South Africa due to the failed digital migration) and spectrum in the 2.6 GHz band is the most commonly used carrier aggregation combination internationally (see section 2.1 and 3.2 in the SEIA study, Addendum 1).

ICASA, as an organ of state, is duty-bound by the spirit, purport, and values of the Constitution to always conduct itself in good faith. Section 195(1)(a) and (b) of the Constitution require all organs of state to maintain a high standard of professional ethics and to promote the efficient, economic, and effective use of resources. Under no circumstances may any government official or entity use their position opportunistically, self-interestedly, or maliciously. This means that the reasonable expectations of the MNOs must be respected.

Section 195 also demands good faith consultation, that is consultation that is not merely a formality, but influences and informs all policies and laws.

ICASA neither consulted nor informed Vodacom or MTN that their substantial investments in infrastructure to utilise emergency spectrum would be for nothing, costing these operators a great deal of money for no net benefit.

This reality also amounts to a deprivation of property rights in terms of section 25(1) of the Constitution and must therefore satisfy the requirements of being a law of general application and non-arbitrariness. We submit that the effective revocation of emergency spectrum from the MNOs is not a law of general application, and is arbitrary and discriminatory.

The two MNOs have a strong case to the effect that ICASA would be constructively expropriating resources and property from Vodacom and MTN by not respecting the security of their investment. Vodacom and MTN invested in property they rationally expected would remain theirs, and that ICASA would not take their property without reimbursement.

In addition to sections 195 and 25, there are other obligatory sections which the summary removal of spectrum would violate, especially §1, §8, §9, §22, §23 and §33. These must spontaneously be understood, considered and complied with by ICASA and all organs of state. Section 24 which demands that all administrative action, such as this must be fair and reasonable must be respected by ICASA. Notwithstanding the points made in this section (a3), and in sections (a1), (a2), and (a4), FMF submits that ICASA's immediate obligation is to give investment certainty to carriers who, through their immediate employment of emergency spectrum, have successfully prevented a mobile broadband crunch from happening. Accordingly, FMF submits that ICASA should extend the validity period of the temporary spectrum assignment indefinitely until such time when the SA government authorities will have overcome (or solved) the chaotic situation that emanated from a flawed auction design (leading to well-justified interdicts) and the failed digital migration (resulting in unusable "dirty" spectrum).

(a4) In the fourth and final line of reasoning, the FMF submits that in the regulatory quest to create the best conditions for consumers to reap value through better and cheaper services, the regulator must principally

be agnostic of, first, the distribution of market shares (however defined) to individual MNOs as a result of consumer choice and competitive rivalry and, second, of how many MNOs play in the market, provided that markets are competitive, which is to say that markets are contestable. See the SEIA addendum, the reasons why South Africa's mobile market is competitive and why the notion of market failure is unwarranted are outlined.

The Coase invariance thesis (better known as the Coase theorem), according to which initial allocation of scarce resources is less important than tradability.

With (a3) of this written representation, FMF submits to revoke the opt-in scheme as set forth in the ITA and instead assign spectrum licences in all frequency bands to the highest bidder. FMF submits that ICASA is acting in bad faith by allowing the possibility that MTN and Vodacom will receive far less (or no) spectrum in the 2.6 MHz band than the 50 MHz allocated as emergency spectrum. With respect to the opt-in scheme applying to 3.5 GHz spectrum, FMF submits that ICASA is acting in bad faith towards South African consumers by allowing the possibility that the two mobile operators, which are critical to providing services to the vast majority of the South African population, will not receive spectrum in the band that is widely believed to host the key technological and commercial innovations necessary for a modern telecommunication sector for the sake of the South African population.

Notwithstanding the points made in this section (a3), and in sections (a1), (a2), and (a4), FMF submits that ICASA's immediate obligation is to give investment certainty to carriers who, through their immediate employment of emergency spectrum, have successfully worked towards a mobile broadband crunch from happening. Accordingly, FMF submits that ICASA is to extend the validity period of the temporary spectrum assignment indefinitely until such time when the SA government authorities will have overcome (or solved) the self-inflicted chaotic situation that emanated from a botched auction design (leading to well-justified interdicts) and the failed digital migration (resulting in unusable "dirty" spectrum).

(a4) In the fourth and final line of reasoning, the FMF submits that in the regulatory quest to create the best conditions for consumers to reap value through better and cheaper services, the regulator must principally be agnostic of, first, the distribution of market shares (however defined) to individual MNOs as a result of consumer choice and competitive rivalry and, second, of how many MNOs play in the market, provided that markets are competitive, which is to say that markets are contestable. In chapter 4.2 of the SEIA addendum, the reasons why South Africa's mobile market is competitive and why the notion of market failure is unwarranted are outlined.

The Coase invariance thesis (better known as the Coase theorem), which goes back to the works of Nobel laureate Ronald Coase, states that the initial distribution of ownership rights is irrelevant because the market

outcome will always reach the same optimal result from the consumer point of view. It is noteworthy that Coase used the example of regulation of spectrum assignment in the US broadcasting industry in his famous paper "The Federal Commission of Communications" published in 1959¹¹ in which he developed the basis for the Coase theorem which in its ultimate version was published in the even more famous paper "The Problem of Social Cost" published in 1960.¹²

In the 1959 paper, Coase proposed that as long as property rights in these frequencies were well defined, it ultimately did not matter if adjacent radio stations interfered with each other by broadcasting in the same frequency band. Furthermore, it did not matter to whom the property rights were granted. His reasoning was that the station able to reap the higher economic gain from broadcasting would have an incentive to pay the other station not to interfere. In the absence of or reasonably low transaction costs, both stations would strike a mutually advantageous deal. It would not matter which station had the initial right to broadcast; eventually, the right to broadcast would end up with the party that was able to put it to the most highly valued use. Of course, the parties themselves would care who was granted the rights initially because this allocation would impact their wealth, but the end result of who broadcasts would not change because the parties would trade to the outcome that was overall most efficient from the perspective of the consumer. And it is the perspective of the consumer that must guide regulatory decisions. At the same time, regulatory decisions must be bound by existing property rights even in the case in which the regulator or any other party comes to the (reasonably informed) view that a reallocation of ownership titles would improve consumer prosperity. As long as markets are competitive and open to entry, consumers will eventually force upon market participants a distribution of ownership titles that is in their own best interest.

SUMMARY: The FMF submits to turn all emergency spectrum in the bands of 2.3, 2.6. and 3.5 into permanent spectrum. The FMF argues that the application for emergency spectrum at the time is to be interpreted as a reflection of the imminent spectrum needs of MNOs in the respective bands. The FMF further submits to turn all spectrum currently assigned to both broadcasters and telecommunication companies in the 700/800 MHz band into permanent spectrum. To make spectrum permanent means to assign private ownership to its current users and allow for full tradeability, i.e., sharing, leasing, selling and collateralising. Finally, the FMF submits to turn all other spectrum assignments, whether for broadcasting, mobile or other private and public uses, into tradeable spectrum. This would ensure that all spectrum resources that are currently blocked by legacy services would have to pass the market test. In a free trading regime, the

¹¹ RH Coase (1959): "The Federal Communications Commission." *The Journal of Law & Economics*. 3: 1-40.

¹² RH Coase (1960): "The Problem of Social Cost". *Journal of Law and Economics*. 3 (1): 1-44.

marginal price bid for a spectrum unit will reflect the consumer value reaped for the unit's employment. For those spectrum resources that are employed by public or private entities to provide critical public services such as airtraffic control, police radio or military communications, the regulator shall exercise its sovereign primacy in the best interest of the public.

The FMF further submits that the notion of South Africa's mobile market to be a case of market failure is unwarranted given the fact that SA has a market with 6 operators sharing spectrum through voluntary roaming agreement whereby they alleviate the artificially created spectrum crunch during the past 16 years. In addition, the failed digital migration is another instance of state failure depriving consumers of the benefits of using spectrum 700/800 MHz band for more cost-effective rural LTE coverage and for more cost-effective rollout of 4G/5G infrastructure in urban areas through carrier aggregation, both of which translate into lower effective prices for broadband data services.

ICASA should make all spectrum resources employed by its current users available on an indefinite basis, by which ICASA would grant market-based property rights as typical in all other markets. It is implied in such an action that spectrum can be shared and traded freely. From a consumer perspective, the teachings of the Coase theorem holds. If the regulator's mandate and the pertaining regime owes its lineage to the Constitution to act in the best interest of the people (consumers), it must be indifferent of the allocation of ownership rights as long as there is no evidence of market failure.

(b) The appropriate extension period

As per the discussion under (a), the FMF submits to turn all spectrum resources currently assigned on a temporary licence basis for exclusive use into permanent—that is, privately owned and fully tradeable—spectrum by conferring ownership to its current users.

(c) Spectrum fees applicable to the extension period

On the basis of the FMF's submission made in (a) and (b), spectrum resources attract market prices that are reflective of marginal consumer value in lieu of the current regulatory practice of levying artificial fees that are ignorant of market value. The current top-down assignment of spectrum and its fee structure grossly misrepresents the true value that spectrum resources could render for the benefit of SA consumers.

(d) Competition and remedies of the further extension of temporary spectrum licences

Question not applicable given the reasons advanced under (a), (b) and (c).

- (e) Consumer benefits in respect of spectrum obligations that the Authority should consider regarding further extension

Question not applicable given the reasons advanced under (a), (b) and (c).

Spectrum pooling arrangements (Sub-section 9.2)

- (a) Spectrum sharing/pooling arrangements on a temporary basis which ICASA should consider.
- (b) Competition impact and proposed remedies, if any, which ICASA should consider regarding the spectrum sharing arrangements.
- (c) Consumer benefits in respect of spectrum obligations that the Authority should consider regarding the spectrum sharing arrangements.

Questions 3.2 (a), (b) and (c) not applicable given the reasons advanced under 8.9 (a), (b) and (c). In markets based on voluntary exchange, market participants are free to share and trade spectrum resources subject to mutual agreement.

Obligations relating to IMT Radio Frequency Spectrum licensees (Sub-section 10.2)

- (a) Consumer benefits in respect of spectrum obligations, including reducing cost to communicate, which the Authority should consider regarding further extension.

The FMF submits that the first and foremost goal of any public mandate is to further the prosperity of people. The past 15 years of spectrum withholding have inflicted enormous harm on South African consumers. As outlined in detail in the SEIA study in the addendum 1, and conceding regulatory authorities the benefit of doubt of utmost benevolence, top-down command-and-control policies of public resource assignment in the absence of market prices and rational economic calculation are simply unable to achieve results in the best interest of consumers.

Notwithstanding that this was Ludwig von Mises's logical argument of the impossibility of economic calculation in socialist systems (the argument extends to public monopolies) in his famous contribution in 1920, all processes of public resource assignment are prone to be captured by special interests and bear the danger of locking in resources in wasteful uses for extended period of time. The failed digital migration impressively illustrates the great danger associated with public planning processes of resource assignment.¹³

Deployment of Electronic Communications Facilities (Sub-section 14.2)

(b) Licensees are required to notify ICASA regarding new installations of electronic communication facilities on their networks within seven days.

Such and other onerous reporting requirements are costly and useless undertakings for which the consumer bears the brunt. Unless the regulator presents valid reasons for reporting certain communications equipment to government authorities, for example, because it poses or may pose a threat to public safety, public health, the environment, or the like, such red tape should be eliminated not only in the interest of consumers but also taxpayers benefit from the resulting streamlining of authorities.

¹³ Mises, Ludwig von (1920). "Economic Calculation in the Socialist Commonwealth."

ADDENDUM 1: South African Government Radio Spectrum Policy - Socio-Economic Impact Assessment (SEIA)

<https://www.freemarketfoundation.com/article-view/media-room-government-spectrum-policy-is-harming-consumers>

A handwritten signature in black ink, appearing to be the name 'Leon Louw', written in a cursive style.

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