

30 November 2021

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue
Eco Point Office Park
Eco Park, Centurion
Gauteng

Attention:

Mr Davis Kgosimolao Moshweunyane
By e-mail: IMTLicensing@icasa.org.za

RE: CIVH written representation - Independent Communications Authority of South Africa General Notice 668 of 2021 (as published item 45496 in the Government Gazette on 16 November 2021)

Dear Mr. Moshweunyane,

CIVH would like to thank the Authority for the opportunity to make written representation with respect to the Second Information Memorandum ("2nd IM") which was published for public consultation on 16 November 2021, and which is also further to the publication of the First Information Memorandum ("1st IM") on 1 October 2021 and the submissions received by the Authority on that.

CIVH would again like to state its support for the Authority, for the proposed truncated timetable and roadmap for the expedited licensing of the International Mobile Telecommunications ("IMT") spectrum, also known as high-demand spectrum, and the licensing of the Wireless Open Access Network ("WOAN"). As previously stated, CIVH firmly believes that the expedited licensing of IMT spectrum and the WOAN is a critical structural reform measure, necessary to stimulate private sector investment, grow the economy, create jobs and accelerate competition to reduce the price of mobile data services in South Africa. All of the aforementioned is especially important in light of the COVID-19 pandemic which continues to challenge the country.

With respect to the 2nd IM and accompanying reasons document ("Reasons document 2nd IM") which were both published for consultation on 16 November 2021, CIVH would like to thank the Authority for considering the previous submission made by CIVH and would like to make the following further written representations to the Authority for consideration:

1. IMT spectrum considered for both auction in the Invitation to Apply (ITA) process and set aside for the licensing of the Wholesale Open Access Network (WOAN):

In the 2nd IM, 2.1 Introduction, the Authority acknowledges that *"South Africa experiences continued growth in demand for spectrum as a result of significant growth in traffic for broadband services. The deficiency of assigned Spectrum for IMT brings constraints and challenges in the provision of broadband services."*

Furthermore, in the 2nd IM, the Authority indicates in 5. Spectrum for the award, that only the following IMT bands will be licensed through the ITA and WOAN processes combined:

- IMT 700 MHz
- IMT 800 MHz

Community Investment Ventures Holdings (Pty) Ltd. Company Registration No.: 2004/010305/07

Postal Address: 1 Petunia Street, Corner of Main Road and Petunia Street, Bryanston, 2191
Tel: +27 (12) 345 7520 Fax: +27 (12) 345 7605

Directors: Basetsana Molebatsi, Craig Caesar, Joe Madungandaba, Khudusela Pitje, Kobus Viljoen, Pieter Uys, Raymond Ndlovu, Sipho Makhubela, Zuko Kubukeli, Andrew Louw
Alternate directors: Pete da Silva, Graham McGregor, Kim Brown, Lizeka Matshekgwa

- IMT 2600 MHz
- IMT 3500 MHz

Furthermore, in the Reasons document 2nd IM, the Authority states in 6.19, that “.....the IMT2300 is not available for licensing in this process.”

The 2300MHz band

1. It is not clear to CIVH as to why the Authority has excluded the currently unassigned spectrum in the IMT 2300 MHz for consideration in the ITA and WOAN processes. CIVH would also like to highlight that on the 4th December 2020, the Authority published “REASONS DOCUMENT RELATING TO THE INVITATION TO APPLY 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, IMTS00, IMT2600 AND IMT3500”, in Notice 697 of *Gazette* 43970.
2. In section 19 of the above document, the Authority has stated the following: “However, the Authority has resolved that the IMT2300 band will be licensed in future, taking into consideration the feasibility study to be conducted in accordance with the Radio Frequency Spectrum Assignment Plan for the frequency band IMT2300 published in the Government Gazette Number 38755 (Notice 392 of 2015).”
3. The ICT COVID Regulations of 11 November 2021 (*Gazette* 45458) (“ICT COVID Regulations”) provide in section 6(7) that, “The following International Mobile Telecommunications (IMT) spectrum bands shall be made available for provisional assignment: 700MHz, 800MHz, **2300MHz**, 2600MHz, and 3500MHz and shall be assigned in accordance with the criteria and conditions stipulated in Annexure A.” On 26 November, the interim spectrum allocations to the various licensees under the ICT COVID Regulations were made known in an article in TechCentral, at “[Icasa awards provisional spectrum – here's who gets what - TechCentral](#)”. The article states that, “In this band, Icasa received only one application, from Telkom. To this end, Telkom was duly awarded 40MHz of provisional spectrum in this band.”
4. CIVH is also concerned that Telkom has already submitted an application to the Authority for amendment of their existing radio frequency spectrum licence in the 2300 MHz band. The Authority published notice of this application in General Notice 610 of 2021, in *Government Gazette* No 45333, and which invited any interested parties to make written representation to the Authority (“the Telkom application”). The Telkom application suggests that a feasibility study, which was always a requirement for the licensing of this band given that there are other licensees in it and that might be affected by the use of it, should not be necessary if the whole band was allocated to Telkom.
5. CIVH maintains that the Authority still has the responsibility to conclude the feasibility study and it is not clear to CIVH what has prevented the Authority from concluding this exercise to date.
6. CIVH would like to use this opportunity to remind the Authority that it has made detailed written representations to the Authority in relation to the Telkom application, in which it has strongly opposed Telkom’s request for amendment to its existing radio frequency spectrum licence in the 2300 MHz band, for the reasons outlined in its submission to the Authority on 16 November 2021. The consultation on Telkom’s application has yet to be concluded and the outcome is far from certain. It would be manifestly unfair to prejudge the outcome by assuming that Telkom will become entitled to the entire band.
7. CIVH also opposes the provisional grant of the 40MHz of spectrum to Telkom under the ICT COVID Regulations and considers it to prejudice the application by any other interested party, for spectrum in that band. The fact that no other applications were made for it under the ICT COVID Regulations does not mean that it is not valuable, nor that no one is interested. Due regard should be given to the time of year, the sudden about-turn by the Authority in its decision to first recall all spectrum previously licensed under the State of Disaster, and then to allow new applications, and the very abbreviated timeframe allowed for these applications to be made under the new ICT COVID Regulations. It would be administratively unfair to base the decision on which bands to make available under an ITA, on these thin grounds.

8. In this regard, we support the argument made by both MTN and Vodacom in relation to Telkom's position in the market¹. While we do not agree that Telkom can be considered to be dominant in the mobile market as a whole, we agree that it is a large operator in the national market for electronic communications and could also be considered dominant specifically in the Fixed Wireless Access market.

Amount of spectrum set aside for the WOAN

9. In the current shape and form of both the 2nd IM and the also the previously issued composite Invitation to Apply for an Individual Electronic Communications Network Service Licence and Radio Frequency Spectrum License for the Wireless Open Access Network ("WOAN ITA"), it is proposed by the Authority that the currently assigned bandwidth of 609 MHz high demand spectrum will be increased through the proposed auction and WOAN licensing processes as follows (and which excludes the available aforementioned unassigned 2300 MHz spectrum):

Auction:	326 MHz
WOAN set aside:	80 MHz
Total new spectrum:	406 MHz

10. However, if the Authority includes the unassigned 1 x 40 MHz of IMT 2300 MHz spectrum for consideration in these processes, this will increase from 406 MHz to 446 MHz (~10% more) of additional spectrum which will be assigned to address South Africa's current deficit in IMT spectrum.
11. In both the reports for the Data Services Market Inquiry (DSMI) published by the Competition Commission of South Africa and also the Mobile Broadband Services Inquiry (MBSI) published by the Authority, it is acknowledged that access to sufficient spectrum is one of the most important inputs which determines the cost of providing Mobile Broadband services. MTN and Vodacom have, for many years, been claiming this to be the **principal reason for the high price of data** (we refer you to the submissions made by these MNOs to the Competition Commission during the investigation into the high prices of data, and the Competition Commission's final report^{2 3}).
12. It therefore stands to reason, that by including all available, additional spectrum in the proposed auction and more particularly, in the WOAN licensing processes, will contribute to lowering the cost of providing Mobile Broadband services in the country. This includes the unassigned 2300 MHz spectrum mentioned above.
13. CIVH would also like to highlight to the Authority, that the 2300 MHz TDD frequency band can already be used for 5G services, and is a 3GPP standardized 5G New Radio (NR) frequency band known as "n40".
14. As can be seen in *Figure 1* below, 5G networks have already been deployed across the world using this frequency band. Also, as can be seen in *Figure 2*, 5G devices also already exist for this frequency band.

¹ Paragraphs 5.13 and 5.15 of the Reasons Document

² <https://www.ellipsis.co.za/wp-content/uploads/2019/05/Data-Service-Market-Inquiry-Summary-of-Final-Findings-and-Recommendations-2-December-2019.pdf>

³ [DSM MTN.pdf \(ellipsis.co.za\)](#) (paragraphs 1.13 and 6 of the MTN "preliminary" submission of 27 November 2017) and [SKM_C30818091712300 \(ellipsis.co.za\)](#) (paragraphs 3.2, 3.3 and 3.4 of the Vodacom preliminary submission of 30 November 2017)

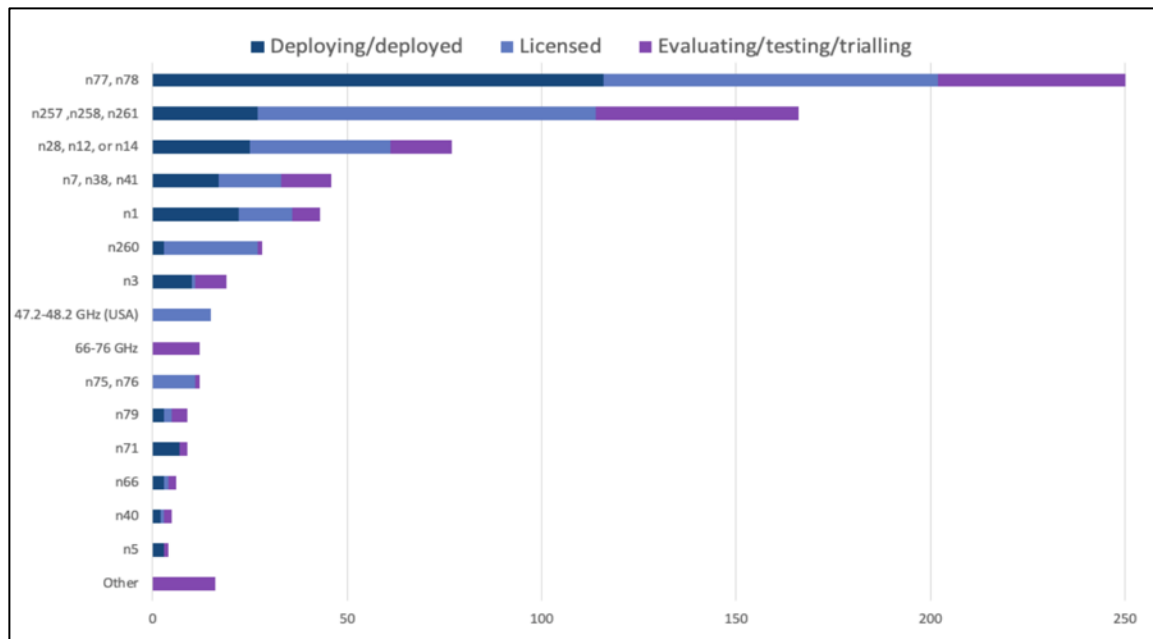


Figure 1: Counts of operators investing in 5G by spectrum band (August 021 - Source GSA)

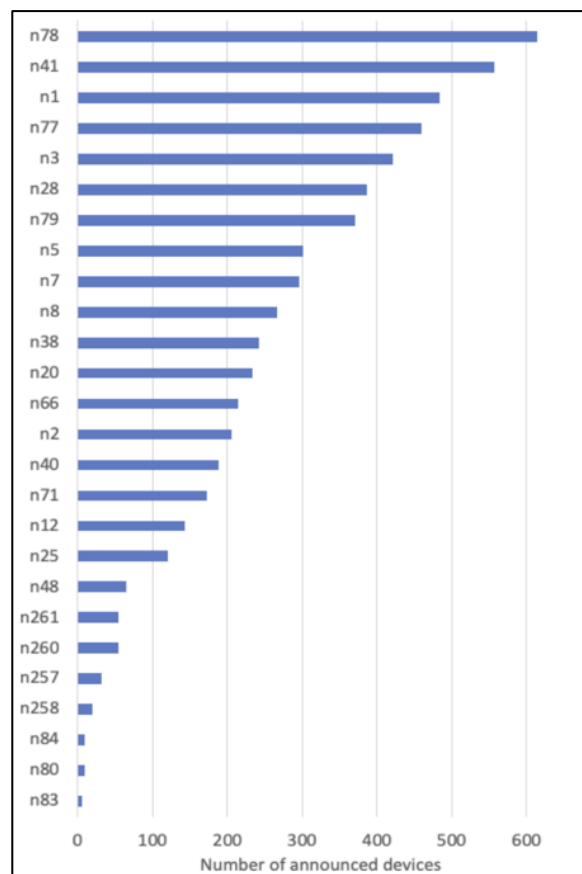


Figure 2: Number of announced 5G devices by support for key spectrum band (August 2021 - Source GSA)

15. By including the available, additional 1 x 40 MHz of 2300 MHz spectrum in the proposed auction and particularly in the WOAN licensing processes, the deployment of 5G in the country can be accelerated. CIVH would also like to highlight to the Authority that in the Summary Report and Recommendations published by the Presidential Commission on the Fourth Industrial Revolution in *Government Gazette* 43834 on 23 October 2020, 5G is recognized as one of the key underlying digital infrastructure components required to enable the 4th Industrial Revolution (“4IR”) in South Africa. Furthermore, the Commission

recommends that South Africa should not delay the 5G process because the country is playing catch-up in 4G. CIVH also argues that by not assigning the IMT 2300 MHz spectrum in the proposed auction and WOAN licensing processes, that the deployment of 5G in the country will also be delayed.

For all of the reasons outlined above, CIVH strongly recommends that the Authority concludes the feasibility study mentioned above, delays the consideration of the Telkom application until it has concluded that feasibility study, and takes all submissions into account made in response to the Telkom application. It is our view that in doing so, the Authority will find it can conclusively include the available 1 x 40 MHz of ITA 2300 MHz spectrum for licensing in the ITA and WOAN processes. Please also see our arguments below on the existing factual arrangements in relation to spectrum held by existing MNOs.

2. The amount of spectrum which has been set aside for the Wholesale Open Access Network (WOAN) is inconsistent with the policy stipulations and is still not deemed to be sufficient for the WOAN to be a viable entity:

In the 2nd IM, 1.13 the Authority itself recognizes that it *“has a legal duty to consider the Policy on High Demand spectrum and Policy Direction of the Licensing of Wireless Open Access Network in exercising its powers and performing its duties under the ECA.”*

In the aforementioned Policy Document, published in *Government Gazette* No 41935 on 27 September 2018, the Council for Scientific and Industrial Research (“CSIR”) was commissioned by the South African Department of Telecommunications and Postal Services (“DTPS”), to determine the amount of spectrum needed for a WOAN to meet the national objectives and targets for broadband delivery, as set out in 2013’s National Broadband Policy.

In the study produced by the CSIR, and included in the aforementioned 2018 policy document, the baseline for the number of users to be served by the WOAN is 20% of the projected mobile user population over the age of 6 (~ 10.248 million). This baseline was derived by the CSIR from studies that show a mobile operator needs to achieve a market share of 10 – 15% to be viable.

The spectrum bands which were considered in the study were limited to the following:

- IMT 700 Band (“3GPP Band 28”)
- IMT 800 Band (“3GPP Band 20”)
- IMT 2600 Band (“3GPP Band 7”)
- IMT 2600 Band (“3GPP Band 38”)

The CSIR study recommended the following:

- The department should consider setting aside only a portion of spectrum in these bands for WOAN and the remaining to other licensees.
 - The department should consider 20% of possible user population in 2020 as a baseline to ensure the viability of the WOAN.
 - The following spectrum combinations should be set-aside for WOAN as a minimum. These would satisfy the baseline user population as well as provide enough capacity for high-end users of the WOAN:
 - 2 x 25 MHz of 800 band (Band 20);
 - 2 x 20 MHz of 2600 FDD band (Band 7); and
 - 25 MHz of 2600 TDD band (Band 38).
1. The above recommendations were meant to address the immediate requirements of the WOAN, as per terms of reference for the study at the time. In addition to this, the study team recommended further studies, that are aimed at ensuring that the WOAN remains relevant in the future be supported. The following additional studies were recommended by the CSIR in the policy document:
- A detailed market study to forecast the market size of WOAN beyond 2020 and up to 2030. This will enable the department to take an early decision on the licensing of spectrum for 5G.

- Experimentation with different spectrum assignment combinations for new mobile broadband spectrum bands to ensure that the emerging broadband needs are catered for and that new technologies, such as 5G, are adopted as early as possible. This would include a recalculation of the spectrum needed by the WOAN beyond the year 2020 or at any point when the key assumptions change.
2. In submissions made by various parties in response to the recommendations made in the CSIR study, the calculations were questioned. In Cell C's submissions in particular, Analysys Mason, an international specialist technical and economist consultancy, quantified the worst case scenario for a WOAN with a 20% market share as 80MHz of spectrum, saying, *"It is important to note that in our high traffic scenario, the estimated spectrum needs are higher than those above. It is therefore likely to be prudent to assign a greater amount of spectrum to the WOAN than the amounts suggested above or in the CSIR report"*.
 3. Despite the recommendations from the CSIR which are contained and ratified in the aforementioned policy document (and despite submissions by the parties at the time), the Authority has decided to only set aside the following spectrum for the WOAN:
 - 2 x 10 MHz of IMT 700
 - 1 x 30 MHz of IMT 2600
 - 1 x 30 MHz of IMT 3500
 4. CIVH contends that the Authority has not in fact fulfilled its legal duty to consider the Policy on High Demand spectrum and Policy Direction of the Licensing of Wireless Open Access Network in exercising its powers and performing its duties under the ECA for the following reasons:
 - The Authority has proposed that a total of only 80 MHz be set aside for the WOAN in the 2nd IM. This is far less than in the aforementioned policy, where a minimum total of **115 MHz** was prescribed. The 2nd IM therefore proposed 35 MHz (or ~30%) less spectrum be set aside for the WOAN than the amount prescribed in the policy.
 - Although the CSIR study in the policy was based on a minimum assumed 20% market share for the WOAN which is consistent with the Authority's stated intentions in the 2nd IM 5.2 that *"South Africa is left with at least five (5) credible wholesale national operators after the spectrum assignment process (including the WOAN)"*, the Authority has set aside far less spectrum for the WOAN than recommended in the study, even though the study also only considered 3 of the 4 spectrum bands which the Authority is now licensing. The word "credible" has also been challenged since it is unlikely that the WOAN can achieve a 20% market share in the near or medium term, given that Cell C has been in the market for 20 years and has yet to achieve a 20% market share in either retail or wholesale services. The same can be said of Telkom Mobile, as although they have been in the market for only 11 years, they benefit from cross-subsidisation and support from Telkom itself.
 - The Authority has also provided no quantitative explanation for its reasons to set aside less spectrum for the WOAN than what has been prescribed by the CSIR study in the policy. Instead, the Authority has only provided an unsubstantiated and qualitative reasoning for the amount of spectrum set aside for the WOAN as follows in the 2nd IM reasons document:

6.18 *"Despite the WOAN being regarded as a 5th Credible National Wholesale Player, the Authority also aimed to ensure the efficient use of the Spectrum by not assigning the WOAN more than what it may require. Case studies show that the concept of a WOAN has not been viable in other parts of the world, and as such, there is a potential substantial risk of stranded spectrum in the WOAN hence the Authority assigned an adequate portion of the IMT spectrum."*
 5. It is not clear to CIVH on which factors the Authority has relied in deciding how much spectrum the WOAN requires. It is concerning that the Authority would have considered studies that indicate that a WOAN is **not viable** and then still only set aside the minimum spectrum determined to be appropriate based entirely on theoretical reasoning about a prospective market share – particularly in the current skewed market.
 6. Most importantly, CIVH is of the view that the Authority will not achieve its aim of ensuring that the WOAN is a viable entity, if less spectrum is assigned to the WOAN in comparison to any other so-called "credible"

National Wholesale Player by considering the possible spectrum assignments of all credible National Wholesale Players **after** the auction and WOAN processes. This approach makes it difficult to determine the appropriate spectrum caps which should, ideally, be in place prior to any applications being accepted by the Authority for participation in the auction. Once an entity has bid for and acquired spectrum in the auction, we cannot see how it will lawfully be possible for the Authority to then remove spectrum from successful bidders by imposing spectrum caps at that point.

7. We note Vodacom and MTN's comments in the Reasons document 2nd IM, specifically at paragraphs 5.17 and 5.18, and Vodacom's assertion that the Authority has "overstated" the spectrum needed by a new wholesale entity. This is a surprising statement given Vodacom's very emphatic arguments regarding the amount of spectrum needed by a mobile operator in order to give effect to their substantial infrastructure investments and to reduce data prices. Since one of the purposes of the WOAN is to assist in reducing the cost to communicate, the more spectrum the WOAN has – on Vodacom's own version – the better it can fulfil these policy goals.
8. We will return to this point below, but the Authority must also, in our view, take into account the factual position into which MTN and Vodacom have manoeuvred themselves by entering into roaming arrangements with each of Liquid Telecom, Cell C and Rain. Effectively, these MNOs (MTN and Vodacom) have gained access to network capacity through the spectrum holdings of these licensees (Liquid Telecom, Cell C and Rain). While the Authority has stated in the Reasons document 2nd IM that it does not consider this to be relevant, we indicate below why it is.
9. CIVH recommends that the Authority reconsiders the amount of spectrum which has been set aside for the WOAN and also that the Authority considers the following principles in determining the amount of spectrum which is set aside for the WOAN (these were also included in CIVH's first written representation, but are repeated again herein):
 - That the WOAN has at least as much spectrum as any single national wholesale operator, by considering the maximum amount of of total spectrum which any single national wholesale operator will have after the auction (and not the current amount of spectrum assigned to the Tier 1 operators)
 - That the amount of spectrum proposed for each of the minimum spectrum portfolios (MSPs) and intended for the third and fourth national wholesale (Tier-2) operators, combined with the ability of these same Tier 2 operators to also bid for additional spectrum over and above the MSPs proposed for the opt in round, does not result in an outcome which sees any Tier 2 operator obtaining more spectrum than the WOAN (for both below and above sub 1 GHz).

3. The spectrum caps have been incorrectly designed and should be reconsidered to promote effective competition

The Authority proposes spectrum caps in the 2nd IM as follows:

"6.9.1 Sub-1GHz safeguard cap of 2x21 MHz (including existing sub-1GHz spectrum holdings); and

6.9.2 An overall spectrum cap of 187MHz (including existing assigned spectrum holdings).

6.3 The sub-1GHz cap will allow all current holders of 2x11MHz of spectrum in the 900MHz band to acquire at most 2x10MHz of spectrum, and the cap will also allow licensees that have no sub-1GHz spectrum to acquire up to 2x20MHz.

6.4 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."

CIVH has a number of material concerns relating to the proposed spectrum caps as follows:

1. The sub-1GHz spectrum cap proposed in paragraph 6.9.1 of 2 x 21 MHz would potentially result in an outcome which is prejudiced against the WOAN, which is currently limited to only acquiring 2 x 10 MHz of sub-1GHz spectrum.
2. CIVH therefore proposes the following instead with respect to the sub-1GHz spectrum cap:
 - The Authority has previously determined and issued regulations to the effect that existing licensees in the IMT 900 band (Vodacom, MTN and Cell C) would each need to “cede” 1 MHz of spectrum. In addition to the ceding and replanning of the band thereafter, an additional 2 x 5 MHz of IMT900 spectrum could also be made available for inclusion in the auction and WOAN processes.
 - In order to deliver of the Authorities intended outcome, namely that there are 5 “credible” national wholesale operators, a 20% share of the total available sub-1GHz spectrum (2 x 95 MHz) would then yield ~ 2 x 20 MHz of spectrum each. 2 x 20 MHz of sub-1GHz IMT spectrum should therefore be set as the sub-1GHz spectrum cap and also a tranche of 2 x 20 MHz of IMT 700 MHz set aside for the WOAN.
3. In addition to the above, the overall spectrum cap of 187 MHz for licensing pursuant to the auction (in addition to current holdings) is also materially prejudicial to the WOAN, which is currently limited to only acquiring a total of 80 MHz of spectrum. In the Authority’s first review of call termination markets in 2010, it recognised that – as is the case internationally – spectrum is a competitive advantage and a smaller allocation or an allocation of non-contiguous or poor quality spectrum is a significant competition disadvantage. It therefore afforded each of Telkom Mobile and Cell C asymmetric interconnection rates which rates are still asymmetric today in recognition of the small market shares of these entities. We do not understand why it is that the Authority is not cognisant of the same disadvantage to the WOAN with respect to having a significant competition disadvantage if it has a smaller allocation of spectrum.
4. Furthermore, as we have alluded to above, CIVH questions why the Authority is not more concerned about the current access by Vodacom and MTN in particular to spectrum held by each of Liquid Telecom, Rain and Cell C in terms of the roaming arrangements between them and MTN and Vodacom. This effectively gives each of these 2 MNOs, so much additional capacity that they are unlikely to require more spectrum at all for as long as the roaming arrangements are in place, which we understand is usually for a period of between 10 - 20 years.
5. Furthermore, the allocations under the ICT COVID Regulations have become semi-permanent as a result of litigation and expectation created by ICASA since April 2020 and its continued assignment under the most recent ICT COVID Regulations for another 6 months. We do not understand the Authority’s contention at paragraph 5.22 of the Reasons document 2nd IM that, *“The Authority acknowledges that MTN and Vodacom are spectrum constrained based on the market shares of connections. However, 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.”*
6. Neither the Competition Commission nor the Authority have, in our view, given sufficient attention to the structure and ultimately, the effect of these arrangements on the market in our view. Cell C no longer has any of its own network infrastructure by its own admission as part of its ‘recovery’ strategy, and its postpaid consumer base has been transferred to Vodacom while its prepaid consumer base has been transferred to MTN. According to press reports over the past year it is still financially in dire straits⁴ despite a concerted effort to present the results in a positive light. Cost-cutting measures have effectively resulted in the licensee operating as a **large MVNO**⁵ – it simply cannot be considered to be a true mobile network operator competitor to MTN and Vodacom. The fact that it holds a licence, which the Authority concludes results in it being considered to be a competitor⁶, is a red herring, and the Authority is, with respect, incorrect in its assertion in paragraph 5.25 that Cell C services its own subscribers, as it has no direct contractual relationship with any subscriber – they have all been ceded or transferred as the case may be. We agree with Telkom’s view as stated in paragraph 5.16.5 of the Reasons document on the 2nd IM. It suits both MTN and Vodacom to argue that they

⁴ [Cell C in deep financial trouble \(mybroadband.co.za\)](https://mybroadband.co.za/news/telecom/111111-cell-c-in-deep-financial-trouble), November 2020; ['In transition' Cell C posts R5.5 billion loss, pins hopes on recapitalisation | Fin24 \(news24.com\)](https://news24.com/2021/04/11/cell-c-posts-r5-5-billion-loss-pins-hopes-on-recapitalisation/), April 2021; [Cell C swings into profit, secures funding \(engineeringnews.co.za\)](https://engineeringnews.co.za/2021/08/11/cell-c-swings-into-profit-secures-funding/), August 2021; and [Cell C H12021 Results Infographic v7](#), October 2021

⁵ Paragraph 5.17.6 of the Reasons document.

⁶ Paragraph 5.30 of the Reasons document

are facing competition from another MNO for obvious reasons.⁷ It also suits them not to have the roaming arrangements considered in relation to spectrum caps – again, for obvious reasons.⁸ The pro-competitive ‘remedies’ proposed by the Authority are inadequate in our view to either protect or promote the interests of the WOAN, or to address competition in the market.

7. CIVH therefore proposes the following instead with respect to the overall spectrum cap:

- The calculation outlined by the authority in 6.4 of the 2nd IM is incorrect for the following reasons:
- 975 MHz (of the total possible 985 MHz, due to the current guardbands in the IMT 900 and 1800 bands) and not 935 MHz of high-demand spectrum would have been assigned at the auction stage and the spectrum set-aside for the WOAN. Please see the breakdown provided in Table 1 below:

Table 1: IMT spectrum holdings in South Africa (Total MHz)

	700 FDD	800 FDD	900 FDD	1800 FDD	1900 TDD	2100 TDD	2100 FDD	2300 TDD	2600 TDD	3500 TDD	Total
Telkom				24	20		30	60		28	162
Liquid				24						56	80
Vodacom			22	24		5	30				81
MTN			22	24		10	30				86
Cell C			22	24			30				76
RAIN				24					20		44
Assigned	0	0	66	144	20	15	120	60	20	84	529
Unassigned	60	60	4	6	0	0	0	40	170	116	456
Total IMT	60	60	70	150	20	15	120	100	190	200	985

- In order to deliver of the Authority’s intended outcome of 5 “credible” national wholesale operators, a 20% each share of total assigned spectrum (975 MHz) would then yield a total of 195 MHz of spectrum each. A minimum of 195 MHz total spectrum should therefore be set as the overall spectrum cap and also set aside for the WOAN as well.
8. If the above recommendations are not considered by the Authority, CIVH is of the view that any other “credible” wholesale national operator will be able to acquire spectrum which is more than double what has been proposed for the WOAN (184 MHz vs 80 MHz). This effectively means any other “credible” wholesale national operator stands to acquire **130% more spectrum than the WOAN**.
9. This will mean that the WOAN can never be a viable or “credible” entity. The cost of production for the WOAN will be directly related to the amount of spectrum which is set aside for the WOAN and whether or not it benefits from true pro-competitive remedies such as a drawdown on capacity, spectrum caps, and national roaming. A disproportionate amount of spectrum allocated to other wholesale national operators will result in an unfair economic bias against the WOAN, in order for it to be a viable entity. The WOAN also has no other mechanism to gain access to additional spectrum, other than what the Authority has proposed for the set aside.

4. IMT bands to be included in calculation of spectrum cap

In the 2nd IM, the Authority states in the 2nd IM Reasons document, at paragraph 8.9 that “*The Authority will thus not consider the 3600 – 3800 MHz band in calculating the spectrum caps in this licensing process.*”

1. CIVH again submits to the Authority that it should consider including the spectrum assigned for the Broadband Fixed Wireless Access (BFWA) services in the bands 3600-3800 MHz, in calculating spectrum caps. In not doing so, the eventual spectrum allocations of all national wholesale operators will be distorted by considering the end state **after** the proposed auction.

⁷ Paragraphs 5.13.3 and 5.16.2 of the Reasons document 2nd IM.

⁸ Paragraph 5.16.4 of the Reasons document 2nd IM.

2. Also the reality is that there are various licensees such as RAIN, who are already using the 3600-3800 MHz bands to offer nationwide, commercial 5G fixed wireless services in South Africa with significant uptake already today.
3. CIVH would also like to highlight that although the 3600 - 3800 MHz bands can only currently be used for BFWA and not IMT services in South Africa, it is widely anticipated that the expected allowance will be granted for IMT use after the World Radiocommunication Conference which takes place in November 2023.
4. Therefore, by including the 3600-3800 MHz spectrum assigned for BFWA in calculating the spectrum caps, the Authority can avoid distorting competition in the market, by also considering the upcoming developments around technology evolution and the associated use of spectrum bands to deliver on this evolution in technology. CIVH also submits that the Authority considers all existing IMT assignments per operator shown in Table 1 together with the benefits of the roaming arrangements that each of MTN and Vodacom have concluded, in calculating the proposed spectrum caps.
5. In addition to the above, the Authority has still not expressly clarified if the 24.25 GHz – 27.5 GHz bands held by licensees will be considered in calculating the spectrum caps. Also, could the Authority also please clarify the same for the 27.5 GHz – 29.5 GHz bands. These are all critical aspects of the future market for mobile broadband services. Neither of these bands have been designated as IMT spectrum in the Radio Frequency Assignment plans from 2015, however both are proposed for IMT use in the Draft Radio Frequency Assignment plans from 2021.
6. According to the draft 2021 ICASA Radio Frequency Spectrum Assignment Plan, both the 26 GHz and 28 GHz band have been allocated to mobile use on a co-primary basis together with fixed, inter-satellite, fixed-satellite and space research services. However, only the 24.25 GHz – 27.5 GHz is proposed for IMT use. While 27.5 GHz – 29.5 GHz has been allocated on a co-primary basis for mobile use, it is not clear if IMT use is permitted unlike the 24.25 – 27.5 GHz band.

CIVH proposes that consideration of the the current spectrum caps should, in addition, exclude any allocations beyond 3800 MHz, and recommends that the Authority clarify this criteria, to avoid being challenged by any party on the current spectrum cap proposal and implementation thereof.

New operators who the Authority specifically references in its discussion on the setting of the reserve price, will be dissuaded by the absence of real pro-competitive conditions on existing MNOs. Investors in these potential new entrants will be concerned about the WOAN's viability in a skewed market in which existing dominant MNOs are not constrained in any way prior to entering the auction, particularly where the allocation of spectrum to the WOAN is not adequate to enable it to compete.

5. Minimum Spectrum Portfolios (MSP) and spectrum caps are not aligned and will result in spectrum fragmentation:

In the 2nd IM Reasons document, the Authority states in 5.29 that it has *“adapted Ofcom UK’s 2012 broad analytical framework to assess the spectrum that a national wholesaler is likely to need to be capable of being a credible national wholesaler. Determining whether or not a particular national wholesaler is likely to be credible is ultimately an exercise of the regulatory judgement in light of the evidence. The Authority has decided to consider the two credible national wholesale operators (i.e. Vodacom and MTN) and have determined that in order to be credible, an operator have would need to have an average of 80MHz of spectrum combined for coverage and capacity. It is on this basis that the Authority has calculated the minimum spectrum portfolios for a credible operator.”*

1. CIVH does not agree with the Authority's reliance on Ofcom's 2012 approach since this cannot possibly take account of the different and much more competitive market context in which Ofcom operates and which, even in 2012, differed considerably from the current South African market.
2. In addition, the Authority has not provided sufficient substantiation in the Reasons document for how it determined that an operator would need to have an average of 80MHz of spectrum combined for coverage and capacity in this document, nor has it referred to any other document or investigation that it has itself undertaken (and it has not followed national policy in this regard).

3. The Authority has also failed to provide a detailed substantiation of how it then further allocated this average of 80 MHz between the IMT spectrum Sub-1GHz and IMT spectrum above 1 GHz in each of the Minimum Spectrum Portfolios
4. CIVH is also strongly of the view that by having unaligned values for the Minimum Spectrum Portfolios (which the Authority has currently set at 80 MHz), and then having a different overall spectrum cap of 187 MHz, will certainly result in unnecessary and undesirable fragmentation of spectrum, which will contribute to inefficient use of the spectrum and which goes against the objectives of the ECA.

CIVH therefore recommends that should the Authority decide to proceed with the Opt-in round (which was **not** recommended by CIVH in its first submission), that there also be an alignment between the total amount of current spectrum and the spectrum caps themselves. The same amount of spectrum should therefore also be set aside for the WOAN.

6. Open – access obligations and Incentives for the WOAN

The Authority proposes the following in the 2nd IM:

“11.3.1 Prospective applicants that have categorised as Tier-1 will:

11.3.1.1 Produce a reference offer for site access to be offered to any licensee requesting site access and guidelines, including pricing, timeframes and policies for reserving space on masts.

11.3.2 The reference offer set out by the applicant in terms of paragraph 11.3.1.1 shall become licence conditions for licences to two tier-1 operators issued in this auction process.”

1. It is not clear to CIVH on what basis the Authority will deem the reference offer for site access to be “sufficient” to enable access seekers to gain access to infrastructure to promote competition. CIVH recommends that the Authority prescribes the following related to the reference offers:
 - That the pricing includes a reasonable markup on cost, which can be substantiated and which will still enable competition at the retail level (and a proposal in this regard ought to be made in the application to participate in the auction alternatively in negotiations with the Authority after the auction, as part of the consideration of winning bidders and licensing)
 - That the site owner is prevented from reserving space/capabilities/capacity for themselves for the future, as a mechanism to deny access to any seeker who intends to deploy a service in the shorter term
 - That the reference offer is not only limited to traditional passive facilities-leasing, but is also required to be extended to other more advanced open-access managed network services such as Multi Operator Radio Access Network (“MORAN”) and Multi Operator Core Network (“MOCN”) and which are already widely deployed in the South African market today.

2. In addition to the above, the Authority also states the following in the 2nd IM:

“11.3.3 A Licensee assigned spectrum through the auction process will be required to provide open access to MVNOs which must have 51% ownership held by persons from Historically Disadvantaged Persons. This provision shall become licence conditions for licences issued in this auction process. The Licensee assigned spectrum through the auction process shall be required to submit to the Authority within a period of between 3 – 6 months the business plans to ensure that the MVNOs are sustainable for the period of 3 years.”

“11.4.1 The applicants that are to be assigned the radio frequency spectrum through the auction process shall procure a minimum of 30% national capacity from the WOAN collectively as soon as the WOAN is operational for a period of five years.”

3. CIVH believes it is counter-intuitive and prejudicial to the viability of the WOAN, to prescribe an MVNO obligation on successful licensees from the auction process. This is due to the fact the the successful licensees from the auction process will only have an obligation to procure 30% of the national capacity from the WOAN

collectively, and the remaining 70% of national capacity of the WOAN, could likely lie dormant if the WOAN has to compete with the successful licensees from the auction process for additional capacity uptake from interested MVNOs.

4. CIVH therefore recommends that the MVNO obligation is removed from the auction process, which will incentivize MVNOs to procure national capacity from the WOAN instead, and which significantly contribute to ensuring the viability of the WOAN. There should be no obligation on the WOAN to conclude arrangements with MVNOs however, unless and until the Authority also obliges the successful bidders to take up the minimum capacity prescribed in the various documents to date, with sufficient detail to ensure that there is no dispute between the WOAN and successful bidders about their obligations.
5. In addition to the above, the Authority states in the 2nd IM Reasons document, 11.2 *"The Authority in considering the Policy decided that the period for the uptake obligation will be limited to five years."*
6. In its previous submission to the Authority, CIVH highlighted to the Authority that the IM's published in 2020 relating to the IMT spectrum and also the licensing of the WOAN had conflicting requirements for offtake requirements from the WOAN. This is still case in comparing the 2nd IM and the 2020 WOAN IM. The 2nd IM now states the followingg (in addition to 11.4.1 above):

"11.4.2 The 30% national capacity to be procured from the WOAN will be shared proportionally to the amount of the spectrum acquired from the Auction amongst the successful licensees."

11.4.3 The 30% national capacity uptake in the WOAN will be imposed on all successful applicants as licence terms and conditions in accordance with regulation 7(e) of the Radio Frequency Spectrum Regulations, 2015 as amended."

7. However, the 2020 WOAN ITA stated the following:

4.4. 30% Offtake

4.4.1. A licensee that will be assigned spectrum through this process (WOAN) is required to make available a minimum of 30% national capacity to be procured by successful Applicants that will be assigned Radio Frequency spectrum through the IMT auction licensing process, as soon as the WOAN is operational, for a period of 7 years.

4.4.2. The obligation to procure a minimum of 30% national capacity from the WOAN by successful Applicants that are assigned Radio Frequency spectrum through the IMT auction licensing process, collectively shall be imposed on the IMT auction licensees as licence terms and conditions in accordance with regulations 7 (e) of the RFSR.

4.4.3. The WOAN will be provided details on which successful applicants assigned Radio Frequency Spectrum through the IMT auction licensing process will be obliged to procure 30% national capacity from the WOAN collectively after the IMT auction licence applicants have been assigned spectrum with a licence condition for the 30% uptake in accordance with regulation 7 (e) of the RFSR.

8. CIVH strongly recommends that the Authority aligns the offtake period to 10 years in both the IM and WOAN ITA's. The longer offtake period of 10 years will further help ensure viability of the WOAN and the Authority is requested to reconsider its position on this point.

It is also not clear to CIVH how the Authority has considered the policy in deciding a sufficient offtake period for the WOAN.

7. Recent developments relating to temporary spectrum allocation and postponement of WOAN licensing process:

Finally, there have been 2 recent and related developments which are of concern to CIVH as below:

Assignment of provisional radio spectrum:

1. In line with the updated ICT COVID-19 National Disaster Regulations, the temporary radio frequency spectrum licences issued in April 2020 in terms of the 2020 Regulations shall terminate on 30 November 2021.
2. A new provisional radio frequency spectrum regime has now been introduced and the new provisional radio frequency spectrum licences shall operate from 1 December 2021 until 30 June 2022 or until three months after the termination of the National State of Disaster, whichever occurs first.
3. The following International Mobile Telecommunications (IMT) spectrum bands were made available for provisional assignment:
 - 700 MHz
 - 800 MHz
 - 2300 MHz
 - 2600 MHz
 - 3500 MHz
9. The provisional assignments made by the Authority are as follows (we discussed this in section 1 as well):

Table 2: Provisional spectrum assignments per operator (Total MHz)

	700	800	2300	2600	3500
MTN	20	20		40	40
Telkom	40	40	40	10	12
Vodacom	20	20		40	40
Rain	40	40		60	
Cell C				20	20
Liquid					4

4. CIVH is concerned that the incumbent operators might find it more beneficial to their interest to delay the proposed auction and WOAN processes for the following reasons:
 - Current provisional spectrum assignments circumvent spectrum caps
 - Current charges for use of provisional spectrum are almost certainly far less than the likely price to acquire spectrum in an auction
5. CIVH has a material concern that the current provisional assignments are eventually converted into permanent assignments by the Authority and that the current auction and WOAN licensing processes are abandoned.

CIVH would like to place on record that it believes that should this happen, it will run counter to and likely be anathema to the objectives of the ECA as set out in the 2nd IM, at section 3 headed "Objectives".

Postponement of consultation relating to the WOAN:

6. CIVH is extremely concerned that the Authority has given notice on 19 November that it had resolved not to publish the envisaged WOAN consultation document on 19 November as previously communicated. The Authority has also given notice that In the intervening period, it will engage other international jurisdictions to draw lessons from their experiences on the licensing of a typical WOAN. The Authority has also indicated that

it will publish a notice advising of the process to be followed in respect of the licensing of the WOAN by no later than March 2022.

7. CIVH is concerned about the postponement of the consultation relating to the WOAN, as it believes the current consultation relating to the proposed auction of spectrum is intimately and fundamentally linked to the consultation required for the WOAN. Not being in a position to consider the implications on the viability of the WOAN in the current consultations and processes related to the auction, will be detrimental to the success of the WOAN as a viable entity. This is even more so the case given our concerns about the necessary pro-competitive conditions that should be imposed in favour of the WOAN but in the licences of successful bidders in auction. Without the pro-competitive conditions being a certainty in the draft licences – and without having seen these conditions – there can be no certainty for a potential applicant for a WOAN licence that they will ever benefit from these proposed conditions. Investors are far less likely to support a new entrant without having seen the likely conditions that will operate in its favour in documents such as licences, or in formal conditions pertaining to the ITA.
8. Certainty is of the essence of regulation. The separation of these two consultations is highly prejudicial to potential new entrants and to any possibility of a successful WOAN licensing process, or a viable WOAN. Capacity offtake, facilities-sharing, spectrum caps and other pro-competitive remedies including pricing and mandatory roaming are critical to achieve national policy goals. If these conditions are not visible and concrete, we believe the entire WOAN process will be undermined.

CIVH remains committed to supporting the licensing of both the IMT spectrum and WOAN in a lawful and rational process that promotes and protects competition, and will avail itself for all ongoing stakeholder engagement and consultations on the topic.

Many thanks



Nicholas Naidu

Head of Technology: CIVH

082 997 3821

Nicholas.Naidu@CIVH.co.za

