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The Independent Communications Authority of South Africa
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Attention: Mr Davis Kgosimolao Moshweunyane

By email: IMTLicensing@icasa.org.za
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Dear Sirs,

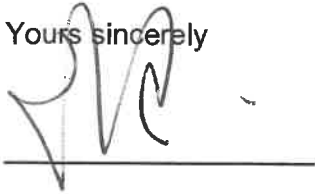
RE:

SECOND INFORMATION MEMORANDUM ON THE LICENSING PROCESS FOR INTERNATIONAL MOBILE TELECOMMUNICATIONS IN RESPECT OF THE PROVISION OF MOBILE BROADBAND WIRELESS ACCESS SERVICES FOR URBAN AND RURAL AREAS USING THE COMPLIMENTARY BANDS, IMT700, IMT800, IMT2600 AND IMT3500, FOR PUBLIC CONSULTATION

1. Cell C Limited ("Cell C") would like to thank the Independent Communications Authority of South Africa ("ICASA") for the opportunity to provide written comments to the second Information Memorandum ("**Second IM**") published for consultation on the process ICASA intends to follow in respect of the licensing of high demand spectrum in the identified International Mobile Telecommunications ("**IMT**") radio frequency spectrum bands for IECNS and WOAN licensees as published in *Government Gazette* 45496 on 16 November 2021 ("**IMT Notice**").
2. In addition, Cell C thanks ICASA for holding a question-and-answer workshop on 15 October 2021, where ICASA made a presentation to interested parties on the process and contents including inviting interested parties for written comments to the first draft Information Memorandum ("**First IM**") published on 1 October 2021.
3. Cell C looks forward to further engaging with ICASA on the second Information Memorandum in relation to the proposed auction for high demand spectrum. Accordingly, we attach our written submission in this regard, as requested in the IMT Notice.

Cell C hereby confirms its readiness to participate in any subsequent consultations and oral hearings, which may be called for by ICASA.

Yours sincerely



Themba Phiri
Executive Head: Regulatory Affairs
Cell C Limited

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1. Executive Summary

- 1.1. The award of high demand IMT spectrum to IECNS licensees and the WOAN will be a significant contributor to the success of the IMT spectrum auction process and the provision of quality national mobile broadband wireless services. It will be a foundational step to the achievement of the goals set out in 'SA Connect' and amplified in the quest to be 4IR ready. It will be critical to ensure that the market in which IMT spectrum is made available is as competitive as possible, provides for credible national wholesale operators and is as supportive of the WOAN as possible. Cell C's intention in making this submission is to contribute to the ways in which ICASA can achieve these goals.
- 1.2. By way of summary, we advise that Cell C would like to raise the following main points:
 - 1.2.1. Whilst Cell C understands the various pressures and challenges faced by ICASA, ICASA must ensure that the 'invitation to apply' and the IMT spectrum licensing via an auction process is clearly articulated and understood by industry and finalised within the regulatory framework to avoid any further unintended consequences such as further delays due to litigation. This is likely to require some flexibility in the timetable for the IMT spectrum auction process and ideally for a draft 'invitation to apply' for IMT spectrum document ("ITA") to be published, soliciting industry feedback in advance of publication of the final version.
 - 1.2.2. Adequate spectrum caps and minimum spectrum portfolios of IMT spectrum, offered within a suitable Opt-in round, are crucial for competition and sustainability of five credible national wholesale mobile operators. It is submitted, that the currently proposed minimum spectrum portfolios of IMT spectrum are insufficient to achieve ICASA's stated objectives and require enlarging, whilst the Opt-in round process suffers from some important flaws that require modification (particularly in relation to winner and price determination) and requires some additional clarification.
 - 1.2.3. Licensed spectrum holdings need to be accounted for in a consistent way for the purposes of assessment against both spectrum caps and minimum spectrum portfolios of IMT spectrum and should include all spectrum that is used for mobile broadband services, including the 3600-3800 MHz spectrum, despite it not currently having an IMT designation in South Africa.
 - 1.2.4. Cell C agrees with ICASA that roaming arrangements between licensees should not be considered as mechanisms extending access to spectrum for roaming providers to spectrum held by licensees acquiring roaming services.
 - 1.2.5. Cell C submits that spectrum sharing regulated in terms of Radio Frequency Spectrum Regulations of 2015 should be permitted for the IMT spectrum bands currently licensed, ensuring efficiencies in

spectrum usage and a higher quality of digital services are offered to more consumers in line with the objectives of the Electronic Communications Act, 2005 ("ECA").

- 1.2.6. It is essential that regular updates be provided on the expected timelines for the completion of the digital migration process and, crucially, clarity is required on precisely how payment (and other licensing) terms for sub-1 GHz spectrum will be modified in the event of a delay in the usability of this spectrum.
 - 1.2.7. Reserve prices for the IMT spectrum were based on analysis of valuation and international benchmarks conducted prior to the COVID-19 pandemic and resulting economic downturn. Cell C requests that ICASA re-considers whether, in light of the persisting COVID-19 prevalence, and the resulting economic impact, a reduction in the previously published reserve prices is now appropriate.
 - 1.2.8. Finally, clarification of several other aspects of the auction design, including how specific frequencies will be assigned to winning bidders following the conclusion of the (generic lots) main auction stage is also in our view, required. The current specification of the assignment stage appears likely to result in unintended consequences threatening contiguity of spectrum holdings and efficiency of assignment.
- 1.3. Cell C appreciates this round of engagement with ICASA and trust that its comments as contained herein are well received. Cell C looks forward to participating in the remainder of this process.

Cell C written submission to the IMT Notice and outline for its response on the consultation on the process ICASA intends to follow in respect of the licensing of high demand spectrum in the identified IMT radio frequency spectrum bands for IECNS and WOAN licensees

2. Introduction

- 2.1. Cell C Limited ("**Cell C**") is encouraged by the publication of the IMT Notice inviting a further round of written comments on the Second IM that will inform the drafting of an expected draft Invitation to Apply for IMT spectrum ("**ITA**"). Our comments on the Second IM are made in the context of supporting ICASA in its intention to conclude the processes required to ensure that the high demand spectrum is licensed within the regulatory and policy framework without any ambiguity and risk of further delay.
- 2.2. This submission incorporates both Cell C's general concerns, raised in a form of questions and recommendations, including raising those concerns that were not adequately addressed at the ICASA workshop of 15 October 2021 ("**Workshop**") or through the publication of the Second IM, and recommendations made by Cell C to address some of the concerns raised at the Workshop and this phase of consultation, as requested by ICASA.
- 2.3. Importantly, and for the reasons raised previously by Cell C, Cell C suggests following this process with the publication of a draft ITA for further consultation. This will afford an opportunity to Cell C and interested parties to be better placed in providing robust input to the licensing process. We look forward to commenting on the draft ITA once ICASA has had the opportunity to carefully consider all submissions received in this round of consultation. We believe the award of high demand IMT spectrum, and the introduction of a Wireless Open Access Network ("**WOAN**") can transform the market and, enhance competition which will bring down costs to the benefit of the consumer.

3. ITA Process

3.1. Publication of a draft ITA for written comments

Cell C understands from the Workshop that ICASA had published the First IM for the purposes of consultation and that it must be read together with the 2018 National Radio Frequency Plan, the 2015 Radio Frequency Spectrum Regulations, the 2015 Radio Frequency Spectrum Regulations, the Reasons Document published in Government Gazette 43970 on 4 December 2020 ("**2020 Reasons Document**"), which includes the Competition Assessment and Consideration of the Policy Direction as published on 4 December 2020 and the ITA published on 1 October 2020 ("**Competition Assessment**").

Cell C further understands that the Second IM must also be read together with the Reasons Document published on 16 November 2021 in Government Gazette 45497 ("**2021 Reasons Document**") and that it builds on the First IM (published on 1 October 2021). It is, however, unclear to Cell C if the initial Information Memorandum published in Government Gazette 42820 on 1 November 2019 and the 2020 Reasons Document remains relevant to this process or whether the Second IM is to be read only with the 2021 Reasons

Document as stated in section 1.22 of the IMT Notice. **Cell C submits** that the second and final Information Memorandum be published in its full form. Only a full form Information Memorandum will enable interested parties to understand the content of the envisaged ITA. In addition, Cell C further recommends that a new draft ITA be published thereafter for written comments to avoid any ambiguity, unintended consequences, and further delays. Lastly, Cell C believes it would be useful for ICASA to publish an explanatory note with a reasons document with the amended ITA in its draft form thus providing transparency and certainty to interested parties and to the public who intend providing written comments to the draft ITA.

We make this suggestion for the following reasons:

- a) In the past recent experience, the final ITA deviated substantially from the content of the initial Information Memorandum published on 4 November 2019 for the purposes of consultation. For example, the concepts of the Opt-in round and categorisation of Tier 1 and Tier 2 national wholesalers was not consulted on. This has led to unintended consequences, including litigation resulting in further delays in the assignment process of IMT spectrum.
- b) In addition, Cell C believes that there would be provisions in the final ITA that would be seen for the first time that are not addressed in the Second IM or the 2021 Reason Document. It is further recommended that at the very least there needs to be a clear process of two stages providing for the opportunity for clarification questions from prospective bidders ahead of filing the application. This approach will ensure that any uncertainty may be avoided during the application and auction stages of the ITA.

We note that in paragraph 4.24 of the 2021 Reasons Document, ICASA notes that there is no legislative or regulatory obligation upon it to publish a draft of the ITA. However, for the reasons set out above, and in the context that there will certainly be elements of the ITA that are not contained within the Second IM (e.g. parts relating to the application itself, such as technical questions, submission of business plan etc), Cell C considers it very important that the ITA first be made available in draft form, with the opportunity for comment.

- 3.2. Initially we understood that ICASA intends publishing a consultation document of the draft amended composite ITA for I-ECNS and Radio Frequency Spectrum Licences for the purpose of operating a WOAN on 19 November 2021. It is unclear to Cell C the reasons why ICASA had planned to consult on a draft amended ITA for the WOAN but is unable to do so on an amended ITA for IMT spectrum. We seek clarity in this regard.

4. **Amendments to applications**

- 4.1. It is noted that applicants may amend their applications under the ITA in accordance with regulation 8 of the 2015 Radio Frequency Spectrum Regulations as was contained in section 15.3.7.4 of the 2020 ITA. At the Workshop (and in paragraph 14.3.2 of the Second IM), ICASA stated that applications submitted in terms of the 2020 ITA may be amended to meet the

application and qualification stage requirements for the amended ITA contemplated in section 12, Key Activity 6, 10 December 2021.

- 4.2. It remains unclear to Cell C however, if the expectation of ICASA is that amendments to the existing applications may take place and be recognized as a legitimate application in terms of the amended ITA, or whether an entirely new application under the ITA is required.
- 4.3. **Cell C recommends** that ICASA provides legal clarification of its position in this regard, confirming that the IM and the amended ITA provide for the recognition of applications submitted under the 2020 ITA and cater for the submission of amendments only, and related processes as this requirement was not envisaged in section 15.3, Qualification Stage of the 2020 ITA.

5. Competition

- 5.1. ICASA states in section 3, entitled "Objectives" of the Second IM that the licensing process ICASA intends to follow, fulfil some of the objectives in section 2 of the Electronic Communications Act, 2005 ("ECA") which are as follows:

"Promote broad-based black economic empowerment, with particular attention to the needs of women, opportunities for youth and challenges for persons with disabilities;

Promote the universal provision of electronic communications networks and electronic communications services and connectivity for all;

Promote the interests of consumers with regard to the price, quality and the variety of electronic communications services;

Develop and promote SMMEs and cooperatives;

Encourage investment and innovation in the communications sector

Promote an environment of open, fair and non-discriminatory access to broadcasting services, electronic communication networks and to electronic communications services;

Promote competition within the ICT sector;

Promote and facilitate the development of interoperable and interconnected electronic networks, the provision of the services contemplated in the Act and to create a technologically neutral licencing framework; and

Ensure efficient use of the radio frequency spectrum."

Cell C supports this approach by ICASA as Cell C believes that this is aligned with requirements of section 31(3) of the ECA where ICASA may take into account the objectives of the ECA when prescribing procedures and criteria for IMT spectrum, specifically the promotion of competition in the Information and Communication Technology sector.

- 5.2. In addition to 5.1 above, Cell C supports both ICASA's approach in terms of its Competition Assessment, which informs how the spectrum lots, spectrum floors and spectrum caps should be arranged and the Competition Commission's recommendation on asymmetric assignments in order to promote competition. For example, in paragraph 4.12 of its 2021 Reasons Document, ICASA notes that *"the CCSA proposes that robust regulatory interventions are needed to address the robustness of the positions of Vodacom and MTN."*
- 5.3. It is noted that ICASA had set out its proposals in the First IM and 2020 ITA based on the completed Competition Commission's Data Service Market Inquiry (DSMI) findings and the Competition Assessment as contained in the 2020 Reasons Document. Cell C agrees with ICASA that the Competition Assessment should continue to form a reasonable foundation on which ICASA can base its decisions relating to the current IMT spectrum auction design and appropriate competition measures proposed for the new amended ITA.
- 5.4. Cell C notes that the ICASA Mobile Broadband Services Inquiry findings as published in Government Gazette no. 44337 of 26 March 2021 ("**MBSI Findings**") is also relevant. Consistency with the MBSI Findings is also important for sound decision making. Cell C is therefore pleased to see that ICASA has taken account of the MBSI findings in its Second IM. Cell C understands that the MBSI analysis, in which ICASA determines that Vodacom and MTN are each dominant (retail market share of greater than 45%) in multiple South African regions, is the basis on which ICASA has reached the conclusion that Vodacom and MTN are dominant (Tier 1) operators.
- 5.5. Cell C notes that this regional analysis differs from the municipality-based analysis undertaken by ICASA in its 2020 Competition Assessment and which continued to be relied upon in the First IM. In that case, Vodacom and MTN were also designated as Tier 1 operators. In Cell C's view, this conclusion remains accurate and any further amendments to the Competition Assessment through the remainder of this IMT spectrum licensing process should not reach a different conclusion.
- 5.6. Similarly, Cell C submits that ICASA was, and remains correct in its conclusion on the importance of retaining at least 5 credible national wholesale operators, post-auction of the IMT spectrum. Cell C further submits that ICASA has also correctly concluded that the protection for smaller operators is necessary, in order to achieve the "credible competitor" objective. As ICASA notes in relation to paragraph 3.8 of its 2021 Reasons Document, minimum spectrum portfolios offered via an opt-in round *"is a necessary intervention to level the playing-field and ensure that the auction does not serve to entrench the dominance of existing market player[s]"*.
- 5.7. We submit that one form of protection is that of spectrum caps to be applied to the IMT spectrum, which are a key component of the ICASA's IMT spectrum auction design. The level of these spectrum caps for sub-1GHz at 2x21 MHz remains in Cell C's view correct. The cap on total spectrum holdings has been increased by ICASA from 184 MHz (2020 ITA and First IM) to 187 MHz. Cell C does not agree with this change, which is now based on 20% of total IMT

spectrum (post-IMT-spectrum-auction) of 935 MHz. ICASA's previous approach of taking 18% of the total of 1015 MHz, including the 80 MHz of 3600-3800 MHz spectrum licensed to Rain, appears a more robust approach¹. In particular, as Cell C further comments on in more detail in section 8 of this response, the definition of relevant spectrum holdings that contribute to these caps must include spectrum in the 3600-3800 MHz band, which is equivalent to the 3400-3600 MHz spectrum being auctioned both technically and in terms of its usage in other parts of ITU Region 1 (i.e. Europe and the Middle East).

- 5.8. Nonetheless, Cell C does agree that an overall spectrum cap of 184-187 MHz is appropriate and that this cap should not be any higher in order for competition to be appropriately safeguarded. A higher cap would lead to a Vodacom and MTN being able to acquire even more spectrum and increase their dominance of retail and wholesale mobile markets in South Africa.
- 5.9. As ICASA has correctly recognized in its Competition Assessment Report that spectrum caps alone however are not sufficient to ensure a competitive mobile market post-auction of IMT spectrum. Indeed, ICASA noted in paragraph 97 of the competition assessment section of its 2020 Reasons Document that: *"The risks related to the third and fourth national wholesalers not acquiring the spectrum they need to continue to be or to become credible competitors absent measures in the auction – are very high. The Authority's pro-competition measures (sub-1GHz caps, overall spectrum caps, spectrum portfolios/floors, WOAN etc.) are individually and collectively justified and proportionate."*
- 5.10. It is submitted that another form of protection for smaller operators is therefore offered by ICASA in the form of the 'Opt-in round' of the IMT spectrum auction process, which Cell C agrees is a sound principle. The proposed Opt-in round offers two Minimum Spectrum Portfolios of IMT spectrum ("MSPs") to successful bidders, which would then be able to take-up the roles of credible third and fourth operators in the South African mobile market.
- 5.11. It is submitted that MSPs are necessary to ensure that there are five credible national wholesale providers in South Africa. In particular, the aim of these MSPs is to ensure that two Tier 2 (or current sub-national) operators will be able to compete on a more equitable footing with the two Tier 1 operators that currently dominate the market. However, it is Cell C's view that the current MSP definitions do not guarantee enough spectrum to ensure that the operators winning them are in fact credible.
 - 5.11.1. The two current MSPs proposed by ICASA ensure that two non-Tier 1 operators will each have a minimum of 80 MHz of spectrum post-auction. However, 80 MHz represents just 7.9% of the 1015

¹ We note that ICASA is not entirely clear how it derives a market total of 935 MHz since this is 1015 MHz minus 80 MHz, but the 80 MHz could either be Rain's 3600-3800 MHz spectrum or the 80 MHz set-aside for the WOAN. Paragraph 6.4 of the Second IM states that the 935 MHz includes the spectrum set aside for the WOAN. Cell C therefore assumes that the 935 MHz figure excludes the 80 MHz of 3600-3800 MHz assigned to Rain. However, it is appropriate for both this spectrum and the spectrum set aside for the WOAN to be included and for a total of 1015 MHz of spectrum to be considered.

MHz of total mobile spectrum available in South Africa post-auction.²

5.11.2. The best international reference point, and one on which ICASA relies heavily in its IMs and in the 2020 ITA and 2020 and 2021 Reasons Documents, is the MSPs proposed by UK regulator Ofcom in its 2012 consultations ahead of the January 2013 UK 4G auction. In defining MSPs, Ofcom considered a number of credibility dimensions to better understand the minimum amount of spectrum that a UK mobile operator would require, in order to be credible.

5.11.2.1. Ofcom's analysis concluded that there is a material risk to an operator's credibility if the operator held less than 10-15% of the total spectrum available. In the South African context, this corresponds to a range of 102-152 MHz of spectrum.

5.11.2.2. Ultimately, Ofcom incorporated MSPs with at least 50 MHz of spectrum into its auction design, which represented 10% of the 503 MHz of total mobile spectrum available in the UK market post-auction). The corresponding spectrum amounts for South Africa would therefore be 102 MHz.

5.11.2.3. However, and very importantly, Ofcom's MSPs considered spectrum holdings across only three spectrum bands: the 800 MHz, 1800 MHz and 2.6 GHz bands. The holdings of the fourth UK operator (H3G UK), which as expected was the winner of the MSP through the Opt-in process, also held 30MHz of spectrum in the 2.1 GHz band. As such, its total post-auction holdings as a result of winning only the smallest MSP (that included 800 MHz band spectrum) and no additional spectrum was 70 MHz. Had it won the other available MSP (and no additional spectrum) it would have held 100 MHz of spectrum.

5.11.2.4. Therefore, in reality Ofcom's MSPs offered 70-100 MHz, or 14-20% of post-auction mobile spectrum to the MSP winner. The equivalent amount of spectrum in the South African context would be 142-202 MHz.³

5.12. Furthermore, it is noted that ICASA has stated its intention to prevent the IMT spectrum auction award from worsening the competitive situation in South Africa. For example, paragraph 32 of the competition assessment section of

² As mentioned earlier in this section, there will be 1015MHz of spectrum used for the provision of mobile services in South Africa post-auction, and not 935MHz as ICASA assumes in the Second IM.

³ This figure is derived from a market total of 1015MHz of spectrum, which includes 80 MHz of 3600-3800 MHz licensed to Rain, which is used to provide mobile broadband services and, as we argue in a later section of this response, should be incorporated by ICASA in its calculations for the purposes of assessing spectrum holdings against spectrum caps and MSPs.

the 2020 Reasons Document states: *“The forthcoming spectrum auction is not expected to solve the above wholesale and retail competition concerns in South Africa. However, the Authority is keenly aware of the need to prevent the auction award from worsening the competition concerns in mobile markets identified by the Authority. This is done by imposing appropriate obligations and spectrum caps prescribed in the ITA.”* Similarly, in the 2021 Reasons Document, ICASA states in paragraph 7.9 that: *“The opt-in process will serve to level the playing field and ensure that all successful bidders have minimum amount of spectrum to allow them to compete effectively. To allow the auction to proceed without first remedying this situation would compromise the Authority’s objectives to promote competition.”*

- 5.13. As a result, Cell C submits that the MSPs should ensure that, at the very least, the spectrum shares of MSP winners are no lower as a percentage of total IMT spectrum than the holdings of the smaller of the current Tier 2 operators (in terms of current spectrum holdings). At present this is Cell C, which holds 76 MHz of spectrum, representing a share of 12.5%. As a result, post-auction a credible operator should be required to hold at least 127 MHz of spectrum (12.5% of the 1015 MHz of total post-auction mobile spectrum).
- 5.14. Further evidence of the inadequacy of the current MSPs, is that they guarantee spectrum only on par with that of the WOAN operator (i.e., a total of 80MHz). However, the retail Mobile Network Operators (“MNOs”) require greater spectrum holdings than the WOAN in order to be credible given that they do not enjoy other forms of regulatory protection that the WOAN will enjoy. In particular, the WOAN, is guaranteed that 30% of its national capacity must be purchased by other licensees. This contributes materially to the overall credibility of the WOAN operator and therefore lowers the spectrum requirements for the WOAN operator to be credible. For other MNOs the spectrum requirements for credibility are higher and therefore the MSPs should be raised for other MNOs to reflect the credibility advantage of the WOAN.
- 5.15. In addition, Cell C notes Table 3 at paragraph 58 of the competition assessment section of the 2020 Reasons Document that *“The 3rd and 4th wholesale operators and the WOAN need a minimum sufficient sub-1GHz and mid-band (2.6 GHz, 2.3 GHz, 3.5 GHz) spectrum to be credible.”* Cell C currently holds no spectrum in any of these mid-bands and the MSPs as currently specified would allow it to bid on only up to 10 MHz of IMT spectrum in the 2.6 GHz band⁴ within the Opt-in round. Cell C therefore submits that 10 MHz does not constitute the “minimum sufficient mid-band” spectrum that Cell C requires in order to be credible.
- 5.16. Based on the above considerations, Cell C submits that the MSPs must contain more than 80 MHz of spectrum. An appropriate range would be between the 127 MHz that represents Cell C’s current share of mobile spectrum and the 142-202 MHz used by Ofcom, when converted to South African market equivalent terms. Conservatively, noting that ICASA is aiming for 5 credible

4 Or alternatively 2x5MHz in the 800MHz band, although this is not mid-band spectrum and so would still leave Cell C with no mid-band spectrum.

national wholesale operators in South Africa (including the WOAN), compared to 4 in the UK, a minimum amount of 130 MHz may be appropriate for the MSPs.

- 5.17. 130 MHz corresponds to approximately 13% of the total spectrum holdings post-IMT spectrum auction. This holding would likely be sufficient to prevent the worsening of the competitive situation in South Africa and is also, submitted, as being in-line with appropriately normalized international benchmarks, namely from the UK. Cell C therefore recommends that the two MSPs are defined as follows:

- 5.17.1. Portfolio 1: 2×10 MHz of sub-1 GHz spectrum + 110 MHz of spectrum above 1 GHz;
- 5.17.2. Portfolio 2: 2×15 MHz of sub-1 GHz spectrum + 90 MHz of spectrum above 1 GHz.⁵

6. IMT 700 and IMT 800

- 6.1. Cell C is of the view that sub-1GHz spectrum is of particular importance to MNOs and that ICASA is correct to seek to license the IMT700 (700 MHz) and IMT800 (800 MHz) bands for mobile services as soon as possible. At the same time, it is important that the availability and usability of these bands, together with any constraints on their use, is clearly understood by prospective licensees. Whilst Cell C therefore appreciates ICASA's ambition to license these bands as part of the upcoming IMT spectrum auction, some additional information and clarification is required from ICASA in order for these bands to be licensed effectively at this time.
- 6.2. Whilst Cell C understands that there are uncertainties regarding the digital migration process, in order for MNOs to accurately value the 700 MHz and 800 MHz spectrum, its expected availability must be set out as clearly and accurately as possible. We note that the paragraph 1.1.4 of the First IM states that *"Television broadcasting licensees licensed in the in the 694 to 862 MHz band will not be required to vacate any portion of their analogue spectrum assignments during their relevant licence period, other than as shall be determined by the Minister, in concurrence with ICASA, in the analogue switch-off in the digital migration process."*
- 6.3. First, Cell C notes that in its Second IM, ICASA has stated that *"the Minister has committed to complete the digital migration process by 31 March 2022"*. However, this process remains somewhat uncertain, in so far at least as ICASA contemplates that this deadline may not be met. **Cell C's recommendation** is that ICASA therefore in its (draft) ITA provide as follows:
 - 6.3.1. a clear articulation of any major uncertainties associated with completion of the process by 31 March 2022 and their expected impact on this timeline;

⁵ Portfolio 2 contains only 120 MHz of spectrum, but has a larger amount of sub-1GHz spectrum. In line with ICASA's current proposals, Cell C suggests reducing the amount of spectrum above 1GHz in this portfolio by 20 MHz relative to Portfolio 1 to offset the additional 10 MHz of sub-1GHz spectrum it contains.

- 6.3.2. a commitment to providing, following the IMT spectrum auction, frequent updates (e.g., monthly) on progress with the digital migration process and any updates to the prescribed timetable.
- 6.4. Second, it is vital for bidders to fully understand the amount that they may ultimately have to pay for spectrum, in order to make decisions on purchasing spectrum licences, raise finance and place bids in an auction. Paragraph 5.7 of the Second IM, states in paragraph 5.7⁶ that ICASA will: “*include the IMT700 and IMT800 bands in the licensing process*”. However: “*should this deadline not be met, the Authority will continue to license the IMT700, IMT800, IMT2600 and IMT3500 bands but the Authority will **consider the proportional payments** on the IMT700 and IMT800 based on the availability of these two bands.*” [our emphasis].
- 6.5. Whilst Cell C appreciates that there is some uncertainty over the timelines of the digital migration process, many of which may be beyond the control of ICASA, a clear framework for determining the amount to be paid (and other associated terms and conditions) is a clear pre-requisite to being able to sanction bids for spectrum licences in these bands.
- 6.6. Cell C therefore requests ICASA to elaborate on *exactly* how payment terms for 700 MHz and 800 MHz spectrum licences will change in the event of any delay to availability / usability of the spectrum relative to the timeline for concluding the digital migration process. This elaboration should include a detailed description of by how much payment amounts will be reduced due to any delay in spectrum availability, the timing of those payments and any impact on the applicable licence term, as well as under what precise circumstances these changes will be triggered. This second request for information is not dependent on a resolution to the timing and availability of the spectrum, merely that a certain set of facts will apply in the event of a delay.
- 6.7. **Cell C therefore recommends** that payment for 700 MHz and 800 MHz spectrum be delayed until after the spectrum becomes fully usable (nationally) by the new licensees, and that the final payment amount be reduced pro-rata from the winning bid amount in the auction in accordance with the remaining licence term at the date of first full usability. For example, if a winning bid is made for a twenty-year licence but a delay in the digital migration process means that the spectrum is not fully usable for the first two years of the licence term, then the total payment due should be reduced to 18/20ths of the original bid amount and payments should only commence from after the date of first full usability. This reduction in payment amount notwithstanding, the new licensee should be able to make partial use of the 700 MHz and 800 MHz spectrum, respecting technical conditions set by ICASA (as with the current temporary licences in these bands) until the spectrum becomes fully usable across the whole of South Africa.
- 6.8. With regard to delayed payment, Cell C notes paragraph 16.1.4 of the Second IM, where ICASA states that: “*for Lots acquired from the IMT700 and IMT800,*

6 Repeated in paragraphs 4.30 and 6.16 of the 2021 Reasons Document

*Auction Fee must be paid into the Authority's bank account within thirty (30) working days after the public announcement of the award process results by the Authority **proportionate to the geographic or population coverage as determined by the Authority.*** [our emphasis]. This statement is unclear to Cell C but seems to imply that a payment would be due at the same time as for 2.6 GHz and 3.5 GHz, but with some reduction in amount reflecting the proportion of the country in which the 700 MHz / 800 MHz spectrum can be used at that time. This approach seems flawed for two main reasons:

- 6.8.1. The proportion of the country in which the spectrum is useable may change, particularly as digital migration is completed, so an adjusted payment in advance would lack the flexibility to deal with this in a straightforward way
- 6.8.2. It is not the case that the value offered by 700 MHz and 800 MHz spectrum varies proportionally to the proportion of the country in which it can be used. The key driver of value for this spectrum is its extensive coverage characteristics. Without being able to use it in all locations a more than proportionate decrease in its value to a mobile operator would result.
- 6.9. As a result, **Cell C recommends** a simpler approach whereby operators can use the spectrum licensed to them to the extent possible without causing undue interference, but pay nothing for it until the digital migration process is completed and the spectrum is fully usable. At that point the payment should be a pro-rated amount based on the original winning bid in the auction and the proportion of the 20-year licence term that remains.
- 6.10. Third, bidders must be clear on the licence duration for the 700 MHz and 800 MHz spectrum. Paragraph 7 of the Second IM states that: *"a Licence is valid for twenty (20) years from the date of issue taking into consideration the residual analogue and digital television broadcasting service migration below 694 MHz band timescales in South Africa."* Cell C is unclear as to the meaning of this statement, and in particular whether the licence duration is in fact 20 years from the date of issue or 20 years from the conclusion of the digital migration process. **Cell C recommends** a licence of 20 years from the date of issue, with payment terms adjusted as suggested above in the event of a delay in the conclusion of the digital migration process.
- 6.11. Fourth, bidders must have a clear understanding of how spectrum interference will be managed and also have a clear view of any obligations incumbent upon them as licensees for spectrum in these bands. The Second IM does not further elaborate on paragraph 1.1.6 of the First IM, which states that *"prospective winners of the bands shall coordinate with the television broadcasting services licensees before utilising the spectrum, to ensure that television broadcasting services are protected in accordance with transitional arrangements during the digital migration period."* With respect, Cell C finds this statement to be ambiguous and has a number of questions in this regard:
 - 6.11.1. What form does ICASA envisage that this co-ordination should take?

- 6.11.2. How is interference to be determined?
- 6.11.3. In the event of conflicting views on the level of interference between broadcasters and mobile operators, what is the dispute resolution mechanism? Who decides?
- 6.11.4. What prevents broadcasters from stating (potentially without basis) that spectrum cannot be used by mobile operators in certain (or all) areas due to concerns over interference?
- 6.12. The above points notwithstanding, Cell C agrees with ICASA that including these bands within the current IMT spectrum auction is the correct approach. In paragraph 1.17 of the First IM ICASA contemplated not auctioning the 700 MHz and 800 MHz bands until the conclusion of the digital migration process. However, as ICASA noted in paragraph 1.18 of the First IM, there would be significant implications for the IMT spectrum licensing process (and for the WOAN licensing process) of following such an approach. Cell C accordingly holds the strong view that ICASA must remain firm in its stated intention *"to auction the IMT700 and IMT800 whilst the digital migration process is underway"* (Paragraph 1.17 of the First IM). ICASA's subsequent statements in the Second IM suggest that is no longer contemplating dropping these bands from the auction, but rather has now shifted its focus to how payment terms should be adjusted in the event of a delay to the conclusion of the digital migration process. Cell C agrees with this approach.
- 6.13. It is important that Cell C's suggestions above on clarity of timelines, revisions to payment terms and interference management are adhered to. If this is done, Cell C sees no fundamental reason why the auction of 700 MHz and 800 MHz spectrum cannot go ahead in parallel with the conclusion of the digital migration process. Moreover, it is important that these bands are auctioned at this time to avoid further delay in the licensing of these bands to MNOs.
- 6.14. Conversely, were ICASA still to contemplate not awarding the 700 MHz and 800 MHz bands until the conclusion of the digital migration process, Cell C has a number of questions and significant concerns:
 - 6.14.1. Under this approach, would ICASA still proceed with auctioning the 2.6 GHz and 3.5 GHz bands according to the existing timetable? It is vitally important that spectrum in these bands is made available as soon as possible. However, in the event that the 700 MHz and 800 MHz bands are excluded in a combined auction, how will ICASA's proposals in regard to the auction format and competition measures including the opt-in round and the spectrum caps change? Such a fundamental change to the IMT spectrum auction would be material and seem to require an updated Competition Assessment and auction design, which in Cell C's view would be likely to materially delay the process for auctioning the 2.6 GHz and 3.5 GHz as well as the 700 MHz and 800 MHz bands. This outcome would be highly undesirable and cause significant capacity problems for MNOs and adverse consequences for subscribers.

- 6.14.2. Furthermore, if the award of 700 MHz and 800 MHz spectrum were to be delayed pending the conclusion of the digital migration process, how would ICASA then ensure that the digital migration process concluded in a timely manner in order to allow for the (separate) auctioning of the 700 MHz and 800 MHz bands as soon as possible? Without the spectrum auction to expedite the process, Cell C is concerned that the digital migration process could drag on for many more years.

7. Opt-In Round

- 7.1. As set out above, Cell C agrees with ICASA in relation to the need for an Opt-in round in order to ensure five credible national wholesale operators (including the WOAN) following the conclusion of the IMT spectrum licensing process. Whilst Cell C submits that the definitions of the MSPs should be revised to reflect the fact that more spectrum than ICASA has specified will actually be required for credibility, the necessity of an Opt-in round involving MSPs is not in question.
- 7.2. Cell C notes that in the First IM, ICASA appeared to contemplate (as a secondary option) discarding the Opt-in round. This would have been of very significant concern to Cell C and would have appeared to run contrary to ICASA's own Competition Assessment which foresaw a need for an Opt-in round with spectrum floors in order to maintain 5 credible national wholesale operators, post-auction. Cell C has already commented on this aspect of the auction design within section 5 of this response document. Cell C is however pleased to see that ICASA, in the Second IM and 2021 Reasons Document (e.g. paragraph 7.9), has re-affirmed its commitment to the inclusion of the Opt-in round, which if run correctly and with updated (larger) MSPs should help to safeguard competition in the South African mobile market.
- 7.3. In relation to the effective running of the Opt-in round, it is of vital importance that the dynamics of bidding in the Opt-in round are clearly stated in order to be understood by all bidders (including those Tier 1 operators that will not be eligible to compete in this stage of the auction). In particular, bidders require a very clear understanding of the auction format, auction rules, available lots, eligibility of each bidder to bid on those lots, closing rules, winner determination and price determination before an auction process can be undertaken.
- 7.4. Cell C is pleased to see that the Second IM provides a much clearer explanation than was previously available from the First IM and the 2020 ITA (wherein the Opt-in round was not properly specified by ICASA). Nonetheless, some important gaps remain and clarity in relation to these is very important to bidders. Furthermore, Cell C believes that the design of this stage of the auction (as we currently understand it) is materially flawed in relation to winner determination and requires revision by ICASA.
- 7.5. Cell C therefore requests that, in order to avoid any ambiguity and uncertainties, ICASA:
- 7.5.1. sets out in detail the prescribed framework for the Opt-in auction round, including how this phase of the IMT spectrum auction will

work - for example, how much spectrum is each potential Opt-in bidder entitled to win, how would the bidding take place, how are winners going to be determined etc.?

- 7.5.2. provides detailed worked examples for this and the subsequent phase(s) of the IMT spectrum auction.
- 7.5.3. runs mock auctions for this phase and the (subsequent) main phase of the IMT spectrum auction
- 7.6. In the remainder of this section, Cell C highlights some key ambiguities relating to the design of the Opt-in round and explains the winner determination flaws that we have observed. Cell C's aim here is to illustrate to ICASA where some of the key uncertainties lie and exemplify the kind of information that ICASA needs to provide (at this stage) to bidders.

MSP definitions and eligibility of potential bidders

- 7.7. Portfolio 1 consists of 2×10 MHz of sub-1GHz spectrum and 60 MHz of spectrum above 1 GHz, whilst Portfolio 2 consists of 2×15 MHz of sub-1GHz spectrum and 40MHz of spectrum above 1 GHz, both inclusive of existing spectrum holdings.
 - 7.7.1. Could ICASA please confirm which bands below 1 GHz are included in calculating an operator's sub-1 GHz holdings for this purpose? In particular Cell C understands that Liquid Intelligent Technologies (formerly Liquid Telecom) 850 MHz holdings are included, but would appreciate confirmation of this.
 - 7.7.2. Could ICASA please confirm which bands above 1 GHz are included in calculating an operator's holdings above 1 GHz for this purpose? Table 1 in the 2021 Reasons Document states "IMT spectrum above 1 GHz", which appears to be a welcome update to the table in section 6.1 of the 2020 ITA (referenced in the First IM), which had suggested that only 1800 MHz, 2100 MHz and 2600 MHz bands are counted. ICASA therefore appears to correctly include 2300 MHz and 3400-3600 MHz, but in Cell C's view incorrectly excludes the 3600-3800 MHz held by Rain.
 - 7.7.3. Furthermore, to ensure transparency, could ICASA please confirm at the ITA stage how much each Tier 2 and sub-national wholesale operator is eligible to acquire during the Opt-in round? Paragraph 15.2.1 of the Second IM states that "*after the completion of the Qualification Stage, the Authority will notify each bidder regarding their eligibility to participate in the Opt-in Auction and the amount of spectrum in each frequency band that they are entitled to win under MSP 1 and under MSP 2*", However, there is no need for ICASA to wait until the Qualification Stage when this information can be published at the (draft) ITA stage, at least for Cell C, Telkom, Rain and Liquid Telecom, being the previous applicants that do not have Tier 1 status and therefore would be eligible to opt-in, should they elect to do so. Cell C's understanding of the current proposal is as

follows, with key dependencies on the assumptions that all IMT spectrum including the 850 MHz band and all holdings above 1 GHz (excluding the 3700 MHz) are counted⁷:

Operator	Portfolio 1		Portfolio 2	
	Sub-1GHz	Above 1GHz	Sub-1GHz	Above 1GHz
Cell C	0 MHz	10MHz	2×5 MHz	0 MHz
Telkom	2×10 MHz	0 MHz	2×15 MHz	0 MHz
Rain	2×10 MHz	10 MHz	2×15 MHz	0 MHz
Liquid Telecom	2×5 MHz	0 MHz	2×10 MHz	0 MHz

Figure 1: Summary of spectrum each eligible operator may bid for in the opt-in round (Source: Cell C, 2021)

Available lots

- 7.8. Paragraph 7.9 of the 2021 Reasons Document states that: *“In availing the spectrum for the opt in round, the Authority has to consider the applicants who meet the pre-qualification criteria and the total spectrum that would be necessary to assist the successful bidders to acquire the Minimum Spectrum Portfolio to establish them as credible players. The Authority has deliberately avoided predetermining these lots so to allow for flexibility in this regard. However, the Authority proposes to set aside IMT700 and IMT2600 for MSP 1. Whereas for MSP2, the Authority will set aside IMT800 and IMT2600”*.
- 7.9. Paragraph 15.2.8 of the Second IM states that: *“suppose that the Opt-In Auction assigns two packages, one for 2×10 MHz in the 700 MHz band and 20 MHz in the 2600 MHz band, and one for 2×5 MHz in the 800 MHz band. In this case, lots 3-4 (700 MHz), lots 20-23 (2600 MHz) and lot 8 (800 MHz) would be removed from the Main auction, as the equivalent spectrum has already been assigned”*.
- 7.10. In this context, Cell C requests for ICASA to please clarify which lots operators would be able to bid for in the Opt-in round to acquire enough spectrum to “make good” that licensee’s MSP? Contrary to the First IM (as described in paragraph 1.2.8) wherein the spectrum associated with each MSP was not specified, ICASA now appears to propose setting aside 700 MHz for MSP1 and 800 MHz for MSP2, with 2.6 GHz being allocated for both MSPs. Furthermore, ICASA appears in its example of paragraph 15.2.8 of the Second IM have specific lots within each band in mind for each MSP. Cell C is not aware of any stated reasoning for these choices and requests that ICASA provide such reasons and the opportunity for bidders to comment, since there are differences

⁷ Cell C assumes that itself and Rain would be eligible to bid for a 10 MHz block of spectrum above 1 GHz as part of Portfolio 1 because this is the smallest available lot size in the 2.6 GHz band, and each operator would in theory be eligible to acquire 6 MHz as a result of current holdings of 54 MHz each. i.e. 10 MHz is the smallest amount that would “make good” that bidder’s MSP.

between different lots within each band, and certainly between bands and bidders may have different preferences in this regard.

- 7.11. Taking these likely differences in preferences between bidders into account, **Cell C recommends** that:
 - 7.11.1. for sub-1 GHz, operators be able to choose to bid on either 700 MHz or 800 MHz lots; and
 - 7.11.2. for spectrum above 1 GHz, operators be able to choose to bid on either 2.6 GHz or 3.5 GHz.
- 7.12. Such an approach would be compatible with ICASA's existing auction format and rules, but would importantly provide the opportunity for each individual bidder to opt-in for spectrum that best reflects that bidder's preferences. This would contribute to a more efficient assignment of the spectrum, one of ICASA's stated objectives.
- 7.13. Cell C notes that in paragraph 6.4 of the Second IM, ICASA states that "*the bidder may bid for and acquire only the smallest amount of spectrum that would 'make good' that bidder's MSP*". However, with regard to spectrum above 1 GHz, if Cell C's suggestion above were adopted and bidders could opt for 3.5 GHz spectrum, it is important to specify that MNOs that are entitled to bid on a total of 6 MHz to 'make good' portfolio 1 are in fact eligible to bid on a single 10 MHz lot of either 2.6 GHz or 3.5 GHz. Cell C notes that although exactly 6 MHz could in theory be comprised of the (non-contiguous) 2 MHz and 4 MHz single lots within the 3.5 GHz bands, these bandwidths are not standardised for LTE or 5G-NR and are therefore of no use to any operator except the holders of existing licences adjacent to these blocks in the 3.5 GHz band (i.e., Telkom and Liquid Intelligent Technologies respectively).

Winner determination

- 7.14. An Opt-in round has the potential to be very complicated since different (potential) bidders appear to be able to bid on and win different amounts of spectrum. This makes a fair winner determination quite challenging. In this context, ICASA has set out its winner determination proposals in the Second IM, but Cell C sees two main issues with these current proposals, which we describe in further detail below:
 - 7.14.1. There is an inherent unfairness in determining the winners of MSPs based on the absolute premium offered over the reserve price when different bidders are able to bid on different amounts of spectrum (with different aggregate reserve prices). This could lead to an inefficient outcome.
 - 7.14.2. The sequential (rather than combinatorial) evaluation of bids, first for MSP1 and then for MSP2, may also lead to an inefficient outcome, including increasing the probability of unsold spectrum
- 7.15. Considering the first of the identified issues, and referring back to *Figure 1* (Paragraph 7.7.3), it can be seen that for MSP2, by way of example, Cell C would be eligible to bid for 2x5 MHz of spectrum in the 800 MHz band, whilst

Liquid Telecom could bid for 2×10 MHz and Telkom and Rain could each bid for 2×15 MHz. A new entrant meanwhile could theoretically bid on the full content of M-P2 - i.e. 2×15 MHz of 800 MHz plus 40 MHz of 2.6 GHz.

- 7.16. Since ICASA proposes to evaluate bids based on the absolute (aggregate) premium to reserve price, bidders that are eligible to bid for the least spectrum – in this case Cell C, and to a lesser extent Liquid – would be fundamentally disadvantaged against bidders eligible to bid for more spectrum, such as Telkom or Rain (or in the extreme case, a new entrant). To take an example, suppose (entirely hypothetically) that Cell C were to bid for MSP2 with a premium over reserve price of ZAR100 000 000. In this case, Telkom (or Rain) could bid with a premium of only ZAR33 400 000 per block and still have their bids ranked higher than Cell C's for the purposes of determining winners. This means that the operator valuing the block of spectrum most highly would not be the winner, which is by definition an inefficient outcome, contravening ICASA's stated objectives in relation to this spectrum assignment.
- 7.17. In the example above, Cell C's bid would have been 13.29% above reserve price, but Telkom or Rain would have been able to win MSP2 with a bid that was just 4.44% above reserve price. Moreover, a new entrant would have been able to bid at just 3.78% above the aggregate reserve price for 2×15 MHz of 800 MHz plus 40 MHz of 2.6 GHz in order to outbid Cell C.
- 7.18. For MSP1, where some bidders are eligible for only (cheaper) spectrum above 1 GHz, whilst others are (also) eligible for sub-1 GHz spectrum, the situation and potential inefficiency is even starker. Cell C understands that it is eligible under MSP1 to bid for a single 10 MHz block of 2.6 GHz spectrum, with a reserve price of ZAR97.8 million. Telkom on the other hand is able to bid on 2×10 MHz of 700 MHz spectrum, with a reserve price of ZAR1.05 billion, and Rain can bid on 2×10 MHz of 700 MHz plus 10 MHz of 2.6 GHz at an aggregate reserve price of ZAR1.15 billion. Suppose (again, entirely hypothetically) that Cell C made a large bid of double the reserve price – a 100% premium. In order to beat that bid, Telkom would have to bid just 9.5% above reserve price for the blocks for which it is eligible. Rain would only need to bid 8.5% above reserve price, and a new entrant just 6.0% above reserve.
- 7.19. It is clear that under this approach to winner determination that the deck is firmly stacked against bidders that are eligible for less spectrum under the opt-in rules, which in the case of both MSP1 and MSP2 appears to be Cell C. This approach to winner determination therefore greatly decreases Cell C's chances of winning an MSP vis-à-vis its competitors, without good reason. In fact, in the above examples it would have been more efficient to assign the spectrum to Cell C since it would have placed the highest bids for the same blocks of spectrum. Other bidders would simply be rewarded for being permitted to place bids on more blocks of spectrum.
- 7.20. **Cell C therefore recommends** a simple but significant change to ICASA's proposed winner determination rules for the Opt-in round. Whilst the bid forms can remain as ICASA intends, the evaluation of bids and determination of winners should be made on the basis of the **percentage premium above reserve price**, rather than the absolute premium. This approach would

promote ICASA's objective of efficiency of assignment, whilst resulting in no material change to the dynamics of the auction.

- 7.21. In relation to the second issue identified above, in paragraphs 15.2.6.1 and 15.2.6.2, ICASA states that: *"the Authority will rank all bids received for MSP 1 from highest to lowest. The highest ranked bid is the winning bid for MSP 1"* and *"the Authority will next rank all bids received for MSP 2 from highest to lowest, but discarding the bid submitted by the winner of MSP 1 (if any). The highest ranked bid is the winning bid for MSP 2"*. Cell C submits that this sequential, rather than combinatorial, approach to evaluation of bids – i.e. MSP1 first, and then M-P2 - may result in an unnecessary inefficiency in the assignment.
- 7.22. As an example, assume that there are two bidders in the Opt-in round, Bidder A and Bidder B. Now assume that Bidder A has a preference for MSP2, but is also willing to accept MSP1 and places bids on both MSPs with a premium of ZAR100 million on MSP1 and ZAR1 billion on MSP2. At the same time, assume that Bidder B is interested only in MSP1 and places a bid only for this MSP at a premium of ZAR90 million. Under ICASA's approach, MSP1 bids will be evaluated first and MSP1 will be awarded to Bidder A (bid premium of ZAR100 million beating Bidder B's bid premium of ZAR90 million). MSP2 is then evaluated, but there are no valid bids, because Bidder A has already won MSP1 and cannot win both MSPs. MSP2 therefore goes unsold.
- 7.23. This outcome is highly inefficient since MSP2 is unsold, whilst being Bidder A's strong preference. The winning bids have a total premium of just ZAR100 million. An alternative assignment, arrived at via evaluation of all bids for both MSPs in parallel, would have seen Bidder A assigned MSP2 and Bidder B assigned MSP1 at a total bid premium of ZAR1.09 billion. This would have been the efficient assignment.
- 7.24. Furthermore, in this example under ICASA's proposed rules Bidder A would have had to pay ZAR90 million for MSP1 whereas if Bidder B had also bid anything between ZAR100 000 and ZAR999 900 000 for MSP2, then Bidder A would have won their preferred MSP2 and the price would have been zero (excluding reserve prices). The latter outcome, which correctly reflects the opportunity costs of the spectrum, would also have been the outcome under Cell C's recommended approach (see below).
- 7.25. **Cell C therefore recommends** that bids in the Opt-in round are evaluated in parallel (combinatorially) rather than in series (sequentially). The combination of bids that leads to the highest total bid premium, subject to the rule that no bidder can win more than one MSP, should be selected as the winning bids. Or, if Cell C's other recommendation on using the percentage premium to evaluate bids is adopted then the highest percentage bid premium across each combination of bids should be evaluated and the combination with the highest percentage bid premium should be the winning bids.
- 7.26. Finally, Cell C notes that no provision appears to have been made for determining a winning bid in the event of a tie (which we note is less likely, though still possible, if bids are evaluated based on percentage bid premium).

As things stand, with bids rounded to the nearest ZAR100 000, a tie is perfectly possible and a clear process needs to be established for determining the winner in such a case.

Price determination

- 7.27. Clarification is required in relation to paragraph 15.2.6.3 of the Second IM, which states that: *“Each winning bidder must pay a price equal to the lower of (a) the bidder’s own winning bid; and (b) the highest bid for either MSP 1 or MSP 2 that was submitted by a bidder that did not win either MSP”*. In particular, it should be clarified that the amount payable should be zero in the event that either:
- 7.27.1. There is only 1 bidder in the Opt-in round - i.e. although there is no other bid from a bidder failing to win either MSP, the opportunity cost is zero and so a zero bid from a another losing bidder should be assumed so that the winning bidder is not required to pay the amount of their own winning bid; or
 - 7.27.2. There are 2 bidders that each win one of the MSPs – i.e. although there is no other bid from a bidder failing to win either MSP, the opportunity cost is again zero and so a zero bid from a another losing bidder should again be assumed so that the winning bidders are not required to pay the amount of their own winning bids.
- 7.28. Without these clarifications some non-sensical price determinations may occur. For example, suppose that Bidder A bids ZAR1 billion on MSP1 and Bidder B bids ZAR1 billion on MSP2 (with neither placing any other bids). Bidder A is awarded MSP1 and Bidder B MSP2, but under the current wording of paragraph 15.2.6.3, each bidder may be required to pay ZAR1 billion (plus the reserve price). Now suppose that Bidder C placed a bid of ZAR100 000 on either MSP, thereby increasing competition. The result would stay the same, but the prices payable by both Bidder A and Bidder B would drop to ZAR100 000. Clearly this makes no sense and in reality, without a bid from Bidder C, the price for both Bidder A (MSP1) and Bidder B (MSP2) should be zero, reflecting no opportunity cost. Bidder C’s intervention should then push the price for both MSPs up to ZAR100 000, reflecting the increase in opportunity cost.
- 7.29. Where a percentage bid premium approach is used for winner determination, the price for winning bidders could be set in an analogous way by applying the percentage bid premium placed by the highest losing bidder on top of the reserve price of the package won by the winning bidder.

Location and nature of the Opt-in round

- 7.30. In paragraph 15.10.1 of the Second IM, ICASA sets out that the Main Auction stage will be conducted using an *“online auction system run over standard Internet browsers”*, which will *“enable bidders to participate from their own location”*. However, for the Opt-in round of the auction, no specific reference is made as to whether the auction will also be conducted online. Paragraph 15.2.4 of the Second IM states that *“the Authority will prepare a bid form for each*

eligible Bidder to fill out and return to the Authority during the Opt-in Round", implying that it may be a paper-based format held in a centralised location. Could ICASA please clarify the location and nature of the Opt-in round?

8. Spectrum Caps

- 8.1. It appears to Cell C that spectrum caps are an extremely important component of ICASA's proposals for auctioning the IMT spectrum. These caps are important for safeguarding competition and preventing an excessive concentration of spectrum. Cell C takes the view that although the spectrum caps could be lower / tighter, ICASA has adequately provided reasons for its choices, subject to our comment in paragraph 5.7 of this response that the overall spectrum cap should revert from 187 MHz to 184 MHz.
- 8.2. Cell C however sees two areas in which refinement of ICASA's proposal is required:
 - 8.2.1. first, all spectrum that is used for IMT purposes, whether currently allocated for IMT or not, should be counted for the purposes of assessing spectrum holdings of existing licensees against these caps; and
 - 8.2.2. second, absolute consistency is required between assessments of spectrum holdings in relation to both the overall spectrum caps and for determining the eligibility of licensees to bid for additional spectrum in order to make up an MSP within the Opt-in round.
- 8.3. In relation to the first point, Cell C requests that ICASA clarifies precisely which spectrum bands count towards the spectrum caps. Cell C's understanding is that the following bands are currently considered to count towards the spectrum caps: 700 MHz, 800 MHz, 850 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2.3 GHz (2300-2400 MHz), 2.6 GHz and 3400-3600 MHz.
- 8.4. In addition, ICASA states in paragraph 8.9 of the 2021 Reasons Document that *"the Authority will thus not consider the 3600 – 3800 MHz band in calculating the spectrum caps in this licensing process"*. ICASA appears to base this conclusion on *"there being no guarantee that this band will be allocated to Mobile Services"*⁸ on a primary basis at WRC-23. However, this analysis appears to miss the key points, namely that:
 - 8.4.1. This band is already being used for Mobile Services in South Africa by Rain.
 - 8.4.2. This band is used throughout the rest of ITU Region 1 (i.e. Europe and the Middle East) for Mobile Services and moreover is considered by mobile operators to be part of the same band as the 3400-3600 MHz band, which does already have a formal IMT primary allocation. Indeed, in the UK where the 3400-3600 MHz and 3600-3800 MHz bands were assigned in separate auctions due to legacy services in the 3600-3800 MHz taking longer to clear,

8 2021 Reasons Document, paragraph 8.7.

ensuring contiguity in operator's holdings across the whole 3400-3800 MHz band has been one of Ofcom's key considerations. This is because 3600-3800 MHz is the same spectrum that is used for the same purpose in the same single carriers by MNOs as the 3400-3600 MHz band.

- 8.4.3. Although the IMT primary allocation at WRC-23 is unimportant to the long-term use of this band, which, as above, will be for Mobile Services, this band will duly receive the expected primary allocation at WRC-23 as it is recognised around the world (in Region 1 and beyond) as part of the key band for 5G services.
- 8.5. Cell C is therefore of the strong view that 3600-3800 MHz spectrum should be included for the purpose of calculating spectrum holdings and spectrum caps. Regardless of its current primary allocation and lack of IMT identification in South Africa, this spectrum is very much in use for providing mobile broadband services and is equivalent to the 3400-3600 MHz band spectrum that forms part of the IMT spectrum auction (and which explicitly does contribute towards the spectrum caps).
- 8.6. In fact, not including this spectrum for the purposes of calculating spectrum holdings and spectrum caps would confer a material competitive advantage upon licensees of spectrum in this band. Such licensees would be able to acquire IMT spectrum up to the 187 MHz cap specified by ICASA, whilst at the same time continuing to hold and use additional equivalent spectrum for the same purpose. This situation would have the potential to frustrate ICASA's well-intentioned objectives as regards protecting competition within the South African mobile market.
- 8.7. Cell C also notes that in paragraph 8.8 of the 2021 Reasons Document, ICASA states that: *"should the 3600 – 3800 MHz band be allocated to the Mobile Service and identified for IMT, the Authority will undertake a process to assess the spectrum assignments in the band to ensure that the spectrum cap is not exceeded by all licensees"*. Cell C requests that ICASA clarify the meaning of this statement. Does it for example mean that following WRC-23, ICASA will check whether Rain's total holdings including its 80 MHz in this band exceed 187 MHz, and if so, revoke Rain's licences for any excess spectrum above the cap? Whilst this would help to redress any breach of the spectrum caps by the end of 2023, and Cell C considers this a better approach than providing no solution at all, it seems an unnecessarily complex approach given that the 3600-3800 MHz spectrum is already in use by Rain for providing 5G Mobile Services. This spectrum should, very simply, be included for the purpose of calculating compliance with spectrum caps now and avoid handing a competitive advantage to Rain until the end of 2023.
- 8.8. In relation to the second point, consistency in assessing spectrum holdings for the purposes of spectrum caps and within the Opt-in round is also extremely important. The purpose of the MSPs within the Opt-in round is to define a minimum amount of spectrum that an MNO requires to be credible and allow for operators to acquire up to that amount of spectrum (including existing holdings) within the Opt-in round (without the prospect of being strategically

outbid by Tier 1 operators). However, if all relevant spectrum (including 3600-3800 MHz, but also all of the other bands set out in paragraph 8.3 of Cell C's response document) is not counted in making this assessment, then an MNO could conceivably emerge from the Opt-in round with more spectrum usable for mobile broadband purposes than defined by the MSPs.

- 8.9. Such a benefit would only be available to those operators holding relevant spectrum licences that are not counted as part of ICASA's assessment of eligibility to bid in the Opt-in round (e.g. spectrum in the 3600-3800 MHz band). This carries the risk of distorting competition within the Opt-in round.
- 8.10. ICASA should therefore ensure that the same approach is used to determine eligibility for spectrum in the Opt-in round as for determining compliance with the spectrum caps and ensure that this approach includes all spectrum that can be used for the provision of mobile broadband purposes (regardless of its current primary allocation of IMT identification status).

9. Roaming Agreements

- 9.1. In paragraph 5.27 of the 2021 Reasons Document, ICASA concludes that it *"does not find it appropriate to consider the spectrum capacity that is available to MTN and Vodacom through the spectrum sharing agreements as an accretion in their total spectrum holdings"*. Cell C understands that ICASA reaches this conclusion on the basis of its MBSI findings, where it determined that roaming agreements are not exclusive, that the roaming providers are also able to use their licensed spectrum to serve their own customers (i.e. the agreements are not equivalent to spectrum licensing) and there are several pro-competitive effects, including affording roaming providers greater bargaining power with Tier 1 MNOs in relation to e.g. site access, managed services agreements etc. Cell C agrees with ICASA and supports these conclusions.

10. Timetable of Key Activities (including Mock Auctions)

- 10.1. Cell C observes that a timeline for Key Activities associated with the IMT spectrum auction was provided by ICASA in paragraph 12 of the First IM. No update has been provided to this timetable in the Second IM. Cell C notes that the timelines for the Key Activities as contained in paragraph 12 of the First IM as part of the outline of the process that ICASA intends to embark may be unachievable. **Cell C recommends that the timeline requires review and the inclusion of some form of flexibility.** We submit this for the following main reasons:
 - 10.1.1. There are many sub-activities within a Key Activity. For example, in relation to Key Activity 9, Start of the Auction process, it is envisaged that a mock auction would take place prior to the main IMT spectrum auction. However, no further information is provided as to when the mock auction(s) begin(s) and end(s) and the start and end of the main auction. It would be helpful for the bidders to understand these processes and timelines in order to adequately prepare for these activities.

- 10.1.2. There is a risk that ICASA may miss some of the stated timelines. For example, the time allocated between announcement of qualified bidders (21 February 2022) and the auction beginning, even if only as a mock auction (1 March 2022) is not sufficient time for a proper development of the specification of this stage of the auction, for bidders to understand and raise their concern on these specifications and then for ICASA to arrange and carry out a mock auction.
- 10.1.3. ICASA states in paragraph 15.2.2 of the Second IM that it will “*give each eligible bidder at least 24 hours prior notice before the start of the Opt-in Round*”. Cell C submits that 24 hours is insufficient notice to start a major spectrum auction and the start date must be clearly set out further in advance, which means that a greater delay between the mock auction and the commencement of the Opt-in round is likely to be required in practice.
- 10.1.4. ICASA has given itself eight (8) business days between Key Activity 5, Closing date for written comments for the 2nd IM and Key Activity 6, Publication of the ITA as amended. Considering the importance of these key activities to both industry and ICASA, it is more likely that ICASA will receive substantial written responses from the industry as input to the process and then ICASA will require time to apply its mind on these responses and thereafter finalise the amended ITA. This process may require more than the envisaged time and administrative justice requirements may well necessitate further time which if not afforded, may compromise ICASA in its decision making in finalizing the amended ITA.
- 10.1.5. After this consultation process and the consultation process on the 2nd IM, there may arise a need to include an additional Key Activity. In particular, it is Cell C’s recommendation that ICASA publish a draft ITA for written comments, this will then make the proposed Key Activity timetable even more stringent.
- 10.2. Cell C also notes from Annex B to the First IM that many Key Activities associated with the WOAN licensing process will overlap with Key Activities related to the IMT spectrum licensing process. Whilst this is to some extent inevitable and requires management by industry stakeholders, there are some intense periods of activity that will require 100% focus. For example, whilst the auction for IMT spectrum is underway it will not be possible for key MNO staff to attend public workshops relating to the WOAN licensing process. These workshops are currently scheduled for 15 March 2022, at which time it is quite likely that the IMT spectrum auction remains in progress.
- 10.3. Cell C refers ICASA to the GSMA auction best practice guide which is accessible at <https://www.gsma.com/spectrum/wp-content/uploads/2021/09/Auction-Best-Practice.pdf> as matters for further guidance and consideration by ICASA in relation to the IMT spectrum auction.

11. Other Issues Arising

There are various further questions that arise in relation to the Second IM and preceding documents, which Cell C outlines below. Some of these questions relate to points from the 2020 ITA, which have not as yet been satisfactorily clarified by ICASA and on which the First IM and Second IM are silent. In this section Cell C briefly articulates some of these areas and the clarifications that are required.

11.1. WOAN capacity offtake

Within paragraph 11.4.1 of the Second IM, ICASA indicates that winning bidders in the IMT spectrum auction “*shall procure a minimum of 30% national capacity from the WOAN*”. However, the definition of the 30% capacity offtake requirement from the WOAN remains unclear to Cell C. In particular, the following questions arise:

- 11.1.1. Can ICASA please clarify whether this 30% of national capacity relates to 30% of the capacity on the WOAN or 30% of the total capacity requirement of the purchaser (e.g. Cell C)?
- 11.1.2. Whilst Cell C assumes that 30% of the WOAN's total capacity is intended, this will be a constantly changing amount as the WOAN expands. How therefore does ICASA propose that compliance with this obligation is measured and how regularly will mobile operators be required to revise the amount of capacity they purchase from the WOAN?
- 11.1.3. Is the 30% of capacity to be measured nationally or on a site-by-site basis? For example, if the WOAN operates 10 sites, will licensees of IMT spectrum be (collectively) required to procure at least 30% of capacity from each site or just 30% of the total capacity, which could for example consist of all of the capacity at 3 sites and none of the capacity at the other 7 sites?

11.2. Unsold lots and assignment of specific frequencies

- 11.2.1. Can ICASA please clarify how specific frequencies will be assigned to winning bidders? Paragraph 15.1.7 of the Second IM states that: “*Winning bidders will take turns to pick contiguous frequency blocks, with the order determined by their winning bid amounts*” and states that “*the rules for the Frequency Assignment Phase are set out in section 15.12*”. However, paragraph 15.12.1 adds only that: “*Whenever feasible, it is the Authority's intention that all winning Bidders be assigned contiguous spectrum within each spectrum band. Further information about the procedure will be provided to qualified bidders before the Auction*”.
- 11.2.1.1. There is therefore significant ambiguity over how the assignment phase of the auction will work in practice. For example, where a bidder acquires multiple blocks, how is the winning bid amount determined for comparison purposes? Is it the average bid amount per

block within the band, or is it the total amount (which would mean that bidders are highly likely to be ranked in order of how many blocks they purchase)?

11.2.1.2. Irrespective of the details of the process for ranking winning bids, the approach of defining the order of selection of frequencies based on winning bid amount is open to spoiling tactics. For example, the purchasers of the 2 MHz and 4 MHz blocks in the 3.5 GHz band may seek contiguity with existing holdings in the band but this option may be taken away by another bidder with a higher winning bid from the main auction stage.

11.2.1.3. Allowing bidders to agree an assignment plan, or failing that resorting to a second price sealed bid assignment stage would be preferable and afford greater certainty (or at least control over one's own destiny) to bidders.

11.2.2. In addition, ICASA indicates in paragraph 17.18.1 of the 2020 ITA that unsold lots will be auctioned during an unsold lots round, which according to paragraph 17.18.3 will have the same rules as the main bid rounds. However, if a lot is unsold in the main stage of the auction then it must have failed to attract a reserve price bid. On that basis, without any reduction in reserve price, unsold lots would presumably go unsold once again in the unsold lots round (unless a bidder changes their mind only after the entire main stage of the auction is complete). Can ICASA please clarify the intention behind this round and whether any rule changes, such as a reduction in reserve prices, would be appropriate in order to clear unsold lots?

11.3. Bid options

In paragraph 15.4.3.3 of the Second IM, ICASA states that it *"is minded to start with bid increment options of 10%, 15% and 20% of the Standing High Bid on each Lot"* but that *"It may introduce other bid increments later"*. Cell C submits that these are high increments to begin the auction with. Instead, ICASA should begin with lower bid increments (e.g. below 5%) and assess the aggregate demand and whether there is frequently a need for tie breaks on maximum bids, and if so increase the increment in subsequent rounds. These increments can then be decreased once again later in the auction, as ICASA originally envisaged.

11.4. Reserve prices

ICASA notes the risks of high reserve prices in paragraph 7 of the spectrum valuation section of its 2020 Reasons Document. Whilst ICASA has explained the rationale for its reserve price choices, which persist in the Second IM and 2021 Reasons Document (paragraph 6.20), these were based on analysis of valuation and international benchmarks conducted prior to the COVID-19 pandemic and resulting economic downturn. Cell C requests that ICASA reconsiders whether, in light of these developments, a reduction in the previously published reserve prices is now appropriate.

11.5. Speed and coverage obligations

- 11.5.1. In paragraph 11.1.1 of the Second IM, ICASA states that a 5Mbit/s cell edge throughput obligation applies *“for all national wholesalers who are awarded radio frequency spectrum licenses on spectrum band(s) IMT700 and/or IMT800 within five (5) years of licence issue”*. It goes on in the same paragraph to add that *“this obligation must be achieved with IMT bands (i.e. IMT2600, and IMT3500) assigned through this licensing process and any other assigned IMT spectrum prior to this process”*. Cell C’s interpretation of this statement is that if an operator acquires licences in the 700 MHz or 800 MHz bands then it will be subject to the throughput obligation in relation to any IMT band it acquires (including 2.6 GHz and 3.5 GHz) or previously holds a licence for. However, if an operator purchases spectrum in only the 2.6 GHz and /or 3.5 GHz bands (and not in the 700 MHz or 800 MHz bands), then no throughput obligation would apply to any spectrum acquired or previously held. Cell C requests ICASA to please confirm that this interpretation is correct?
- 11.5.2. Cell C notes where sub-1 GHz spectrum is being used, an operator cannot, in Cell C’s view, achieve the throughput obligation of 5Mbit/s at the cell edge with the 2.6 GHz and 3.5 GHz bands unless it constrains the cell size and loses some of the advantages of the sub-1 GHz spectrum. Cell C therefore urges ICASA as part of its clarification of paragraph 11.1.1 of the Second IM to ensure that the 2.6 GHz and 3.5 GHz bands are excluded from this obligation, regardless of whether an operator acquires 700 MHz / 800 MHz spectrum or not, or alternatively to clarify that the cell edge can be interpreted as being a different distance from the cell for each band (i.e. the cell size is smaller for 2.6 GHz or 3.5 GHz than it is for 700 MHz or 800 MHz)..
- 11.5.3. In paragraph 11.2.3 of the Second IM, ICASA states that *“In respect of 700MHz or 800MHz licenses”* awarded to operators categorised as Tier-2: *“operators that cover less than 80% of the population with IMT services must expand such coverage to at least 80% of the population in general across South Africa, including Batch 1 and Batch 2 areas in accordance with their commercial interest.”* In this regard, Cell C requests that ICASA clarify the required quality of service to constitute “coverage” (i.e. is coverage defined by the same 5Mbit/s throughput obligation at the cell edge as applies generally based on paragraph 11.1.1. of the Second IM?).
- 11.5.4. Based on paragraph 11 of the Second IM (and paragraph 9.3 of the 2021 Reasons Document), Cell C understands that no throughput or coverage obligation would apply until 5 years after the digital migration process has completed, Can ICASA please confirm that this understanding is correct?

11.6. Spectrum sharing

- 11.6.1. In paragraph 11.6.2 of the Second IM, ICASA states that spectrum sharing obligations will apply “in cases where the spectrum is not fully utilised by the licensee”. Can ICASA please clarify (and provide) the definition of “fully utilised”?
- 11.6.2. Cell C submits that spectrum sharing regulated in terms of Radio Frequency Spectrum Regulations of 2015 should be permitted for the IMT spectrum bands currently licensed, ensuring efficiencies in spectrum usage and a higher quality of digital services are offered to more consumers in line with the objectives of the ECA, 2005.

11.7. Independent auditor

ICASA states in the Second IM that an independent auditor will be appointed to oversee the auction process. In paragraph 15.14.2 ICASA states that “*the auditor will be permitted access to all the activities of each Bidder*”. Could ICASA please clarify the meaning of this statement? For example, does it refer to bidding activity (i.e. data able to be obtained from the online bidding platform), or to some other meaning of the word “activity”?

12. Conclusion

- 12.1. Cell C re-iterates its view as to the significance of the IMT spectrum auction process to the SA Connect objectives and the provision of quality national mobile broadband wireless services. This submission was made in an effort to assist ICASA in its process management in a manner that will consider the needs of all licensees and likely participants in the process.
- 12.2. Once again, we re-state the importance of avoiding further procedural delays and ensuring the auction is run as per the revised schedule, or with only minor revisions to reflect Cell C’s comments around the timing of Key Activities. This can only be done with the assistance of all players and consultation and engagement must remain a priority, along with the flexibility required to give due consideration to the inputs such that the Key Activity timelines are met. Similarly, Cell C re-iterates the value of the work done thus far on the competitive dynamics in the mobile broadband services market and such work must inform the mechanisms envisaged, such as the Opt-in round, which remains a crucial lever for competition and sustainability in the market.
- 12.3. Cell C is mindful of the challenges ICASA faces, including but not limited to those implicit in the digital migration process. We, however, urge ICASA to draw on its mandate of independent regulation in the public interest, to create as much certainty as possible where it can, in the event of any further delays to the usability of IMT spectrum. This includes a sound and sustainable auction design, timelines and the necessary elucidation for licensees on current and legacy questions from the First IM and 2020 ITA.
- 12.4. Cell C thanks ICASA for its renewed efforts thus far and remains available to offer any clarification required whilst we await participation in the next stage of

the process, which we suggest is a draft of the ITA. We wish ICASA well in its deliberations for the next stage of this process.
