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Dear Sir

INFORMATION MEMORANDUM FOR RADIO FREQUENCY SPECTRUM PROSPECTIVE LICENCE TO PROVIDE MOBILE BROADBAND WIRELESS ACCESS SERVICES FOR URBAN AND RURAL AREAS USING THE COMPLIMENTARY BANDS (700MHz; 800mhz & 2600MHz)

The above Information Memorandum has reference. Attached are Cell C's written comments for consideration by the Authority. Cell C confirms its readiness to participate in any subsequent consultations that might be envisaged by the Authority.

Cell C recommends, as will be set out in our submission, that further consultations are held on this critically important topic, to find the best way forward in the circumstances, namely the availability of spectrum right now, the delay in digital migration, and the need for additional capacity to meet demand for high speed broadband services in the country.

We trust that you find the above in order.

Yours faithfully

Zolile Ntswana
Executive Head: Regulatory Affairs

SUBMISSION

BY

CELL C (Pty) Limited

ON

**ICASA'S INFORMATION MEMORANDUM FOR RADIO FREQUENCY RADIO
FREQUENCY SPECTRUM PROSPECTIVE LICENCE TO PROVIDE MOBILE
BROADBAND WIRELESS ACCESS SERVICES FOR URBAN AND RURAL AREAS
USING THE COMPLIMENTARY BANDS (700MHz; 800mhZ & 2600MhZ)**

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1. INTRODUCTION

Cell C appreciates the opportunity to provide written comments on the Information Memorandum for Radio Frequency Spectrum Prospective Licences for the provision of national mobile broadband wireless access services using the 700MHz, 800MHz and 2600MHz bands.

Spectrum is a scarce resource and considered to be extremely valuable worldwide. The growth in demand for high speed data is also a worldwide phenomenon. Operators must either increase capacity on their networks by spending significant amounts of money on building more sites (which is difficult in an ever more built up environment, and in light of environmental concerns), or acquire more spectrum.

The International Telecommunications Union (ITU) continues to examine options for allocating spectrum for services in demand, such as data. For the time being, 4G services (the technology enabling high speed data as we will explain below) can be provided over a number of bands including the 1800MHz and 2100MHz bands which are available in South Africa. These services can also be offered over bands in the 800MHz range, which are less available as part of this band is currently in use by broadcasters. Other bands that may be used for 4G or LTE services include the 700MHz band and the 2600MHz band.

Cell C is intent on deploying innovative, high quality services over its network and to this end, has an interest in the method, cost and timing of the allocation of scarce national resources such as radio frequency spectrum (spectrum). We are naturally also interested in the process by which competing interests might be assessed where demand exceeds the availability of this resource.

Cell C does, however, have some significant concerns about the document published by the Authority. These are set out below in the following categories:

- Specific concerns
 - Policy and proper process
 - Objectives of spectrum licensing
 - Spectrum licensing approach
- General concerns

2. SPECIFIC CONCERNS

2.1 Policy and proper process

The Minister of Telecommunications and Postal Services (“Minister”) is the custodian of all spectrum as a national resource. It is sensible and proper that the Minister would determine, by national policy, how best the allocation and award of spectrum might achieve national goals. This is also anticipated in section 3 of the EC Act which deals with policy directions specifically concerning radio frequency spectrum.

In a speech on 7 September 2015¹, the Minister stated that *“government will finalise its policy on the allocation of new radio frequency spectrum for broadband within the next six months, with a final policy document to be published by no later than the end of the financial year, in March 2016, allowing communications regulator Icasa to go ahead with licensing access to telecommunications operators”*.

However, the existing National Radio Frequency Spectrum Policy of 2010 (“**Spectrum Policy**”) and the goals of the existing National Broadband Policy of 2013 (“**SA Connect**”) find no expression in the Information Memorandum. Amongst other things, the Spectrum Policy aims to:

- promote the rational, economical, efficient and effective usage of spectrum, keeping pace with the rapid evolution of wireless technologies and services within the framework of government strategic objectives
- provide guidance on the allocation of frequencies to different RF services in the country
- contribute to the promotion of national interests, development and diversity, including increasing the amount of spectrum available for assignment, improving sharing conditions among services and increasing the number of licences dedicated to community radio and tv broadcasting services

¹ <http://www.techcentral.co.za/?s=I+will+fix+telecoms+dep%27t+Cwele&x=6&y=9>

- ensure a co-ordinated and harmonized national approach to spectrum usage, set conditions for the availability and efficient use of radio spectrum by various services to support specific national objectives and to provide a greater degree of predictability and certainty to current and future stakeholders in the use of the spectrum.

There is thus a policy gap between the Authority's proposals on the one hand, and SA Connect and the spectrum policy on the other.

In Cell C's view, any award of high demand spectrum by any mechanism must give effect to national goals and a specific policy direction from the Minister. Cell C made these points along with other respondents in the 2011/2012 consultation on the Authority's Invitation to Apply (ITA), at the same time as it made extensive comments in response to the then Minister of Communications' draft Policy Directive, also dated December 2011. The Authority subsequently withdrew its ITA, which suggests that the Authority was in agreement with the requirements of proper process.

The publication by the Authority of an "Information Memorandum" does not constitute an invitation to apply (for a licence), or a consultation document, or even a draft regulation. We are actually unclear on the exact purpose or nature of the document, save that it contains some, but very limited, insights into the Authority's current thinking on methodology for the allocation of high demand spectrum. The Information Memorandum does not address timing, or how it links to the Ministerial policy directions.

We also cannot find any indication that ICASA has considered the alternatives to auctions. Beauty contests (competitive licensing) are also a viable option, as they are an equally and perhaps more so, effective manner of determining which applicants should be granted access to spectrum. Selection criteria can be applied to determine the candidate best-suited to receive high demand spectrum, and might include:

- Rollout and coverage undertakings
- Quality of service
- Proposals for efficient use of frequency
- Financial and technical qualifications and strength

The treatment of spectrum is a matter of such great national importance that we consider that the development of an appropriate award framework requires a significant amount of careful

consideration. This process could and ought to have begun some time ago and now ought not to be rushed in the interests of "getting it done". It would be very helpful to have insight into the timing of the migration of frequency from the 700 and 800MHz bands for purposes of broadband services. The Authority's relationship with the Department of Telecommunications and Postal Services ("DTPS") ought to make this possible. This is in our view, a glaring omission.

It would also be helpful for the Authority to use the time while it waits for a policy direction, to examine in more detail, the concepts of sharing and leasing of spectrum as this could perhaps ameliorate the spectrum constraints faced by the industry, which have been exacerbated with the long delay in awarding high demand spectrum. Cell C recommends that the Authority conduct research into the typical approach to sharing, leasing and trading and the perceived need for this in South Africa and publish the results, and evaluate the benefits and challenges in a public consultation as soon as possible.

2.2 Objectives of spectrum licensing

The Authority, in its Information Memorandum outlines the following objectives as underlining its intended auctioning of spectrum:

- Increasing universal service and access by ensuring rural connectivity
- Giving consumers more choice
- Introducing a wholesale open access network
- Promote investment in the ICT Sector
- Ensure quality of service and experience
- Ensure affordability of services

Cell C views the above objectives as being noble but they fall short of the primary goal of the release of spectrum at this time in South Africa. Cell C submits that the primary goal of spectrum policy and auctions should be economic efficiency; i.e. to put spectrum to its best use and to meet consumer demand in a way that is affordable and equitable.

The approach and objectives articulated by the Authority, unfortunately, seem to point towards awarding spectrum to the highest bidders by way of auction. This may fail to assure economic efficiency because the bidders' private valuation of the spectrum on offer may differ from

social values given the skewed market structure in the ICT sector in South Africa. The duopoly of Vodacom and MTN that controls at least 85% of all revenue in the mobile sector obviously has the deepest pockets, and will be able to afford to pay the highest price on auction. Smaller players such as Cell C and new entrants are unlikely to be able to compete on price for valuable spectrum bands at auction.

Such an approach will give effect neither to national goals as they are expressed in the national policy documents referred to above (the Spectrum Policy and SA Connect) nor to section 2 of the EC Act. In particular, such an approach will not promote competition as is required by section 2(f). Other subsections that are relevant are sections 2(k) (*ensure that broadcasting services and electronic communications services, viewed collectively, are provided by persons or groups of persons from a diverse range of communities in the Republic*), 2(m) (*ensure the provision of a variety of quality electronic communications services at reasonable prices*), 2(n) (*promote the interests of consumers with regard to the price, quality and variety of electronic communications services*) and 2(z) (*promote stability in the ICT sector*).

We also see little attention being paid to the concept of “the public interest” in this draft document. Proper consideration needs to be given to the powers and duties of ICASA to act “*in the public interest*” as this is an overriding obligation on ICASA under the ICASA Act and EC Act. Any document published by the Authority ought to have this front of mind. An auction with the intention to raise the greatest amount of money would not, in our view, be fulfilling the Authority’s mandate to act in the public interest. We expand on this view in the following section.

2.3 Spectrum licensing approach

Cell C agrees that auctions have emerged as a very common means of assigning spectrum licences to companies wishing to provide wireless communication services. With a well-designed auction, there is a strong tendency for the licences to go to the parties that value them the most, and the national fiscus can obtain a boost to revenues in the process. Cell C hopes, however, that ICASA has asked and adequately answered the question: “*Who should get the spectrum and at what price?*” given the very specific market circumstances in which an award of any kind would now take place.



However, Cell C is of the view that, despite certain virtues, any form of auction in the South African market as it stands may, at best, ensure that the bidder with the highest private value wins, rather than the bidder with the highest social value. Private and social values can diverge in these auctions because the winners are usually already competing in a marketplace. One collection of winners may lead to a more collusive industry structure. For example, a licence may be worth more to a dominant market player than to a small player or a new entrant, simply because of the greater market power the dominant market player would enjoy without the new entrant. In light of this, it is appropriate to exercise discretion as to the amount of spectrum any one operator is entitled to hold.

Spectrum auctions, by their very nature, raise revenue for the fiscus. However, maximising revenues is likely to conflict with the goal of creating a competitive market for wireless services and at the same time, ensuring national coverage at reasonable prices for consumers. This follows because having paid a high price for spectrum, the winning bidders may struggle to finance the rollout of a national LTE network, or to fulfil universal service obligations that involve coverage. So whilst the auctioning of spectrum to MTN and Vodacom, for argument's sake, would raise far more revenue than selling licences to many smaller licensees, in Cell C's view, this would be ultimately to the detriment of post-auction competition and efficiency. We expand on this view below.

The Authority has approved Vodacom's acquisition of Neotel. As a result, and as is being argued before the Competition Tribunal right now, this acquisition would result in Vodacom having a significant spectrum advantage over its competitors because it would have access to Neotel's 800 MHz, 1800MHz and 3500MHz spectrum. Vodacom has already begun using its existing 1800MHz spectrum allocation for 4G services, by re-farming its 2G spectrum. Post-merger, Vodacom would have double the bandwidth of any competitor in the 1800MHz band. This would enable it to offer higher average mobile broadband capacity and speeds over its 4G network without having to compromise the capacity and quality of its 2G and 3G networks. Since it has already started rolling out 4G in the 1800MHz band, this could be implemented very quickly. Vodacom would also gain a high flexibility of how to use the 1800MHz carriers, while other operators would either have to build additional sites or continue to re-farm 2G or 3G spectrum, and even then they would not be able to match Vodacom's 4G speeds. As a consequence, Vodacom would get both a first-mover advantage and be able to offer a



superior service. These advantages would not be redressed by the proposed award of 4G spectrum for the reasons we set out below.

First, the 1800MHz band provided particular advantages for an LTE roll-out. Since there is more bandwidth available than in the lower frequency bands, such as the 700MHz and 800MHz bands that are due to be made available by ICASA, it allows for the deployment of wider frequency carriers, which directly affects the network speed. The high popularity of the 1800MHz band for LTE internationally also means that it has the highest number of 4G compatible devices (e.g. almost double the number of 800MHz devices). Other operators will not have the opportunity to gain access to additional 1800MHz spectrum.

Second, the spectrum bands to be made available are not currently used by any operator. In order to deploy 4G services in those bands, the network will have to be upgraded, which is costly and time-consuming. Furthermore, this investment can only start once an operator has certainty about which band(s) they will get access to, which will further delay the eventual launch of 4G services in that band.

Third, it is highly likely that Vodacom would acquire one of the three largest lots (B, C and D), if it is not prevented from participating in the award process, which would mean that it would continue to hold more spectrum than its competitors.

Fourth, the coverage obligations as currently proposed must be met by each of the 3 largest spectrum package holders (i.e. B, C and D) rather than being an obligation on one operator only or shared amongst operators. Hence operators do not have the opportunity to reflect the cost of meeting the rollout obligation in their bids (since all operators must achieve the same targets, and so any one operator reducing its bid price to reflect a coverage obligation cost, risks being out-bid by another player). It is also unusual for a coverage obligation on underserved areas to be applied equally on three different operators (since each operator is likely to be starting their 4G rollout from a different base of 2G/3G cell sites, and so the cost of building new sites to achieve the obligation will differ between the different operators). Cell C understands that in most markets worldwide where coverage obligations have been applied, the obligation has tended to either be placed on one operator, or shared amongst operators (such that at least one operator covers any one area)



Fifth, Specifically, and in contrast to other regulators worldwide, there are no measures within the proposed award mechanism aimed at ensuring a fair distribution of spectrum or to address competition issues, namely spectrum caps or an equivalent measure (e.g. spectrum floors as used in the UK, which ensured that the available spectrum was divided in a fair manner amongst a minimum of 4 operators).

The points above suggest that the proposed award mechanism in the Information Memorandum is unusual when considered in the context of international 4G spectrum awards where many regulators have tried to include various measures to address competition issues and to ensure a fair distribution of spectrum in the 4G market. In some markets, specific measures have been put in place to ensure weaker competitors (e.g. more recent market entrants, or 3G-only operators) can gain a minimum amount of 4G spectrum, such as in the UK. In other markets, regulators have also attempted to attract new 4G entrants by setting aside spectrum for this purpose.

As a consequence, the net result could be a two-tiered market that will prevail into the medium/long term, with Vodacom being in an advantageous position in terms of higher average 3G/4G mobile broadband speed and capacity than other market competitors – with very little real competition in this market as a result.

A key point to note in the South African context is that with consumer expectations evolving, higher speed data services are becoming a required part of operator portfolios. Hence operators that cannot meet customer expectations with respect to data are likely to suffer increased churn to competitors who are able to provide these services. In South Africa, this will mean that Vodacom, with a superior 4G network offering, is able to easily differentiate itself and further increase its already significant subscriber and revenue market share and its competitors are at risk of falling behind in their ability to offer comparable higher speed data services. This sort of competitive advantage is virtually impossible to replicate or match in the short to medium term.

It would not have been unusual and in fact it would have been appropriate in our view, for the Authority to have sought to address the imbalance in competition in the market currently, in this draft of the proposed award process particularly in view of Vodacom's dominance, and the fact that the draft Information Memorandum followed the announcement of the acquisition by Vodacom of Neotel (and hence the accretion of spectrum to Vodacom). The proposed award represents a chance to level the playing field.

Cell C believes that there are a number of other instruments available to the Authority to address competition issues in both the spectrum auction and downstream markets for wireless services. These could include the following:

- Set-asides
- Bidding credits
- Spectrum caps
- The band plan
- The auction format
- Detailed review of mergers involving spectrum transfers.

The effective award of spectrum by the Authority to Vodacom from Neotel is manifestly unfair and not pro-competitive. For this reason, Cell C has taken the Authority's decision in this regard on review, which is set down in the High Court in November 2015. Unfortunately the Information Memorandum as currently drafted does nothing to improve the anti-competitive effects of the Authority's decision.

2.4 General concerns

2.4.1. Lack of information necessary to make an informed decision

The Authority's Information Memorandum does not contain sufficient information that would be material to successful participation by potential bidders. Cell C (and no doubt other operators) will be using consultants and a degree of certainty in the arrangements would be necessary well ahead of the time. The only certainty that Cell C has is that the proposed auction will be held using the SMRA format. Assuming that an auction is the preferred method of award (despite our concerns in this regard), Cell C would expect any subsequent document to reflect the following (without limitation):

- A qualification round should take place beforehand. For example, is Vodacom eligible for participation when it has, in terms of the Authority's own approval process potentially gained access to spectrum from Neotel?
- Payment mechanisms for participants and winners should be made clear before the auction begins to allow bidders to make the appropriate funding arrangements.



- Post-auction treatment of spectrum obtained should be made clear to prevent speculative bids. The "use it or lose it" principle should apply with clearly defined timeframes.
- The reserve prices for each auction lot must be disclosed before the auction begins and the Authority should disclose how the reserve price was determined, e.g. was there a benchmarking exercise or was the price determined by a mathematical formula?

2.4.2 Inconsistency in awards of high demand spectrum

Cell C notes with concern that the Authority has to date adopted an inconsistent approach when assigning spectrum in high demand bands:

- Cell C opposed the ad hoc assignment of 5MHz of spectrum in the 2100MHz band to MTN apparently simply at its request, but this assignment proceeded in any event in June 2013. MTN now holds a larger amount of spectrum in this band than Cell C.
- The use of 60 MHz in the 2300-2400MHz band by Telkom for access is also unclear despite Cell C having asked about this in its 7 October 2014 IMT Roadmap submission at paragraph 2.7.1.
- The Authority assigned an additional 5 MHz to WBS through an erratum published in *Government Gazette* 38755 on 4 May 2015 titled "Erratum to Final Radio Frequency Spectrum Assignment Plan (RFSAP) for Frequency Band 2500 to 2570 MHz and 2620 to 2690MHz". In terms of sub-regulation 8.1 of *Government Gazette* 38640 of the abovementioned frequency band, the Authority stated the following: "*The radio frequency spectrum licence of WBS in the 2550-2565 MHz band will be amended for its re-assignment in the 2575-2590MHz band*". This indicates a like for like in-band migration of 15MHz. However, the implication of the erratum is that WBS will be assigned 20MHz for the in-band migration, benefiting from an additional 5MHz.
- Cell C is further concerned that in terms of the requirement to carry out an in-band migration in terms of the RFSAP for 880 to 915MHz and 925 to 960MHz bands, Cell C, Vodacom and MTN are required to relinquish 1MHz of valuable spectrum each. This 3MHz added to the guard bands' spectrum, will result in a total of available spectrum of 5MHz, which is significant. This additional spectrum will apparently be made available by the Authority through an ITA process in terms of

the abovementioned RFSAP. Cell C is concerned that certain licensees can substantially benefit from receiving additional spectrum through an in-band migration process whilst other licensees lose some of their spectrum without compensation through a similar process, which spectrum is then classified as “spectrum in high demand”.

2.4.3 Set-top box condition

Cell C is also concerned at the somewhat vague and slapdash requirement to introduce the provision of set-top boxes as an obligation on successful bidders in the proposed auction process in terms of the Information Memorandum, which currently appears to be unlawful as well as utterly misguided:

- Cell C understands that the 2008 Broadcasting Digital Migration Policy as amended, deals with set top boxes. This policy falls within the scope of authority of the Minister of Communications and not the Minister, whilst spectrum allocation clearly falls within the scope of authority of the Minister.
- In terms of the Broadcasting Digital Migration Policy, Government will provide subsidized set-top boxes to “poor households” in terms of section 88(1)(a) of the EC Act using funds from the Universal Service and Access Fund (USAF). The latest March 2015 policy amendments by the Minister of Communications envisage that it will ultimately be necessary to acquire digital-enabled TV sets as the set-top boxes will be an interim measure – which is consistent with international trends in this regard. Thus the rationale for making an award of spectrum for telecommunications operators subject to a condition on the provision of set-top boxes is entirely illogical.
- Licensees provide electronic communications services and network – set top boxes have nothing to do with the provision of these services by licensees.

Cell C trusts that the Authority will give due consideration to these matters in taking this further.

Yours faithfully

