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REVERENCE TELECOMS' WRITTEN SUBMISSION IN RESPONSE TO THE 'NOTICE ON THE MEMORANDUM ON THE INTERNATIONAL MOBILE TELECOMMUNICATION ("IMT") SPECTRUM, INVITING COMMENTS IN RESPECT OF THE PROVISIONING OF MOBILE BROADBAND WIRELESS OPEN ACCESS SERVICES FOR URBAN AND RURAL AREAS USING THE COMPLIMENTARY BANDS, IMT700, IMT800, IMT2300, IMT2600 AND IMT3500' (GOVERNMENT GAZETTE NUMBER 42820 OF 1 November 2019).

REVERENCE TELECOMS, A NEW 75% SA BLACK OWNED MNO IN RSA.

Reverence Telecoms (Pty) Ltd ("Reverence") would like to thank ICASA for the opportunity to submit our written comment on the ICASA Information Memorandum on IMT Spectrum as well as the Unassigned High Demand Spectrum Assigned to the WOAN published in the Government Gazette # 42820 of 1 November 2019.

Reverence, currently submits as a stakeholder that intends to build and operate a national mobile network, commencing in 2020.

The company is a new 75 % BBBEE owned venture, with a 25% stake which is Black woman owned and led.

We also intend making an oral submission of our response.

Yours Sincerely

Ms Duduzile F. Bogatsu



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INTRODUCTION

Reverence would like to respond by highlighting a few points which are comprised of three parts in the sections of the Memorandum as indicated below:

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PART 1: THE SPECTRUM REQUIRED FOR NEW OPERATORS

There seems to be an inaccurate assumption that all new entrants or small operators would be MVNOs.

- a. Whilst new entrants are compelled to obtain access to base stations, jointly identify sites, use lower frequency bands on towers (space on towers with wider coverage is often reserved for large operators); request use of municipal sites in rural areas from monopolies, it would be detrimental if wholesale prices, roaming and interconnection fees as well as spectrum are not controlled to allow sufficient competitiveness and growth by new or smaller operators. Control of all these factors by a few monopolies, *inter alia*, are often making entry restrictive.
- b. Therefore, an interim phase to enable the roll out of infrastructure by MVNOs and new MNOs needs to be regulated. The country needs to learn from the mistakes that were made in the past MVNO model that Cell C was compelled to adopt when it entered the SA Market in 2001; whereby it was paying high roaming charges in areas where it did not have network coverage, as well as high interconnect rates. This dynamic puts pressure on the retail pricing and margins of new MNOs or MVNOs, thereby stifling innovation and growth at an individual company level, as well as limiting national economic growth which could otherwise be enabled by the availability of a wider range of services to consumers.
- c. New MNOs need to be enabled to compete meaningfully in the lucrative SA market with special economic structures and systems created to enable small players to compete for spectrum in their



own category. In addition, the Authority should enable the growth of new and small operators in terms of time and space to operate in the economically viable sectors, whilst they may also be rolling out infrastructure in the previously neglected high density urban areas and rural areas.

- d. Corporate clients must also have quotas set for them to source voice, text, equipment and broadband services and products from HDGs. Government sourcing also needs to improve to allow for growth of new MNOs and MVNOs that are from HDGs.
- e. Penalties for non-adherence by operators (incumbents) should be heavy enough for them to feel the impact on their bottom line.

Reverence plans to enter using 4G/LTE and later deploying 5G; hence the company fully supports ICASA efforts in the regulatory process of enabling further spectrum for access by IMT services.

Bid Participation and Spectrum Acquisition Plans:

1. LTE (4G) Plans:

With reference to the Information Memorandum Published on the 1st of November 2019, Reverence Telecoms is lobbying for spectrum tabled on page 20 (section 5.3.5 – Table 5: Option 5). The identified spectrum the company seeks to acquire falls under LOT C and/or LOT D. Spectrum in these lots will be suitable for voice traffic and coverage (700 MHz) and Broadband LTE (2600 MHz).

2. 5G Rollout:

Given the advent of 5G and its spectrum intensive nature, the company advises that ICASA makes provision for larger blocks in the 3500 MHz band and higher. The Reverence technical team advises of the need to acquire at least 100 MHz, with the company's technical partners/suppliers recommending blocks as sizeable as 400 MHz on average for 5G NR applications.

IMPORTANT CONSIDERATIONS FOR THE AUTHORITY AND THE SECTOR

The sector needs to deal with truths about this industry as part of a broader socio-economic challenge in South Africa.

SOUTH AFRICA'S HISTORY IS DIFFERENT FROM OVERSEAS COUNTRIES

The Authority need not be reminded that Apartheid primarily set up a system that was exclusionary and inequitable; yet these inequities continue to reproduce themselves through distorted patterns of ownership and exclusion, shaped by decades of continued apartheid laws



and policies that pervade every aspect of South African society today.

Therefore, certain models that are used for allocating resources overseas may not always work well, despite them being considered to be “Best Practice”. Spectrum is an important input in producing telecommunications and needs to be handled with caution.

REVERENCE WELCOMES THE EFFORT BY THE AUTHORITY TO ADDRESS SOCIO-ECONOMIC INJUSTICES.

Whilst it is acknowledgeable that any further delays in allocating spectrum are costly for the economy, spectrum is an important input among all economic resources that have been historically plundered in Africa for the benefit of the few, with telecommunications not being an exception.

Considering that new entrants like Reverence, can only succeed in this market when fairness and the reversal of past socio-economic injustices, as well as inequality gaps are addressed to enable a competitive environment to new and small operators, the need for spectrum should not just benefit the large operators, neither is it accurate to assume that all new entrants fail, nor would have to be restricted to being MVNOs, even though the current monopolistic environment tends to compel such models of entry.

There should be an exception rather than the rule that what most global and South African opinion makers tend to think and say about new entrants, particularly when referring to Africa, is subject to error in misperceptions that are fed by limited knowledge, experience and wisdom.

Many opportunities that could have been granted to very capable people in Africa have been lost because of misconceptions that are generally biased and upheld by those that have limited understanding and perpetuated oppression for one reason or other. This has cost the country irrecoverable losses that are still haunting all the people of South Africa today. Notwithstanding, there is no shot gun approach that can effectively redress the socio-economic wounds of our country. Everyone has to look for innovative and ethical ways of addressing the mistakes of the past. It is therefore, time that equal opportunities are granted by levelling the playing fields to those that deserve and merit such opportunities, lest destructive white monopolistic capital will continue to wound the country forever.

Reverence recognises the attempt by the Authority to address all the related issues; therefore, the approach should be more to offer guidance, rather than criticism; which is the attempt this response is making to support better decision making by the Authority.



PART 2: THE OBLIGATIONS STATED IN THE INFORMATION MEMORANDUM

Reverence appreciates the efforts that the Authority has historically made and continues to make for the sector to be competitive, inclusive, open, fair, and non-discriminatory for equitable economic growth.

After much consideration and deliberation, albeit still work in progress; Reverence herein proposes various approaches that the Authority may consider for attaining positive outcomes for the sector and the country.

5.4 THE FACTORS AND PRINCIPLES THAT THE AUTHORITY SHOULD CONSIDER IN DETERMINING THE RESERVE PRICES APPLICABLE TO EACH LOT:

- A. Are there any new entrants in each LOT? If so, split the bidding into two groups per point D, below.
- B. Are there small operators in each LOT? If so, split the bidding into two groups per point D, below.
- C. Avoid chances of the highest bidder far exceeding the reserved prices (perhaps by no more than 10%) and being preferred because of having deep pockets than smaller players or new entrants (learn from the mistakes of the German auction, covered in Part 3 of this document).
- D. In order to avoid the skewed results mentioned in C (above), consider establishing Reserve prices for two categories of bidders:
 - i. Incumbents
 - ii. Small and new HDG entrants
- E. In order to ensure participation in the bids, learn from the China example whereby prices for spectrum are low to stimulate investment in rural areas, create efficiencies in the use of spectrum with wide network coverage that stimulates long term economic growth objectives, as opposed to high short term revenues for government at the cost of hampered long term economic growth, empowerment and better services to communities. The risks disadvantages would eventually force inconsistencies in spectrum allocation approaches by various government administrations due to the inherent flaws that are typical of generic spectrum auctions (learn from India's mistakes).



5.5 THE FACTORS AND CONSIDERATIONS THAT THE AUTHORITY SHOULD MAKE IN FORMULATING RADIO FREQUENCY SPECTRUM CAPS:

Tweak the auction in order with clear aims to:

- A. Prevent bad behaviour such as colluding, bidding with bullish prices, threatening, insults, *inter alia*
- B. Encourage competition and/or
- C. Limit the power of dominant players.
- D. Avoid last-minute bidding by establishing activity rules to ensure that bidders participate throughout the auction.
- E. Set limits on spectrum ownership by controlling how much spectrum one player can own.

IN ADDITION, THERE ARE PRECAUTIONS THE AUTHORITY NEEDS TO CONSIDER REGARDING AUCTIONING SPECTRUM:

“**Spectrum set-asides** can be created to ensure spectrum is available to new players in the market. All of these tweaks are established to encourage specific outcomes and sometimes this works. It is also true however, that the more complex a spectrum auction becomes, the greater the chance there is of an unexpected, undesirable outcome.

THE SMRA AUCTION METHOD ALSO HAS NUMEROUS DRAWBACKS.

The predetermined nature of the spectrum lots can lead to inefficiencies where some bidders may end up with non-contiguous blocks of spectrum. This may happen inadvertently or it may be a result of predatory bidding by competitors.

SPECTRUM RESERVES IN AUCTIONS

A final contentious area of spectrum auction design is that of the reserve price or minimum opening bid for spectrum. Set the reserve too high and potential bidders may choose not to participate. Set it too low and run the risk of not realising the full value of the spectrum.

DISPROPORTIONATE WEIGHT PLACED ON REVENUES

There appears to be an unfortunate trend in spectrum auctions to place a disproportionate weight on the revenue generated from the auction as opposed to the revenue that will be generated by the cheaper and more pervasive access to telecommunications that occurs when spectrum is assigned efficiently and effectively. The economic impact of communication infrastructure is well-documented but seems to pale compared to the priority of maximising revenue from spectrum auctions. This seems like a mistake worth



avoiding.” Source: Research ICT Africa, “*Debating Spectrum: Spectrum Auctions for Beginners*”, by RIA Admin, Dec 3rd, 2013.

6. COVERAGE OBLIGATIONS FOR THE INDUSTRY

Reverence appreciates the good intentions of the Authority in attempting to impose coverage obligations on operators that are assigned with spectrum using cited examples like Germany.

6.1 UPLINK AND THROUGHPUT OBLIGATIONS FOR THE INDUSTRY

The recommended Uplink and Throughput obligations for the industry are fair with regards to licensees needing to provide nationwide data services for the country, as they meet internationally recognised performance standards.

6.2.1 COVERAGE OBLIGATION FOR THE INDUSTRY SHOULD BE CONTEXTUAL

However, there are vast differences between RSA as a developing nation and European countries, particularly Germany which is the 4th largest economy in the world.

Apart from the socio-political histories being different, below are some of the aspects that are different which are critical factors that would need to be matched or overcome before similar approaches in awarding spectrum and applying regulations as used in Germany (*inter alia*) can be considered to be appropriate for South Africa.

Caution: A blanket approach as proposed by the Authority with regards to rural populations presents numerous impractical challenges for new entrants.

Below are the some of the reasons why.

SOUTH AFRICA AND GERMANY ARE VASTLY DIFFERENT

There are vast differences between Germany and RSA which indicate that the automatic “cut and paste” of spectrum auction approaches used in Germany and other advanced countries could be misplaced.

POPULATION PROFILES

Population sizes and land sizes are vastly different. Germany is the most populous country in the European Union and ranks as the 16th largest country in the world in terms of population.

	Germany	RSA
Total popn. 2019	83,783,942	59,308,690 (SA popn. is 70.8% of the size of the German popn.)



URBAN VS RURAL PROFILES

The Authority may be correct in noting similar migration tendencies as well as the lack of sufficient IMT and broadband infrastructure between the German rural population and the SA rural population. Considering that the villages in Germany are becoming increasingly less inhabited as people are moving to cities (<https://www.caritas-germany.org/focus/campaignsandinitiatives/campaign-2015-demographic-change-in-rural-german-communities>), this is also a characteristic in RSA and many other developing countries.

However, the SA rural population is larger than that of Germany yet the socio-economic profile is also vastly different. The definition of rural areas by STAT SA is: *"Farms and traditional areas characterised by low population densities, low levels of economic activity and low levels of infrastructure."* Based on this definition alone, it is highly risky for a new, small and HDG entrant to be restricted to the rural areas for at least three years before rolling out to the highly lucrative urban areas, where monopolies have already, and will continue to reap high margins.

Note: The German % of rural population is far less than that of RSA, yet their total population size is nearly 30% larger than that of RSA; 77% of it being urban, as opposed to 67% of RSA's population being urban. This means that investment in technology per area and in urban areas in Germany is likely to yield higher returns than in RSA because urban areas generate higher yields for operators. **In addition, their population densities in both urban and rural areas make it better worthwhile to invest even in rural areas than in South Africa's rural areas** (see next table).

	Germany	RSA
Rural popn.	18,842,275	19,439,950
Rural vs. urban %	23%	33%

POOR RURAL INFRASTRUCTURE ROLL OUT IN GERMANY AGGRAVATED BY HIGH COST OF AUCTIONED SPECTRUM

However, the complaints recorded in a video clip in Germany about ineffective broadband services in rural areas where turnover is low, reveals a likelihood of operators in Germany focusing on urban areas for various reasons, among which high spectrum costs in the auction process deprived the country of rapid infrastructure roll outs even in urban areas, (see video clip titled **Germany 2019 — The Big Issues (1): Digital shortcomings** on <https://www.dw.com/en/5g-auction-in-germany-raises-65-billion-from-four-telcoms/a-49168657>).



There is evidence that the heavily contested auctioning of 5G spectrum in Germany in 2019, as well as a previous auction which resulted in some operators exiting the industry, did not yield the results of better rural penetration as it seems to be widely acclaimed in the Memorandum.

GEOGRAPHY AND POPULATION DENSITY

Geographically, South Africa is the 24th-largest country in the world. It is about the same size as Colombia, twice the **size** of France, three times as big as Japan, four times the **size** of Italy and five times the **size** of the United Kingdom. Land size comparisons have implications on the spread of infrastructure costs, particularly in rural areas. South Africa is about 3 times bigger than Germany. **Germany** is approximately 357,022 sq km, while **South Africa** is approximately 1,219,090 sq km.

The sparseness of the SA population because of the large land size, makes it more expensive for SA than it is for Germany, to communicate in rural* areas per 1000km², where the population density is also less than that of Germany.

Land size	Germany	RSA
	357 386 km ² (29.3% size of RSA)	1,219,912 km ²
Popn density	237/km2	45.78/km2

UNEMPLOYMENT

Germany has one of the lowest unemployment rates in the world (3.1%). In sharp contrast, South Africa has one of the highest unemployment rates in the world (29.1%). Unemployment among the SA youth (ages 15-24) is at 53.2% whereas Germany is only at 6.8%. This is worse in rural areas.

The employment rate in Germany is much higher (96,9%) than that of RSA which is at about 70%, with the likelihood of being worse off in the last quarter of 2019.

Unemployment	Germany	South Africa
Unemployment rate (Total Nov 2019)	3.1%	29.1%
Unemployed number (Q3, 2019)	1,356m <i>Germany has one of the lowest unemployment rates in the world</i>	6,151m <i>South Africa has one of the highest unemployment rates in the world.</i>
Unemployment, youth ages 15–24	6.8%	53.2%



GDP

The GDP of Germany is the 4th largest in the world, whereas South Africa's ranks 33rd in the world. These economic disparities, *inter alia*, illustrate that there are inherent socio-economic structural issues that are very different, such that our resource utilisation requires relevant approaches to our size and society.

Annual GDP	\$4.6 trillion	\$386.73 billion (less than 10% the size of Germany)
GDP per Capita (2019)	\$49,617	\$6,521 (13.14% of Germany)
GDP per capita ranking	4th	37th

EDUCATION

Education Profiles and related poverty profiles are also very different. Lower Education levels tend to equate to higher levels of poverty.

A report by the Organisation for Economic Co-operation and Development (OECD), put South Africa behind only Ghana, while Asian countries excelled, taking the top five places, while the US and the UK, were ranked 28th and 20th, respectively.

Education and Literacy	Germany	RSA
Education	Germany has one of the world's highest levels of education, technological development, and economic productivity.	South Africa is rated close to last in its quality of education: 139 out of 143 countries – when looking at the overall quality of its education system. https://businesstech.co.za/news/lifestyle/87310/south-africas-education-system-vs-the-world/
Literacy	Over 99% of those of age 15 and above are estimated to be able to read and write.	SA Literacy rates are at 94.37% of those of age 15 and above, who are estimated to be able to read and write.



POVERTY IS ON THE RISE IN RSA

Poverty is on the rise in RSA according to STATS SA reports, and is generally defined according to racial lines, most of whom are located in high density townships and rural areas. These are the very consumers that are also less connected because they reside in underserved areas.

Whilst South Africa is rated the most unequal society in the world, Germany is broadly a middle-class society, although there has been a strong increase in the number of children living in poverty. In Germany, this is different from South Africa where the majority of the rural population are younger and poor.

SA rural areas are worse off economically considering that unemployment in RSA is high.

THE CURRENT INCOME INEQUALITY GAP IN RSA

The persistence of South Africa's inequality a quarter century after formal democracy is, in large part, down to enduring colonial and apartheid geographies.

The unequal incomes, according to the Inequality Trends report, remain stubbornly racialised, gendered and spatialised. The recent research by Stellenbosch University economist Anna Orthofer delves into precisely these effects and finds that wealth inequality in South Africa is staggering. The wealthiest 1% owns 67% of all the country's wealth. The top 10% owns 93%. The remaining 90% of South Africa owns a paltry 7% of the country's wealth. (<https://www.newframe.com/why-sa-is-the-worlds-most-unequal-society/>).

The Income inequality Gini coefficient of Germany in terms of income distribution is 0.29, whereas that of South Africa is 0.62 (2018); (where 0 = complete equality; 1 = complete inequality). {Source: OECD Social and Welfare Statistics: Income Distribution}.

These income inequalities are telling of the plight of both our communities and our business sector in South Africa.



6. OBLIGATIONS

6.2.3 and 6.2.5 Licensees being required to roll out the broadband network to “97% of the population in underserved areas before rolling out to urban areas” is well intended. However, this requires further clarification. Reverence considers that “Underserved areas” also include high density townships as well as informal settlements in urban areas in small and large towns.

6.3.1 and 6.3.2 The Open Access Obligation that a licensee must provide open access services to a minimum of 3 MVNOs, of which the MVNOs must have a minimum of 51% ownership held by HDGs, is not controllable by licensees. The regulator may need to ensure it drives this process.

6.3.3 The requirement that licensees must commence operations within 3 years of spectrum allocation is fair, provided that the mentioned 700MHz and 800MHz spectrum is released to the licensees within a maximum of 3 months of it being assigned to enable timely infrastructure roll out.

6.3.4 The conditions of what constitutes a breach need to be clearly stated and so it is with the process and time frame of withdrawal of such license, otherwise it becomes policy without effective implementation, which has historically tended to be the case in various regulations in various African governments.

6.3.5 The successful implementation of this requirement for licensee off takes of at least 30% of spectrum from the WOAN is provided that the delays in the WOAN do not affect the rollout of the high demand spectrum assigned, lest there could be inefficiencies.

6.3.6 The wireless open access conditions over and above those contemplated in 6.3.1 and 6.3.3 relate to infrastructure sharing for small operators and new entrants that many not have their own infrastructure until after a few years of operating. These need to be protected against monopolistic behaviours even through the WOAN infrastructure sharing.

6.4.4. Compulsory infrastructure sharing would alleviate operational constraints for smaller and new operators. However, there needs to be harmonious conditions that ensure fair access and position of small operator’s antennas on towers

6.4.5 WOAN OBLIGATIONS: It is not clear what the 3-5 years obligation “ holiday” following the award of the license means. It indeed, is necessary for the Authority to impose additional pricing conditions and terms of access upstream in order to influence efficiencies amongst all operators downstream, otherwise uncompetitive behaviors would take advantage of the absence of such conditions. This is adequately addressed in the ensuing paragraphs 6.4.6 - 6.4.9.



Reverence concurs with the concerns being raised in the industry about the challenges in the feasibility of the Authority's plan for a simultaneous assignment of the urgently needed remaining IMT spectrum to licensees at the same time spectrum is assigned to the WOAN.

"There are concerns that the process to establish the network will further delay the release of the high-demand 2,6GHz spectrum band, the release of which has already been delayed by more than five years. Operators need urgent access to this band to evolve their businesses cost effectively to meet the pent-up demand for data. Other concerns relate to the opportunity cost of such delays, not only for the sector but the national economy at a time the kind of stimulation this would provide is most required.

...**Mexico and Kenya** are cited as markets where open access has been identified as a remedy for extreme dominance, and where mobile is the predominant form of access to broadband. But efforts to implement open-access wireless networks for high-demand spectrum to increase competition in these markets have failed. In the case of Kenya, the dominant, still significantly state-owned operator was able to extract itself from the open-access network, rendering it unviable. In Mexico, the extensive constitutional and institutional adjustments to enforce the open-access network (the digital dividend 700MHz band only) has resulted in a legal and regulatory maze that has delayed the process for years. The project now appears to be unravelling."*

GENERAL RISKS THE WOAN NEEDS TO MITIGATE:

Reverence recommends that contingency measures based on various possible scenarios, be set up in case the WOAN:

- Does not get off the ground, or
- Delays in operationalising, or
- Becomes inefficient or ineffective, or
- It fails to achieve its goals after it starts operating.



PART 3: COMMENTS ON THE SPECTRUM AWARDING PROCESS

7. THE AWARD PROCESS OF THE SPECTRUM TO THE INDUSTRY

AUCTIONING SPECTRUM COULD BE “BEST PRACTICE” WITH POOR IMPACT

The perception that auctioning spectrum is the best practice is still debatable worldwide. Reverence is of the opinion that caution needs to be exercised in the method selected, the design, process, caps, reserving of prices. The flaws that are inherent in spectrum auctions have not yet been done away with.

The following lessons were derived from the recent spectrum auctions that were held in Germany:

A. OPERATORS IN GERMANY ARE BEMOANING THE HIGH COST OF 5G SPECTRUM

“Operators in Germany are acting despondent after a spectrum auction reached a price they claim could limit their ability to invest in 5G network deployments. Following 497 rounds of bidding that begin in mid-March, Germany’s regulatory agency banked \$7.4 billion for 420 megahertz of spectrum in the 2 GHz and 3.6 GHz bands earmarked for 5G mobile services (June 2019)”

(Source:<https://www.sdxcentral.com/articles/news/german-operators-bemoan-high-cost-of-5g-spectrum/2019/06/#genesis-nav-primary>).

Dirk Wössner, head of market leader Deutsche Telekom Germany, said *“the auction leaves a bitter aftertaste,”* and Vodafone Germany CEO Hannes Ametstreiter described the final price tag as *“catastrophic.”*

B. NETWORK ROLL OUT SUFFERED A BIG SETBACK

Deutsche Telekom Germany was the biggest spender, acquiring a total of 130 megahertz of spectrum for \$2.43 billion, but its management was not happy with what it spent. “The network rollout in Germany has suffered a significant setback. The price could have been much lower. Once again, the spectrum in Germany is much more expensive than in other countries,” Wössner wrote in a prepared statement.

“Network operators now lack the money to expand their networks,” he added. “With the auction proceeds one could have built approximately 50,000 new mobile sites and closed many white spots.”

German telecom operators had similar grievances in 2000, following the auction of spectrum licenses to support 3G services. Operators ended up bidding nearly \$43 billion for those licenses.



C. SPECTRUM AUCTIONS CAN KICK OUT SOME OPERATORS INCLUDING SMALL OR NEW ENTRANTS

Except if mechanisms used by overseas countries are carefully amended, the Auctioning of spectrum runs the risk of disadvantaging small operators and HDGs, even large operators that may not have large budgets for spectrum, regardless of their role in the value chain.

It may seem like it is best practice, as it is commonly used, but it does not always equate to positive impact on the sector even if government may raise short term revenue collection for themselves. The German example is a case in point, which we cite here because the Memorandum IMT is impressed with it.

D. THE IMMEDIATE CASH FLOW COMMITMENT FAR REMOVED FROM ALLOCATION DATES

The new spectrum that was auctioned in Germany in 2019, which is spread across 41 blocks, will not be formally allocated until 2021. The 3.6 GHz band will be made available first, followed by the 2 GHz band in 2026.

The bidders in Germany complained about the high cost of the auction and warned it could lead to a lack of investment in networks.

E. THE NEW SPECTRUM IN GERMANY IS USED PRIMARILY IN URBAN AREAS

The spectrum in Germany is used primarily in urban areas and operators in Germany are complaining that the high cost of spectrum has left them with little money to roll out infrastructure.

The overall outcome here is that auctions may leave no money for network infrastructure roll outs, what more in rural areas which are not economic viable.

F. GERMAN GOVERNMENT CLAIMS MONEY IS TO INCREASE ALL SPEEDS

“The terms of the auction require operators to provide high-speed coverage to 98% of households by 2022 and also to share their network with competitors under a "national roaming" clause in the contracts. The money raised from the auction will be used to upgrade all Germany's broadband networks for improved mobile phone coverage, according to the BNetzA. Germany's wireless networks currently rank only 46th in the world for download speeds.” [Source: www.dw.com](http://www.dw.com)

An important question arises from the case study of the spectrum auction in Germany:

Is the South African government then going to use money raised from large spectrum auctions to upgrade the broadband networks of RSA?



After all, it should be expected that the accountability for community development through infrastructure development and better services lies with the government of the day, which may justify business not to take responsibility for developing network infrastructure.

While Reverence is committed to add to the operators that are improving the quality of lives of all South Africans through network infrastructure development, the risk of market entry needs to be supported by the Authority with a long term view of the rewards that are gained by all when the investment environment is made easier.

7.5.2 QUALIFICATION

7.5.2.2 THE REQUIREMENT FOR BIDDERS TO BE IN POSSESSION OF AN I-ECNS LICENSE TO QUALIFY

In order to level the playing fields for all operators with particular regards to the fairness principle, Reverence appeals to the authority to:

A. Fast track all applications for the transfer of licenses before publishing the auction in the ITA, considering that currently, applications are taking close to a year or longer to process, for unexplained reasons.

It would be unfair competition if the Authority proceeds without first inviting all applicants for licenses that would want, qualify and afford to participate.

B. The Authority needs to ensure that an opportunity is availed to new B-BBEE operators to purchase or be issued with unused I-ECNS licenses, that are in the market which have expired due to non-compliance by previous owners, have been non-operational, or companies are dormant.

It also needs to be put on record that due to unfair practices that were implemented by past administrations, there are many license holders whose licenses were never used that are:

- 1) Hoarding unused licenses in wills of deceased estates, yet are needed by new operators.
- 2) Overpricing licenses that never traded.
- 3) Companies under which the licenses were registered have been deregistered due to dormancy.
- 4) Non-compliant holders of licenses.
- 5) Previously imposed consortiums making the sale or transfer of licenses difficult.



There is therefore, a need for the Authority to consider re-issuing licenses that are inactive, to those that demonstrate preparedness to enter the market.

7.5.5 ISSUANCE SUBJECT TO FEE PAYMENT

An important question may needs to be asked: What if the auction fee payable is way beyond what the bidders can afford, therefore successful bidders cannot eventually make the payment? In designing the auction process, the Authority may need to take precautions that will not inhibit new entrants or small operators. There are lessons that can be avoided that were experienced in the India, Kenya and Ghana spectrum auctions, among others.

7.5.7 GRANTING OF LICENSES

Another important question that needs to be addressed is: How long after allocating the licenses, post the auction, will the winning bidders be availed with the spectrum?

Lessons from the German auction: *“The new spectrum that was auctioned in Germany in 2019, which is spread across 41 blocks, will not be formally allocated until 2021. The 3.6 GHz band will be made available first, followed by the 2 GHz band in 2026.”*

8. THE AUCTION

8.5 AUCTION – BEST PRACTICE?

The question of whether auctions are really “best practice” is subjective, because it depends on whether the one advocating the “practice” is entirely objective. The term is generally being used to mean “what has been commonly practiced so far, there being no worse evil precedent”. However, it is not “best practice” for all participants if the outcome produces “poor impact or negative results”. South Africa is in a unique situation and needs to introduce innovative auction practices that take into account the fair needs of all participants at fair prices; particularly because of the gross inequalities that pervade SA society and business.

It also depends on the whether the national economy is strong enough such that there is negligible inequality; and/or such that equal opportunities with economic freedoms exist for all; and/or such that it is not subject to the exclusion of those that are historically and economically disadvantaged; and/or with fair allocation of



resources. It also is important to note that the comparison made in section 5 presents comparisons between Germany and South Africa that make the term “best practice “superfluous.

It is therefore, important for the Authority to consider totally new approaches. However, under the circumstances of there being no better approaches yet, the risks of unfair advantage need to be mitigated.

CONCLUSIONS AND RECOMMENDATIONS

1. Assumptions about the profile of licensees in 2020 are flawed and need to allow for the entry of new MNOs from HDGs.
2. The current Memorandum, as it stands, has generally assumed that the inequalities applicable in servicing of consumers/end-users of telecom and broadband internet services are the only ones that should be addressed; whereas the enablement of new entrants /SMMEs has been grossly neglected.
3. Considering the political history of SA, with its negative effects which correlate with the economic exclusion of HDGs, spectrum auctioning should ensure it does not disadvantage smaller operators and entry by HDGs unless the risks associated with possible further discrimination are carefully managed.
4. The government may raise a lot of money for itself but at the detriment of HDGs, long term economic growth, competitiveness with other accompanying risks like spectrum hoarding and inconsistencies. This would be a direct betrayal of the very people that the government is trying to serve as the negative ripple effects would be numerous, diverse and probably uncontrollable.

To avoid the continuation of monopolistic capital that disadvantages smaller players – a characteristic RSA is notoriously known for globally- the previously advantaged incumbents that enjoyed previous allocations of spectrum and large profits, yet would also continue to enjoy huge profits in the profitable urban areas whilst using new spectrum in rural areas, should be treated separately. The obligations of prioritising rural areas for three years would not affect the budgets of incumbents as they can afford to wait for long term ROIs; whereas new entrants, more so when they are from HDGs, would be at a complete disadvantage when put on par under a blanket ruling of the use of the “spectrum to cover 97% of rural areas for three years before rolling out to urban areas.” The compulsory use of the newly allocated spectrum in rural areas for three years before using it in urban areas is detrimental to investment by new or small businesses as this makes business unviable. A recommendation would be to consider that new entrants and small operators be allowed to operate in all areas including urban areas, with special concessions upstream.



5. In this context, much stronger support for rural development, including large-scale land reform, is necessary in ways that expand economic opportunities for households in the former Bantustans, in particular. A partnership between the Ministry of Communications with rural municipalities to allow for smaller operators to attain preferential quotas for sites and provision of services to support localized infrastructure development is necessary.
6. While new MNO entrants like Reverence are coming in as 'late' entrants, the timing is right to enter with IMT spectrum, without the legacy infrastructures that require costly upgrades and with the Authority having regulated interconnection and roaming fees. This way, new entrants can afford to keep their costs low provided, the environment is enabling to new operators. New operators would also be entering the market in the advent of 4IR and in time for future migration to 5G.
7. It would also be beneficial for government to incentivize ICT infrastructure investment by new B-BBEE entrants to ensure inclusive strategic infrastructure investment, with predictability and certainty for investors, effective use of spectrum and innovation in the communications sector, (Policy Direction Gazette – July 2019; 1.6 (c)).
8. Given the value that is now placed on spectrum, the risk involved in spectrum auctions for both the government and for bidders grows ever higher and as a result, any failure to effectively and efficiently assign the spectrum grows ever more costly. Dynamic secondary use of spectrum such as "White Spaces" spectrum is a likely one-answer to this, but as technology enables more nimbleness both at the wireless interface as well as at the management interface, new ideas and approaches are likely to continue to emerge.
9. Spectrum lots or capacity should be divided in a way that ensures that the relevant spectrum is not licenced to a single entity.
10. Consideration needs to be made for a parallel auction between large incumbents separate from that for new and small operators.
11. To avoid the mistakes of the auctioning methods that yielded negative results for the German telecoms industry, or mistakes of India, *inter alia*; it is important to learn from China's spectrum modelling which has resulted in far higher growth for the economy with excellent coverage rates.
12. While the WOAN will likely assist in sharing this scarce resource, this needs to be carefully monitored by the regulator to ensure fairness and transparency. In addition, the pre-supposition that all new entrants do not deserve a consideration to bid for high demand spectrum because they do not have



the funding for such infrastructure, perpetuates the mindset of exclusion of smaller players. Innovative ways are needed to provide opportunities for growth of new entrants.

13. Ideally, spectrum should be allocated to companies which comply with B-BBEE requirements, but also with a solid telecom track record of adhering to regulatory demands of lowering prices to consumers when required to do so by the regulator, or if they are start-ups, with a solid telecoms project.
14. Auctioning the entire spectrum exclusively to the incumbents that is outside the WOAN would be detrimental, even against competitive new entrants. New entrants deserve being given the benefit of the doubt and not be judged based on the mistakes of previous operators, just as it would not be fair to assume all historical large operators are either predictable, or would succeed or fail.

Conclusion

Given the highly contested nature of the anticipated spectrum auction, Reverence Telecoms requests that ICASA considers a two-tier approach (separate from the WOAN) by hosting two (2) separate bids. The primary bid would cater for new players, specifically allowing HDGs to bid without the risk of being whitewashed by the incumbents, who have stronger balance sheets. The second bid would cater for the incumbents independently.

Reverence trusts that this would help to moderate fairness from a pricing and 'equal opportunity' perspective. Furthermore, the 'starting' bid pricing of spectrum for new players would need careful consideration, bearing in mind that most new players are starting from a zero base, with limited funding, and the cost of deploying infrastructure already intensive as it is.



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