

# The Information Memorandum on IMT Assignment Processes

31 January 2020



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## 1. Introduction

SENTECH thanks the Independent Communications Authority of South Africa (“Authority”) for the opportunity to make submissions on the *Notice on the Licensing Process for International Mobile Telecommunications (“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* (“Notice”) as published for public comments in Government Gazette No. 42820, dated 1 November 2019.

## 2. Principles to be considered by the Authority

In line with the intention and purpose of the auctioning of the radio frequency spectrum, SENTECH submits that the outcome of the process will have winners and those who will be unsuccessful in their bid. No entity/participant has a deemed right of winning any LOT during the ITA process. The primary purpose of the ITA process is to strive to achieve objectives outlined in the IM and comply with policy objectives, and not to maximise revenue generation.

The National Development Plan proposes that by 2030, the country should have a “seamless information infrastructure (that) will be universally available and accessible and will meet the needs of citizens, business and the public sector, providing access to the creation and consumption of a wide range of converged services required for effective economic and social participation – at a cost and quality at least equal to South Africa's main peers and competitors<sup>1</sup>”

SENTECH submits that the Authority should consider the roles and responsibilities of state-owned entities concerning the promotion of “universal provision of electronic communications networks and electronic communications services and connectivity for all<sup>2</sup>” and the encouragement of “research and development within the ICT sector<sup>3</sup>”. Furthermore, the Authority must acknowledge and support government initiatives requiring spectrum such as the National Integrated Cyberinfrastructure Systems for South Africa (NICIS), Broadband Infracore, SENTECH, etc. SENTECH recognises that the support sought from ICASA must be within the confinement of the law.

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<sup>1</sup> National Development Plan (2030) page 190

<sup>2</sup> Section 2(c) of the EC Act (as amended).

<sup>3</sup> Section 2(i) of the EC Act (as amended).

SENTECH supports the principle outlined by the Authority in section 4.2 of the IM. The company will like to remind the Authority of its other Constitutional responsibilities by emphasising specific phrases as indicated below:

“National legislation must establish an independent authority to **regulate** broadcasting **in the public interest, and ensure fairness and a diversity of views broadly representing South African society**”

SENTECH submits that there is enough spectrum available to set aside a fraction for entities mandated to ensure the delivery of government imperatives.

### **3. Restacking process**

The South African digital terrestrial television (DTT) network was initially based on the ICASA Final Terrestrial Broadcasting Frequency Plan (FTBFP 2008) as published in government gazette no. 32728 of 18 November 2009. The FTBFP 2008 had assignments for DTT services between 474 – 854 MHz. The subsequent amendments to the FTBFP undertaken in 2014 maintained the assignment between 474 – 854 MHz with an understanding of initiating a restacking process once analogue switch-off (ASO) is gazetted. The restacking process can only be implemented after ASO as the current DTT network was fitted around the existing terrestrial television analogue services. The restacking process will most probably be a phased hard switch-over approach and therefore requires a meticulous planning and implementation progression to ensure that existing DTT services are not interrupted.

Taking into consideration Australia’s experience on freeing up of digital dividend, SENTECH agrees with the Australian Communications and Media Authority (ACMA) that the restacking process is a three (3) pronged process: 1) announcement and implementation of ASO; 2) migration of DTT services to below 694 MHz, and 3) the invitation to apply (ITA) process for assignment of high demand spectrum. SENTECH acknowledges that while the migration of DTT services to below 694 MHz cannot occur prior of the national implementation of ASO, the ITA process initiated with the gazetting of the IM conditionally does not impact on the first two events mentioned above. SENTECH is in support of the IM process with the understanding that there is an opportunity for the Authority to discuss with the broadcasting industry the possibility of deployment in the 700 and 800 MHz bands, albeit in pockets.

SENTECH submit that in considering the possibility of introducing IMT 700/800 in pockets, the Authority must address likely competition issues.

## 4. Proposed spectrum for the award

SENTECH supports the Authority's IMT assignment processes. SENTECH will like to reassure the Authority that it too seeks an accelerated process for analogue switch-off to enable the digital terrestrial television (DTT) restacking process to commence (migration of DTT services to below 694 MHz). SENTECH supports the Authority's process of licencing 700, 800 and 2600 MHz bands, making up 338 MHz spectrum. When taking into consideration, the World Radiocommunication Conference-2015 (WRC-15) decisions incorporated into the National Radio Frequency Plan 2018, IMT 700, 800 and 2600, accounts for 338 MHz spectrum out of 685 MHz radio frequency spectrum currently unassigned for IMT. Taking into consideration challenges presently faced with the radio frequency bands 1427 – 1518 MHz, 3300 – 3400 MHz, it is understandable why the Authority has not included them in the *Notice*.

Frequency Band MHz	Unassigned spectrum (MHz)
694-790	96
790-862	72
1 427-1 518	91
2 300-2 450	40
2 500-2 690	170
3300 - 3400	100
3400 - 3600	116

It is also essential to consider that the WRC-19 agreed on the identification of 17.25 GHz of the radio frequency spectrum for IMT applications. The WRC-19 identified the following bands for IMT: 24.25 - 27.5 GHz, 37 - 43.5 GHz, 45.5 - 47 GHz, 47.2 - 48.2 and 66 - 71 GHz. The WRC-19 agreement has managed to ensure that 85% (14.75 GHz) of the radio frequency spectrum identified is harmonised globally. SENTECH highlights these outcomes to remind the Authority that the licensing process for high demand spectrum is only beginning. Therefore, the expected consequences from the licensing of the 700, 800, 2600 MHz spectrum from a policy and regulatory perspective should take into consideration that the process has some way to conclude.

## 5. Reserve price

The history of auctions indicates that there is very little correlation between the preferred auction model and the outcomes of those processes. Jac Marais and Nalo Gungubele highlight the importance of managing ITA outcomes through acknowledging the incorrect underlying assumption that "the operator who places the highest [economic] value on the

spectrum is most likely to create the highest social as well as economic value with the scarce resource to ensure a return on investment”<sup>4</sup>.

SENTECH submit that the Authority should be cognisant that there is no single auction model that has proven to be a “silver bullet”. Section 3, Objectives, of the IM indicate that the Authority is striving to positively influence at the national level an enabling environment for inclusive socio-economic growth. SENTECH submit that at the least the ITA process should attempt to enable industry participation that will encourage equitable and non-discriminatory exposure to opportunities created, including sharing of financial and non-financial surplus, by technology drivers of the data-driven revolution.

SENTECH submit that the Authority must seriously consider the Competition Competition’s *Data Services Market Inquiry Final Report* dated 2 December 2019, particularly Appendix E. SENTECH attaches Annexure E to complement its submission. SENTECH emphasises the need for the Authority to consider the following principles when determining the socioeconomic value of spectrum:

1. Spectrum licensing process as a measure of addressing issues of insufficient competition in the South Africa market;
2. Asymmetrical spectrum licensing process;
3. The Authority is expected, in the short term, to initiate another spectrum auction process target a total of 17 506 MHz of the radio frequency spectrum;
  - a. IMT spectrum bands identified at the WRC19: 24.25 - 27.5 GHz, 37 - 43.5 GHz, 45.5 - 47 GHz, 47.2 - 48.2 and 66 - 71 GHz; and
  - b. The 2300 (40 MHz) and 3300 (100 MHz), 3500 (116 MHz) MHz bands identified for IMT at the WRC15;

SENTECH implores caution in the event the Authority chooses the use of comparable results model (benchmarking) when striving to determine the economic value of the proposed LOTS. According to GSMA

*final prices in developing countries are typically similar to developed countries, and actually higher when income is taken into account, it is clear that this does not reflect a lower financial burden for operators or a lower level of competitiveness in the auctions. In fact, a much higher proportion of operator investment is being squeezed out by reserve prices in developing countries. This again points to reserve prices being set more aggressively in developing countries*<sup>5</sup>

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<sup>4</sup> <https://www.golegal.co.za/high-demand-spectrum-ict-sector/>

<sup>5</sup> <https://www.gsmaintelligence.com/research/?file=5a8f746015d3c1f72e5c8257e4a9829a&download>

The policy objectives, country-specific conditions and objectives of the IM is solely unique to South Africa. It is important to note that likely participants in the ITA process in South Africa can be grouped into three (3) characteristics, namely: 1) entities with significant market share seeking to increase revenue and reduce network costs; 2) entities striving for survival and to ensure operational sustainability in a fair and equitable competitive market; and 3) entities seeking economic opportunities and, to share in financial and non-financial surplus through fair and equitable inclusivity.

The Authority needs to acknowledge that reserve prices will affect entities differently depended on the grouping on characteristics stated above. Entities with significant market power will most likely pass-on the financial burden to consumers to recoup the upfront payment for the auction. Entities seeking to be price competitive taking into consideration the impact of the duopoly in South Africa will most likely be financial constraints as they will require debt financing to participate in the auction process. Lastly, entities seeking economic opportunities will find high reserve prices as a barrier of entry. It is on this reasoning that SENTECH submits that there is a need for different reserves prices for each LOT, taking into consideration the asymmetrical licensing process supported by the company. SENTECH further submit that the setting of reserve prices should not be used and influenced by the need to maximise short-term public revenue.

## **6. Radio frequency spectrum caps**

SENTECH submit that the spectrum aggregation limits must only apply for the ITA process seeking to license 700, 800 and 2600 MHz spectrum. The issue of the spectrum aggregation is also discussed in the *Discussion Document on the Market Inquiry into Mobile Broadband Services in South Africa*. The Authority is complicating the issue of aggregation limits, amongst others, by asking for inputs through separate documents within the same time frames, namely the IM and the *Discussion Document on the Market Inquiry into Mobile Broadband Services in South Africa*.

SENTECH submit that entities with assignment in the 2300 MHz band should not be permitted to bid for spectrum in the 2600 MHz. Additionally, entities should only be allowed to bid for the 700 or 800 MHz spectrum, not both. This implies LOTS with combinations of 700/2600 MHz, 800/2600 MHz or 700 or 800 MHz. As stated above, the issue of spectrum caps will be broadly discussed in the *Discussion Document on the Market Inquiry into Mobile Broadband Services in South Africa*. The outcome of the discussion document must be considered for the ITA process to licence 3300 MHz and, new allocations and identifications concluded at the WRC19.

## **7. SENTECH proposed LOTS**

SENTECH agrees with the principles outlined in the Competition Commission's Data Services Market Inquiry Final Report, as published on 2 December 2019. One of the essential techniques of addressing the duopoly is an asymmetric licensing process. SENTECH submit that when the Authority is finalising LOTS configuration, the principles outlined in LOTS A to I must be considered. SENTECH submit that the Authority must licence spectrum taking into account economic viability of the size of the LOT auctioned.

### Option 1

LOTS	700 MHz	800 MHz	2600 MHz	2300 MHz	3500 MHz	Services
LOT A		2 x 20 MHz (FDD) (801-821 MHz// 842-862 MHz)	2 x 30 MHz (FDD) (2500 – 2530// 2620 - 2650 MHz)			WOAN
LOT B	2 x 10 MHz (FDD) (703 – 713 MHz// 758 – 768 MHz)		2 x 20 MHz (FDD) (2530 – 2550// 2650 - 2670 MHz)			Industry
LOT C	2 x 10 MHz (FDD) (713 – 723 MHz// 768 – 778 MHz)		2 x 20 MHz (FDD) (2550 – 2570// 2670 - 2690 MHz)			Industry / New Entrant
LOT D		2 x 10 MHz (FDD) (791 – 801 MHz// 832 – 842 MHz)				Industry / New Entrant / State- owned entities
LOT E			20 MHz (TDD) (2595 – 2615 MHz)			Industry / New Entrant
LOT F				20 MHz (TDD) (2360 – 2380 MHz)		Regional
LOT G				20 MHz (TDD) (2380 – 2400 MHz)		State-owned entities
					3400 - 3444	Incumbent
LOT H					3444 – 3494 MHz	State-owned entities
LOT I					3494 – 3544 MHz	Regional
					3544 – 3600 MHz	Incumbent
In-band Migration			20 MHz (TDD) (2575 – 2595 MHz)			Incumbent

## 8. Obligations

### 8.1. Coverage obligation for the Industry

SENTECH requests the Authority to make use of the existing *Underserviced areas definition regulations*. At most, the Authority must review and update the regulations. The contents of the *Underserviced areas definition regulations* empower the Authority to address the issue of identification and prioritisation issues stated in section 6.2.3 of the IM. The regulations will enable the Authority to impose obligations based on the remoteness of the areas and state of infrastructure/services in the areas.

### 8.2. Coverage, uplink and throughput obligations for the Industry

SENTECH's interpretation regarding obligations on the provisioning of data services across the country with an average uplink of 15 Mbit/s and the downlink user experience throughput of at least 30 Mbit/s should apply to at most 95% of the population and should relate to the averaged performance of all licenced network. That is, the obligations should not be per licensee. Outlined in the *Discussion Document on the Market Inquiry into Mobile Broadband Services in South Africa* is the Authority to view the market structure and the size of current players. Taking this understanding into account, the Authority will be remised in its obligations, by insisting on the same obligations or all licensees (national, provisional/regional, and expected new entrants).

SENTECH submit that LOT A and B should be burdened with the obligation of providing data services across the country with an average uplink of 15 Mbit/s and the downlink user experience throughput of at least 30 Mbit/s to at least 95% of the population of South Africa. The Authority is advised to review and update the *Underserviced Area Definition Regulations*.

Regarding LOT C, D and E, SENTECH submits that the Authority must make use of the existing *Underserviced areas definition regulations*. At most, the Authority must review and update the regulations. The contents of the *Underserviced areas definition regulations* empower the Authority to address the issue of identification and prioritisation issues stated in section 6.2.3 of the IM. The regulations will enable the Authority to impose obligations based on the remoteness of the areas and state of infrastructure/services in the areas.

SENTECH submit that the Authority must use the revised and updated -sub-regulations Annexure A to assign to fair and equitably assign local municipalities to winners of LOT C, D and E. Winners of LOT C, D and E should be burdened with the obligation of providing data

services with an average uplink of 15 Mbit/s and the downlink user experience throughput of at least 30 Mbit/s to at least 95% of the population of the allocated municipalities.

SENTECH understands that the purpose of the ITA is also to encourage the sustainability of new entrants, grow of existing service providers and to decrease the probability of failure of the process as a result of exits and forced mergers etc. Obligations should be fair and equitable, with the overall outcome successfully addressing country imperatives. The Authority should take into consideration that, *among other things*, the financial implications of objectives consider the following:

- Population density;
- Topography;
- Infrastructure/facilities;
- Frequency band/s;
- Quality of service (QoS); and
- The average number of users who can afford to access services;

The attainment of obligations stated in 6.1.2 of the IM should also be incorporated in the ITA processes to licence 2300, 3300, 3600 MHz and, new allocations and identifications concluded at the WRC19. SENTECH also believe that the level of obligations to be imposed should take into consideration the status quo and the additional requirements to obtain new targets.

### **8.2.1. Coverage obligations for 700 and 800 MHz bands**

SENTECH submit that the Authority must not implement lessons of the German auction process for the 700 and 800 MHz bands without adapting them to the context and conditions of South Africa. SENTECH supports the principle proposed by the Authority. The company submit that the Authority must consider a compromise to encourage the rollout of data services in underserved areas. SENTECH submit that the Authority must consider a split model, where for example LOT A and B are obliged to rollout data services in the configuration of 30/70 (30% urban areas/70% underserved areas) in the process of attaining at least 95% population coverage.

## **8.3. Licensing of the Wireless Open Access Network Operator (WOAN)**

SENTECH proposes that the licensing process of the WOAN must be a beauty contest model. The beauty contest can be designed around the following provisions of the Policy on

High Demand Spectrum and Policy Direction on the Licensing of a Wireless Open Access Network, among other things: section 3.3, 3.4 and 3.6. As stated early, the process must take into consideration that section 9(2) (b) of the ECA and provisions prescribed in terms of the RFSR should be satisfied by the time an application for an individual licence is submitted to the Authority. SENTECH proposes that compliance to section 9(2)(b) of the EC Act should not only be confined to the WOAN as an entity but also to individual persons (natural or juristic) making up the consortium.

The licensing process of the WOAN should be informed by its mandate as articulated in the National Integrated ICT Policy White Paper, 2016 (White paper). The mandate of the WOAN is to provide wholesale electronic communications network services.

The Authority is empowered to licence the WOAN through the policy and policy direction on the licensing of a WOAN, 2019 (policy directive). The Information Memorandum issued by the Authority incorporates some of the recommendations of the Competition Commission (commission) on the WOAN but does not appear to indicate the licensing process for the network licensing process of the WOAN.

SENTECH proposes that the network licensing of the WOAN should enable interested parties/ consortia to participate both in terms of affordability of the administrative fees and encourage empowerment requirements relating to the formation of the interested consortia.

Clause 3.3 (a) of the policy directive is clear on the ownership of the consortium by South Africans. What remains a concern though is the actual control of the consortium. SENTECH submits that to achieve meaningful participation in the control and ownership by historically disadvantaged groups (HDGs), the successful consortium should submit regular reports to the Authority on the following:

- a) Equity ownership information bi-annually;
- b) Board directorship and executive management information annually; and
- c) Annual Financial Statements annually.

SENTECH submits that such a condition will avoid a situation where a member of the consortium may otherwise influence the running of the WOAN and ensure that the Authority continually monitors compliance with conditions of the network licence issued to the WOAN. This will ensure that the empowerment status of the WOAN is not reduced below thresholds.

In addition, SENTECH submits that management and control of the consortium should always be run by 50% plus one person from the HDGs. It is submitted that this condition will ensure that no single member of the consortium will take decisions that are averse to the interests of the HDGs.

Given that the network licence for the WOAN is not provided for in the ECA, the ITA should provide the specificity of the licence; *i.e.* a network licence to provide wireless open network services to distinguish it from existing electronic communications network licences. The issued licence should also reflect the limitations of the proposed licence; *i.e.* what services can be provided through the licence. SENTECH submits that the ITA should also state that the WOAN should provide only wholesale electronic communications network services.

On the empowerment requirements of the WOAN, in line with recent court judgements, the ITA should be clear that section 9(2) (b) of the ECA should be satisfied by the time an application for an individual licence is submitted to ICASA.

In respect of spectrum assignment to the WOAN, SENTECH submits that the ITA should incorporate the commissions' recommendations. These recommendations include a licensing process that should:

- a) ensure a commercially viable consortium secures the licence;
- b) enable cost-oriented access to facilities and national roaming;
- c) provide a spectrum fee holiday; and
- d) have appropriate regulatory oversight that includes non-discrimination in the provision of services.

The commission also recommends that the licensing process for spectrum should promote affordability and access over revenue generation. To get to this end goal, pro-competitive assignments should include spectrum caps on larger operators, asymmetric assignment of spectrum in favour of smaller players and set asides for new entrants such as the WOAN to ensure commercial viability.

The commission 'submission on the Information Memorandum should be incorporated in the ITA. These include the imposition of cost-orientated facilities leasing on all licensees of high demand spectrum, spectrum caps, social obligations, avoidance of burdensome immediate coverage requirements and regulation of aspects of the WOAN such as non-discrimination. SENTECH further supports the commission 'submission that facilities access and sharing should be enhanced to reduce operating costs and ensure the rapid deployment of competing infrastructure.

## **9. Wireless Open Access Network obligations**

SENTECH supports the proposals made by the Authority in section 6.4 of the IM. The company submit that the Authority must adhere with the recommendation of the Competition Commission regarding complying with section 43(8) of the Electronic Communications Act as amended (ECA). The Authority can address the issues raised by the Competition

Commission regarding barrier of entry for MVNO's by implementing the following, *among other things*: 1) proposals made in section 6.4 of the IM; 2) section 43(8) of the ECA; 3) section 43(9) of the ECA, and 4) appropriate design of the licensing process for the WOAN.

The proposals made in section 6.4 of the IM, SENTECH submit that section 6.31, 6.3.3, 6.3.4 and 6.3.6 must be excluded in the ITA process. It is SENTECH's understanding that the principle of the WOAN is to address issues of infrastructure competition and encourage services-based competition. The introduction of the wholesale open-access principle for existing and new entrants, targeting LOTS B, C, D and E will create sustainability challenges for the WOAN. This principle may be counterintuitive to the conditions and context necessitating the licencing of the WOAN. SENTECH submit that the Authority must implement proposals made in section 6.4 of the IM in conjunction with complying with section 43(8) and section 43(9) of the ECA.

## **10. Empowerment Provision for the Industry**

On the empowerment requirements, in line with recent court judgements, the ITA should be clear that section 9(2) (b) of the ECA and provisions prescribed in terms of the RFSR should be satisfied by the time an application for an individual licence is submitted to the Authority. SENTECH submit that the proposal in section 6.6.2 of the IM does not negate compliance of the mentioned provisions. The company believes that the principles of the IM require the same treatment, as stated above, to sections 3.3 (a), (c) and (d) of the policy directive

## **11. Conclusion**

SENTECH thanks the Authority again for the opportunity to make submissions on the IM. SENTECH reminds the Authority that the outcome of the process will have winners and those who will be unsuccessful in their bid. No entity/participant has a deemed right of winning any LOT during the ITA process. The primary purpose of the ITA process is to strive to achieve objectives outlined in the IM and comply with policy objectives, and not to maximise revenue generation.