

# **INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**

**Government Gazette 39203, General Notice 914 of 11 September 2015**

**The Information Memorandum published for comments providing information to prospective radio frequency spectrum applicants. Closing Date is 16h00 on Friday, 16 October 2015**

## **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 AND 2.6GHz.**



**A Submission by  
The South African Communications Forum**



**16<sup>th</sup> OCTOBER 2015**

**DRAFT SACF SUBMISSION ON THE ICASA`S INFORMATION MEMORANDUM PUBLISHED FOR  
COMMENTS PROVIDING INFORMATION TO PROSPECTIVE RADIO FREQUENCY SPECTRUM  
APPLICANTS**

**1. INTRODUCTION**

The South African Communications Forum (SACF) is an industry representative body and represents a cross-section of members of the broadcasting and electronic communications industries, including operators; ICT services providers; manufacturers; among others. The SACF and its members are of the view that the universality of communications is essential in the modern economy to enable active participation and socio-economic development. Mobile broadband, made accessible by spectrum has the potential to achieve universal access to broadband and thereby stimulate economic growth and social development.

The South African Communications Forum ("SACF") thanks the Independent Communications Authority of South Africa ("ICASA") for the opportunity to give our views on the ICASA Draft Information Memorandum which is being published for public comments in Government Gazette 39203, General Notice 914 of 11 September 2015 (the "draft Information Memorandum"). SACF members appreciate that through this process ICASA is seeking the views and inputs of prospective radio frequency spectrum applicants who want to offer mobile broadband, wireless access services for urban and rural areas using the complimentary bands IMT700, IMT800 and IMT2600 for purposes of providing national broadband wireless access services.

The publication of this Information Memorandum is important as it takes South Africa one step closer to making available essential spectrum for mobile telecommunication technologies, a critical components in achieving the goal of 'broadband for all citizens' in South Africa.

The SACF recognises the important role that such spectrum will play in furthering the development of the ICT sector which will further the development of the economy as a whole.

**BACKGROUND**

This SACF response to the draft Information Memorandum has been developed through close collaboration with the Members of SACF, and through intensive research into the parallel processes that have been undertaken or are underway in both developed and developing economies outside South Africa, and the numerous responses to such policy developments submitted by ICT associations and forums similar to SACF. The SACF response is also informed by the state of development of the South African ICT sector, and the actual or perceived successes.

South Africa's National Broadband Policy, SA Connect, was developed through deep consultation and partnerships with the national ICT industry. The aspirational goals of SA Connect can only be implemented after the allocation of the available high demand spectrum bands. Access to this high demand spectrum remains one of the primary obstacles to advancing broadband infrastructure and services as required by SA Connect. Without effective utilization of the available spectrum for national ICT development, the ambitious growth targets set out on South Africa Connect, will not be achieved and have a further deleterious effect on South Africa's ICT competitiveness in the global community of nations.

On 15 December 2011 the Authority published the "Draft Spectrum Assignment Plan for the combined licensing of the 800 MHz and 2.6 GHz bands" and the "Draft Invitation to Apply for Radio Frequency Spectrum licence to provide mobile broadband wireless access services for urban and rural areas using the complimentary bands, 800 MHz and 2.6 GHz" in Government Gazette No. 34872 (Notices 911 and 912 of 2011 respectively. This was done in terms of section 31(3) of the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the Act") read with Regulation 7 of the Radio Frequency Spectrum Regulations 2011, published in Government Gazette.

The Authority furthermore published the final Radio Frequency Spectrum Assignment Plan (RFSAP) for IMT 2015 that provides conditions and requirements attached to the use of a frequency band in line with the allocation and further guidelines as mandated in the National Radio Frequency Plan (NRFP) 2013. These conditions include technical characteristics of radio systems, frequency channelling, coordination and details on required migration of existing users of the band and the expected assignment methods.

SACF takes note that ICASA has not yet finalised the IMT 850 and the IMT 2600 TDD RFSAPs, which should be in alignment with the approach outlined in this draft Information Memorandum. Furthermore, the SACF wishes to bring to ICASA's attention that the IMT 800 RFSAP does not align with the spectrum assignment approach taken in the draft Information Memorandum.

Following the South African Communications Forum's contribution to ICASA's IMT Roadmap for Broadband discussion document, submitted on 7th October 2014, the SACF oral presentation of this contribution on Thursday 9th October 2014, and the invitation by the ICASA Council to submit clarifications and additional information on Tuesday 21st October 2014, SACF was pleased to provide clarifications and supplementary comments, and thanked ICASA for the opportunity.

### **General Remarks**

Mobile operators and service providers currently experience challenges towards ensuring high quality reliable mobile telephony and data services, whilst at the same time meeting the national needs for affordability – the critical cost to communicate that dominates the national ICT discourse.

Furthermore, without access to the spectrum, licensees cannot provide innovation, cost effective and competitive services to the South African public. Networks are heavily congested due to the growing demand for more voice, and an exponentially growing demand for data services. There is a clear need for more spectrum to address the market demand that requires a delicate balance between the still growing need for mobile voice services, and the exponential demand for mobile data, fuelled by the growing popularity and falling prices of data-hungry user terminals such as smart phones and tablet computers.

The lengthy process toward digital terrestrial television migration should not further delay the licensing of the "digital dividend" spectrum bands that will be freed up for broadband access. The licensing of such spectrum should run parallel with DTT migration and should proceed with deliberate speed.

### **SPECIFIC REMARKS ON THE DRAFT INFORMATION MEMORANDUM**

#### **2. LEGAL FRAME WORK**

2.1. ICASA states that: "This Information Memorandum is guided broadly by the provisions set out in the Independent Communications Authority of South Africa Act 13 of 2000 (ICASA Act), Electronic Communications Act, Act 36 of 2005 (ECA), National Radio Frequency Plan 2013 (NRFP), the Radio Frequency Spectrum Regulations 10 2015 (RFSR), as well as the broader policy objectives of South Africa as set out in amongst other documents, the National Development Plan and South Africa Connect (National Broadband Policy), Broadcasting Digital Migration Policy 2008 (as amended) Radio Frequency Spectrum Policy 2010".

SACF is of the view that potential licensees/applicants would require certainty on the legal status of this document viz a viz the policy directive on spectrum to be issued by the Minister of Telecommunications and Postal Services.

Considerable financial investment in the tens of billions of Rands is needed in networks to extend and provide coverage to rural areas and to meet the needs of greater demand. In order to attract such high levels of required investment potential, South African licensees are competing with other national and regional investment destinations to tap into foreign investment funds. To approach this market competitively, full clarity and certainty of process is required. Without such clarity, certainty and transparency, the cost of such funds will be extremely high, and will ultimately increase the cost of communications. ICASA should also provide potential licensees with the next steps to be taken in order to have clear direction as to the timetable and process for such spectrum allocations.

### 3. SPECTRUM FOR THE AWARD

5.1. The draft Information Memorandum states: “The spectrum available for assignment in this process will be as follows:

5.1.1 2×30MHz in the 700MHz band (703MHz-733MHz/758-788MHz)

5.1.2 2×29.305MHz in the 800MHz band (791-821MHz/832.695-862MHz)

SACF members seek clarity from ICASA on the alignment with the IMT 800 RFSAP as the above indication of availability for assignment represents a reduction from 2X30MHz as contained in the IMT 800 RFSAP to 2X29MHz.

5.1.3 2×70MHz and 1×25MHz in the 2.6GHz band (2500-2570MHz/2620-2690MHz and 2595 - 2615MHz)

With regard to the above frequency bands, SACF members noted and highlighted the fact that an additional 5MHz of high demand spectrum was assigned to an operator through a notice in Erratum GG 38755, section 3, which effectively amended 8.1 of the RFSAP. SACF members believe this allocation is in contradiction of regulation 7 of the RFSR published earlier this year, and therefore seeks explicit clarification on this matter from the Authority prior to the ITA and subsequent auction processes.

5.2. The draft Information Memorandum states: “The spectrum will be awarded on a national basis covering the entire territory of South Africa.”

SACF members strongly state that greater clarity must be provided with regard to the definition and scope of the allocation of spectrum for wireless Wholesale Open Access (“WOA”) and the principles under which such WOA will be considered for such allocation.

5.3. The draft Information Memorandum states: “The spectrum available for award is packaged into two (2) Lot Categories and six (6) Lots.”

SACF notes that the document uses the term “categories” without defining the term fully; the difference between categories and lots is not clear as later in the document the terms seem to be used interchangeably.

SACF notes that Lot A is being reserved for Wholesale Open Access (WOA), and that, as indicated in the draft Information Memorandum, will be licensed in a separate process.

- SACF would strongly suggest that there be simultaneous licensing of all available spectrum

rather than in separate processes.

- The draft Information Memorandum does not provide much detail in respect of the obligations or benefits that would be attached to an envisaged wholesale open access operator. In the interest of having the required clarity, certainty and transparency for the significant investment needed by applicants for any of the lots, the obligations and benefits of a WOA should be provided in complete detail.
- SACF request that there be greater clarity on whether all of 700 MHz will be available now as Lot E includes spectrum in the 700MHz band as well.
- SACF members would greatly appreciate insight into what informed the Authority for WOA being assigned 2x20MHz.
- As set out in the draft Information Memorandum, Lot E should reflect 2 x10 instead of 1 X10

5.5 Under “Proposed Lot Categories”, the draft Information Memorandum states, “Applicants are eligible to bid only on one of the proposed Lot Categories except for Lot A which is to be dealt with through a separate Licensing process.”

SACF notes that the “Proposed Lot Categories” is not clearly defined; and as used in the document, it is ambiguous. Confusion is raised by the statement that “applicants are eligible to bid only on one of the proposed Lot Categories except for Lot A.” as here the terms “lot” and “category” are being used interchangeably.

SACF strongly requests that greater clarity be provided as to the eligibility of applicants to apply for both Lot A in addition to other lots or combination of categories. The process needs to be clear if operators can apply for both Lot A as well as for other lots.

## 6. Obligations

The draft Information Memorandum states: “The following obligations will form part of the license conditions of the Radio Frequency Spectrum License to be issued:

### 6.1. Coverage obligation

- 6.1.1. The Authority has been studying approaches used internationally to incentivise network deployment and is particularly impressed by the success of the model adopted in Germany, where operators that acquired 800MHz spectrum were required to provide coverage in less populated areas before they were able to utilise the spectrum in more populated regions. This led to LTE services being available across the whole country in a period of less than two years.
- 6.1.2. The Authority plans to place a coverage obligation following similar principles on the holders of Lots B, C, D and E (i.e. the winners of packages which contain low-frequency spectrum).
- 6.1.3. The Authority will identify areas which should be covered by the holders of Lot B, C, D and E. Licensees will be required to rollout 70% of the broadband network in the identified areas before rolling out in the cities.
- 6.1.4. Licensees will be required to provide sufficient quality of network coverage to provide data services in the areas with an average downlink user throughput of 30Mbit/s in the period from 07:00 to 20:00 (time in the local region). This time period has been chosen to cover the vast majority of mobile data usage in the public area.

- 6.1.5. The holders of Lots B, C, D and E will each have a maximum of three years from the date that the 700MHz/800MHz spectrum becomes available to provide services to all identified underserved areas. If the holder fails to meet this obligation, this will be regarded as a serious breach of the licence conditions.

Generally with regard to the obligations proposed to form part of the license conditions, ICASA must ensure that there is alignment with the aspirational targets of SA Connect and the obligations to be imposed.

SACF members have taken note of ICASA’s objective to increase universal service and access by ensuring rural connectivity, and that rural areas must enjoy similar services as those provided in urban areas.

However, SACF would strongly urge ICASA to differentiate between geographic coverage and population coverage when setting coverage targets. It is SACF’s view that population coverage is the most practical and relevant measure.

Obligations should also be made with cognisance taken of the impact of broadcasters’ occupation and the time necessary for them to migrate and thereby enabling such spectrum being made available to meet the obligations imposed.

Specific comments on the proposed obligations are as follows:

6.1.2: Obligations being imposed on Lot A are critical in meeting ICASA’s objectives in providing coverage and therefore should have appropriate coverage obligations.

Lot A should have an obligation to provide access to infrastructure on a non-discriminatory basis.

6.1.3: ICASA needs to provide a detailed map of the “identified areas” and provide clarity on the basis for inclusion of those areas.

The SACF would respectfully submit that this information needs to be provided well in advance of an ITA in order for the applicant to develop a business case based on a realistic spectrum evaluation.

6.1.4: Based on their experience, SACF members are of the view that providing an average throughput of 30Mbits/s is unachievable in peak periods. Also it is not clear whether the term “average” is referencing average per user or per sector. SACF members recommend that the measure of average per sector throughput be used.

SACF members would greatly appreciate being informed the basis on which the proposed obligation of 30Mbit/s has been determined. Also SACF members would like to have insight into the basis for the time frame of 07:00 to 20:00 being established.

6.1.5: Lot A is excluded and should have similar obligations

## **6.2. Wholesale Open a Wireless wholesale open access obligation**

SACF members have mixed views on the viability of a wholesale open access network and therefore suggest that the feasibility study recommended in SA Connect be completed to inform the business case, scope, definition and obligations of a wholesale open access network.

## **6.3. Digital Terrestrial Television (DTT) Obligations**

- 6.3.1 The draft Information Memorandum states: “In order to fast track the DTT migration project and utilisation of 700/800 MHz, applicants awarded this spectrum are obliged to provide set-top-boxes free of charge to households for Free To Air Terrestrial Television

Service, to those citizens who may not qualify for the subsidy scheme for ownership for poor television owning household in the affected areas”.

- 6.3.2. “The cost to provide set top boxes free of charge will be offset against the auction price”

SACF notes and welcomes that the proposed obligation to provide set top boxes free of charge will be offset against the auction price, i.e. including the cost of such STBs within the auction price. Clearly, greater certainty and clarity needs to be provided on how these total costs of the DTT obligations imposed will be offset. SACF member’s request that greater clarity be provided with regard to the meaning of off-setting the total costs.

SACF is of the view that this DTT obligation is not appropriately structured. The Digital Migration process thus far has taken at least 10 years to determine who will produce set top boxes; how they would be produced, warehoused and distributed; who would qualify for a subsidy, etc. The applicant for high demand spectrum would find it difficult to now have to begin to define these processes in parallel to address a significant number of households. The imposition of such an obligation actually might become a further severe bottleneck to the successful conclusion of DTT migration, if such applicants must now begin to address and define such processes outside of their core competencies, a process which the Government has been grappling with for so many years.

SACF agrees with the proposed price offset but ICASA should not require applicants to acquire, warehouse, identify households or to distribute set top boxes. The DTT obligation should be limited only to an agreed cost to be offset against the auction price.

#### **6.4. BBBEE OBLIGATIONS**

- 6.4.1 The draft Information Memorandum states: “A licensee must achieve BBBEE level 2 status within twenty four (24) months from date of issue of the Radio Frequency Spectrum Licence; or
- 6.4.2 A licensee must increase equity ownership by Historically Disadvantaged Persons (HDP) by three percent (3%) within twenty four (24) months from date of issue of the Radio Frequency Spectrum Licence”

The SACF is an agent for transformation in the ICT industry, and as such welcomes and supports the BBBEE obligation. However, the BBBEE obligations as formulated in the draft Information Memorandum must align with BEE Codes obligations within the existing regulatory framework.

#### **7. THE AWARD PROCESS**

- 7.1. The draft Information Memorandum states: “This section provides an overview of the award process, including an indicative timetable for the completion of the auction.
- 7.2. The award will consist of three stages
- 7.3. The award will be a three stage process which will include qualification, Auction and Licensing Stages.
- 7.4. In the Qualification Stage, parties are invited to submit applications, in which they must state on which Lot Categories (Lot B/C/D/E/F) they may wish to place Bids during the award process. The identities of all applicants will be announced. The Applications will then be assessed by the Authority, and Applicants who meet the requirements will be qualified.

- 7.5. Following Qualification Stage, the Auction Stage will commence. Qualified applicants (Bidders) will be requested to submit a Bid for the Lots that they would be prepared to acquire at Reserve Prices. The Auction Stage will take the form of a 'Simultaneous Multi-Round Ascending' (SMRA) auction.
- 7.6. Applicants will be free to switch between Lots within the Lot Categories for which they are qualified to bid during the SMRA auction process.
- 7.7. Following the Auction Stage, Licences will be issued to winning Bidders, subject to the payment of the Auction Fee."

Some of the members of SACF welcome the adoption of the auction approach by ICASA.

SACF would strongly urge ICASA to consider that applicants should receive information that will have a material impact on their business case well in advance of the auction.

SACF members who support an auction request greater clarity as to what will inform the Reserve Price. The Reserve Price should be appropriate in view of the resultant business requirements and obligations of the eventual licensees and should be rationalised to South African market requirements.

SACF suggests that Auction Fees should be payable when operators have the ability to materially deploy the network utilising the awarded spectrum, i.e. when broadcasters migrate sufficiently to enable use of the spectrum.

## **8. AUCTION**

- 8.1. 7.1. The draft Information Memorandum states: "Spectrum auctions have proven to be a "best practice" for assigning spectrum where demand exceeds supply"
- 8.2. The Authority has been following auction formats which have been used worldwide when licensing spectrum, particularly in situations where demand exceeds supply, and is thus considering the use of the SMRA or the Combinatory Clock Auction (CCA) systems with generic lots."

Some of the SACF members support the statement that the auction process is recognised as global best practice for the assignment of high demand spectrum, and auctions have only been applied in select markets.

Amongst SACF members who support an auction, the preferred method is a 'Simultaneous Multi-Round Ascending' (SMRA) auction. However those who support the SMRA feel that there needs to be greater detail provided including associated time frames. SACF members would caution on the complexity of adopting a Combinatory Clock Auction (CCA) with generic lots.

### **8.3. SMRA FORMAT**

- 8.4. The draft Information Memorandum states: "The SMRA is an open ascending multi-unit auction that takes place over a number of rounds. In this format, bids are placed for individual lots, and the auction proceeds in successive rounds with increasing prices, until there are no new bids. A points-based activity rule is often used, under which bidders may only decrease or maintain their level of demand from one round to the other, as measured by the number of eligibility points<sup>15</sup>. In each round, the highest bid placed on each lot is called a Standing High Bid. When the auction ends Standing High Bids become winning bids and the bidders pay the amounts they bid.

The traditional implementation of the SMRA allows bidders to place bids for specific frequency lots.

- 8.3.2. The SMRA with generic lots has been used in several recent multi-band spectrum awards in Europe. Examples include Germany, Italy, Spain, Portugal, Greece and the Czech Republic.
- 8.4. The Reserve Price of each Lot will be published in the ITA.
- 8.5. The auction will take place in Johannesburg, with all Bidders co-located in the same building. The exact location of the auction will be communicated nearer to the auction date.”

SACF is of the view that Auction Fees should be payable when the operators have the ability to materially deploy the network utilising the spectrum.

As noted above, SACF requests clarity as to what will inform the Reserve Price. SACF again states that the Reserve Price should be appropriate in view of the resultant business requirements and obligations of eventual licensees and should be rationalised to South African market requirements.

## 9. Conclusion

As the Republic of South Africa’s stakeholders deliberates on ICASA’s Spectrum Policy and Regulatory Issues, SACF strongly requests the ICASA to focus on resourcing and strengthening both the concerned raised by Policy Makers and Stakeholders so that they can urgently conclude all outstanding activities needed to allocate the invaluable radio frequency spectrum to existing and new ICT operators, so that they may build the modern ICT Infrastructures and deliver the services that will fuel South Africa’s growth in all key national development domains, as outlined and specified in all South Africa’s development plans, including the overriding NDP and the subordinate ICT related policies and regulatory provisions.

In conclusion, SACF strongly recommends the following actions be taken:

- Allocating spectrum for high-capacity wireless access, in particular wireless broadband so the majority of South African can gain access to the latest ICT networks and services as soon as possible.
- To improve South Africa’s ICT competitiveness and to close the digital divide ICASA assigns high demand spectrum bands for increasing coverage of wireless broadband.
- Fast track and conclude digital terrestrial television migration as soon as possible so that the “digital dividend” of broadcast spectrum that will be available for mobile broadband after migration becomes available without further years of delay.
- Licensing of spectrum should run parallel with DTT migration – should proceed with deliberate speed.

**SACF would welcome the opportunity to participate in any public hearings on the finalisation of this Information Memorandum.**

**END**