



Digital Broadband International

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"The Wireless Internet Communications Company"

Registration No: 2006/006460/07

## **DIGITAL BROADBAND INTERNATIONAL 2 PTY**

### **COMMENTS**

**ON**

**THE DRAFT SPECTRUM ASSIGNMENT PLAN FOR THE  
COMBINED LICENSING OF THE 800 MHz AND 2.6 GHz BANDS**

**GENERAL NOTICE 911 OF 2011**

**Dated: 29 February 2012**

## 1. INTRODUCTION

- 1.1 Digital Broadband International 2 PTY, (DBI) welcomes this opportunity to comment on ICASA's Draft Spectrum Assignment Plan for the Combined Licensing of the 800 MHz and 2.6 GHz Bands, General Notice 911 of 2011, (the "Draft Spectrum Plan")
- 1.2 DBI is a South African registered broadband communications start-up company founded by South African and US partners. DBI holds an Electronic Communications Services License (0220/IECS-JAN-09) and an Electronic Communications Network Services License (0220/IECNS-JAN-09).
- 1.3 DBI's mission is to build out and operate a national wireless broadband network and offer a suite of IP communications services at competitive prices. DBI intends to offer broadband and IP communications to residential and SME customers in addition to offering wholesale services.
- 1.4 DBI applauds ICASA's efforts to move forward expeditiously with the combined licensing of the 800 MHz and 2.6 GHz spectrum bands.
- 1.5 However, DBI believes that the Draft Spectrum Plan Draft should be amended and expanded to better promote and ensure consistency with the Minister of Communications Draft Policy Directions for Electronic Communications Services in High demand Frequency (hereinafter the "Draft Policy Directions").

## DISCUSSION

### 2. Sec 5 - Licensing Philosophy

#### **ICASA should include the 2.3 GHz MHz band in the Combinational Awards of Spectrum**

- 2.1 In paragraph 5.13 of the Draft Spectrum Plan, ICASA proposes to carve out an exception for operators holding wireless spectrum in the 450-470 MHz and the 2.3 GHz bands, which will allow them to apply for additional spectrum in the 800 MHz and 2.6 GHz bands.
- 2.2 Such a result would only serve to effectively sanction the inefficient use of scarce wireless spectrum and encourage more spectrum hoarding.
- 2.3 According to ICASA's preliminary spectrum audit, the incumbent operator who currently holds more than 60 MHz of spectrum in the 2.3 GHz band is using the 2.3 GHz spectrum to provide national backhaul links.
- 2.4 At best, it is a grave misallocation of scarce public resources to use the 2.3 GHz band for network backhaul. There is an abundance of more cost effective alternatives available for national backhaul including fiber backhaul networks as well as higher frequency band spectrum ( 5 GHz and above).

- 2.5 Such use of the 2.3 GHz Band for network transport is also wholly inconsistent with the meaning and spirit of the Draft Policy Directions.
- 2.6 In particular, paragraph 2.1.7 of the Draft policy Direction specifically directs ICASA, in relevant part, to “Ensure efficient spectrum utilization and the introduction of new entrants...”
- 2.7 Accordingly, DBI submits that consumers and competition would be better served if the 2.3 GHz band was made available for wireless broadband access instead of being used for network transport.
- 2.8 DBI urges ICASA to require current spectrum licensees in the 2.3 GHz band to migrate network backhaul traffic onto more efficient and suitable backhaul networks that are widely available throughout the country.
- 2.9 ICASA should further move expeditiously to include any newly freed spectrum from the 2.3 GHz band in the combinational award of spectrum from the 800 MHz and 2.6 GHz bands.

### 3. Sec 8 - In Band Migration in 800 MHz and 2.6 GHz Bands

- 3.1 In Sec 8 of the Draft Spectrum Plan, ICASA states that in-band migration of incumbent spectrum licensees is necessary to align the bands “to the preferred frequency channel arrangements.”
- 3.2 However, to accomplish its In Band Migration Plan, ICASA is proposing to award these same incumbent spectrum licensees with additional scarce spectrum without requiring the spectrum licensees to even apply through the ITA process for the spectrum.
- 3.3 According to ICASA’s proposed In Band Migration Plan:
  - WBS will receive an additional 15 MHz of spectrum from the 2.6 GHz band in addition to its current 15 MHz and thus bringing WBS’ **total spectrum holding in the 2.6 GHz band to 30MHz**
  - Neotel will receive an additional 2x10 MHz of spectrum from the 800 MHz band in addition to its current 2x 4.92 MHz and thus bringing **Neotel’s total spectrum holding in the 800 MHz band to 30MHz.**
- 3.4 WBS and Neotel will be given a portion of the very same spectrum that ICASA is requiring every other spectrum license applicant to compete and bid for through the ITA process.
- 3.5 Such disparate and unequal treatment of similarly situated license applicants will effectively result in the denial of due process and equal treatment rights of every

other spectrum license applicants. Such an outcome is inconsistent with the ECA and other laws of the country.

- 3.6 DBI respectfully urges ICASA to reconsider its draft In Band Migration Plan and develop a more equitable solution that does not deny due process or equal rights to similarly situated spectrum applicants.

#### **4. Schedule A**

##### **Application Fees (Paragraph 1.16)**

- 4.1 Section 2.1.1.3 of the Draft policy Directions requires ICASA to develop a licensing process that in part, will facilitate the “introduction of new entrants.”
- 4.2 However, ICASA’s proposed spectrum application fees and proposed payment terms for new spectrum licenses are unreasonably high and unduly burdensome to new entrants.
- 4.3 In Paragraph 1.16 of Schedule A to the Draft Spectrum Plan, spectrum applicants are required to submit a non-refundable application fee of R 100,000. In addition, winning auction bidders have 30 days to come up with a 30% down payment. Paragraph 1.38.6 of Schedule A to the Draft Spectrum Plan
- 4.4 DBI submits that the R 100,000 non refundable application fee clearly exceeds ICASA’s costs of processing an application and will only serve as a deterrent to smaller operators and new market entrants, contrary to the Draft Policy Directions.
- 4.5 Moreover, there are more efficient and targeted methods for ICASA to accomplish the goal of dissuading frivolous spectrum applications. For example, ICASA already requires applicants to submit financial documents to demonstrate their financial bona fides.
- 4.6 Accordingly, DBI recommends that ICASA amend its proposed spectrum application fees to ensure that spectrum license fees do not exceed ICASA’s costs of processing license applications and that all other licensing fees and requirements be fair, reasonable and not unduly burdensome to new entrants.

##### **30% HDI Requirement (Paragraph 1.31)**

- 4.7 The promotion of broad based black economic empowerment has been a long held national policy objective of Government and the commitment to promoting such objective is strewn throughout the Draft Policy Directions and the ECA
- 4.8 In paragraph 1.1 of the Draft Policy Directions, the DoC identifies three key national policy objectives which should guide any licensing process for high demand spectrum.

- 4.9 Those national policy objectives include:
- 1.1.1 Facilitate the introduction of new national and rural providers of electronic communications, including broadband;
  - 1.1.2 **Ensure that the participating licensees contribute to broad based Black empowerment;** and
  - 1.1.3 Impose universal access and service obligations to promote uptake and usage of electronic communications in rural and urban poor settlements
- 4.10 The promotion of broad based Black empowerment is further set forth as a specific Policy Direction to ICASA in paragraph 2.1.1.1 to 2.1.1.3 which direct ICASA to facilitate the licensing of high demand spectrum and determine a licensing methodology to achieve the following objectives:
- 2.1.1.1 Universal access and broadband for all
  - 2.1.1.2 Introduction of new entrants; and
  - 2.1.1.3 Economic empowerment**
- 4.11 Notwithstanding the DoC's Policy Direction and Government's long held policy objectives on black economic empowerment, ICASA will be called upon to decide "whether corporate special purpose vehicles (SPVs) that are primarily designed to enable an operator to meet the 30% HDI equity shareholding requirement, are in fact consistent with such national policy objectives?"
- 4.12 DBI submits that as a matter of equity and law, the determination of whether a license applicant meets the 30% HDI equity requirement should not be relative to one's market capitalization or size.
- 4.13 Put simply, the HDI requirement should not be misinterpreted to mean "30% means 30% of the operating company, but if you are a large incumbent operator, then 30% means something less than 30% of the operating company."
- 4.14 Such a disparate treatment of smaller operators versus larger operators runs contrary to the overall objectives of the Draft Policy Directions which in part call for the promotion of new market entry and new competition in the ICT sector.
- 4.15 DBI urges ICASA to state unambiguously that corporate SPVs whose primary purpose is to enable an operator to "meet" the spectrum licensing requirement for 30% HDI shareholding without actually affording HDI groups access to 30% ownership of the operating entity, are in fact inconsistent with the ITA's requirement and with Government's national policy objectives.
- Auction Trigger (Paragraph 1.36)**
- 4.16 In paragraph 2.1.4 of the Draft Policy Directions, ICASA is directed to "ensure that auctions are utilized only as a last resort, where there are competing applications who meet stated policy objectives"
- 4.17 However contrary to the above Policy Direction, ICASA has set an unreasonably low "trigger" for resorting to the sealed bid/auction process.

- 4.18 In paragraph 1.36, ICASA states that “in the event that more than one applicant meets the criteria set in phase 2 (the Comparative Evaluation Phase) for a package, the applicants will move to the sealed bid phase.”
- 4.19 Given the pent up and long standing demand for spectrum licenses in South Africa, it is highly probable that there will be more than one operator who passes the prequalification phase.
- 4.20 However, ICASA has not provided any explanation as to how it determined that the bar for an auction should be set at “more than one qualified operator” or why?
- 4.21 DBI believes that ICASA’s proposed auction trigger is too low and will immediately result in an auction instead of relying on an auction only as a last resort.
- 4.22 DBI respectfully urges ICASA to re-examine its proposed standard for triggering the auction/sealed bid phase of the ITA.

### **Sec 3 - Withdrawal of the Spectrum License (Paragraph 3.1)**

- 4.23 ICASA has developed a reasonable and detailed “use it or lose it” spectrum policy in paragraph 3.1 of the Draft Spectrum Plan.
- 4.24 However, this proposed “use it or lose it” spectrum policy is only applicable to new licensees.
- 4.25 Moreover, there is nothing in the Draft Spectrum Plan or in any other spectrum regulations that imposes specific “use it or lose it” obligations on current spectrum license holders.
- 4.26 It would be a contravention of the Draft Policy Direction 2.1.7, if ICASA were to effectively exempt current spectrum license holders from its “use it or lose it” policy, or to impose a less onerous regime on them, given the vast amounts of spectrum that have already been awarded and arguably are being underutilized by incumbent spectrum licensees.
- 4.27 Indeed, such a scenario would be a prime example of “closing the barn door after the horse has already left.”
- 4.28 DBI respectfully urges ICASA to amend its Draft Spectrum Plan to be amended to make its proposed “spectrum use it or lose it” policy applicable to both current spectrum license holders and to new spectrum licensees.

## **5. Harmonizing ICASA’s Draft Spectrum Licensing Plan with Clearly Defined National Policy Objectives**

### **Facilitating the Licensing of Spectrum in the 800 MHz Band Based on a Wholesale Open Access Network Basis**

- 5.1 DBI commends the ICASA for proposing a wholesale wireless broadband

- license.
- 5.2 If properly structured, the wholesale wireless broadband licensee can do much to accomplish Government's goals of promoting more affordable, accessible and available broadband communications services for all South Africans and at the same time, facilitate greater economic opportunities in the ICT for those who have been previously shut out.
  - 5.3 However, given the unequal market power between facilities based incumbent operators/wholesalers and resellers, the wholesale licensee must be held to a higher standard in order to allow market forces to work efficiently and effectively,
  - 5.4 Historically in South Africa, facilities based incumbent operators have viewed their wholesale customers with distrust and as competitors out to steal their retail business, rather than as actual customers who represent opportunities to develop additional revenue streams.
  - 5.5 This commonly held view was present pre-ECA in the relationship between facilities based incumbent operators and VANS providers. This view still exists today in the relationship between facilities based incumbent operators and new ECNS and ECS providers.
  - 5.6 The recent ruling by the Competition Tribunal against an incumbent operator for ant-competitive practices is a testament to the unbalanced bargaining power between facilities based incumbent operators and their wholesale customers.
  - 5.7 The limited availability of spectrum in the 800 MHz and 2.6 GHz bands will further contribute to the "unbalanced bargaining power" between the wholesale spectrum licensee and its wholesale customers, resulting in a wholesale communications market that is stagnant at best, or doomed to failure at worst..
  - 5.8 ICASA must therefore put in place competitive safeguards to ensure the delivery of reasonable, fair and non discriminatory wholesale services to all licensed operators, in order for the wholesale licensee to succeed and to enable Government to finally achieve its broader goals for the ICT sector.
  - 5.9 Competitive Safeguards are warranted and necessary given the past history of questionable competitive practices in the market place, the limited availability of spectrum and the high cost of network facilities.
  - 5.10 Absent the enactment of critical competitive safeguards on the wholesale spectrum license, the prospects for developing a sustainable and robust wholesale communications market in South Africa are bleak at best,.
  - 5.11 Accordingly, DBI respectfully urges the ICASA to impose Competitive Safeguards upon the Wholesale Licensee to promote open, fair and non-discriminatory access to the wholesale network as well as to ensure the long term sustainability of a wholesale communications market in South Africa.

- 5.12 DBI recommends that at a minimum, ICASA should require the Wholesale Spectrum Licensee to agree to the following Competitive Safeguards as part of the terms and conditions of its license:
- a. Implement a reciprocal Infrastructure Sharing plan that includes at a minimum,
    - i. Shared tower space;
    - ii. Shared building/roof top sites;
    - iii. Collocation; and
    - iv. Sharing of any other relevant essential facilities
  - b. The successful applicant for the wholesale license should be required to divest itself of all retail broadband, data and VoIP services so as to ensure fair, reasonable and non-discriminatory treatment of wholesale customers

### **Infrastructure Sharing**

- 5.13 It has been almost 7 years since the ECA was promulgated and there are still no regulations on Infrastructure Sharing notwithstanding the authority set forth in the ECA.
- 5.14 As has been demonstrated in other jurisdictions globally, Infrastructure Sharing makes good economic sense for both new and incumbent operators, given that it can lower an operator's CAPEX costs.
- 5.15 Infrastructure Sharing also benefits consumers as well as society in general, by minimizing the impact on the landscape and disruption caused by the need to develop duplicative tower sites.

### **Retail Broadband, Data and VoIP Services Divestiture**

- 5.16 As has been previously discussed herein, the wholesale market in South Africa has been beset by a long past history of questionable competitive practices by facilities based network operators, the high cost of network facilities and now by the limited availability of spectrum.
- 5.17 As was the case and is the case today, incumbent network operators view wholesale customers as threat to their retail business and not as potential sources of new revenue streams.
- 5.18 Accordingly, DBI urges ICASA to require the Wholesale licensee to divest itself of all current retail broadband, data and VoIP services, so as to ensure fair, reasonable and non-discriminatory access to the network by wholesale customers.
- 5.19 It is disingenuous and impractical for an incumbent operator to suggest that it can erect a firewall between its existing retail broadband, data or voice business and its new wholesale business.

- 5.20 As a practical matter, it will be virtually impossible for ICASA to monitor whether such a firewall is indeed being effectively enforced by incumbent operators.
- 5.21 However, the Wholesale Licensee should be allowed to petition ICASA for a retail exemption in those markets where there is insufficient demand for wholesale services and hence the network is being underutilized
- 5.22 In addition, the Wholesale Licensee can petition ICASA for a retail exemption as an “operator of last resort” in geographic markets where there are no service providers.
- 5.23 Consumers will benefit from retail divestiture since long overdue and much needed broadband services will finally reach underserved communities and markets
- 5.24 Industry will benefit because both incumbents and new entrants will get wholesale access to broadband network services on terms that are reasonable, fair and non discriminatory
- 5.25 Finally, the macro economy will benefit since entrepreneurs and small operators will finally get access to previously unavailable network infrastructure.

**Allow for the Introduction of New Entrants Through Combinational Awards of Spectrum from All Available Spectrum Bands Including the 700 MHz band**

- 5.26 DBI understands that ICASA may have already begun a preliminary inquiry into the availability of 700 MHz spectrum for wireless broadband access.
- 5.27 DBI further understands that an additional 45 MHz of paired spectrum from the 700 MHz band could become available in South Africa, depending upon the level of commitment by Government to such an undertaking.
- 5.28 A number of Regulators in the Asia-Pacific region have already moved to make spectrum from the 700 MHz band available for wireless broadband access and industry standards are expected to be ready by June 2012.
- 5.29 DBI recommends that ICASA amend the Draft Spectrum Plan to combine the award of 700 MHz spectrum along with the awards of 800 MHz and 2.6 GHz spectrum.
- 5.30 As is the case with the 800 MHz band which is being “pre-awarded” as part of the combinational licensing process, the 700 MHz band can and should be “pre-awarded” as part of the current licensing process.
- 5.31 The issue of migrating current analogue users out of the 700 MHz band should be dealt with in a manner similar to and concurrently with the 800 MHz band migration plans.

- 5.32 The combinational award of spectrum from the 700 MHz, 800 MHz and 2.6 GHz bands will do more to maximize the digital dividends and thus result in more affordable, accessible and available broadband communications services for all South Africans.

### **Facilitating the Introduction of New Entrants as a Policy Objective**

- 5.33 As is the case with promotion of broad based black empowerment as a national policy objective, facilitating the introduction of new competition has been a long held Government Policy Objective support for which can be found throughout the Electronic Communications Act (ECA) as well as in the Draft Policy Directions.
- 5.34 In the following section, DBI addresses several policy “sub components” that are critical to achieving Government’s goal of facilitating the introduction of new competition.

### **Imposing Universal Access and Service obligations on All Spectrum Licensees**

- 5.35 DBI submits that the policy goal of promoting universal access and broadband for all is best accomplished by ensuring that all spectrum license holders be subjected to similar types of universal access or service obligations.
- 5.36 Universal access is not a goal that can be achieved by the efforts of new spectrum licensees alone.
- 5.37 Wireless spectrum offers the best opportunity for expanding internet penetration and broadband access in South Africa.
- 5.38 Thus all current spectrum license holders, (whether incumbent or non incumbent spectrum holders such as Neotel and WBS), should share in the responsibility and obligations for helping Government to achieve its universal access and broadband for all objectives.

### **Mandatory Voice and Data Roaming**

- 5.39 DBI respectfully submits that all current spectrum license holders should be required to offer mandatory voice and data roaming agreements.
- 5.40 Mandatory voice and data roaming agreements are critical to market entry by new spectrum licensees because they will enable voice and data network coverage in rural areas from an early stage thus making it more feasible to satisfy the license obligation in the given time-frame.

- 5.41 Mandatory roaming agreements will improve the time-to-market for new spectrum licensees as well as serve as an interim solution for Voice and data services in underserved communities.

### **Asymmetrical Interconnection Rates**

- 5.42 Asymmetrical interconnection rates are another key policy tool utilized by regulators in both fully developed and underdeveloped markets to jump start competition.
- 5.43 As new entrants begin offering services in a market, there will be an imbalance in terminating calls that will naturally favor incumbent operators.
- 5.44 Put simply, new entrants who will start off with a smaller customer base than established incumbent operators will originate more voice calls to incumbents than they terminate from the incumbents.
- 5.45 Asymmetrical interconnection rates will help mitigate the economic impact of such call termination imbalance until such time that new entrant is able to grow its customer base to scale.
- 5.46 Asymmetrical interconnection rates will help make it more economically feasible for new spectrum licensees to serve underserved communities over the long term and thus help satisfy other spectrum license obligations.

## **6. RECOMMENDATIONS**

DBI respectfully recommends that ICASA amend its Draft Spectrum Plan to clarify and/or incorporate the following proposals:

- 6.1 ICASA should amend the Spectrum Plan to include the 2.3 GHz band in the combinational award of spectrum from the 800 MHz and 2.6 GHz bands and require current spectrum licensees in the 2.3 GHz band to migrate their network backhaul traffic onto fiber networks or other more suitable backhaul networks.
- 6.2 ICASA should amend its draft In Band Migration Plan in a manner that does not result in the denial of due process and equal treatment rights to similarly situated spectrum license applicants by giving spectrum to a select few operators while requiring all other operators to apply and bid for the very same spectrum through the ITA process .
- 6.3 ICASA should amend its proposed spectrum application fees to ensure that spectrum license fees do not exceed ICASA's costs of processing the license applications and that all other licensing fees and requirements are fair, reasonable and not unduly burdensome to new entrants.
- 6.4 ICASA should state unambiguously that corporate SPVs whose primary purpose is to enable an operator to "meet" the licensing requirement for 30% HDI shareholding

- without actually affording HDI groups access to 30% ownership of the operating entity, are in fact inconsistent with the ITA and with Government's national policy objectives.
- 6.5 ICASA should re-examine and amend its proposed standard for triggering the auction/sealed bid phase of the ITA so as to be consistent with the Draft policy Direction that auctions be used as a last resort.
  - 6.6 ICASA should amend its Draft Spectrum Plan to make its proposed "spectrum use it or lose it" policy applicable to both current spectrum license holders, as well as to new spectrum licensees.
  - 6.7 ICASA should amend the Draft Spectrum Plan to impose Competitive Safeguards upon the Wholesale Licensee as part of the terms and conditions of its license, Such Competitive Safeguards should include, but is not limited to:
    - a. Implementing an reciprocal Infrastructure Sharing plan that includes at a minimum,
      - i. Shared tower space;
      - ii. Shared building/roof top sites;
      - iii. Collocation; and
      - iv. Sharing of any other relevant essential facilities
    - b. Requiring the successful applicant for the wholesale licensee to divest itself of all retail broadband, data and VoIP services so as to ensure fair, reasonable and non-discriminatory treatment of wholesale customers;
  - 6.8 ICASA should proceed with haste to complete its inquiry into the availability of 700 MHz spectrum for wireless broadband applications and to combine the award of 700 MHz spectrum along with the awards of 800 MHz and 2.6 GHz spectrum.
  - 6.9 To the extent permitted under the ECA, ICASA should require that all current spectrum license holders, (whether incumbent or non incumbent spectrum holders such as Neotel and WBS), share in the responsibility and obligations for helping Government to achieve its universal access and broadband for all objectives.
  - 6.10 ICASA should amend the Draft Spectrum Plan to require Mandatory reciprocal voice and data roaming agreements of the Wholesale Licensee;
  - 6.11 In the case where an incumbent operator has been awarded the wholesale spectrum license, ICASA should require said incumbent operator to offer asymmetric interconnection rates to new entrants

**Respectfully Submitted,**

A handwritten signature in black ink, appearing to read 'Julius Kearney', with a stylized flourish at the end.

**Julius Kearney**  
**DBI Director**