GSMA Africa
First Floor
Bishop Magua Centre
George Padmore Lane
Ngong' Road
Nairobi
Kenya

Tel: +254 020 217 77 44

www.gsma.com/mea

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GSMA on comments on ICASA's Information Memorandum for licensing of the 700 MHz, 800 MHz and 2.6 GHz spectrum bands

The GSMA would like to thank ICASA for the opportunity to comment on its Information Memorandum that provides guidance to prospective applicants regarding the process and criteria to be applied by the Authority in the licensing of IMT spectrum bands. We would welcome the opportunity to present at a public hearing if one is scheduled by the Authority.

The GSMA strongly supports the simultaneous licensing of the 700 MHz, 800 MHz and 2.6 GHz bands for provision of mobile broadband services and wish to commend ICASA on its willingness to ensure a transparent and objective award procedure is implemented. This will encourage market players to compete vigorously and to invest in the infrastructure needed for broadband technology deployments throughout South Africa.

Spectrum harmonization

The GSMA warmly welcomes the use of regionally harmonised 700 MHz, 800 MHz and 2600 MHz channel plans and the technology neutral approach to awarding usage rights in these bands.

Furthermore, in order to avoid future interference issues between systems, we recommend in-band migration of Neotel's network downwards to the CDMA 2000 sub-band starting at 824 MHz, as detailed in the Final (Draft) IMT Roadmap - Section 8.4.3. This will not only reduce adjacent frequency bands interference mitigation costs but also free the entire 2x30 MHz bandwidth in the 800 MHz band for the provision of mobile broadband.

Finally the GSMA strongly recommends that in addition to the harmonised channel plan, South Africa should also follow harmonised technical conditions in order to enable the economies of scale in equipment manufacturing, and in so doing lower network equipment and handset costs.

Wholesale open access license

Although we understand the reasons why ICASA is considering licensing a wireless wholesale open access network (WWOAN) (insufficient network coverage particularly in rural areas, slow introduction of new services), we would like to underline that implementing a WWOAN is likely to lead to challenges in establishing, funding and regulating the network, making it more likely to fail. Furthermore, in the case where the wholesale network co-exists with incumbent networks, the challenges are even greater. As a result, Governments and Regulators are likely to try to ensure that the WWOAN will succeed by discriminating in favour of the latter and by doing so, would introduce distortions in market competition.

Imposing coverage obligations on low-frequency spectrum winners but not on the WWOAN which will be granted license for equivalent spectrum band – or assigning more bandwidth in the 700/800 MHz bands (2x20 MHz for the WWOAN versus 2x10 MHz and 1x10 MHz for other licensees) and exempting the WWOAN from spectrum fees payments are illustrations of such discrimination.

As a consequence, existing operators may be reluctant to direct their traffic to the WWOAN; they may rather rapidly deploy their own networks while the detailed roadmap of the creation of the WWOAN is to be finalised. The WWOAN is then more likely to fail, leading to an inefficient use of the spectrum and a missed opportunity to benefit from the socio-economic impacts associated with the usage of the digital dividend.

Those barriers probably explain why the vast majority of countries around the world have adopted the model of network competition in their mobile markets. There are now only 30 countries with single networks, representing less than 3% of the world's population[1].

Considering the particular case of the South African market, there are likely to be some truly under-served areas in South Africa where commercial operators are unable to roll out due to economic reasons. Creating some form of publically funded (or co-funded) WWOAN to cover these specific areas could be a possible option to be discussed with operators. This entity would not compete in the retail market but will rather provide non-discriminatory access to its network to other mobile operators, allowing them to serve the rural population[2]. However, alternative solutions such as voluntary infrastructure sharing, voluntary roaming agreements, reverse auctions and Government subsidies to support the extension of a national backhaul network are other ways to encourage coverage expansion beyond commercially viable areas.

Lot composition and size

The GSMA shares ICASA's view that the 700 MHz, 800 MHz and 2.6 GHz bands complement each other and that the simultaneous licensing of these bands will help narrow the digital divide by increasing broadband coverage and enhancing competition. However, this objective will only be met if spectrum licenses - with appropriate amount of spectrum - are granted to those best-capable of using them to their optimal efficiency.

The 700 MHz and 800 MHz bands are proving instrumental in delivering widespread LTE services but these bands will only deliver their full potential if the spectrum available is licensed in a way to accommodate large carriers in order to improve network performance and offer greater capacity. We therefore strongly recommend the assignment of contiguous blocks with operators being able to acquire at least 2x10 MHz bandwidth each for better network performance and greater LTE efficiency.

Furthermore, although the Information Memorandum does not clarify whether new entrants will be allowed to bid for spectrum, we would like to provide findings from a GSMA analysis on the impact of setting aside spectrum for new entrants in a mature market. Spectrum set asides and caps can lead to inefficient outcomes such as spectrum remaining unsold (Chile and Canada AWS auction in 2008, 2009), spectrum being acquired by inefficient user who deploys little and fails to gain market share (Netherlands and Belgium 2.6 GHz auction in 2010 and 2011), or in increased spectrum costs for incumbents (Netherlands 800 MHz auction in 2012).

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[1] For more information, see GSMA report http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/10/Government_intervention_in_the_South_African_broadband_market.pdf

[2] As above.

It is showed that in mature markets that already have a healthy number of incumbents – such as the South African market – the mobile broadband market share of new entrants is below 20% for the entire period examined with a decrease 13 quarters after launch (see figure below), The new entrants are then more likely to fail in the medium or long term, leading to valuable spectrum resources being left idle and therefore preventing the incumbent market players from using that spectrum resource to provide the population with innovative services.

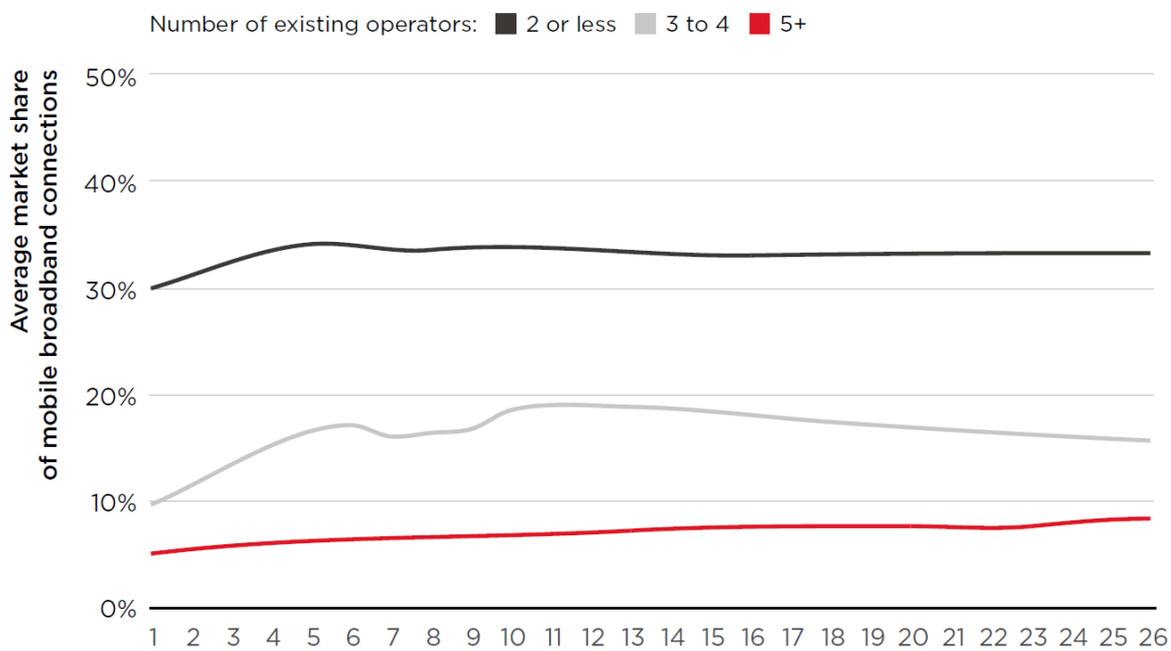

Figure 3: New entrants' average mobile broadband market share by market structure, quarters after launch
Source: GSMA Intelligence

Coverage requirements

Digital Dividend spectrum is a valuable national resource and the GSMA notes that ICASA is planning to impose coverage obligations on licensees being granted the right of use of the 800MHz frequency band. When considering the imposition of coverage obligations, the GSMA would like to stress the following points:

- Balance coverage requirements with lower reserve price of the spectrum. If coverage requirements exceed commercially viable levels then the value of the spectrum will be reduced
- Coverage requirements should not be linked to specific frequency bands to avoid inefficient use of the spectrum
- Coverage requirements should be set in terms of population and not geography
- Allow voluntary passive and active infrastructure sharing on commercial terms

Digital dividend

In South Africa, the digital switchover (DSO) has been held back by a lengthy process and as a result, South African consumers are missing out on the socioeconomic benefits that result from greater access to broadband. The GSMA notes that ICASA is considering practical measures to

accelerate the DSO, namely the provision of set-top-boxes free of charge to specific categories of households, in order to free the Digital Dividend spectrum for mobile broadband.

With 35 million mobile unique subscribers as of June 2014[3], the South African mobile market is relying on the Digital Dividend spectrum to meet the strong demand for broadband services across the country. It is vital to the mobile operator community that they receive certainty on how and when the Digital Dividend frequencies will be licensed and cleared from incumbent users. The sooner mobile operators have certainty on the issue, the sooner South African consumers can benefit from new mobile broadband services.

Spectrum auctions

The GSMA agrees with ICASA's view that auctions have proven to be an efficient way to assign spectrum when spectrum demand is expected to exceed supply. In the case of multiple spectrum blocks auctions, the main formats used are the Combinatorial Clock Auction (CCA) and the Simultaneous Multiple Round Auction (SMRA)[4]. Each format may have its advantages and vulnerabilities and then produce different outcomes depending on the market circumstances and the objectives of the governments and regulators. In either case, auctions should not be designed to maximize short term revenue for governments but instead recognize the long term socio-economic benefits that will result from efficient spectrum usage.

Levying high reserve prices for spectrum auctions will reduce the funds available for network deployment, increase consumer prices and limit the potential economic benefits of mobile broadband and therefore prevent governments from achieving key policy goals, such as increasing broadband uptake and driving economic growth. In the same way, imposing excessive annual fees for mobile spectrum use will be counterproductive to the government objectives to bring broadband services to the South African population. We therefore recommend that ICASA should demonstrate its willingness to ensure a fair and predictable spectrum licensing process by publishing the recurring spectrum fees – if any – that will be applicable to the spectrum being auctioned.

The GSMA remains at your disposal to discuss any of these points in more details. We encourage ICASA to take a leadership role in the assignment of this important spectrum for the further deployment of mobile broadband across South Africa.

Yours sincerely

MORTIMER HOPE

Director Africa
Email: mhope@gsma.com
Mobile:+27 82 994 8248

[3] Source: GSMA Intelligence
[4] www.gsma.com/spectrum/wp-content/uploads/2014/11/The-Cost-of-Spectrum-Auction-Distortions.-GSMA-Coleago-report.-Nov14.pdf