



GSM Association
Unit 11 & 12
Bishop Magua Centre
Ngong Road, Nairobi, Kenya
Tel + 254 020 2177744
Fax + 254 020 2172343
Web www.gsma.com

6 October 2014

Dear Mr Makgotlho,

The GSMA, which represents the interests of mobile operators worldwide, would like to congratulate the Independent Communications Authority of South Africa (ICASA) on its publication of the Draft International Mobile Telecommunications (IMT) Roadmap for consultation.

The IMT Roadmap provides a substantial amount of useful information that provides mobile operators with a degree of certainty in the market. This regulatory framework has set an agenda for accelerating mobile broadband connectivity to all South Africans and will enable the industry to work closely with key policymaking and regulatory bodies such as the Department of Telecommunications and Postal Services, the Department of Communications and ICASA. The efficient management of spectrum has a direct impact on the development of mobile broadband and other mobile services and therefore the GSMA would like to address several points for consideration during the public consultation period. This issue has never been more pertinent as we work towards addressing future IMT spectrum needs in the run-up to the World Radiocommunication Conference in 2015 (WRC-15).

Channel Plans and Regional Harmonization of the Digital Dividend (700/800 MHz)

The mobile industry supports the retention of the 2x30 MHz channel plan in the 800 MHz band, as well as the adoption of the 2x30 MHz channel plan that consists of 703-733MHz (uplink) paired with 758-788MHz (downlink) as the preferred 700MHz channel plan for Africa, Middle East and Europe (ITU Region 1). This channel plan is based on the reuse of the lower duplexer of the APT channel plan (i.e. 2 x 30 from the APT 2 x 45 MHz). The GSMA believes it is important to maximise regional harmonisation by assigning spectrum at 700 MHz in a way which is compatible with the existing channel plan for 800 MHz in Region 1 at 790-862 MHz.

By doing so, South Africa could benefit from a virtually global band which means the ecosystem will offer the greatest benefit for consumers and mobile operators. The GSMA encourages ICASA and the South African government to consider the importance of regional harmonization of the Digital Dividend. Such alignment would drive economies of scale, offering lower costs to consumers as device manufacturers could mass-produce less complex devices that function in multiple countries on a single band. Lastly, harmonization of the regulatory and technical conditions of the full Digital Dividend will result in reductions in cross-border interference and will maximise economies of scale including interoperability and roaming. The GSMA encourages ICASA and the Government to publish at the earliest a clear timeframe for the release of the Digital Dividend spectrum to mobile in a fair and competitive manner, to help operators plan the vital investment needed to deploy sustainable mobile broadband networks. The availability of this spectrum will be particularly suited to expand coverage in both urban and rural areas.

Supplementary Downlink in Centre Gap of the 700 MHz Band

The use of the 733-758 MHz duplex gap in the 2 x 30 MHz channel plan for the 700 MHz band is the subject of discussion. One option being considered is to use this band as supplementary downlink which some MNOs and regulators consider will maximise spectral efficiency and provide benefits to mobile broadband. There are other options also being considered and the ITU's Working Party 5D is addressing this issue.

In-band Migration Proposals: 800 MHz, 900 MHz and 2.6 GHz

Whilst there is some merit to in-band migration in the 900 MHz band, particularly in order to facilitate contiguous spectrum for all operators, the advantages of this migration would need to be balanced

against the associated costs. One option for this migration would be to remove the guard bands, which would allow operators to utilize more of the spectrum in this band.

In regards to the proposed migration of Wireless Business Solutions (WBS), in-band migration to the TDD portion of the 2.6 GHz band is the industry's preferred option. As highlighted by the IMT Roadmap, this option would be possible within a relatively shorter time frame than other alternatives as it "may only require retuning of the current base station equipment, while the user terminals would probably remain unaffected." (Section 2.6.2, pg. 19). Additionally, an in-band migration to the TDD portion of the band would result in lower migration costs (both network and end-user) and migration timelines than if WBS migrated to an entirely different band.

GSMA supports the proposal for in-band migration of Neotel downwards to the beginning of the 850MHz band (Section 2.6.1, pg. 21) to make the entire 2x30 MHz of the 800 MHz band available for mobile broadband (LTE). For further consideration in regards to the proposed in-band migration is the GSM-R assignment to Passenger Rail Agency of South Africa (PRASA) at 876-880 MHz.

New Allocations of Spectrum to Mobile Services: Driving Socio-Economic Growth

It is widely-recognised that mobile broadband has the potential to stimulate economic and social development in South Africa. Mobile market penetration currently stands at over 66% while the country's mobile broadband penetration rate has almost reached 50% of total connections¹. These figures are significantly higher than any other country in Sub-Saharan Africa and are a testament to a dynamic and innovative mobile market, as well as strong investment from the private sector.

However, the opportunities for market growth and increased connectivity in South Africa remain substantial, and this is highly dependent on the efficient assignment of future spectrum to operators. The GSMA urges ICASA to avoid waiting until all spectrum is assigned and used before making new allocations to mobile services. As the process between allocation and the actual licensing and use of spectrum can take several years, it is imperative that South Africa plans for its future and makes allowances for additional spectrum allocations to cater for future growth.

Mobile is a fast-evolving industry and the ability to quickly adapt and deploy networks is essential to keep pace with technology upgrades. The next phase of development of the sector will be capital intensive. We therefore encourage the government to eliminate hurdles that may unnecessarily delay the growth of mobile broadband services and to recognise that the amount of spectrum available to operators and the terms under which it is released will have a direct impact on the cost, range and availability of mobile services available to the people of South Africa.

The GSMA looks forward to working with ICASA and the Government of South Africa as it develops recommendations and decides on future spectrum policies in the coming months. We request an opportunity to present at the oral hearing, if the Authority decides to hold one.

We remain at your disposal should any further insights or clarifications in regards to the IMT Roadmap be required.

Yours sincerely,



Mortimer Hope
Director Spectrum and Public Policy, Africa
The GSMA

¹ GSMA Intelligence data, Q2 2014.