February 28, 2012

Ms. Yolisa Kedama
Independent Communications Authority of South Africa
Private Bag XI0002
Sandton, South Africa 2146

Via email to ykedama@icasa.org.za

Dear Ms. Kedama:

The CDMA Development Group (CDG) welcomes the opportunity to submit these comments to the Independent Communications Authority of South Africa (ICASA) in response to its invitation to comment on the proposed draft Spectrum Assignment Plan for the radio frequency range 790-862 MHz (800 MHz) and 2500-2690 MHz (2.6 GHz).

The CDG is a non-profit, international consortium of over 100 companies, including many of the world's leading operators and manufacturers of digital cellular, personal communications services (PCS), and third-generation (3G) systems based on Code Division Multiple Access (CDMA) technology.[1] The CDG's mission is to lead the rapid evolution and deployment of 3G and 4G systems, based on open standards and encompassing all core architectures, to meet the needs of markets around the world. The CDG advocates a progressive, spectrum-neutral approach to regulating the wireless communications market which will ensure that CDMA is allowed to co-exist and compete on an equal basis with other wireless standards. A transparent and nondiscriminatory approach to allocating and authorizing spectrum for all mobile operators provides certainty for investors, enables market players to establish robust business cases, and promotes healthy competition.

[1] CDMA is a digital air interface that builds on the concept of employing a unique code to distinguish each call, enabling the most efficient use of a given spectrum range, and providing greater capacity over a wireless network. CDMA is a spread spectrum technology that allows many users to occupy the same time and frequency allocations in a given band. It is the basis of several International Telecommunication Union standards for third generation networks, i.e., CDMA2000, WCDMA/UMTS, and TD-SCDMA.

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Spectrum for IMT services

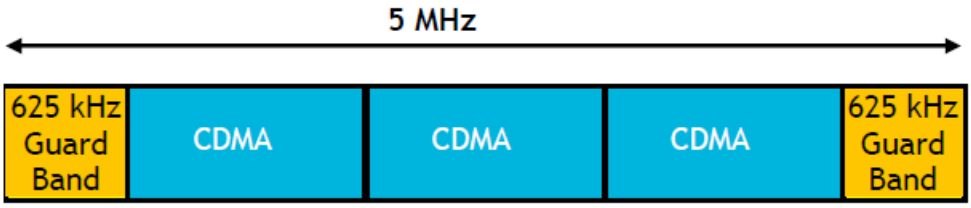
The CDG commends ICASA on its effort to make a significant amount of new spectrum available for IMT services, laying the foundation for the expansion of broadband service availability across South Africa. We believe that the goals identified in the government's broadband policy, notably, bridging the digital divide and growing the economy through improvements to the educational system, healthcare and government services, would be well served by expanding access to broadband services through the increased deployment of IMT services. By allocating additional spectrum for IMT services, ICASA will enable both the additional deployment of existing IMT-2000 technologies, as well as the deployment of emerging IMT-Advanced technologies. The CDG believes that by leveraging the full family of IMT technologies, South Africa can make significant progress toward providing "broadband for all," as stated in the draft Spectrum Assignment Plan.

Efficient Use of the 800 MHz Band Duplex Gap

Noting the important role that CDMA2000 can continue to play in providing broadband connectivity in South Africa, the CDG believes that a minor change to ICASA's proposed 800 MHz band plan could create new opportunities for the growth of CDMA2000-based broadband solutions. According to ICASA's proposed plan, the majority of the duplex gap in the 800 MHz band (821-832 MHz) remains unused, with only the 1.2 MHz block located between 830.8 MHz and 832 MHz (paired with 875.8-877 MHz) assigned for mobile services, specifically for the provision of CDMA2000 services. As a result, ICASA's band plan would only allow the deployment of a single CDMA2000 carrier in the duplex gap, thereby limiting the capacity of a network deployed in the allotted spectrum. This arrangement also leaves vacant approximately 8.8 MHz of spectrum that is well-suited to the provision of wireless broadband services.

To improve the opportunities and spectral efficiency of the plan, the CDG recommends allocating additional spectrum in the 800 MHz band duplex gap. Specifically, the CDG proposes reserving the spectrum currently used for CDMA2000, 827.775-832.695 MHz/872.775-877.695 MHz, or approximately 5 MHz of spectrum in the duplex gap for CDMA2000 services, which would allow the deployment of up to three carriers, as illustrated in Figure 1. With the implementation of appropriate guard bands, the three CDMA2000 carriers would not cause any interference with the proposed downlink of Block Z or the proposed uplink of Block X, nor would such an arrangement have any other negative impact on the licensees of the new 800 MHz spectrum blocks.

Figure 1: Illustration of 3 CDMA carriers in 5 MHz spectrum block



Source: Alcatel-Lucent

The CDG believes that by allocating additional spectrum for CDMA2000 services in the proposed duplex gap, ICASA would be putting that spectrum to its most effective and efficient use, and also could leverage it to meet the "broadband for all" policy goal more rapidly.

Should ICASA have any questions regarding our submission or the comments contained herein, the CDG would be pleased to provide any additional information required by ICASA as it finalizes Spectrum Assignment Plan.

Sincerely,

CDMA Development Group

Perry LaForge
Executive Director