

The Regulation of Radio Frequency Spectrum in South Africa

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The Electronic Communications Act (EC Act) came into force on 19 July 2006, providing for the regulation of, *inter alia*, the radio frequency spectrum in South Africa. In this article, we look at the regulation of radio frequency spectrum provided for in the EC Act. We briefly examine the provisions of the EC Act. We then look at the newly proposed band plan, the proposal being considered for the licensing of WiMax spectrum, recent regulations exempting WiFi spectrum from licensing requirements and the broadcasting digital migration policy recently adopted by the Minister of Communications (Minister).

The Statutory Provisions

Spectrum is generally regulated by the Independent Communications Authority of South Africa (Icasa) in terms of chapter 5 of the ECA. However, the Minister has certain regulatory authority, including the obligation to approve (or disapprove) the band plan, and to decide whether the migration of users that are government entities or organisations is permitted.

Radio Frequency Band Plan

Section 34 concerns the band plan, and provides that Icasa was to publish a revised plan within twelve months of the EC Act coming into force, which would have been 19 July 2007. The revised band plan was finally published by Icasa in Notice 890 of 2008, on 22 July 2008 in Government Gazette 31264. The existing band plan was published as the South African Table of Frequency Allocations (SAFTA) in 2004.

The proposed revised band plan covers the frequency range from 9 KHz to 1000 GHz, where SAFTA covered only those from 20 MHz to 70 GHz. Other changes make the South African band plan conform to recent world radio conference decisions, and aligning spectrum planning to the recommendations made by the International Telecommunication Union for ITU Region 1, in which South Africa falls.

Icasa called for written representations on the proposed band plan, which were due on 12 September 2008.

Radio Frequency Spectrum licensing

The EC Act enjoins anyone from using spectrum without a spectrum licence granted to that person. Spectrum licences are awarded consistent with the radio frequency band plan, by Icasa. To date, applications have been made on application forms made available by Icasa and have been considered on an ad hoc basis.

The EC Act also provides that a spectrum licence is not sufficient for the provision of services in South Africa; if one wants to provide services using spectrum, that person needs a spectrum licence in addition to an appropriate service licence.

The Minister recently published a proposed policy direction for public comment, which if issued would direct Icasa to issue an invitation for individual electronic communications network service licences for the provision of satellite infrastructure. Presumably, spectrum licences will be issued either simultaneously with the service licences or shortly thereafter.

WiMAX Spectrum Licensing

ICASA may make regulations and criteria for awarding spectrum licences for competing applications or instances where there is insufficient spectrum available to accommodate demand.

ICASA has recently concluded an enquiry into the criteria and process for awarding spectrum licences for use of available 2.5-2.6 GHz and 4-3.6 GHz spectrum, the WiMax spectrum. Based on its findings, Icasa has indicated that it will draft regulations that will create a two stage process for awarding licences, involving an pre-qualification phase designed to ensure that the spectrum is awarded to entities owned by historically disadvantaged individuals (HDIs), followed by an auction. Icasa identified the following issues to be taken into consideration during the pre-qualification phase:

- Minimum 51 percent black owned with an emphasis on woman in line with broad-based black economic empowerment legislation;

- Levels of participation in management and control in line with employment equity legislation;
- Affirmative procurement in line with the affirmative procurement legislation; and
- Commitment to skills development of historically disadvantaged individuals in line with the skills development legislation.

ICASA must still promulgate regulations in terms of section 31(3) of the EC Act to give effect to its findings.

Licence Exemptions

ICASA may exempt certain uses of spectrum from the licensing requirement, and prescribe the conditions under which unlicensed use must take place.

Icasa has recently prescribed certain spectrum licence exemptions including for the use of the 2.4 GHz band for wide band wireless systems. ICASA published Notice 926 of 2008 on 29 July 2008 in Government Gazette 31290, setting out a table of uses of spectrum exempt from the spectrum licensing requirement, indicating the frequency band, type of device, maximum radiated power, relevant standards and any additional requirements.

Broadcasting Digital Migration

On 8 September 2008, the Minister published in Notice 958 of 2008 in Government Gazette 31408, the Broadcasting Digital Migration Policy (BDMP). The BDMP sets out the policy for migrating South Africa's broadcasting services from analogue to digital. It is intended that a three-year dual illumination period will commence on 1 November 2008, with a final analogue switch off anticipated in November 2011.

As Icasa is charged with the promulgation of a band plan, it will have to ensure that the band plan is timely promulgated in order to effect the BDMP.

Icasa is also responsible for the promulgation of technical specifications for electronic communications equipment, such as TVs and set top boxes. So, although there are specifics in regard to technical specifications set out in the BDMP, Icasa must promulgate regulations to give effect to those specifics.

If digital migration involves governmental entities or organizations, such as the South African Broadcasting Corporation, Icasa must refer the matter to the Minister, and may migrate the users but only after consultation with the Minister. However, it is Icasa that must impose terms and conditions on service licensees regarding the migration to digital use of spectrum, as well as award spectrum licences.

Conclusion

In conclusion, there are several regulatory activities that must take place in order for spectrum to be effectively regulated in South Africa.

1. Icasa must finalise the revised radio frequency band plan, to include, inter alia, changes that will facilitate broadcasting digital migration.
2. The Minister must finalise its decision to direct Icasa to licence satellite service providers; Icasa must then implement that decision.
3. Icasa must promulgate regulations for the licensing of the remaining available WiMax spectrum.
4. Icasa must promulgate a relevant regulations to implement the BDMP, such as technical standards for set top boxes and TVs.

The adoption of regulations exemption certain uses of spectrum, including in the 2.4 WiFi band, is a welcomed development. However, in order for South Africa to move forward, swift action is required on these outstanding matters.

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