

Review of Equipment Type Specifications

All relevant standard telecommunications technical specifications are assessed through the national Standards Technical Committee, TC 80, which is governed by the South African Bureau of Standards ("SABS"). The Standards Liaison Committee of ICASA oversees this work, as well as that carried out by the SABS Committees TC 73 "Electromagnetic Compatibility" and TC 74 "Communications Technology". ICASA and the SABS concluded a Memorandum of Understanding ("MoU") to govern their co-operation.

Several new South African specifications were finalised in the reporting period. These include:

- > Analogue Terminal Equipment Standard: TE 001
- > Standard for Basic and Primary Rate: ISDN
- > Switching System Standard: SWS001
- > Standard for Analogue Calling Line Identification: TE 010

Short Range Devices (SRDs)

SRDs are devices used very widely by the public and include devices such as electronic car keys, cordless phones, security systems controls and wireless LANs, for which there is only type authorisation in certain frequency bands at very low signal levels. SRDs use frequency spectrums that have typically been allocated for Industrial, Medical and Scientific ("ISM") use, e.g. telemetry, wireless audio systems and wireless LANs, on the basis that individual units must be of an approved type but would not require its own frequency licence as long as it is used under the specified conditions. Proliferation of this equipment may result in undesirable interferences, if not properly regulated. Therefore, there is an urgent need for regulations to be developed to regulate the above services and equipment. After a public enquiry, a notice was drafted advising the public of ICASA's intention to develop regulations relating to the use or possession of certain radio apparatus without a radio frequency spectrum licence, certificate, authority or permit.

This programme is divided into two departments, namely, Frequency Spectrum, and Monitoring and Regions. The responsibility of this programme covers: support in the granting of frequency and station licences, certificates and authorities; the management and planning of access to the radio frequency spectrum through radio communications licensing; the preparation of frequency band plans; investigation of radio communications interferences; and the assessment, adoption and management of technical standards relating to customer equipment and other devices.

Frequency Spectrum

The Frequency Spectrum department undertook the following projects during the period under review:

South African Band Replanning Exercise ("SABRE") 1 and 2

SABRE 1 was initiated as part of the National Telecommunications Forum and Telecoms Act development process and was published by the Department of Communications ("DoC") on 6 May 1997. The purpose was to review the Frequency Plan in the range 20MHz to 3GHz, to align it with international developments and to provide for the migration of certain services from one band to another.

With the proliferation of new technologies, it also became imperative to extend the plan for frequencies above 3GHz. ICASA initiated a consultation process to determine this new Frequency Plan, SABRE 2, and to provide for various services that were being established in frequency bands above 3GHz. SABRE 2 was finalised and published in Government Gazette 1920 of 29 August 2001, under the title "Radio Frequency Spectrum Band Plan covering the range 3GHz to 70GHz".

The SABRE 1 requirement for the migration of certain users (mostly the security agencies of the state) from the 1800MHz spectrum to facilitate access to this spectrum by Cell C, MTN, the SNO and Telkom was initiated in July 2001 by the ICASA 1800MHz Spectrum Committee established in terms of section 17 of the ICASA Act 13 of 2000 ("the ICASA Act"). This committee collated and developed a database reflecting the usage of the 1800MHz band.

Licensing of the Public Safety/Emergency Trunking System

The Ministerial Policy Directive of August 2001 stipulated a need for a uniform national public safety/emergency communications system to enable all emergency services to communicate seamlessly. ICASA initiated preparations for the necessary licensing of these services and frequency allocation. The project was placed on hold pending results of a pilot project by the Department of Communications, utilising GSM technology as opposed to digital radio trunking.

Telecommunications Regulators' Association of Southern Africa ("TRASA") Projects

Following the TRASA AGM, held in Livingstone, Zambia from 3 to 6 September 2001, several projects were identified for action, for example, the Regional Licensing Centre; Cross-Border Co-ordination; and Regional Standards. Cross-Border Co-ordination was advanced by an MoU between ICASA and Lesotho Telecommunications Authority ("LTA"), signed on 14 February 2002. This formed a platform, which was later used to address GSM spillovers, services in 'no-person's land' as well as adjustments to international tariffs.

International Telecommunications Union ("ITU") World Radio Conference

Preparation for the ITU World Radio Conference is a major effort co-ordinated by the Department of Communications to ensure South African input to this event. ICASA was nominated to Chair the committees assigned to deal with Chapter 2 (Mobile, Mobile Satellite and Space Science Services) and Chapter 5 (Maritime Mobile and Broadcasting) of the ITU conference-planning document. This global event is scheduled for 9 June to 4 July 2003 in Geneva, Switzerland.

Publication of an Annual Broadcasting Frequency Plan

Section 31(5)(a) of the IBA Act requires that the Authority reviews the plan annually. A similar frequency plan was last published in 1999. The current plan was finalised in January 2002. The plan provides for a broadcast frequency assignment policy framework, schedules of frequencies in the various broadcasting frequency bands allocated to the different categories of broadcasting services and assignments that are operational, licensed or spare.

Digital Broadcast Frequency Plan Development

Preliminary input was provided by ICASA to the Digital Broadcasting Advisory Body ("DBAB") appointed by the Minister in terms of the Broadcasting Act. ITU guidelines are expected to be issued in 2004. Further contributions will be made once the discussion document is published.

Radiocommunications Frequency Licences

Frequency licences are issued for radiocommunications operators. These licences are issued to a variety of users, ranging from large-scale users who hold multitudes of frequencies to single frequency users who use the licences for two-way radios or burglar alarms. During the period under review, 3476 frequency licences were issued. The main frequency licences issued during this period are set out in Appendix A, page 48.

Type Approval and Licensing of Telecommunications Equipment

The Equipment and Supplier Licensing Unit is responsible for the processing of applications for type approval and licensing of Telecommunications equipment in terms of Chapter VI of the Telecommunications Act. This approval and licensing is done against relevant specifications and standards covering Technical Performance, Electrical Safety and Electromagnetic Compatibility.

Telecommunication Line Terminal Equipment ("TLTE")

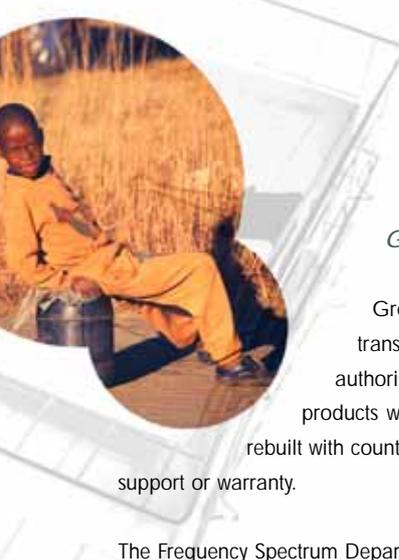
Telecommunication equipment that interfaces with the Public Switched Telephone Network ("PSTN") is classified as a TLTE (sometimes also referred to as Customer Premises Equipment or Telephone Attachments). This category includes, amongst others, modems, all types of phones, fax machines, speech recorders and lightning protection devices, etc.

The Telecoms Act requires that such equipment is type approved and licensed. The number of TLTE licences issued during the period under review were 114 (see Appendix A, page 46). In addition to the 114 TLTE licences issued, there were also 592 TLTE licence renewals (see Appendix A, pages 46 to 47).

Switching Systems (SWS)

Telecommunications equipment with one or more input ports that are capable of connecting to the Public Switched Telephone Network ("PSTN"); a number of extension ports to which TLTE may be connected; and the ability to interconnect incoming and extension ports for the purposes of exchanging electronic information, is classified as a Switching System ("SWS"). This category includes, amongst others, Private Automatic Branch Exchange ("PABX"), Integrated Services Digital Network ("ISDN"), Automatic Call Distribution Systems ("ACD") and Automatic Call Processing Systems ("ACP"). Seventy-one licences were issued (see appendix A, pages 46 to 47) and 381 renewed for this type of equipment.





Grey Market Products

Grey marketing essentially involves the unauthorised transfer of brand name equipment and software outside of authorised channels. This could lead to the sale of grey market products which may be damaged or obsolete products, products rebuilt with counterfeit parts, or products delivered without manufacturer support or warranty.

The Frequency Spectrum Department received several complaints regarding suspected grey market products from organisations such as the Telecommunications Line Terminal Equipment Association ("TLTEA"), Association of Information Technology Suppliers and Media, Telkom and Telkom Test Laboratory, Customs and Excise and the SABS. These complaints were investigated with the help of the various regional offices. The ICASA Council appointed several staff members of this department as inspectors, to enable them to participate in investigations into suspected unlicensed equipment.

Licensing of Line Maintenance Organisations

Two categories of Line Maintenance Organisations are licensed in terms of sections 56 and 57 of the Telecoms Act. Twenty five licences (see Appendix A, page 47) were issued and 84 were renewed in this category in the period under review.

- > Line Maintenance Organisation type 1 ("LMO-1")

The organisation is licensed to install, alter and maintain ICASA approved PABX switching units as well as the associated extension-line cabling and terminal equipment.

- > Line Maintenance Organisation type 2 ("LMO-2")

The organisation is licensed to install and maintain telephone cabling and reticulation.

Frequency Spectrum Assignments and Licensing Software Project

The tender for this project was issued in August 2001. The tender was awarded to the LS and Z-Comms consortium. LS broadcasting frequencies module had been used by the IBA in the past. This project, once completed, will replace the obsolete Spectrum System, which does not provide further upgrade paths to facilitate new licensing categories and requirements or revised licensing processes. The new Frequency Spectrum Assignment System will provide for comprehensive nationwide frequency assignments and licensing; integrating radiocommunications and broadcasting. The new system will be fully operational by December 2002.

Installation of fixed DF monitoring units in Gauteng

This project involves the deployment of four direction-finding monitoring units purchased from Protea Electronics in 1998. The contract was awarded to Poyntings Engineering for the installation of one unit as a pilot project. The project officially commenced on 26 March 2002. The first direction-finding monitoring unit is expected to be operational by October 2002. This infrastructure will significantly improve effectiveness of spectrum monitoring and location of sources of unlicensed radio transmissions.

Monitoring and Regions

The Monitoring and Regions department enforces compliance with the Telecoms Act in terms of spectrum usage and stamps out illegal spectrum usage by unlicensed defaulters. The Regional Offices conduct inspections, monitoring, interference investigations, maritime surveys and maritime examinations.

The Durban, Port Elizabeth and Cape Town offices perform maritime surveys. These offices have experienced technical officers who carry out marine surveys on behalf of the South African Maritime Safety Authority ("SAMSA") and conduct Global Maritime Distress and Safety System ("GMDSS") examinations.