Andrew Roos P.O. Box 350 Newlands 7725

15th April 2004

Mr. Mandla Mchunu Manager: Spectrum Management ICASA

Dear Mr. Mchunu

Draft Amateur Radio Regulations

Thank you for the opportunity to comment on the draft amateur radio regulations published in Government Gazette No. 25814 on 17th March.

I hold a Class A1 amateur radio license with the callsign ZS1AN and am the chairman of the Cape Town Amateur Radio Centre. I am a member of Council of the South African Radio League with responsibility for Education and in this capacity participated in the process of drawing up the draft regulations. However I submit these comments in my personal capacity.

Section 25.5 of the ITU Radio Regulations as amended at WRC-03 leaves it up to each administration to determine whether Morse code proficiency should be a requirement for an amateur radio license. The amateur community in South Africa is divided on this issue. A survey that I conducted of my club members in September last year showed that 52% were in favour of retaining a Morse requirement for the Class A1 license, while the remaining 48% believed that the Morse requirement should be dropped.

My personal feeling is that Morse code remains an important mode of amateur communications and should be included in the license requirements in some form. Morse code has specific advantages in amateur communications, especially its power and bandwidth efficiency. Listening tests show that Morse code requires 13 dB less power than single-sideband (SSB) voice communications for the same intelligibility, so a 100 W Morse signal has the same intelligibility as a 2 000 W SSB signal. Morse code also makes much better use of the limited spectrum bandwidth available to amateur radio, since Morse stations can be spaced 250 Hz from each other with little interference while SSB phone stations require a channel spacing of at least 2.5 KHz, so one SSB transmission occupies the same bandwidth as ten Morse transmissions. And the simplicity and low cost of Morse transmitters makes them an ideal project for newcomers to amateur radio and those who cannot afford more sophisticated equipment. Given the limited power and bandwidth available to amateur stations, Morse code is especially suited to our requirements, so it is not surprising that it remains one of the most popular modes of amateur communication worldwide.

However I recognize that not all amateurs share these views, and that it is important to find a compromise that all parties can accept. I believe that the draft regulations

achieve the right compromise. They allow the national body approved by the Minister to specify assessments for the Class A1 license. One of the prescribed assessments can be Morse code, while other assessments can be prescribed in other areas of interest. In this way candidates who do not wish to learn Morse code do not have to, while those who do can use their Morse proficiency to qualify for a Class A1 license. The draft regulations also accommodate those who believe that no further assessment should be required for access to the bands under 30 MHz by giving the holders of Class A2 licenses generous frequency allocations in both the digital modes and the phone segments of the 160, 80, 40, 20, 15 and 10-meter bands with a maximum power of 100 W.

The three-tier license structure specified in the draft regulations also provides an excellent platform to support the South African Radio League's declared commitment to using amateur radio as a vehicle for technical education amongst the youth and previously disadvantaged communities of South Africa.

The Class B license will provide an accessible first step into amateur radio that concentrates on what you need to know to operate a radio transmitter safely, legally and without causing interference. Once someone has been awarded a Class B license, he or she will be able to participate fully in the amateur radio community, where many of our activities and social interactions are by radio. This will hopefully motivate her or him to continue studying, while providing the means to obtain assistance from other amateurs.

The Class A2 license will continue to provide an opportunity to learn the theoretical basis of electronics and radio. It is my objective as education councilor for the SARL to have the Radio Amateurs' Examination certified by the South African Qualifications Authority (SAQA), so the knowledge and experience gained will count towards other technical qualifications in the National Qualifications Framework (NQF).

The assessments prescribed for the Class A1 license will provide the opportunity and motivation for the holder of a Class A2 license to continue his or her studies in an area of particular interest with a more practical emphasis. As well as motivating learners, the Class A1 license assessments will also motivate clubs to provide opportunities for learners – for example, practical workshops to build electronics projects that fulfill the requirements for the Class A1 license.

In conclusion, I believe that the regulations as they stand are both a good compromise on the issue of Morse code and a firm foundation on which to build the future of amateur radio in South Africa.

Yours Sincerely,

Andrew Roos