Amendment #2 to RSS-118 Issue 2

(Land and subscriber stations: voice, data and tone modulated, angle modulation radiotelephone transmitters and receivers operating in the cellular mobile bands 824-849 MHz and 869-894 MHz)

The following are additions and amendments to RSS-118.

1. Receiver Sensitivity, Adjacent and Alternate Channel Desensitization, Spurious Response Attenuation and Intermodulation Spurious Response Attenuation

These four tests (sections 9.1 to 9.4) of the RSS are to be regarded as optional and test results are not required to be submitted to Industry Canada.

Although they are voluntary tests, compliance to the standards is recommended in order to minimize potential interference from transmitters operating in adjacent channels. Frequency assignments will be based upon engineering considerations compatible with the receiver standards.

2. Cellular Digital Packet Data (CDPD) Systems

CDPD equipment is permitted in the cellular bands. The equipment shall comply with the relevant sections of the RSS and be certified by Industry Canada. However, systems that cannot conform to the RSS should be referred to Manager, Radio Equipment Standards, Industry Canada, for evaluation on a case-by-case basis. Examples are systems using different modulation techniques and hence test modulation conditions, such as frequency deviation (sections 5.7 and 5.8 of the RSS), to represent the CDPD signals in a real system operation, that are different from those specified in this RSS.

3. Electronic Serial Number (ESN)

The following supersedes section 2.3.2 of RSS-118 annex A on ESN.

The electronic serial number is a 32 bit number that uniquely identifies a cellular mobile station to any cellular system.

(a) Each mobile transmitter in service must have a unique ESN.

(b) The ESN host component must be permanently attached to a main circuit board of the mobile transmitter and the integrity of the unit's operating software must not be alterable. The ESN must be isolated from fraudulent contact and tampering. If the ESN host component does not contain other information, that component must not be removable, and its electrical connections must not be accessible. If the ESN host component contains other information, the ESN must be encoded using one or more of the following techniques:

(1) Multiplication or division by a polynomial;

(2) Cyclic coding;

(3) The spreading of ESN bits over various non-sequential memory locations.

(c) The ESN must be factory set and not alterable, transferable, removable or otherwise able to be manipulated. Cellular mobile equipment must be designed such that any attempt to remove, tamper with, or change the ESN chip, its logic system, or firmware originally programmed by the manufacturer will render the mobile transmitter inoperative.

4. Cordless Cellular Base Stations

4.1 Cordless-mode cellular base stations (CCBS) are permitted, licence-exempt, to provide a cordless telephone system with a cellular handset or handsets.

4.2 The CCBS shall be certified by Industry Canada according to the relevant sections of the RSS (and in following the certification procedure RSP-100).

4.3 The CCBS shall comply with the standard CS-03 and be certified under the terminal attachment program procedure CP-01.

4.4 The CCBS and the handset shall incorporate a security code of a minimum of 8 bits or equivalent to prevent unintentional line seizure, dialing or ringing. A description of the implementation of the code is required, i.e testing is not required. See RSS-210 Issue 2, section on "Cordless telephones: general conditions" for details.

4.5 The RF output power shall not exceed a level that is required for reliable communication. Relaxed frequency stability and spectrum mask requirements can be considered for the lower power usage.

4.6 The applicant for certification shall provide a letter from the appropriate Cellular Service provider (Mobility Canada, 20 Carlson Court, Etobicoke, Ontario, M9W 6V4, tel: 416-798-5039/fax: 416-675-0740 or Rogers Cantel, One, Mount Pleasant Road, Toronto, Ontario M4Y 2Y5, tel: 416-935-6921/fax: 416-935-7630), stating that the CCBS authorization protocol has been tested and found to work satisfactorily.

4.7 The authorization protocol shall be based on the following principles:

(a) The CCBS shall be connected to the Authorization and Call Routing Equipment (ACRE) of the Cellular Service provider.

(b) A CCBS that is authorized for service will enable its transmitter, authorize any associated handsets, and provide service, using the spectrum and parameters specified by the ACRE during authorization.

(c) A CCBS that is authorized for service, and that is unable to find spectrum free of interference within its defined set of channels, will disable its transmitter and report its condition to the ACRE.

(d) A CCBS that attempts and fails to authorize with an ACRE will retry a predetermined number of times, or for a predetermined length of time, before disabling its transmitter and ceasing any future retry attempts.

(e) A CCBS that connects with an ACRE and that is instructed by the ACRE that it is not authorized for service will disable its transmitter and cease any further retry attempts.

(f) A handset will only operate in cordless mode after it has obtained authorization with its associated CCBS.

(g) Until authorized for service by the ACRE, neither the CCBS nor the handset shall be able to transmit.

5. Reminder: ″Supplement 1993-1 to Radio Standards Specifications (RSS) Nos. 118, 119, 120, 121, 122 and 182″ is still in effect.

Issued under the authority of the
Minister of Industry

R.W. McCaughern
Acting Director General
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