

August 7, 2002

American Telecommunications Certification Body, Inc.
6731 Whittier Avenue
Suite C110
McLean, VA 22101

RE: Certification Application
FCC ID: AB6OUTS12000

Dear Sir/Madam,

This letter is an explanation of the steps taken to ensure that the Dual Band 850 MHz – 1900MHz S12000 system meets the band edge requirements (see Section 3.5.2 for GSM 850 and section 3.5.3 for PCS1900 of “Exhibit – Radio Test Report” for details of this issue).

GSM 850 System Information:

GSM 850 band operates in the following band:
824 MHz to 849 MHz uplink, 869 MHz to 894 MHz downlink.

That correspond to ARFCN in the [128;251] range.

GSM 850 band is divided into two non-contiguous sub bands A and B, defined in frequency and corresponding ARFCN, as:

sub_band	Mobile TX MHz (UL)	BTS TX MHz (DL)	ARFCN
A	825.00 - 835.00	870.00 - 880.00	128 to 131
A	824.00 - 825.00	869.00 - 870.00	133 to 181
B	845.00 - 846.50	890.00 - 891.50	183 to 231
A	835.00 - 845.00	880.00 - 890.00	233 to 238
B	846.50 - 849.00	891.50 - 894.00	241 to 251

The condition to be met is that the edge channels (ARFCN 128, 131, 133, 181, 183, 231, 233, 238, 241 and 251) shall not emit at maximum power in order to meet the spurious emissions at the antenna terminals requirements.

With Nortel S12000 850 MHz Band BTS, max power for these channels has to be reduced by 2 dB to be compliant with requirements. In order to accomplish this the OMC-R software that controls the output power of the system has been modified so that the maximum output power of the system is limited so that if one edge channel belongs to a cell and the max power of this cell is greater than the max power authorized for an edge channel, the cell creation or modification is forbidden. In this way the spurious emissions cannot exceed the limit required. This limitation is done at the software level and cannot be changed by the customer.

GSM 1900 System Information:

GSM 1900 band operates in the following band:
1930 MHz to 1990 MHz uplink, 1850 MHz to 1910 MHz downlink.

That correspond to ARFCN in the [512;810] range.

GSM 1900 band is divided in following sub bands below , defined in frequency and corresponding ARFCN, as:

sub_band	Mobile TX MHz (UL)	BTS TX MHz (DL)	ARFCN
A	1850.2 – 1864.8	1930.2 – 1944.8	512 to 585
D	1865.2 – 1869.8	1945.2 – 1949.8	587 to 610
B	1870.2 – 1884.8	1950.2 – 1964.8	612 to 685
E	1885.2 – 1889.8	1965.2 – 1969.8	687 to 710
F	1890.2 – 1894.8	1970.2 – 1974.8	712 to 735
C	1895.2 – 1909.8	1975.2 – 1989.8	737 to 810

The condition to be met is that the edge channels (ARFCN 512 , 585 , 587 , 610 , 612 , 685 , 687 , 710 , 712 , 735 , 737 and 810) shall not emit at maximum power in order to meet the spurious emissions at the antenna terminals requirements.

With Nortel S12000 Band 1900 MHz BTS, max power for these channels has to be reduced by 4 dB to be compliant with requirements. In order to accomplish this the OMC-R software that controls the output power of the system has been modified so that the maximum output power of the system is limited so that if one edge channel belongs to a cell and the max power of this cell is greater than the max power authorized for an edge channel, the cell creation or modification is forbidden. In this way the spurious emissions cannot exceed the limit required. This limitation is done at the software level and cannot be changed by the customer.

Sincerely,



GSM BTS RF
Senior Manager