American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

July 1, 2002

RE: Sony Ericsson Mobile Communications

FCC ID: PXITR-502-A2

I have a few comments on this Application.

1.) Form 731 – in the future, please list all the Emission Designators and their corresponding RF Power Outputs as separate line entries. Using the values shown on in section 4.3 of Test Report, GSM800 will be shown as .741W ERP and GSM1900 will be shown as .691W EIRP
2.) Please identify if the compandor was on or off during the Modulation Deviation Limiting test.
3.) Please identify the audio input level used to obtain the 0dB reference at 8KHz for the Voice and Voice + SAT Modulation Limiting plots.
4.) Since the Audio Filter Characteristics test only applies to Part 22 analog FM devices under Part 22, how does the PCS interface noted in the test setup affect testing at 850MHz?
5.) Please identify where the audio signal was injected for the Post Limiter Attenuation (LPF) test.
6.) Occupied Bandwidth Plot for Voice and Voice + SAT should show modulation products of the 2500Hz tone set 16dB above reference. These modulation products are missing. Please provide revised Occupied Bandwidth plots for voice operations.
7.) Section 8.3 – With the exception of Base Frequency Range plots, no RBW settings have been identified. .
8.) Table 9.3-1 is mis-identified as "Attenuation of spurious radiation below fundamental".
9.) Only GSM1900 data is provided for transmitter radiated spurious. At a minimum, test data for worst case modulation mode in the AMPS band and the PCS band to the 10^{th} harmonic on worst the case channel should be presented. This is true regardless of the 20dB rule.
10.) FYI: Section 13.4 – Test Procedure for receiver spurious emissions indicates measurements were made to five times the highest operating frequency using a quasi-peak detector. Since this device operates in excess of 1800MHz, you may wish to reconsider this language (quasi peak not used ever above 1000MHz). In addition, you may wish to provide measurements exactly at the receiver local oscillator frequencies. This is required information for submissions to Canada.
11.) Was earphone attached to equipment during radiated ERP and EIRP measurements? What about for transmitter radiated spurious emissions? As a reminder, earphones should always be stretched vertically above any transmitter during testing.
12.) No data has been presented showing compliance with the radiated or conducted band edge emission limits of 24.238(b).
13.) No data has been presented showing compliance with the radiated or conducted band edge emission limits of 22.901(d)(2).
14.) Agreement of RF Conducted Power of GSM800 and GSM1900 between Test Report and SAR Report seem a bit off. Agreement should be within ~10% (0.3dB) between both reports.
15.) Is equipment capable of transmitting data across multiple time slots? If so, can it send data while on the belt clip? Was this configuration tested for body worn compliance?
16.) Are any other batteries or accessories which may impact SAR available for this device?
17.) In the SAR report, 800TDMA and 800GSM test results are not included because "…the maximum power is significantly lower…" than in AMPS-FM mode. The Test Report shows GSM800 is over 2dB higher than AMPS-FM. A more detailed explanation is needed.

William H. Graff
President and Examining Engineer

mailto: whgraff@AmericanTCB.com

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.