



**Sony Ericsson**

**Sony Ericsson Mobile Communications (USA) Inc.**  
7001 Development Drive  
RTP, North Carolina 27709

July 11, 2002

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

Attention: Equipment Authorization Branch  
Subject: TCB Comment Responses for FCC ID: PXITR-502-A2  
Model: T62u

Dear Mr. Graff:

The attached pages (2) contain responses to your comments concerning application for FCC certification of Sony Ericsson model T62u bearing FCC ID: PXITR-502-A2

If you have any further questions and/or comments, please do not hesitate to make contact.

Sincerely,

Pierre Chery  
Technical Manager, Type Approval  
Research Triangle Park, NC  
[Pierre.chery@sonyericsson.com](mailto:Pierre.chery@sonyericsson.com)

Tel No: (919) 472-1697  
Fax No: (919) 472-6382



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- 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

**In the future Emission Designators will be listed as requested.  
For GSM1900, 28.4dBm is .69183W, would it be more accurate to list it as .692W?**

- 2.) Please identify if the compandor was on or off during the Modulation Deviation Limiting test.

**The compandor was enabled 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.

**The 0 dB audio input level was 76 and 58 mV for Voice and Voice+Sat, respectively**

- 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?

**The PCS interface noted in the test setup does not affect testing. The PCS interface is noted in the test setup to indicate that the base station simulator has the optional PCS interface capability, though not used for this test.**

- 5.) Please identify where the audio signal was injected for the Post Limiter Attenuation (LPF) test.

**The audio signal was injected to the port of the audio interface board labeled ATMS(audio to mobile station). This interface board was attached to the port at the bottom of the phone.**

- 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.

**Figures 7.3-5 and 7.3-6 of revised test report show the modulation products.**

- 7.) Section 8.3 – With the exception of Base Frequency Range plots, no RBW settings have been identified.

**The RBW was set to 1MHz for the out of band emissions measurements made from 30 MHz to 20 GHz**

- 8.) Table 9.3-1 is mis-identified as “Attenuation of spurious radiation below fundamental”.

**Table 9.3-1 has been re-titled “Radiated spurious emissions”**

- 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<sup>th</sup> harmonic on worst the case channel should be presented. This is true regardless of the 20dB rule.

**Worst case data for AMPS and PCS bands is added to table 9.3-1 of the revised test report**



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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.

**As suggested, correction has been made in the revised test report**

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.

**Yes, earphone was attached during these tests.**

12.)No data has been presented showing compliance with the radiated or conducted band edge emission limits of 24.238(b).

**Band edge plots were added to section 8.3 of revised test report**

13.)No data has been presented showing compliance with the radiated or conducted band edge emission limits of 22.901(d)(2).

**Band edge plots were added to section 8.3 of revised test report**

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.

**Note that maximum reported SAR value is based on calculated maximum output power setting(nominal factory setting + maximum tolerance), while measured conducted power is the nominal factory setting.**

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?

**Equipment is not capable of transmitting data across multiple time slots in the uplink.**

16.)Are any other batteries or accessories which may impact SAR available for this device?

**For body worn operation, there are no other batteries or accessories 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.

**According to Supplement C of OET 65, when different modes share the same frequency band only those with output power within 1dB from the higher output power mode need to be tested. According to this statement, and looking at the device description table in the T62u report (document number SEM/CV/P-02:0592/REP), 800 TDMA signals have 1/3 duty cycle, while 800GSM signals have 1/8 duty cycle resulting in an average output of 21.62 dBm and 20.57 dBm, respectively. This means exactly a 4.63 dB and a 5.68 dB lower output power in each of the above cases than the output power for the AMPS mode. This reduction of output power would result in a much lower SAR, as it has been described in the report.**