



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

February 17, 2003

RE: Nokia, Inc.

FCC ID: PPINPL-2H

After a review of the submitted information, I have a few comments on the above referenced Application.

**EMC Report/General:**

- 1) Please provide photographs of both sides of the main board. Only one side appears in the internal photographs provided.
- 2) Information in this application states that the device is capable of GSM 900 and GMS 1800 outside of the US. Please explain what precautions are built into the device to keep this part of the device from functioning in the U.S.
- 3) Information given in the theory of operation (pages 1 & 4) and tune up procedure (pages 5-7) state the conducted power maximum is 1 Watt, while the maximum conducted power measured was 0.818 W. Please explain.

**SAR Report:**

- 4) The FCC likes to be able to confirm that the 15 cm liquid depth was present by supporting test configuration photographs or Z-axis data that is measured to 15 cm. This supplemental information was not provided for the actual test. Please confirm that the liquid depth was at least 15 cm, and if available please provide the photograph.
- 5) The FCC prefers for all plots to be provided. Please provide a justification for not providing all plots. Note that if the channels tested for each configuration (left, right, cheek, tilt/ear, extended, retracted etc.) have similar SAR distributions, a plot of the highest SAR for each test configuration should be sufficient as long as this is stated; otherwise additional plots should be included to document the different SAR distributions in order to identify peak locations relative to device and phantom.
- 6) During z-axis plots, the first 2 points should be made in the first 10 mm. This does not appear to have been the case for one of the z-axis plots.
- 7) Please provide a description of the averaging (integration) procedures to get 1-g SAR from final interpolated grid.
- 8) The FCC asks that the SAR laboratory re-measure the peak power to ensure that the device is fully functioning during the SAR test at maximum TX power. Reported power results appear to be identical to EMC EIRP reported values. Were conducted measurements made during SAR testing? . What assurance can be provided that the device was functioning correctly at full maximum power during the SAR test.

Timothy R. Johnson  
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@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](http://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.