



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

January 31, 2003

RE: Nokia Corporation

FCC ID: PYANHL-4J

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

EMC

- 1) The following exhibits do not appear to be provided:
 - a) Letter of Confidentiality (note several items were checked confidential when uploaded).
 - b) Parts List
 - c) Users Manual
- 2) Information in this application states that the device is capable of GSM 900 and GSM 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) Please provide a photograph that shows where the antenna is located within the phone. This can not be determined from the photographs
- 4) The plot on page 73 of 94 seems to show a concern at the bandedge. Please provide an explanation and if necessary a plot with much smaller span near the bandedge with a slower sweep time.
- 5) Please confirm if this device includes EDGE capabilities. It was noted that EDGE was seen in the block diagram. Please confirm the correct emissions designator for this device as required by CFR 1.1033(c)(4). Please note that the FCC asks for GSM to be listed as 300KGXW and EDGE as 300KG7W. See attached document for further information.

SAR

- 6) Please provide a confirmation that radiated power measurements were made for each SAR scan. Reported results appear to be identical to EMC reported values. Please provide full details including photographs of radiated power test used during SAR testing. If radiated testing was not performed during SAR testing please retest. Please note that conducted power measurements are preferred for SAR testing.
- 7) The theory of operations mentions the maximum power class for this device (1900 MHz) is 1, while the SAR test report states 2 (page 6). Please explain.
- 8) Dipole Verification was performed at 1800 MHz. Note that recently the FCC has recently specified that the verification must be performed at 1900 MHz and is no longer accepting 1800 MHz. See slide presentation from October TCB training, page 4.
- 9) For course scans, what was the probe tip distance to phantom inner surface?
- 10) 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.
- 11) 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.

----- Continued on Next Page -----

- 12) 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
- 13) FYI, for body SAR the FCC prefers the use of 1.5 cm.



Timothy R. Johnson
Examining Engineer

Direct Phone: 404-414-8071

[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 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.