

# EXHIBIT 1

Application for Certification and Letters

Applicant: Northern Telecom Ltd.

For Certification on:

AB6S12000



## Certification Application

February 26, 2003

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

RE: Certification Application  
FCC ID: AB6S12000

Dear Sir/Madam,

As per our recent discussions with ATCB, please accept this application for the certification of the product filed under Part 2 Subpart J, for equipment operating under Part 22, Subpart H and Part 24 Subpart E of the regulations of the Federal Communications Commission. With authority to act as an agent, Sanmina-SCI is filing this application for certification on behalf of Nortel Networks.

The product for which certification is sought is Nortel Network's 850 MHz/1900 MHz GSM indoor and outdoor basestations (S12000). All detailed information for the system is included in the respective exhibits as required by the Rules. The S12000 was previously certified for the following configurations-  
**FCC ID numbers: AB6INDS12000/AB6OUDS12000**

1900 Band only - PA ( GMSK 30W / Edge 30W )  
850 Band only - PA ( GMSK 30W / Edge 30W )  
1900/ 850 Dual Band - PA ( GMSK 30W / Edge 30W )  
GMSK modulation  
8PSK modulation

Please reference the above filings for test data and documentation supporting the configurations identified. The Data and documentation presented in this application supports the following additional configurations:

1900 MHz Band only –with HePA ( GMSK 60W / Edge 45W)  
GMSK modulation code  
8PSK with HePA configuration  
H4D coupler  
H2D coupler  
Duplexer

The above configurations all use the identical platform and are field configurable systems. Nortel wishes to introduce a 60 Watt High Power amplifier, which as per FCC part 2 of the rules requires a new application for equipment authorization be



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## Certification Application

submitted. Due to complexity of managing many ID numbers for the same system, Nortel is submitting the new application with test data for the new increased power configurations, and all of the configurations noted above under the existing approvals. As previously done with S8000 (AB6S8000) the indoor and outdoor platforms will be included in one filing as the transmit paths and components are electrically identical with respect to the requirements of FCC Parts 2, 22 and 24 (please see attached attestation letter).

Note that the 1900 MHz HePa (power amplifier) has received stand-alone certification by their manufacturer **Powerwave Technologies**. The PA is certified **under FCC ID: QTPSCPAPCS1900**

Please find the following attached exhibits:

- EXHIBIT 1 Application and Letters
- EXHIBIT 2 Test Report List
- EXHIBIT 2A S12000 Radio Report
- EXHIBIT 2B S12000 EMC Report
- EXHIBIT 3 Transmit Label Photo
- EXHIBIT 4 Technical and Functional Description
- EXHIBIT 5 External Photographs
- EXHIBIT 6 Internal Photographs
- EXHIBIT 7 Parts Lists
- EXHIBIT 8 Schematics Lists
- EXHIBIT 8A E-RDRX 850 MHz (Radio Board) Schematics
- EXHIBIT 8B E-LDRX 850 MHz (Logic Board) Schematics
- EXHIBIT 8C E-RDRX 1900 MHz (Radio Board) Schematics
- EXHIBIT 8D E-RDRX 1900 MHz (Radio Board) Schematics (continued)
- EXHIBIT 8E LDRX and E-LDRX 1900 MHz (Logic Board) Schematics
- EXHIBIT 8F RDRX 1900 MHz (Radio Board) Schematics
- EXHIBIT 9 RF Exposure
- EXHIBIT 10 Factory Test Specification
- EXHIBIT 11 Reference Manual

Please contact me if any further information is required.  
Important: Please see attached request for confidentiality.

Sincerely,

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On behalf of Nortel Networks