



Timco Engineering Inc.
FCC Authorized Telecommunications
Certification Body (TCB)

Nokia Inc.
Building 5A-107
600 Mountain Avenue
Murray Hill, NJ 07974

September 4, 2018

Bruno Clavier- General Manager
Timco Engineering Inc.
849 N.W. State Road 45
P.O. Box 370
Newberry, Florida 32669

Dear Mr. Clavier:

The **Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4** is the subject of this request for an FCC Class II Permissive Change Authorization under **FCC ID: H8N9961V1**. Nokia (formerly Alcatel-Lucent), hereby requests this Class II change to add NBLoT capability to the Grant. The **Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4** is a Multi-Standard Home Cell, or 9961 MSHC, is a compact wireless access point for enhanced voice and data services, using licensed spectrum delivering improved network reach and increased capacity while off-loading traffic from the macro network.

The **Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4** has a power output capability of 100 mW (20.0 dBm) LTE 2x2 MIMO. FCC Grants to-date covers single carrier operation at fundamental bandwidths (BW) of 5 MHz, 10 MHz, 15 MHz and 20 MHz. The objective of this Class II Permissive Change request is to obtain authorization for NBLoT GuardBand Operation for Bandwidths of 10 MHz, 15 MHz and 20 MHz.

Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4 operation for NBLoT with **9M49G7D, 14M0G7D and 18M5G7D** emission designators is in the **MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES** spectrum for Blocks A through F. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27, Subpart C following the procedural requirements specified in FCC Part 2, Subpart J – Equipment Authorization Procedures. The data, summarized below, is in the form presently used by the Commission’s Radio Equipment List.

Equipment Identification:	H8N9961V1
Rules Part Number:	Part 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES
Frequency Range:	Transmit: 2110 – 2155 MHz; Receive: 1710– 1755 MHz
Output Power:	100 milliWatts Maximum per Antenna Port
Frequency Tolerance:	± 0.05 ppm
Emission Designator:	9M49G7D, 14M0G7D and 18M5G7D

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for authorization of the **Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4**. The technical or non-technical contact at Nokia will comply with any request for additional information should the need arise. The attached exhibits, with the applicable FCC Rule section, are assembled and presented in accordance with the Table of Contents attachment.

Should there be any questions or procedural issues please feel free to contact me by email and/or phone.
Sincerely,



Steve Gordon
Member of Technical Staff
email: Steve.gordon@nokia-bell-labs.com

Reviewed by:



Raymond J. Johnson
Technical Manager
FCC Compliance Test Group
Nokia, Global Product Compliance Laboratory
Phone: +1 908 679 6220
email: ray.johnson@nokia-bell-labs.com

Att. Table of Contents for the **Alcatel-Lucent 9961 Multi-Standard Home Cell (MSHC) V1 B2/B4** Product
Certification Report

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Cover Letter

<u>Exhibit #</u>	<u>FCC Rule Number</u>	<u>Description</u>
Exhibit 1	Section 2.1033(a)	FCC Form 731
Exhibit 2	Section 2.911 (d)	Qualifications and Certifications
Exhibit 3		Setup Photographs
Exhibit 4		Test Report