Nokia Solutions and Networks
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May 29, 2024

Timco Engineering Inc.
FCC Authorized Telecommunication
Certification Body
13146 NW 86th Drive, Suite 400
Alachua, FL 32615

Subject: Application for Class II Change to FCC ID: VBNAEHC-01 for AirScale MAA 64T64R B41 320W AEHC (AEHC) Radio Unit, Operating in Band 41

Dear Examiner:

The **Nokia Solutions and Networks**, AirScale MAA 64T64R B41 320W AEHC (AEHC) Radio Unit (hereinafter referred to as "AEHC") is the subject of this application for a FCC Class II Change to the Product Certification under FCC ID: VBNAEHC-01. The AEHC is an LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2496 – 2690 MHz). The AEHC was originally filed for Single and Multiple LTE 20 MHz carriers, 40 MHz, 60 MHz and 100 MHz Single 5G-NR carriers and 64x64 MIMO operation with a maximum total output RF power of 320W at its 64T/64R transmit ports.

A Class II Permissive Change was filed on March 01, 2021 to add modes of operation for LTE (F9W) 10MHz single carrier plus 5G-NR (G7W) 20, 50, 80 and 90 MHz single carriers and multiple contiguous/non-contiguous 5G NR +LTE (total up to three 20 MHz) carrier configurations (20MHz+20MHz, 40MHz+20MHz, 20MHz+20MHz+20MHz, 40MHz+20MHz+20MHz, 20MHz+20MHz+20MHz+20MHz and 40MHz+20MHz+20MHz+20MHz).

A Class II Permissive Change was filed on August 26, 2021 to add multi carrier 5G-NR/LTE configurations (LTE 20+NR 90, NR 50+LTE 20, NR 50+LTE 2x20, NR 50+LTE 3x20, LTE 2x20 + NR 90, NR 2x40+LTE 2x20, NR 2x50+LTE 2x20, NR 2x40+LTE 3x20, NR 2x50+LTE 3x20, LTE 3x20 + NR 90) and 5G-NR only configurations (100+20, 100+40, 60+100, 80+100, 60+40) to the existing grant. No new bandwidths were added. Total power 320W for all ports, 64Tx64R MIMO.

A Class II Permissive Change was filed on January 20, 2022, to add 30 MHz Bandwidth to the grant, demonstrate operation of 190MHz contiguous, and additional concurrent carrier configurations associated with these capabilities.

A Class II Change was filed on April 11, 2022, to add a single carrier 70MHz bandwidth at 280W and two additional dual carrier configurations.

A Class II Change was filed on October 25, 2023, for addition of 5G-NR 10MHz bandwidth at 100W.

A Class II Change was filed on April 25, 2024, for additional bandwidths that are a result of a Slim Carrier (Disabled Resource Blocks) to confirm that it would meet the out of band emissions when used in a smaller BW segment. The additional BW segments are 33, 34, 38 and 38.5 MHz (40 MHz Slim Carrier, 160 W), 44, 49, 49.5 MHz (50 MHz Slim Carrier, 200 W).

This Class II Change is for additional higher bandwidths that are a result of a Slim Carrier (Disabled Resource Blocks) to confirm that it would meet the out of band emissions when used in a smaller BW segment. The additional BW segments are 55 and 57.5 MHz (60 MHz Slim Carrier, 240 W), and 86 MHz (90 MHz Slim Carrier, 320 W).

The key data for this Class II change is summarized below.

FCC ID:	**VBNAEHC-01**
FCC Rules:	**Part 27**
Frequency Range:	**E-UTRAN Band 41, 2496-2690MHz**
Output Power:	**240 and 320 Watts maximum (Total for all ports with 64Tx64R MIMO Configuration)**
Frequency Tolerance:	**± 0.05 ppm**
Emissions Designators:	**45M9W7W, 46M0W7W, 74M2W7W**
Carriers:	**55, 57.5 and 86 MHz**

Enclosed in this application package are the FCC 731 Form, an Agent Authorization letter, the required measurement data and other required exhibits specific to this request for a FCC Class II Change authorization of the subject product. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27 following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures. The supporting exhibits are assembled and presented in accordance with the *Table of Contents* attached below.

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

Sincerely,

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