

Nokia Global Product Compliance Laboratory 600-700 Mountain Avenue, Room 5B-111 Murray Hill, NJ 07974, USA

July 06, 2018

Timco Engineering Inc.

FCC Authorized Telecommunication Certification Body

849 N.W. State Road 45, P.O. Box 370

Newberry, Florida 32669

Subject: Application for Original Equipment Certification under FCC ID: VBNAAHE-01 for Nokia AirScale MAA

64T64R 128AE B41 120W AAHE, Operating in the Band 41

Dear Examiner:

The Nokia Solutions and Networks AirScale MAA 64T64R 128AE B41 AAHE (hereinafter referred to as "AAHE") is the subject of this application for a new FCC Product Certification under FCC ID: VBNAAHE-01. The AAHE is a LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2630-2690 MHz). The AAHE supports one to three 20MHz carriers and 64x64 MIMO operation with a maximum total RF output power of 120W at its 64T/64R transmit ports. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for multicarrier operation.

The key data are summarized below.

FCC ID: VBNAAHE-01

FCC Rules: Part 27

Frequency Range: E-UTRAN Band 41, 2630-2690MHz

Output Power: 120 Watts Total with 64Tx 64R MIMO Configuration

Frequency Tolerance: ± 0.05 ppm

Carriers: 1~3 20MHz Carriers

Enclosed in this application package are FCC 731 Form, letters of Request for Permanent and Short-Term Confidentiality, agent authorization letter, the required measurement data and other required exhibits specific to this request for 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,

Raymond J. Johnson Technical Manager

Raymond Johnson

Global Product Compliance Laboratory

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Cover Letter

Confidentiality Request Letter with NDA (Non-Disclosure Agreement)

Short Term Confidentiality Request Letter

Agent Authorization Letter

Required Exhibits:

EXHIBIT	FCC RULES	CONTENTS
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Exhibit 2	Sections 2.911 (d)(1, 2) & 2.911 (e)	Certifications and Qualification
Exhibit 3	Section2.1033 (c)(1, 2, 4, 5, 7)	Manufacturer, FCC Identifier, Emission Types, Frequency Range and Maximum Power Rating
Exhibit 4	Section 2.1033 (c)(11)	Equipment Identification Label
Exhibit 5	Sections 2.1033 (c)(6, 8, 9, 10, 13)	Description of Operation → Confidential
Exhibit 6	Section 2.1033 (c)(10)	Block Diagrams → Confidential
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Exhibit 11	Section 2.1033 (c)(21)	Setup Drawings or Photographs
Exhibit 12	Sections 2.1033 (c)(14), 2.911 (e)	Test Report
Exhibit 13	Sections 1.1307 & 1.1310	RF Exposure Assessment