NOKIA Bell Labs

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Subject: Application for Class II Change to FCC ID: 2AD8UAWHHF01 for Nokia AWHHF Airscale Micro RRH 4T4R 5G n41 4x20W Radio Unit, Operating in Band 41

Dear Examiner:

The **Nokia Solutions and Networks – OY**, AWHHF Airscale Micro RRH 4T4R 5G n41 4x20W (hereinafter referred to as "AWHHF") is the subject of this application for a FCC Class II Change to the Product Certification under FCC ID: **2AD8UAWHHF01**. The AWHHF 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 AWHHF was originally filed for 20 and 40MHz carriers and 4x4 MIMO operation with a maximum total RF output power of 80W at its 4T/4R transmit ports. A Class II change was processed for LTE-TDD 2-Carrier and 3-Carrier Operation followed by a Class II Change for LTE-TDD 20 MHz Single Carrier 4G Operation, then Class II Change for single carrier 60 MHz and 100 MHz 5G NR Operation.

A Class II Permissive Change was processed to cover modes of operation for addition of 20 and 80 MHz 5G-NR (G7W) single carriers at 80W and 10 MHz LTE (F9W) single carrier at 50W. Also, Multiple Contiguous carriers 10MHz+10MHz+10MHz, 10MHz+10MHz+20MHz and 10MHz+20MHz+20MHz.

A Class II Permissive Change was processed to add 5G-NR Split Mode plus 5G-NR and LTE Concurrent configurations.

This Class II Permissive Change would add a 30MHz 5G-NR single carrier and 30+30MHz non-contiguous multiple carrier configuration to the existing Grant. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G NR and LTE operation.

The key data for this Class II Change are summarized below.

FCC ID:	**2AD8UAWHHF01**
FCC Rules:	**Part 27**
Frequency Range:	**E-UTRAN Band 41, 2496-2690MHz**
Emissions Designator:	**27M8G7W**
Output Power:	**80W total with 4x4 MIMO Configuration**
Frequency Tolerance:	**± 0.05 ppm**

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 an 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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