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**Timco Engineering Inc.**  
**FCC Authorized**  
**Telecommunication Certification Body (TCB)**  
849 N.W. State Road 45  
P.O. Box 370  
Newberry, Florida 32669

**June 5, 2018**

**Subject: Application for Class II Permissive Change Equipment Authorization under FCC ID: 2AD8UFW2IMBOM1 for Nokia Flexi Zone MBO B66 RF Module, Operating in the Band 66 AWS Band**

Dear Examiner:

The Nokia Flexi Zone Multiband Outdoor Micro Base Station (MBO) is a small cell that consists of a common digital system module (host), up to two LTE (Long Term Evolution) RF transceiver modules in various combinations and optional WiFi AP (Access Point) and Bluetooth RF modules. Each RF transceiver module supports 2 Tx/Rx branches.

The FW2IMBOM1 B66 RF Module (MBO B66), the subject of this application, is a LTE Transceiver supporting a carrier bandwidth of 5/10/15/20 MHz and a maximum RF power output capability of 5W at each of its 2 MIMO transmit port outputs. The MBO B66 transceiver received its certification on May 15, 2017 under FCC ID: 2AD8UFW2IMBOM1, with the 5M00F9W, 10M00F9W, 15M00F9W and 20M00F9W Emissions designators in the broadband extended AWS spectrum: AWS-1 (A-F, 2110-2155MHz) and AWS-3 (G-J, 2155-2180MHz).

In the original certification, only one carrier was supported and evaluated. Now two carriers are supported by the MBO B66. There is no change on the total power output and the hardware. There are no modifications in the transmitting and receiving frequency ranges. However, the above new change degraded the unwanted emissions of the product by more than 3dB, but the overall unwanted emissions remain compliant with the requirements. Additionally, in the original filing, only an omnidirectional stick antenna supplied by Nokia was recommended for MBO B66 and evaluated in the RF exposure report submitted. Now new directional antennas are recommended by Nokia for MBO B66. Therefore, the RF exposure needs to be reassessed.

Per CFR 47 Part 2.1043, a Class II permissive authorization is requested to authorize the MBO B66 station under the existing FCC ID 2AD8UFW2IMBOM1. Per FCC 2.1041 (b), the technical requirements specified in FCC Part 27 were evaluated.

Enclosed in this application package are FCC 731 Form, 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 key data are summarized below.

<b>Equipment Identification:</b>	<b>2AD8UFW2IMBOM1</b>
<b>Rules Part Number:</b>	<b>Part 27</b>
<b>Frequency Range:</b>	<b>Transmit 2110-2180 MHz (AWS Blocks A-B-C-D-E-F-G-H-I-J)</b>
<b>Maximum Output Power:</b>	<b>5 Watts per port and 10 Watts per unit</b>
<b>Frequency Tolerance:</b>	<b>± 0.05 ppm</b>
<b>Carriers:</b>	<b>two 5/10/15/20MHz Carriers</b>
<b>Emission Designators:</b>	<b>5M00F9W, 10M00F9W, 15M00F9W, 20M00F9W.</b>

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. The contacts at Nokia will comply with any request for additional information should the need arise.

Sincerely,



Terry Schwenk

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### 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	Section 2.1033(c) (1,2,4,5,7)	Manufacturer, FCC Identifier, Emission Types, Frequency Range and Maximum Power Rating
Exhibit 4	Sections 2.1033 (c)(14) & 2.911 (e)	Test Report
Exhibit 5	Sections 1.1307, 1.1310 & 27.52	RF Exposure Report
Exhibit 6	Section 2.1033 (c)(21)	Setup Drawings or Photographs

\*The information in exhibits submitted in the original filing about Operational Description, Block Diagram, Schematics, User's Manual, Photos and Product Label are still valid and will not be resubmitted here.