



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

Nokia Global Product Compliance
Laboratory
600-700 Mountain Avenue
Room 5B-111
Murray Hill, NJ 07974, USA
November 25, 2019

Timco Engineering Inc.
849 N.W. State Road 45
P.O. Box 370
Newberry, Florida 32669

Dear Examiner:

The Nokia **700 MHz TRDU** is the subject of this request for an FCC Class II Permissive Change Authorization under FCC ID: AS5BBTRX-01, for operation in the domestic 700 Upper band C (Tx: 746 - 756 MHz and Rx 777 - 787 MHz), i.e. E-UTRAN band 13, with Long Term Evolution (LTE) technology. Nokia of America Corporation, hereby requests this Class II change to add an additional Guardband NB-IoT carrier to the existing Grant.

The **700 MHz TRDU** has 2 antenna ports. The **700 MHz TRDU** supports 2x40W MIMO with 1 transmit and 1 receive stream. The maximum output power of the 2x40 configurations is 80 watts or 49.0 dBm per unit. The TRDU was powered by a DC power supply with +24VDC.

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:	AS5BBTRX-01
Rules Part Number:	Part 27
Frequency Range:	Transmit: 746 – 756 MHz; Receive: 777 – 787 MHz
Output Power:	40 Watts Maximum per Antenna Port
Tolerance:	± 0.05 ppm

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices) and the required measurement data and exhibits specific to this request for authorization of the 700 MHz TRDU. 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 **700 MHz TRDU** Product Certification Report

TABLE OF CONTENTS

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