

Prepared (also subject responsible if other) Denis Lalonde		No. TA8AKRY901332-1		
Approved	Checked	Date Dec. 4, 2020	Rev A	Reference

Federal Communications Commission  
Authorization & Evaluation Division  
7435 Oakland Mills Road  
Columbia, Maryland 21046  
Attention: Equipment Authorization Branch

TUV SUD BABT  
Octagon House  
Concorde Way, Segensworth North  
Fareham, Hampshire, PO15 5RL  
United Kingdom

December 4, 2020

## **Subject: Class 2 Permissive Change for FCC ID: TA8AKRY901332-1**

To Whom It May Concern:

Ericsson AB requests a Class 2 Permissive Change for the above-mentioned FCC Identifier.

The modifications to the original equipment are:

- Introduction of NR operation
- Replacement of obsolete duplexers and filters
  - o Z1C7A4: Changed Filter B5 2.5x2.0mm DOT/FILTER (RTN 501 0562/1) to Filter B5 FILTER (RTN 501 0587/2)
  - o Z1D7A4: Changed Filter B5 2.5x2.0mm DOT/FILTER (RTN 501 0562/1) to Filter B5 FILTER (RTN 501 0587/2)
  - o Z2C7A4: Changed Duplexer B5 2.5x2.0mm DOT/FILTER (RTN 501 0562/1) to Duplexer B5 FILTER (RTN 501 0587/2)
  - o Z2D7A4: Changed Duplexer B5 2.5x2.0mm DOT/FILTER (RTN 501 0562/1) to Duplexer B5 FILTER (RTN 501 0587/2)
- Modification of receiver tuning capacitors
  - o L2BA2 & L2CA2: Changed 4.7nH  $\pm 0.1$ nH 0402 0.75A/INDUCTOR (REG 724 6341/47B) to 5.1nH  $\pm 0.1$ nH 0402 0.6A/INDUCTOR (REG 724 6341/51B)

This Radio Unit (Radio Dot – RD 2242) is designed for use in LTE, WCDMA, and NR cellular telephone system. The transmitter will operate from 869 MHz to 894 MHz. The receiver circuit supports 824 MHz to 849 MHz. It supports channel bandwidths of 5 and 10 MHz for LTE and 4.2 to 5 MHz for WCDMA. The new NR operation supports channel bandwidth of 5, 10, 15, and 20 MHz. The Radio Unit supports modulation types QPSK, 16QAM, 64QAM, and 256QAM for LTE/NR and QPSK, 16QAM, and 64QAM for WCDMA. The Radio Unit operates in the Cellular Radiotelephone Service as per 47 CFR Part 22. It meets the requirements of Third Generation Partnership Project (3GPP) for operation in LTE, NR, and WCDMA cellular systems.

The Radio Unit supports spectrum consisting of two or more sub-blocks separated by sub-block gap(s), NCS (None-Contiguous Spectrum).

The Radio Unit has the ability to be used in a RBS system configured for 3GPP MIMO/Spatial multiplexing and beam-forming technologies for LTE.

The Radio Unit will in normal mode operate at a nominal power output of 50 mW per port at the output connectors (2 connectors with up to 50 mW in each connector connected to built-in antennas).

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This Radio Unit (Radio Dot – RD 2242) will always require a license for transmission.

The Exhibit 8 user manuals submitted with this application are generic and may cover multiple products.

This application is only valid for the model specified in the Exhibit 12 circuit description.

Ericsson AB requests confidentiality under CFR 0.459 according to attached letter. We further certify that the applicant nor any party to the application is subject to a denial of Federal benefits, that includes FCC benefits, pursuant to section 5301 of the Anti-Drug abuse Act of 1988, 21 U.S.C. Section 862.

If additional information is needed, please contact me on the below listed number.



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