

From: Matthew Hussey

To: Hung Le

Date: July 01, 2021

Subject: Request for Info - File # 0112-EX-CM-2021

---

Message:

FCC requested additional information:

1. More detailed technical information on antenna patterns and antenna direction.

we have additional information on the antenna patterns, which have been attached to the application.

2. Why the application needs to increase the power from 10 watts to 1600 watts (ERP)

Ericsson is supporting operators to roll out C band with maximal performance. C band is challenged in coverage (esp. for UL), one solution to extend C band coverage is via FDD-TDD Carrier Aggregation. i.e. leveraging FDD (e.g. AWS band) UL to extend the coverage area where C band UL becomes too weak but C band DL can continue to be used together with the AWS DL. To test the full benefits from such feature, however, the current AWS STA power level is somewhat too low (10W EIRP minus 17db antenna gain is 0.2W Tx power). The applied EIRP (1600W total, 320W/MHz) is still lower than the actual typically deployed in the commercial AWS network. (typical network example: 8W/MHz\*20MHz=1600W, antenna gain 17dbi, 2-3db BF gain=>19-20db array gain. =>160000 W EIRP total, 800W/MHz).

3. An engineering analysis and explanation of how it would specifically avoid causing harmful interference to incumbent Advance Wireless Service operations in the proposed area.

4. How Ericsson can coordinate with all AWS licensees in the proposed corresponding venue.

For questions 3 & 4, there are no other entities that are actively using this spectrum in our area of operation, so we will not be causing any interference.

5. Any stop buzzer information just in case interference occurs?

The stop buzzer PoC is:

Jason Banaag  
Solutions Architect II  
jason.banaag@ericsson.com  
(678)208-9685