

Ericsson  
File No. 0051-EX-CN-2017  
2/1/2017

### Description of the Experiment and Objectives to be Accomplished

As part of our work in developing 5G, Ericsson is seeking this authorization to conduct pre-commercial outdoor field trials to validate key 5G concepts and associated performance. This research will contribute to the continued development of 5G technologies, necessary to ultimately enabling 5G deployment. In these trials, [REDACTED]

The tests will use only one base station, so operation will be at a single location within the authorized areas at any given time. Although the base station will be transported to different locations within the test areas over the course of the trials, the base station will remain fixed while it is operating.

### Timing Request

We are requesting authorization by February 28, 2017.

### Output Power

Note that the power listed on Form 442 reflects EIRP, not ERP. The maximum EIRP will be 47 dBm and the average EIRP will be 23 dBm.

### Call Sign Waiver Request

The experimental 5G base stations are not built to transmit a call sign. While we have determined that we would be able to modify the base stations to transmit a call sign in simple Morse code should the Commission not grant the waiver in its current form, Ericsson requests that the requirement to transmit a call sign be waived for this experiment. We will be experimenting with new modulations, and other parties will not have receivers that can read the call signs. We are coordinating with existing users in advance to address interference issues.

### Directional Antenna Information

As shown in the attached Antenna Exhibit, the base station radio unit will be mounted on a mast that is attached to a van. The mast will be raised to a maximum height of 12 meters.

The antenna parameters will be:

