

Ericsson submits this application for Special Temporary Authority to conduct a 5G demo at our Santa Clara facility on October 10-12, 2016. Except for the different location and a lower antenna height, this application is identical to the application the Commission granted for Ericsson to demo 5G at the 2016 Super Mobility Week show.¹

The exhibition will use an experimental 5G base station and a piece of experimental 5G mobile user equipment. The equipment will be inside the Ericsson facility in Santa Clara, California. (The demo will be entirely indoors and have, at most, a 30-foot radius of operation.) The **REDACTED**. The transmissions will be at no more than 2 Watts EIRP. Because of **REDACTED**, the lower power, and the indoor location, the experiment will not interfere with existing users. Out of an abundance of caution for the government systems in the requested band, we are nonetheless providing a 24 hour emergency contact to turn off any transmissions should interference be detected. The contact information is: Keith Shank, 214-679-4362.

Ericsson is requesting to operate on the government spectrum bands only because this phase of our 5G research was designed in Sweden to operate on these bands. We have no plans to request that this spectrum be repurposed for commercial use.

Directional Antenna Information

The base station, which has a directional antenna, will be located inside the Ericsson facility, as will the user equipment. The antenna will be at 6 feet high and **REDACTED**.

The antenna parameters will be:

Polarization: **REDACTED**
Horizontal HPBW: **REDACTED**
Vertical HPBW: **REDACTED**
Antenna gain: **REDACTED**
EIRP: ≤ 2 Watts
Electrical tilt: **REDACTED**
Mechanical tilt: **REDACTED**

¹ See File No. 1023-EX-ST-2016.

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Exhibit to STA Application, File No. 1318-EX-ST-2016

Date Filed: September 6, 2016

Diagram for the V-pol antenna elements: azimuth

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Diagram for the V-pol antenna elements: elevation.

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