

Ericsson

Exhibit to STA Application, File No. 1071-EX-ST-2016

Date Filed: July 12, 2016

Ericsson submits this application for Special Temporary Authority to conduct a 5G demo for T-Mobile inside its headquarters at 3625 132nd Ave SE, Bellevue, Washington. The Commission has previously granted Ericsson Special Temporary Authority to conduct similar demos for a broader audience at the 2015 CTIA show,¹ at the 2015 Verizon 5G Forum,² and at the 2016 Consumer Electronics Show.³

The demo will last only 2 days. We are requesting, however, that authorization be granted for 60 days because the customer may need to change the dates for the demo at the last minute, too late to file for a new STA.

The exhibition will use an experimental 5G base station and a piece of experimental 5G mobile user equipment. The demo will be entirely indoors, inside the T-Mobile building, and will have, at most, a 30-foot radius of operation. The antenna will have [REDACTED] and the transmissions will be at no more than 2 Watt EIRP. Because of the [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 T-Mobile building. The antenna will be at [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. 0808-EX-ST-2015.

² See File No. 0806-EX-ST-2015.

³ See File No. 1253-EX-ST-2015.

Diagram for the V-pol antenna elements: azimuth

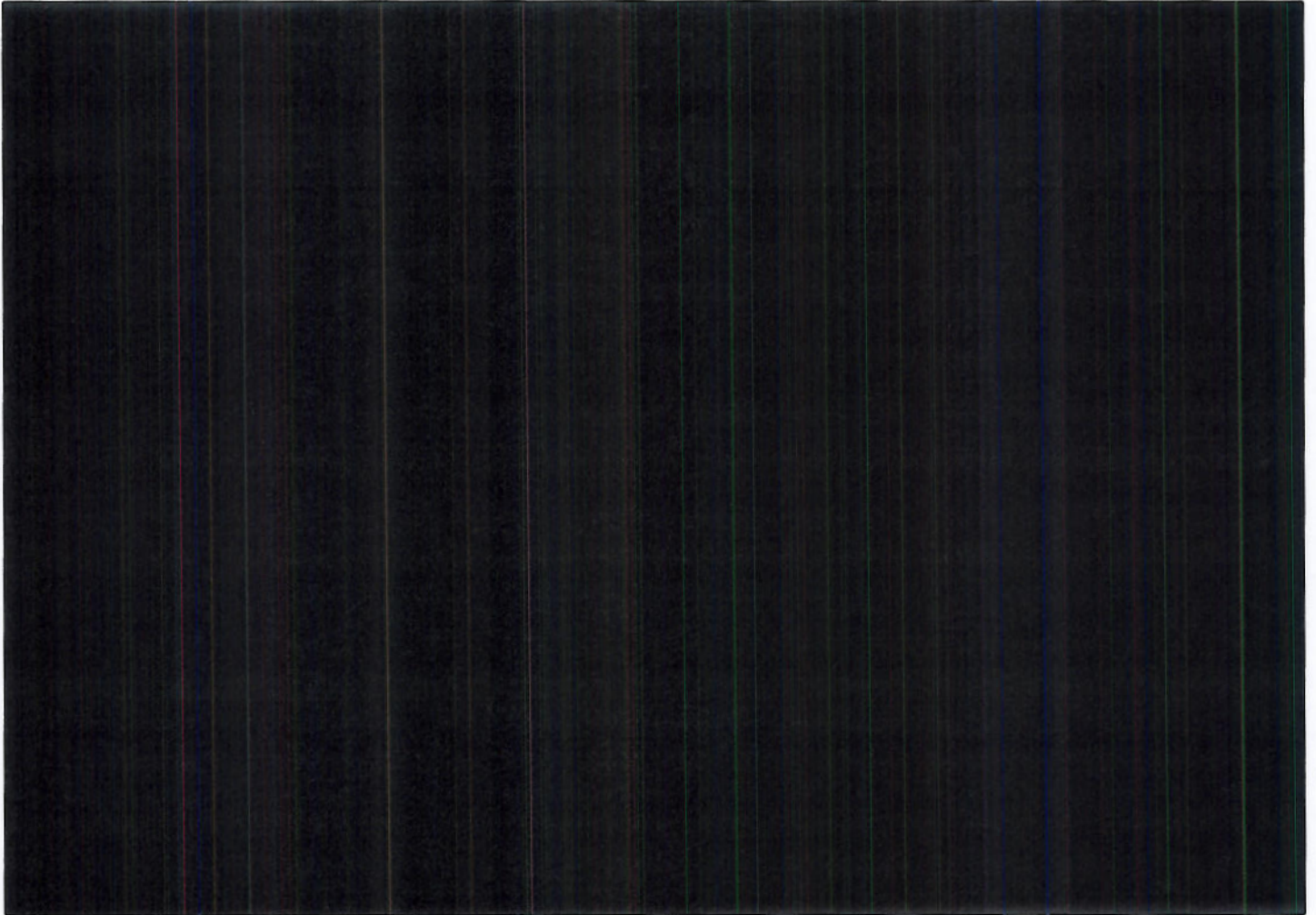


Diagram for the V-pol antenna elements: elevation.

