

**Ericsson**

**Exhibit to STA Application, File No. 0134-EX-ST-2016**

**Date Filed: 2/4/2016**

Ericsson submits this application for Special Temporary Authority to conduct a 5G demo at the Federal Communications 5G Forum on March 10. This application uses the same spectrum and the same technical parameters as the Commission previously approved for us to use for at the Verizon 5G Technology Forum in August 2015.<sup>1</sup>

The exhibition will use an experimental 5G base station and a piece of experimental 5G mobile user equipment. The equipment will all be located inside the Federal Communications Commission, 445 12<sup>th</sup> St. SW, Washington, DC 20554, where the Workshop will be occurring. The antenna will have a [REDACTED]. The transmissions will be at no more than 0.2 Watt EIRP. Because of the [REDACTED] the antenna, the low power, the indoor location as part of the technology workshop and our advance coordination with FCC staff, 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 authorization to transmit on 14.7-15.1 GHz because the experimental equipment we will be using operates on this spectrum at our testbed in Plano. Ericsson has no intention of requesting that this spectrum being repurposed for commercial use.

#### 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, Ericsson requests that the requirement to transmit a call sign be waived for this demo. Other parties will not have receivers that can decode the call signs because of the new types of modulations used, the operation will be indoor only as part of an industry event, and either the Forum or our 24-hour emergency contact can be reached should users notice any interference and need to request shutting off transmissions.

#### Timing Request

As the FCC's 5G Workshop is planned for March 10, we respectfully request that this application be decided before then, so we can know whether to send equipment and personnel to Washington, DC for the demo.

---

<sup>1</sup> See File No. 0806-EX-ST-2015.

**Ericsson**

**Exhibit to STA Application, File No. 0134-EX-ST-2016**

**Date Filed: 2/4/2016**

Directional Antenna Information

The base station, which has a directional antenna, will be located inside the FCC. The antenna will be at [REDACTED] and have a [REDACTED].

The antenna parameters will be:

- Polarization: [REDACTED]
- Horizontal HPBW: [REDACTED]
- Vertical HPBW: [REDACTED]
- Antenna gain: [REDACTED]
- EIRP: [REDACTED]
- Electrical tilt: [REDACTED]
- Mechanical tilt: [REDACTED]

**Diagram for the V-pol antenna elements: azimuth**

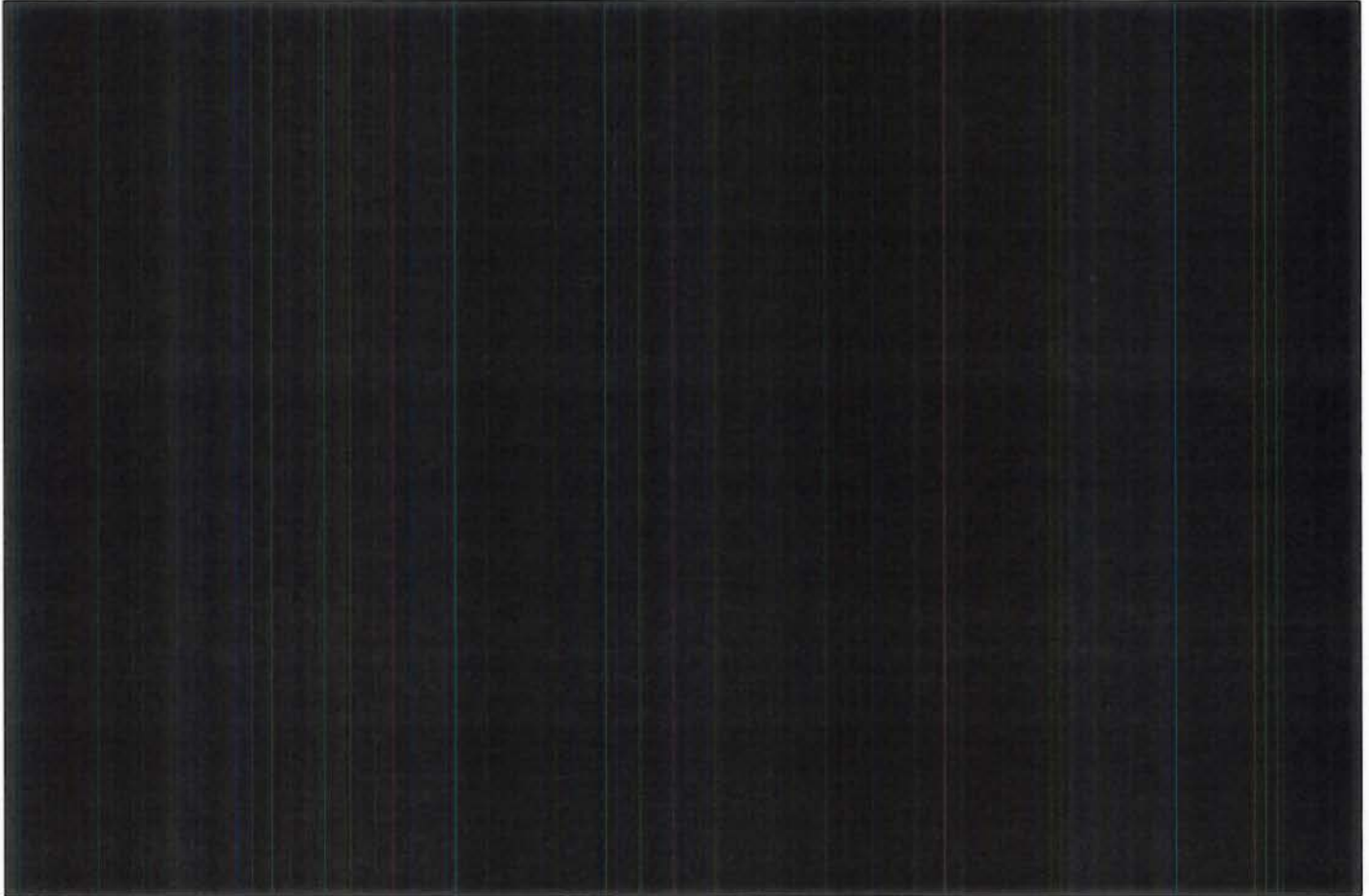


Diagram for the V-pol antenna elements: elevation.

