Ericsson Inc STA File Number: 0463-EX-ST-2012 STA Confirmation Number: EL373223 Date of Submission: June 12, 2011

Ericsson submits this application for Special Temporary Authority to conduct a short-term experiment to facilitate the exponential growth in data demand for mobile broadband. In order to continue to deliver the same level of performance to their LTE customers, Verizon Wireless hopes, pending regulatory approval, to deploy a second carrier for its LTE network. Ericsson, as Verizon's LTE supplier, needs to test new optimization techniques related to having a dual-carrier LTE network. Specifically, this experiment will test how to properly load balance the network, will test interactions between different bands of LTE (700 MHz and 2.1 GHz), and will test handovers between LTE and eHRPD systems. The best practices that are developed in this experiment will be applied, pending regulatory approval, in a nationwide second-carrier deployment.

The experiment will rely on 18 antennas that are mounted on 6 existing towers¹ (3 antennas per tower) in the Seattle, Washington area. The antennas will transmit at standard base station power (2 x 40 W), and including all antenna gain, will transmit at 2 x 62.5 dBmi (3556 W). The antennas are highly directional and Ericsson will not interfere with existing users. The experiment is made most effective by approximating operational power levels.

Verizon Wireless has previously determined which of the towers require filing FAA Form 7460-1. These forms, or the determination that FAA filing was unnecessary,

¹ The names of the tower sites are Mill Creek, Silver Lake, Thrasher's Corner, Keeler's Corner, Swamp Creek, and Filbert. The STA application specifies which tower and which antenna (1, 2, or 3) each entry reflects.

are attached for each tower. (Please note that the answers on the STA application for "distance to nearest airport" are approximated; the FAA determinations are based on the actual distances and corresponding calculations.)

Because of the immediate importance to the consumer market of facilitating the increased demand for data while maintaining the user experience, Ericsson requests that the FCC grant this request for special temporary authority.

For technical questions about the experiment, please contact Can Hatipoglu at <u>can.hatipoglu@ericsson.com</u> or 972-583-2630. For any questions about the application, please contact Kelley Shields at <u>kelley.shields@ericsson.com</u> or 202-824-0103.