

July 16, 2021

The Federal Communications Commission Form 422 Conf. No.: EL223047

445 12th Street, SW Form 442 File No: xxx

Washington, DC 20554

To Whom It May Concern:

Ericsson, Inc., an innovative leader in developing next-generation 2G, 3G, 4G, and 5G radio access networks, respectfully submits a request for an experimental license under 47 C.F.R. Part 5 (Experimental Radio Service). This letter is attached to the above-identified application according to FCC Form 422.

Ericsson Inc. seeks an experimental license grant for the Band 8 (899/938MHz) frequency. Ericsson Inc. intends to operate in and around its laboratories in Plano, Texas. The proposed term is October 01, 2021 to September 31, 2023.

Grant of this experimental license application will enable Ericsson Inc. to undertake additional product development, research, and testing that supports its goal to facilitate deployment of mobile broadband networks for Utilities. The product, and the attendant experimental testing, is relevant to the continued expansion of mobile broadband networks, including methods for increasing capacity, network speed, equipment density, and ease of operation.

The following information is provided to satisfy FCC Form 422, Question 7, a-c.

- a. The complete program of research and experimentation proposed including description of equipment and theory of operation
 - The equipment to be experimentally tested consists of the Ericsson Inc. fixed cellular radio transceiver or remote radio head. The remote radio head is designed to connect to the Ericsson Inc. Baseband, which connects to the Utilities' Private Networks and provides cellular service for electric grid modernization, security and redundancy.
 - Testing of the remote radio head will entail sensors connecting to the base stations in their typical operating environment.
- b. The specific objectives sought to be accomplished
 - The objectives to be accomplished is continued testing of both Ericsson Inc. software and hardware. This includes testing of hardware revisions and new software releases required to meet the requirements of, and fix bugs for, Ericsson Inc.'s Utilities customers.
 - Furthermore, Ericsson Inc. hopes to assess performance in real-world RF environments, and performance of various UEs (user equipment) with the remote radio head.
- c. How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion, or utilization of radio art, or is along lines not already investigated.



In testing the Ericsson Inc. hardware and software, Ericsson Inc. hopes to additionally further the understanding of 4G radios and algorithms as applied to mission critical networks operating in low band spectrum in over-the-air and laboratory testing.

Ericsson Inc. includes this letter as part of the above-referenced application to affirm its understanding of its obligation to conduct operations under this license. Ericsson Inc. accordingly agrees that it:

- Affirms that all of its experimental operations will be secondary, such that they must not
 cause interference to narrowband or broadband operations authorized on a primary basis;
 and that narrowband and broadband operators authorized on a primary basis have no
 obligation to mitigate any interference that such primary operation may present to the
 Ericsson Inc. experimental operations.
- Will not utilize the license in live mission-critical networks
- Has designated an overall project manager and a "stop buzzer" contact (see below) for these experiments. Ericsson Inc. has successfully coordinated such testing for all of its licenses to date.
- Understands that the experimental license will only permit shared use of the subject radio frequencies and that Ericsson Inc. may have to coordinate with other licensed entities.

Stop Buzzer contact:

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We welcome any comments or questions from the Commission, either to Matthew Hussey, Director Gov. Affairs & Public Policy (<u>Matthew.Hussey@ericsson.com</u> +12028240114) or Gautam Talagery, CTO for Utilities at the contact information below:

Best Regards,
/s/ Gautam Talagery
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