

**Nokia Siemens Networks US, LLC  
Request for Modification of  
Experimental License WC2XLI  
OET File No. 0112-EX-ML-2012**

**NARRATIVE STATEMENT**

Pursuant to Section 5.3(d), (f) and (g) and Section 5.51 of the Commission's rules, 47 C.F.R. § 5.3(d), (f), (g) and § 5.51 (2010), Nokia Siemens Networks US, LLC ("NSN"), hereby respectfully requests a modification of its license issued under call sign WC2XLI so that it may conduct additional tests and demonstrations of prototype broadband devices for operation in the U-NII band 5.47-5.725 GHz at an additional site in Arlington Heights, Illinois.

NSN is not seeking authority to perform a market study under this authorization. Moreover, no fees will be charged to entities using the equipment during this test. After the test is completed, NSN will recall and recover all devices that do not comply with FCC regulations.

**A. Purpose of Operation and Need for Modification:**

NSN is a leading manufacturer of mobile radio equipment and is continually engaged in the design and development of new and innovative communications equipment. The experimental authority requested herein will allow the company to validate and demonstrate the functionality of prototype devices designed to support the communications needs of users.

Specifically, NSN proposes to conduct additional validation and demonstrations of prototype equipment in the Nokia Siemens Network facility in Arlington Heights, Illinois. Grant of the modification will allow NSN to validate and demonstrate prototype equipment and obtain feedback so that it may enhance the company's efforts to design, develop and improve its equipment to meet the communications needs of potential users.

**B. Location of Proposed Operation:**

NSN proposes to conduct its tests and demonstrations using up to one fixed base station transmitters antenna that will be located at the location identified below, communicating with remote/mobile units operating within a radius of no more than 1.0 km from the fixed base stations.

200N Arlington Heights Road  
Arlington Heights, IL 60004  
42° 05' 03" North Latitude  
87° 58' 50" West Longitude  
(NAD83 Datum)

**C. Technical Specifications:**

**1. Frequencies Desired**

NSN seeks modification of its authorization to operate in the U-NII bands 5.47-5.725 GHz. NSN will comply with the FCC's regulations for the U-NII band as set forth in 47 C.F.R. Part 15, Subpart E, including the requirements for implementation for Transmit Power Control ("TPC") and the Radar detection function of Dynamic Frequency Selection ("DFS").

**2. Effective Radiated Power**

All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiation. In particular, the fixed equipment to be deployed under the authority requested herein will not exceed the power limits defined in Section 15.407 of the FCC's Rules, 47 C.F.R. § 15.407 (2010). Moreover, NSN will reduce the actual powers to the minimum power needed for successful operation, based on set-up and testing at the demonstration site.

NSN will also evaluate environmental considerations to ensure compliance with Section 1.1306 of the FCC's rules, 47 C.F.R. § 1.1306 (2010), and, in particular, the human exposure requirements set forth in FCC OET Bulletin No. 65.

**3. Modulation and Emissions**

NSN proposes to operate primarily using OFDM modulation, but it may use other modulation techniques as well. The primary emission designator is 20M0W7W. Other emission modes may be utilized, but in no event will the emissions extend beyond the requested frequency bands.

**4. Antenna Information**

The fixed base station transmitter antenna will be located on a building and street pole at a height not less than 20 feet above the ground. Outside portable antennas will not be used. No antennas will be mounted in a fashion that will require further approval under FAA or FCC rules and regulations.

**5. Equipment To Be Used**

NSN expects that it will be able to conduct its demonstration with one central base units and up to 20 remote/mobile units. Moreover, NSN will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the equipment.

**D. Protection Against Interference:**

NSN recognizes that the operation of any equipment under an experimental authority must not cause harmful interference to authorized facilities. Should interference occur, NSN will take immediate steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

In addition, NSN will advise entities using the equipment that permission to operate the equipment has been granted under experimental authority issued to NSN, that such operation is strictly temporary, and that the equipment may not cause harmful interference. Entities will also be advised in accordance with Section 2.803 of the Commission's rules, 47 C.F.R. §2.803 (2010), that any unapproved devices have not been authorized as required by the rules of the FCC and are not being offered for sale or lease, or sold or leased, until authorization is obtained.

**E. Public Interest:**

NSN submits that issuance of an authorization modified as requested is in the public interest, convenience, and necessity. Grant of its application will allow NSN to develop innovative equipment that will accommodate the communications needs of users.

**F. Contact Information:**

For questions about this application, please contact:

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In the unlikely event interference concerns should arise during the period of authorization, please contact:

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