

First Step Internet, LLC
Exhibit to Application for Renewal Experimental License
Call Sign WI2XYD

Pursuant to Section 5.63(c)(1) of the Commission's Rules, First Step Internet, LLC ("First Step") hereby provides this statement in support of its application for renewal of its experimental license (Call Sign WI2XYD). First Step requests a license term of six months to conclude its trial.

Overview

First Step is a broadband provider that holds a nationwide non-exclusive 3650-3700 MHz service license (Call Sign WQKH843). First Step delivers fixed broadband service to approximately 5,900 residential and business customer accounts in Idaho and eastern Washington, with a focus on rural and previously underserved locations. First Step uses a wide array of unlicensed spectrum and "lightly licensed" spectrum in the 3650-3700 MHz band. First Step has determined that, in many areas, the 3650-3700 MHz band offers a good combination of throughput, propagation, cost and equipment solutions to deliver high-quality broadband service to its subscribers and others in the target markets that lack access to competitive broadband services. First Step has deployed on 3650-3700 MHz spectrum and, at several locations, has upgraded to LTE equipment.

First Step is a recipient of \$415,855 in Rural Broadband Experiment ("RBE") funding for 116 census blocks in Idaho and Washington.¹ The funded area includes census blocks that are within the footprint of Teakean Butte. First Step had planned to serve these census blocks using its registered 3650-3700 MHz access points at Teakean Butte.² However, First Step has been unable to operate its registered 3650-3700 MHz access points from Teakean Butte because an earth station licensee has claimed that First Step's operations cause harmful interference. This has affected First Step's ability to serve the RBE funded census blocks.

First Step therefore proposes to utilize spectrum in the 3550-3650 MHz to provide the service that it currently cannot provide on its existing 3650-3700 MHz license. Based on its experience with 3650-3700 MHz operations and LTE in particular, First Step believes that LTE technology deployed in the 3550-3700 MHz band can meet its objectives through a combination of throughput, propagation, cost and equipment to deliver high-quality broadband service to unserved consumers in the target area.

First Step constructed and deployed facilities under its experimental license. It currently provides service to eight customers. It offers 12/2 Mbps service for \$75. First step learned, through the trial authorized by the experimental license, that it was unable to provide service in the north-facing sector without causing interference to the registered earth station. It is operating its southwest-facing and southeast-facing sectors and reaching a range of up to 12 miles non-

¹ See *Public Notice*, "Rural Broadband Experiment Support Authorized for Five Winning Bids for First Step Internet, LLC and Northeast rural Services, Inc.," DA 15-1003 (rel. Sept. 11, 2015).

² The Teakean Butte access points were registered in file numbers 0006760053, 0006760135 and 0006760319.

line-of-sight.

Using the experimental license allowed First Step to deploy LTE service and determine the tolerance of the earth station to accept harmful interference.

In the next phase of the trial, First Step plans to increase speeds up to 25/3 Mbps and experiment with various speed plans and consumer pricing points. This phase of the trial will further inform First Step's future spectrum, network expansion and investment plans. First Step continues to believe that a combination of Priority Access Licenses ("PAL") and GAA "license by rule" spectrum will be a successful approach, but at this point in time there is no Part 90 certified equipment that incorporates the functionality needed to comply with new Part 96 requirements.

In order to determine the financial and technical viability of the CBRS band and assess consumer acceptance at various speeds and price points, First Step seeks renewal of its experimental license to use spectrum in the 3550-3650 MHz band from Teakean Butte in Idaho to serve up to 25 customers, a number substantially less than the 100 customers the Commission authorized in the initial experimental license. Renewal will enable First Step to provide service to identified unserved areas that are funded through the RBE program and inform First Step's business, investment, technology and deployment decisions as it plans for expansion and densification of its broadband network.

As required by Section 5.602(e), all end users will be advised at the commencement of the trial that service is being provided on a trial basis, that any non-approved devices are for testing only and that all equipment must be returned at the end of the trial period. First Step further acknowledges that it will need to retrieve the devices from the users at the end of the trial. In particular, all users will be notified that the service they will be receiving is being provided in part or in whole under experimental authority, and that as a condition of the experimental license, First Step may be required at any time, without prior notice, to cease operations in the spectrum between 3550 and 3650 MHz. In addition, First Step acknowledges and will notify users that all customer premise equipment authorized under the experimental license remains the property of First Step, and must be collected or rendered inoperable at the conclusion of the trial. At the end of the trial, First Step will either: (1) shut off the service immediately, stop billing users for the service and post a public notice at www.fsr.com, and collect or render all customer premise equipment inoperable, or (2) change the frequency and operating parameters of some or all of the customer premise equipment that is part of the trial to parameters authorized under Part 90, Subpart Z of the FCC rules (which may materially impact network capacity, performance, and quality of service), post a public notice to www.fsr.com, and allow users to opt out of the modified service offering with no further obligation to pay for the service.