DESCRIPTION OF RESEARCH PROJECT

Pursuant to Sections 5.3(j) and Section 5.61 of the Federal Communications Commission's rules, 47 C.F.R. §§ 5.3(j) and 5.61, CCO Fiberlink, LLC ("Charter"), a limited liability company and subsidiary of Charter Communications, Inc., seeks Special Temporary Authority ("STA") for 180 days, beginning October 1, 2018, or immediately upon grant, to test and evaluate mid-band coverage and capacity performance in anticipation of 5G wireless development. As part of its efforts to lead the industry in broadband innovation, Charter intends to conduct fixed wireless experiments in the 3.7-3.8 GHz band. The proposed operations will advance Charter's understanding of 5G technology and network potential in mid-band spectrum and will advance the potential deployment of 5G fixed and mobile services.

Charter will conduct the proposed outdoor fixed testing within a radius of 10 km from the specified fixed locations identified in the STA Form in the Keystone, Iowa area. These experiments will evaluate the use of mid-band spectrum and 5G technologies for their use in point-to-multipoint access network capacity (*e.g.*, rate versus range) and data throughput. The ultimate goal of these tests is to research the techniques and efficacy of fixed wireless rural broadband solutions in mid-band spectrum.

Protection Against Interference

Charter understands it must accept RF interference from any federal and non-federal incumbent users of this band and that all Charter operations will be on a secondary basis. With regard to existing users, Charter has confirmed there are no protected Fixed Satellite Service ("FSS") earth stations operating within 20 miles of the areas in which Charter seeks to conduct testing. Charter has also confirmed there are no Fixed Service licenses operating within Charter's proposed testing area. In addition, Charter will only test between the hours of 7 a.m. and 7 p.m., and Charter personnel will be present at all times during the testing.

Restrictions on Operation

Charter does not seek authority to perform a market study under the requested license.

Contact Information

Point of contact for FCC licensing issues:

Colleen King Vice President, Regulatory Affairs (202) 621-1921 colleen.king@charter.com

Point of contact for questions about testing operations:

Greg McLaughlin Sr. Director of Wireless Operations, R&D (720) 482-4290 greg.mclaughlin@charter.com

The following individual will be available 24/7 during all testing and has authority and ability to immediately cease all operations:

Elliott Hoole Director, Wireless R&D (303) 349-4203 Elliott.Hoole@charter.com