

NARRATIVE STATEMENT

A. Purpose of Operation and Need for Special Temporary Authority Experimental License:

HNS License Sub, LLC (“Hughes”) respectfully requests special temporary authority from the Federal Communications Commission (“FCC”) to test and evaluate new equipment for wireless broadband access to the home in rural, suburban and urban areas.

Specifically, Hughes proposes to test and evaluate key functionalities of prototype equipment designed to improve Non-Line-of-Sight (“NLoS”) reliability and spectral efficiency of wireless of broadband wireless access systems. It also seeks to test and evaluate the coverage, capacity, and reliability of multiple link operations on the same frequency channel. Hughes proposes to conduct these tests from one hub location using prototype Base-Node (“BN”) and remote node (“RN”) radio equipment operating in the 3300-3550 and 3700-3800 MHz bands.

Hughes does not propose to market, sell, or lease prototype equipment or services to end users.

Hughes requests expedited grant of the special temporary authority (starting September 14, 2020) in order to enable it to conduct propagation testing while foliage is still on the trees.

B. Additional Location Information:

Hub Location:

11717 Exploration Lane, Germantown, MD
Lat. Long.: 39.178995°, -77.247936° in WGS84
Ground Elevation: 143 meters AMSL
Building/Antenna Structure Height: 15 meters AGL
Antenna Height to Tip: 17 meters AGL
Center of Radiation: 16 meters AGL

Remote Sites:

Various temporary fixed locations within a 15 km radius of the hub location

C. Technical Specifications:

1. **Frequencies:** 3300-3550 MHz and 3700-3800 MHz
2. **Effective Radiated Power and Equipment:**

Type	Equipment Model	Number of stations	Bandwidth (MHz)	Emission designator	EIRP (dBm)	EIRP (W)	ERP (dBm)	ERP (W)
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Base station	BN AA3-BN-XX	2	80	80MOD7D	55	316.2	52.8	190.5
Remote terminal	RN AA3-RNF-XX	20	40	40MOD7D	46.4	43.7	44.2	26.3

D. Contact Information:

For questions about this application, please contact:

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11717 Exploration Lane
Germantown, MD 20876
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Email: Kimberly.baum@echostar.com

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

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In addition to Kimberly Baum whose information is provided above.