

## **NARRATIVE STATEMENT**

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

HNS License Sub, LLC ("Hughes") respectfully requests modification of its special temporary authority (call sign WR9XAB) 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 requests to add an additional hub location to its special temporary authority 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. This additional hub will facilitate testing and evaluation of the coverage, capacity, and reliability of multiple link operations on the same frequency channel. The additional hub location will use the same prototype Base-Node ("BN") and remote node ("RN") radio equipment operating in the 3300-3550 and 3700-3800 MHz bands, as described below.

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

Hughes requests expedited grant of this additional hub site to its special temporary authority (starting September 28, 2020) in order to enable it to conduct propagation testing while foliage is still on the trees. The additional hub site is approximately four miles from the licensed hub under call sign WR9XAB.

### **B. Additional Location Information:**

#### Additional Hub Location:

100 Lakeforest Blvd, Gaithersburg, MD 20877  
Lat., Long.: 39.152170°, -77.208748° in WGS84  
Ground Elevation: 134 meters AMSL  
Building/Antenna Structure Height: 34 meters AGL  
Antenna Height to Tip: 36 meters AGL  
Center of Radiation: 35 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) |
|-----------------|-----------------|--------------------|-----------------|---------------------|------------|----------|-----------|---------|
| Base station    | BN AA3-BN-XX    | 2                  | 80              | 80M0D7D             | 55         | 316.2    | 52.8      | 190.5   |
| Remote terminal | RN AA3-RNF-XX   | 20                 | 40              | 40M0D7D             | 46.4       | 43.7     | 44.2      | 26.3    |

#### **D. Contact Information:**

For questions about this application, please contact:

Kimberly Baum  
Hughes  
11717 Exploration Lane  
Germantown, MD 20876  
Telephone: (202) 286-6089  
Email: [Kimberly.baum@echostar.com](mailto:Kimberly.baum@echostar.com)

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

Sampath Ramaswami  
Senior Director Marketing  
Hughes  
11717 Exploration Lane  
Germantown, MD 20876  
Telephone: (301) 428-2996  
Email: [sampath.ramaswami@hughes.com](mailto:sampath.ramaswami@hughes.com)

In addition to Kimberly Baum whose information is provided above.