## AMG Technology Investment Group, LLC dba Nextlink 0891-EX-CN-2017

## **Response to Commission Questions**

The following responds to questions emailed to the applicant's counsel on December 14, 2017 in connection with the above-referenced application. The application was filed on November 27, 2017 and proposed to conduct a trial from a single sector at Aledo, Texas serving up to 20 end users, the minimum necessary to conduct the proposed trial.

1. Please discuss what the market trial is for; why is it necessary; what is its' purpose.

Nextlink intends to continue aggressive growth into underserved markets that require a minimum of 25-100 Mbps maximum download speeds. Nextlink has been very successful in the markets it serves but has avoided offering service in some markets due to the terrain. Nextlink intends to bid aggressively in the upcoming CAF II auctions and believes the 3550-3700 MHz band will assist in expanding into those markets that have been difficult to cover with fixed wireless solutions. The Telrad equipment proposed for the trial and the capabilities of the mid-band spectrum in the 3550-3650 MHz band will help Nextlink determine propagation maps and plans for the CAF II bids and whether this manufacturer is our best choice for deployment. Nextlink also supports numerous businesses, first responders, ISDs and other critical Enterprises. Where feasible, we provide licensed links but in some dense areas, the unlicensed space is too congested to support our quality demands for the customers we serve. This spectrum will assist in growth in difficult topography and/or congested markets where Nextlink currently uses unlicensed 5 GHz spectrum.

## 2. What parameters will be tested?

Nextlink intends to test the following:

- Top download and upload speed capability >25 Mbps x 5 Mbps.
- Throughput of speeds with minimal customers on the AP and with the AP at capacity of 20 end users.
- Overall performance metrics for jitter, delay, uptime, signal quality at recommended and peak performing distances.
- Other QoS metrics in order to provide 99.99+ quality link throughput and to determine if VoIP services are viable over these links.

## 3. What is the criteria for success?

Nextlink defines success as the ability to achieve >25 Mbps speed download minimum and beyond based on end user to access point ratio to determine the maximum number of subscribers per access point in order to determine infrastructure cost to serve customers in existing and upcoming CAF II bidding markets. The trial will test areas within dense foliage, various distances through foliage/no foliage and whether this band and gear will meet Nextlink's CAF II business plan objectives. If these factors are met and operating

in this spectrum can eliminate interference in our heavier populated markets, Nextlink will certainly seek to acquire access to 3550-3650 MHz spectrum to implement its CAF II plans and for overall improvements and expansions within its growing and current footprint.

4. How does the technical trial relate to the market trial?

Nextlink provides a substantially higher level of throughput and uptime over most fixed wireless carriers with higher level speed packages and lower pricing than that of our competitors. Nextlink currently has 3.65 MHz licenses and Telrad equipment operating with several subscribers in a dense rural area. Unfortunately, the distances are short, the speeds are not as high as the market demands and the cost to number of subscribers per access point are not conducive to providing widescale coverage for these underserved communities. Telrad has improved its operating systems and has versions running in the 3550-3650 MHz space and if its upgrade to Nextlink's access points performs well within this "quieter" spectrum, Nextlink will be capable of bringing its services to thousands of underserved census blocks across multiple states.

5. What is the smallest number of units need to test the objective compared to the size of the existing customers?

The application proposes a market trial involving a maximum of 20 end users. Nextlink believes this is the minimum number of units necessary for the trial to produce meaningful results consistent with the objectives of the trial.