

February 10, 2021

Submitted via email to 5GChallengeNOI@ntia.gov

Rebecca Dorch National Telecommunications and Information Administration U.S. Department of Commerce 325 Broadway Boulder, CO 80305

Re: Open RAN Policy Coalition Comments on 5G Challenge Notice of Inquiry, Docket No. 210105–0001, RIN 0660–XC04

Dear Ms. Dorch:

We would like to thank the National Telecommunications and Information Administration (NTIA) for the opportunity to provide our vision for the 5G Challenge Notice of Inquiry.

Airspan is a RAN vendor focused on 4G and 5G solutions. Our comments will address specifically to this part of the 5G network, which is the one closer to the end user/devices and with a greater impact on innovation.

In order to boost 5G innovation and challenge the status quo of the current legacy predominant RAN vendors an open infrastructure is required. The term Open RAN is widely used to define a new type of architecture based on open interfaces, disaggregation of software and hardware plus external network functions, like the RIC (RAN Intelligent Controller), which interacts with the RAN software through open APIs (Application Programming Interface).

Several alliances like O-RAN Alliance, Small Cell Forum or ONAP are leading the field in creating technical specifications to make these systems interoperable between vendors.

We believe the following listed areas are key for a successful 5G Challenge:

• Focus funding on the right projects which will help accelerate 5G innovation. Funding is a key element to boost innovation. Creation of smart labs with a full 5G ecosystem in place where vendors like Airspan can plug their solutions and test new features with dedicated support from all counterparts, promoting interoperability between all parties. Together with funding for R&D headcount to stimulate faster deployment of new features.

• Place security at the heart of 5G deployment by requiring vendor diversity through the supply chain. New entrants to the market are needed, and network resilience must be improved. The Government should make it a regulatory requirement for network operators or NTIA to procure equipment from multiple vendors, with a preference for interoperable equipment such as Open RAN.

• **Target the right features for DoD purposes**. 3GPP is the organization leading the definition of mobile technology protocols through their releases. It is important for NTIA to follow the right features that fits best DoD purposes. A short list of interesting features to be aware of could be:

o Location Services. Increasing the accuracy to locate objects

 Ultra-Reliable Low Latency Communications (URLLC). Reducing the round trip time of communications. This could be helpful for AGV (Automated Guided Vehicles), robots or VR/ER

• **Network Slicing.** Creating independent 5G networks (slices) re-using same network infrastructure

• **Dynamic Frame Configuration.** To control the speed of the transmission Downlink and Uplink in a TDD spectrum

• Select Open RAN vendors as the foundation of a disruptive 5G Network. As an example, O-RAN is formed of 25 Tier 1 Operators and more than 200 vendors with different technology skills (RAN, servers, switches, Core Network, etc), these work together to define technical specifications to make Open RAN a reality. Open RAN enables diversification, which is the key asset for faster innovation and a greater level of security.

Sincerely,

Abel Mayal, SVP of Technology and Marketing Airspan Networks