

# The U.S. commitment to safe flights and robust 5G services is the strongest in the world.

The U.S. wireless industry has just announced additional concrete and significant steps to address aviation community concerns, providing a clear path forward for the introduction of 5G services in the C-Band in January 2022. Coupled with protections already put in place by the FCC, the U.S. has now offered the greatest set of protective measures in the world to safeguard aircraft from potential harmful interference from new 5G services operating in the Phase 1 C-Band segment (3700-3800 MHz). We can now move forward to expeditiously deploy 5G across the U.S. under this new framework.



“These technical mitigations represent one of the most comprehensive efforts in the world to safeguard aviation technologies,” an agency spokesman said. “With these measures in place, the FCC will continue to work productively with the FAA so that 5G networks deploy both safely and swiftly.”



## 5G C-BAND WIRELESS AND AVIATION COEXIST TODAY

Hundreds of thousands of 5G base stations in almost 40 nations are already deployed in the C-Band today, including in the 100-megahertz segment (3700-3800 MHz) where C-Band 5G will launch in the U.S. starting in January. Many of these countries set their regulatory power levels to the same or even higher power as permitted under the FCC’s rules, and there are no reported incidents of harmful interference despite millions of passengers flying in these nations every year. U.S. airlines fly daily and safely to these nations. There is no real-world evidence to suggest the U.S. could not safely deploy 5G in the C-Band under the rules the FCC adopted in February 2020 after many years of study. Nonetheless, the U.S. wireless industry and the FCC have responded, directly putting the aviation community’s concerns to rest.

## THE WIRELESS INDUSTRY’S ADDITIONAL MEASURES PROVIDE THE MOST SIGNIFICANT PROTECTION IN THE WORLD.

The additional precautionary measures just announced collectively go beyond the protections any other country has taken to safeguard the aviation industry from wireless operations in the 3700-3800 MHz band. The power levels permitted in the U.S. were already lower than those permitted for 5G wireless services in the same band in numerous other countries. To further address the aviation community’s concerns, the U.S. wireless industry has agreed to:

### **1. The most rigorous protection of public airports anywhere in the world.**

In response to aviation requests, U.S. operators agreed to voluntarily limit base station power for 5G operations in the 3700-3800 MHz band near public use airports with paved runways, on top of compliance with existing regulatory limits for deployments around airports. As a result, the U.S. now has the most extensive protection around public airports of any other nation in the 3700-3800 MHz band.

In fact, the only other nation in the world with any restrictions around airports in this spectrum band is France, which relaxed certain of its airport requirements after test flights showed no interference between 5G and aviation operations.<sup>i</sup>

## **2. The only protections of public heliports anywhere in the world.**

In response to aviation requests, U.S. operators agreed to voluntarily limit 5G deployment in the 3700-3800 MHz band near public heliports to control signal levels near takeoff and landing areas for medevac and other helicopter missions. No other nation offers any special protection for public use heliports from wireless operations in the 3700-3800 MHz band. This unprecedented step was taken despite the helicopter industry's recent proposal that simple equipment mitigation steps could be taken to address any potential concerns around helicopter safety.<sup>ii</sup>

## **3. The most significant protections of airborne signals in the world.**

The U.S. wireless industry voluntarily committed to the first-of-its-kind nationwide limit on signal levels above the horizon in the world. This step provides even greater protection to in-flight operations and further ensures no interference to aircraft landing. This additional step is unprecedented and further demonstrates the U.S. wireless industry's commitment to allaying any lingering concerns.

5G deployments are successfully occurring without harmful interference to aviation operations in dozens of countries that have no precautionary measures in place. The measures offered by the wireless industry for the 3700-3800 MHz band are a step further than real-world use cases show are needed, and in any event go further than anything offered elsewhere in the world.

---

<sup>i</sup> The only other two countries to adopt restrictions around airports for purposes of 5G coexistence are Japan and Canada, and neither has adopted limits in the 3700-3800 MHz band. Of the two, the only active 5G operations today are in Japan, and the restrictions are explicitly limited to the 4000-4100 MHz band, which is significantly closer to the 4200-4400 MHz band where aviation operations occur. Wireless operations in the 3700-3800 MHz band in Japan have no airport-related limitations whatsoever.

<sup>ii</sup> Helicopter Association International Petition for Exemption (filed Oct. 29, 2021) (noting that “the latest generations of [night vision goggles] allow for the use of searchlights to detect and avoid obstacles when landing at off-airport... [and] this allows for a much better means of detecting obstacles and determining the rate of closure to a landing area at night than a radar altimeter”).