

IATA Position on 5G C-band Frequency Allocations and Assignments

IATA and its member airlines understand the economic importance of making spectrum available to support next generation commercial wireless telecommunications (5G). However, we insist that maintaining current levels of safety of passengers, flight crews, and aircraft must continue to be one of governments' highest priorities. In line with Article 4.10 of the ITU Radio Regulations and ICAO Standards and Recommended Practices, we strongly urge the governments to reaffirm their commitments to aviation safety by providing all necessary considerations and regulatory measures to ensure that incumbent aviation systems and services are free from harmful interference.

Before deciding on any spectrum allocations or conducting spectrum auctions, the governments must ensure that every frequency allocation/assignment is comprehensively studied and is proven not to adversely impact aviation safety and efficiency. Robust testing in coordination with aviation safety regulators and aviation subject matter experts is critically important in providing necessary information. The failure to engage in interagency and inter-industry dialogue mutually and positively between aviation and telecommunication regulators and stakeholders has the potential to increase aviation safety risk, cause flight cancellations and operational interruptions and uncertainties for airlines, significantly impacting the traveling public and flow of cargo. Governments must therefore provide the necessary leadership to act as the fair facilitator, ensuring the open sharing of information between the Civil Aviation Authority and telecommunication regulators, such that there are mutually agreed conditions and measures, enabling aviation to safely coexist within a 5G environment. These conditions and measures should be codified in the appropriate national laws and regulations.

Without further delay and preferably prior to 5G roll-out, the conditions and measures for safe co-existence of aviation and 5G in C-band must be developed and deployed in consultation with aviation safety regulators, aviation subject matter experts and all impacted airspace users. Practical measures that have been codified in national telecommunication regulations and successfully deployed include:

- Ensure through testing sufficient spectrum separation between 5G C-band deployments and 4.2-4.4 GHz frequency band used by existing radio altimeters
- Clearly codify and enforce the maximum power limit for 5G C-band transmission and downward tilting of all 5G antennae
- Establishment of sufficient 5G C-band prohibition and pre-cautionary zones around airports

IATA also urges aviation standard making bodies, national aviation regulators and ICAO to continue expediting their efforts to develop new standard for radio altimeters. We also urge telecommunication regulators to establish a necessary clear, forward-looking plan to define the spectrum environment globally, for the next decades, such that the new radio altimeters and other aircraft equipment being developed can support safe, global aviation operation throughout the equipment' life cycle. Moreover, we request aircraft and avionics manufacturers to carefully review their design and engineering methodology to ensure that a single point of failure due to electromagnetic interference will not negatively impact safety of flight operation and performance of aircraft.

In closing, IATA would like to reaffirm its commitments in working with the governments, aviation and telecommunication regulators and other stakeholders to ensure safe deployments of 5G. We stand ready to collaborate with government agencies and organizations to develop and identify suitable solutions and necessary mitigations.