



SMALL UAV COALITION

*A Partnership for
Safety & Innovation*

Spectrum Position Statement

November 2019

The Coalition supports a highly-automated unmanned traffic management (UTM) “system of systems.” Such an approach, underpinned with interoperability requirements allowing for a common basis of communicating data, will enable safe and efficient operations at scale across a wide range of use cases in all operational environments, including operations beyond visual line of sight, over people, and at night.

Spectrum is a critical input to safe and reliable operations of unmanned aircraft systems (UAS) in low altitude airspace. Spectrum will be used for (1) wireless control links between unmanned aircraft and their control systems, (2) remote identification; (3) payload communications; (4) separation and de-confliction from air- and ground-based risks.

The Coalition supports the use of existing licensed and unlicensed spectrum to achieve these purposes. Research and development is well underway for the use of LTE, 5G and other existing commercial wireless networks that allows for connectivity between the UAS and the operator and the operator to the UTM and air traffic management (ATM) when required. Research presented to the Drone Advisory Committee further affirms the viability of LTE as an option for non-payload command and control communications. Partnerships between industry and government entities at the federal, state and local levels are exploring the capabilities of commercial mobile wireless spectrum to support UAS operations. Data collected through public-private partnerships can help inform and advance regulatory policies for the establishment of UTM.

The Coalition supports continued collaboration between industry and government stakeholders to develop an interoperable “system of systems” model for UTM that provides a common basis for communicating identification, flight management, detect-and-avoid, and other functions that will be core to the functioning of safe traffic management. This collaboration should promote a unified, global market for UTM that achieves international harmonization.

Adoption of spectrum policies that take advantage of the full range of spectrum opportunities and existing commercial wireless networks will help the commercial drone industry thrive while allowing for a safer, more reliable and resilient UTM.