

From: Jeremy C.-H. Wang
Co-Founder / President & COO, Ribbit

February 27, 2026

To: Senior Director, Space Services and International; and
Senior Director, Terrestrial Engineering and Standards
Innovation, Science and Economic Development Canada
Engineering, Planning and Standards Branch
235 Queen Street, 6th Floor, East Tower
Ottawa ON K1A 0H5

Comment on SMSE-016-25 Consultation on a Policy, Licensing and Technical Framework for Remotely Piloted Aircraft Systems (RPAS) in the 5030-5091 MHz Band and Certain Bands Used to Provide Commercial Mobile Services

Dear ISED,

We applaud the proposed policy, licensing, and technical framework for future RPAS spectrum needs. The proposed changes will heed longstanding calls for spectrum reform to enable commercial RPAS operations beyond increasingly crowded and power-limited ISM bands. Further, these changes are consistent with recent multi-lateral discussions at the RTCA, ITU, and other international aviation and spectrum organizations.

I am submitting the responses below on behalf of Ribbit. Ribbit builds and operates dual-use self-flying airplanes with a focus on connecting remote and contested regions. Ribbit is a contractor of record to multiple public safety, defence, research, and transportation agencies, and has additionally partnered with wholesalers, Indigenous communities, and humanitarian groups who spend \$73M annually on air freight. In 2023, Ribbit performed Canada's first automated gate-to-gate flight, and Ribbit continues to be the Government of Canada's strategic partner for airborne autonomy on full-sized aircraft.

Q1: We support this amendment.

Q2: Higher frequency bands such as those in the 5GHz range are valuable for short-range high-data rate payload communications, such as photos, video, or mapping data that is collected as part of RPAS operations. Although payload data is often stored onboard in raw form and retrieved after the flight, live verification of data quality and integrity is necessary to ensure that the flight is proceeding correctly. RPAS operators will require another means to stream payload data if commercial RPAS bands are limited to CNPC data only.

Q3: Yes, this band is appropriate for short-range (less than ~30 km radio line of sight) operations, generally conducted by small and medium RPAS (<150kg in weight). Although Ribbit focuses on remotely and optionally piloted full-sized aircraft operating at significantly longer ranges, we recognize the utility of this band to smaller RPAS reliant on short-range line-of-sight radio links.

Q4: No comment.

Q5: We support the proposed general approach of licensing terrestrial aeronautical, satellite space, and aircraft stations, as it is consistent with current approaches elsewhere in general aviation.

Q6: No comment.

Q7: We support this amendment, as it would balance desired improvements to RPAS CNPC performance with controlled risk via output power limitations similar to the rules for ISM bands. We also support the use of the 15.4-15.7 GHz band for aeronautical radionavigation, recognizing that robust detect-and-avoid radar remains an outstanding technical challenge for larger RPAS operating at distances beyond visual line of sight.

Q8-22: No comment.

Q23: We support the application of the RPAS framework to these bands—see answer to the next question for further context.

Q24: We generally support the application of the RPAS framework to additional commercial bands below 1 GHz. This would further enable robust long-range (>25km) communications for beyond visual line of sight operations, which is critical to larger RPAS, including full-scale remotely and optionally piloted aircraft being developed by Ribbit. To date, the only viable means of achieving such long-range communications at higher altitudes (>1000 ft AGL) has been through power-amplified directional antennas operating in higher frequencies with developmental spectrum licences, or through LEO satellite terminals.

Q25: We support the removal of this prohibition given the simultaneous introduction of an RPAS framework and the continued need and opportunity for commercial spectrum in rural and remote areas.

Q26: We support this amendment given the simultaneous introduction of an RPAS framework and the need for satellite services in support of RPAS operations at long distances, in remote areas lacking alternative communication infrastructure, or in challenging weather and terrain for line of sight links.

Q27-28, 30: We support this amendment as it is consistent with the motivation behind the changes referenced in earlier questions.

Q29: No comment.

Q31: Typical altitudes of operation would be <5000ft AGL for full-sized RPAS (i.e. similar popular altitude bands and speeds as general aviation), or <400ft AGL for small and medium RPAS as defined in



100 King Street West, Suite 6200
Toronto, Ontario, Canada M5X 1B8
hello@flyribbit.com

CAR IX. Use cases would primarily include aerial data collection and air cargo over long distances and in primarily rural and remote areas in accordance with the RPAS operational risk philosophy of CAR IX.

Q32-39: No comment.

Sincerely,

Jeremy C.-H. Wang

Co-Founder / President & COO, Ribbit