



18th November 2019
The Manager
Space Systems
Spectrum Planning and Engineering Branch
Australian Communications and Media Authority
Belconnen ACT 2616

Update to Foreign Space Objects Determination - Consultation 34/2019

Dear Mr. Hose,

Goanna Ag is an agriculture technology company headquartered in Queensland, Australia delivering the next generation of smart farming practices. We develop and deploy low-cost, low-power, long-range sensors and work with growers to provide data-driven solutions that simplify farm resources management and improve water usage efficiency. With a team of experienced agronomists, hardware engineers and computer programmers, Goanna Ag is breaking down the complex barrier between Australian growers and informative data to enable a more efficient resource management system.

We are pleased to provide this letter in support to Swarm Technologies, Inc. ("Swarm") in Schedule 1 of the Foreign Space Objects Determination. Swarm's narrow-band satellite constellation will not only significantly lower the costs of connectivity and expand the number of businesses that can afford to gain access to satellite communications, but also contribute to solve the hurdle of connectivity in rural and regional Australia.

One of the value propositions Goanna sees with Swarm is its rapid launch schedule, with 150 satellites planned for orbit by the end of 2020. Our customers operate soil moisture probes, weather stations, canopy temperature sensors across their farming operations through some of the most difficult-to-reach geographies in Australia. As a result, satellite communications are extremely important to our business to ensure that valuable insights make their way to growers and result in maximum water efficiency. We have deployed our own LPWAN network, worked with other satellite operators and are intimately familiar with the challenges associated with achieving global coverage from the existing providers.

Goanna is in favor of enabling market access and increasing competition for low-cost satellite providers throughout Australia. We see immense benefit to Australian agriculture as a result of expanded communication capabilities. Goanna Ag is supportive of the ACMA's intent to include Swarm in the update to the Foreign Space Objects Determination. Thank you for the opportunity to provide comments to this consultation.

Respectfully submitted,

John Pattinson
Chief Development Officer
Goanna Ag