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About this inquiry

An inquiry into current and future regulatory requirements that impact on the safe commercial and recreational use of Remotely Piloted Aircraft Systems (RPAS), Unmanned Aerial Systems (UAS) and associated systems.

http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Drones

Regulatory requirements that impact on the safe use of Remotely Piloted Aircraft Systems, Unmanned Aerial Systems and associated systems.

On 13 October 2016, the Senate moved that the following matters be referred to the Rural and Regional Affairs and Transport References Committee for inquiry and report by 27 April 2017. On 16 February 2017, the Senate granted an extension of time for reporting until **6 December 2017.**

Submissions should be received by **15 December 2016.**

Charlotte Sennersten of Mining3 had the privilege to meet Senator Janet Rice at The Drone Congress held in Brisbane last week, 31st of August 2017. She asked Senator Rice how we might contribute to the 'Drone problem' in relation to technology support for a regulatory framework. Senator Rice indicated that we could still make a submission even though the deadline had already past.

The current regulatory framework allows anyone with a couple of hundreds of dollars to buy and launch a drone and legally fly it as long as the flight does not exceed 400 feet, it is not flown nearer than 5 km to an airport and not closer then 30 meters to people. While these regulations are in place to try to create safe conditions for hobby UAV flights, there are few effective methods of ensuring compliance or for detecting regulatory violations.

In Mining3 we are currently building a digital system that we call the Internet of Space and Time where we go away from a typical HTML based document world to an interactive 3D spatial world that could potentially be used, together with tracking and monitoring on board UAVs, to enforce UAV operational regulations. This enforcement can include geo-fencing, querying spatial volume(s)

and having real time communication with engineering data as long as transponders are in place and mounted on the unmanned vehicles. The regulatory framework can then be incorporated and defined in 3D spatial technologies and activated at any point and time by UAV control systems and associated authorities.

We understand that CASA are looking into how to create a regulatory framework including RPASs and UAS together with coordination with manned Aerial Work for fixed wing and rotorcraft at low altitude levels – creating a safe a shared airspace for manned air vehicles, unmanned vehicles and third person parties in these contexts.

The international regulations have to co-exist with state and local regulations, as well as for long-term regulatory compliance, public safety and national security through education, professional standards, training, insurance and enforcement. Also with higher complexity and higher numbers of UAVs we need better insurance systems for both private and commercial users/operators, including consideration of the suitability of existing data protection, cyber security, liability and insurance regimes, and of a nature sufficient to meet growing use of RPAS.

We would like to demonstrate our ongoing development of a system that can be used for operation, navigation, and geo-fencing with tracking and automated alerting in relation to the legal regulatory framework implemented in technology. If a transponder requirement and legal ID's for each and every UAV was in place we can directly show how this system can work to prevent and secure a safe airspace with 24 hour tracking and data capture.

My team and I would be most happy to demonstrate this system for you and would appreciate the opportunity to work with you to build up and secure a safe airspace.

Sincerely,

Prof Paul Lever
Chief Executive Officer

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