Mr Mark Fitt
Committee Secretary
Economics Legislation Committee
Department of the Senate
Parliament House
CANBERRA ACT 2600
AUSTRALIA

UNSW
THE UNIVERSITY OF NEW SOUTH WALES

13 July 2018

Re: Submission to the provisions of the Space Activities Amendment (Launches and Returns) Bill 2018

Dear Mr Fitt,

Thank you for the opportunity to make a submission on the Space Activities Amendment (Launches and Returns) Bill 2018.

The Space Activities Act 1998 was established at a time when space was the province of large, often multinational, companies and spacecraft usually meant large and extremely expensive satellites. The 1998 Act came about primarily in response to a flurry of activities to establish launch facilities in Australia and its make-up essentially reflected this fact. This was somewhat similar to the New Zealand response to RocketLab, but unlike New Zealand, the Australian government of the day seems to have been focused on enacting robust legislation to regulate the activities and protect the Commonwealth, rather than encouraging and promoting the space businesses. While the resulting legislation was strong from a regulatory point of view, it was not well slanted to promoting Australia's space activities.

Two decades on the technological landscape has changed and so has the global space industry. The global space economy is growing at a compound annual growth rate of 10% and is strongly outpacing the global economy. Technological revolutions, in particular advances in launch technologies as well as the emergence of small satellites, have opened new and unique opportunities for Australia to become an effective player in the $400B plus global space economy. Capturing a share of 2% of the global space economy, which is on par with Australia's contribution to the global economy, would result in good economic returns to Australia. The importance of achieving this is further underscored by the fact that Australia's current space industry of about $3.5B is largely comprised of domestic revenue.

It is against this background that the reform of the Space Activities Act 1998 is taking place. It is strongly hoped that this reform facilitates Australia's space activities and positions the Australian space industry to grow its revenue. This requires that the procedural and financial hurdles of the 1998 act be eliminated in order for Australian players to, at the very least, experience a level playing field compared to competing international actors.

The new bill is a welcome improvement over the existing legislation. Although it represents largely a recasting of the Space Activities Act 1998, it is in a form that facilitates its evolution with the rapidly changing technological scene. While the general framework is fixed by bill, the detail is now moved to the legislative instruments. This allows the government to adapt the implementation of the legislation as the context changes. The bill is a positive step towards ensuring Australia plays an effective role in the global space economy.

In particular, the following elements are clear improvements:

1. The change in the name clarifies the scope of the bill to be limited to launches and returns.
2. The change in the types of authorisation, which separates the payload from the vehicle and facility is important as it now removes the burden of the payload license applicant to provide information and financial insurance for the other two.
3. The change in liability and insurance requirements, which brings them on par with international best practice ensures that Australian activities are not unduly disadvantaged.

Notwithstanding these improvements, it is important to keep in mind that a lot of the detail is now left to the legislative instruments. Therefore, the job is only half-done. It is essential that these rules and regulations are appropriately constructed to bring about the full promise of the new bill. In particular the following elements deserve mention: the requirements with respect to debris mitigation should be clarified in order to avoid uncertainties for applicants; the actual financial requirement should not be unclear in the same way that the maximum probable loss was and should reflect the actual risk-benefit balance of Australian space activities; areas on which the legislation seems to be currently silent, such as on-orbit liability, should be dealt with. Finally, noting that ride-sharing of small spacecraft is only set to increase, it is important to provide the facility for multiple payloads to be considered jointly in order to reduce the procedural burden both on the applicant and the Australia Space Agency.

Yours truly,

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