



25 November 2019

Mr Jim Wolfe
Aircraft Operations
Aviation Environment Branch
Department of Infrastructure, Transport, Cities and Regional Development
GPO Box 594
CANBERRA ACT 2601
Via email: noiseregulation@infrastructure.gov.au

Dear Mr Wolfe

**RE: SUBMISSION TO FEDERAL GOVERNMENT DEPARTMENT OF INFRASTRUCTURE,
TRANSPORT, CITIES AND REGIONAL DEVELOPMENT'S REVIEW OF THE AIR NAVIGATION
(AIRCRAFT NOISE) REGULATIONS 2018 – REMOTELY PILOTED AIRCRAFT ISSUES PAPER**

Infrastructure Partnerships Australia is pleased to provide this submission in response to the Department's Issues Paper. Infrastructure Partnerships Australia is an independent think tank and an executive member network, providing research focused on excellence in social and economic infrastructure.

This submission outlines high-level guidance on how to approach the emerging technology of drones, particularly with respect to noise. Our focus is on drones for commercial and industrial purposes – not for personal use.

Drones can bring substantial potential benefits

Technological innovation is transforming the infrastructure sector, not least in transport. While some technologies such as autonomous vehicles are likely to take some time to hit the mass market, and others like electric vehicles are already here, unmanned aerial vehicles (drones) are part of the next wave of innovation in transport services.

The potential applications of drones are far reaching and are already being explored by the public and private sectors. The ways in which drones are being tested, trialled and operated today include last-mile deliveries, emergency medical supplies, conveyancing, construction, remote monitoring and maintenance of assets, among many others. All have potential to deliver substantial benefits for users through better services, lower costs, and minimising negative externalities.



Drones can operate in places and access spaces people currently cannot. They can also reduce congestion by displacing trips that would otherwise be undertaken on roads. Over the long term, their declining operation and maintenance costs are likely to mean lower costs for users and consumers than with equivalent conventional services. When powered by renewable energy, drones can help to avoid carbon emissions, improve air quality and minimise negative impacts on our urban and natural environments.

Regulation should be outcome-based

Realising the potential benefits of drones will require effective and responsive regulation. Infrastructure Partnerships Australia has long advocated for outcome-based regulation across all forms of infrastructure, and governments often talk about the need for moving to this form of regulation. Given that the market for drone services is in its infancy, this provides a rare opportunity to implement best practice regulation from the outset.

Infrastructure Partnerships Australia submits that regulation of drones should be outcome-based, reflecting the needs of customers and the scale of impact of services on communities.

One transformative impact drones could have is in last-mile delivery and courier services, which have seen exponential growth in recent years with e-commerce and on-demand operations. In this context, Infrastructure Partnerships Australia is concerned that the Issues Paper frames noise from drones through the prism of regular aircraft noise. This framing fails to appreciate the fundamental differences between drones and regular aircraft, as well as the almost entirely separate purposes they serve and markets they support.

Delivery and courier drones are likely to replace trips currently made by light vehicles, motorbikes and bicycle services. Whether delivered by drone or road, these services generate impacts on the community in terms of noise, often with greater frequency in the mornings and evenings when customers demand deliveries. It would not be sensible to restrict the number of food or parcel deliveries via roads during a given period, either from the perspective of customer service or commercial viability.

The same logic applies to drone deliveries. Drones should not be subjected to the kind of movement caps or strict noise regulations applied to commercial aircraft. These forms of regulation are not even fit for purpose for modern commercial airports – a view Infrastructure Partnerships Australia has expressed previously. Applying these outdated and rigid forms of regulation to an emerging sector such as drones would be counter-productive, and simply the wrong tool for the job.

It is also likely that existing concerns around noise will subside as drone technology and usage evolves, becoming more efficient and quieter over time. On this basis, regulation should be flexible, with the capacity to ease any restrictions in line with changes in community impact. This form of regulation would also incentivise operators to innovate in the delivery of their services, and to find ways of minimising negative externalities for communities. Conversely, failing to provide an outcome-focused regulatory environment will hamper development of new technologies and ways of delivering services, denying Australians access to the benefits they bring.

Regulation requires coordination across levels of government

Different levels of government can and should provide input to the regulatory environment for drones. State and local governments are best placed to provide advice on issues related to specific locations and intersections with local environmental and planning controls. The Federal Government's well-established role in regulating aviation nationally makes it best placed to continue this role for drones.

However, it is important that governments do not create a multitude of different regulatory frameworks across the country. Coordination and compatibility across jurisdictions are important features of any successful regulatory framework. Failing to coordinate across overlapping jurisdictions would create an unreasonable regulatory burden for operators and discourage investment.

Providing a clear regulatory environment is important

Clarity of regulation now and into the future is important to promote investment and innovation among existing and potential operators. Developing a new outcomes-based framework with the input of federal, state and local governments will provide a clear regulatory environment for the government, industry and the community.

Throughout the evolution of drone technology and operations, community support is crucial to supporting growth and unlocking the benefits drones can bring. Community access to information, including an avenue for providing feedback on outcomes like noise, is therefore essential.

Getting drone regulation right could place Australia at the forefront of development of drone technology and operations, supporting job creation and commercial activity. Getting this wrong could have the opposite effect, marking Australia as a hostile environment for a burgeoning and highly mobile global drone industry, particularly in relation to research and development of this nascent market.

Thank you for your consideration of this submission. If you require any further information please contact our Senior Policy Adviser, Michael Twycross on 02 9152 6012 or at michael.twycross@infrastructure.org.au.

Yours Sincerely



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