

Our ref: DG37824

03 DEC 2019

[REDACTED]
Aviation Environment Branch
Department of Infrastructure, Transport
Cities and Regional Development
GPO Box 594
CANBERRA ACT 2601

Dear [REDACTED]

Thank you for your email of 27 September 2019 about the Department of Infrastructure, Transport, Cities and Regional Development's (DITCRD) Review of the Air Navigation (Aircraft Noise) Regulations 2018 – Remotely Piloted Aircraft and Review of the Air Navigation (Aircraft Noise) Regulations 2018 – Specialised Aircraft (historic and supersonic).

The Department of Transport and Main Roads (TMR) welcomes the proactive consultation undertaken by DITCRD. Enclosed are the comments from TMR and the Queensland Police Service (QPS).

TMR supports the development of a future regulatory position on historic and supersonic aircraft informed by the continuing evolution of supersonic aircraft types and current international standards work being progressed through the International Civil Aviation Organization Committee on Aviation Environmental Protection.

Given the complex set of challenges arising from remotely piloted aircraft (RPA)/urban air mobility (UAM) noise, TMR supports a holistic approach to regulation. This includes for Queensland, ongoing consultation and engagement with:

- the Queensland Government, in particular TMR, Department of Environment and Science, Department of State Development, Manufacturing, Infrastructure and Planning and QPS
- local governments and the Local Government Association of Queensland.

It is also suggested that to ensure a holistic and integrated approach to the regulation of RPA/UAM matters, noise issues should also be considered by the recently established Drones Working Group which comprises representatives from the Commonwealth, states and territories and reports to the Transport Infrastructure Council.

TMR recognises the importance of a whole-of-Government approach for RPA/UAM (aircraft noise) policy development, including appropriate consultation and coordination.

If you require further information, please contact Mr Randall Fletcher, Executive Director, (Transport System Management), TMR, by email at [REDACTED] or telephone on [REDACTED].

Yours sincerely



Mike Stapleton
Acting Director-General
Department of Transport and Main Roads

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TMR comments: Issues paper- Air Navigation (Aircraft Noise) Regulations 2018 – Remotely Piloted Aircraft

Section, page	Issue, comment	Recommended action
1. General comment		The Department of Transport and Main Roads (TMR) welcomes the proactive consultation undertaken by the Department of Infrastructure, Transport, Cities and Regional Development. Given the complex set of challenges arising from RPA/UAM noise, TMR supports a holistic approach that draws in all levels of government on this matter, including for Queensland, ongoing consultation and engagement with: • The Queensland Government, in particular TMR, Department of Environment and Science, Department of State Development, Manufacturing, Infrastructure and Planning and the Queensland Police Service. • Local governments and the Local Government Association of Queensland. It is also suggested that to ensure a holistic and integrated approach to the regulation of RPA/UAM matters the noise issues should also be considered by the recently established Drones Working Group which comprises representatives from the Commonwealth, states and territories and reports to the Transport Infrastructure Council.
2. s.2.4, p.7	s.2.4 Where noise regulation of drone operations is considered necessary, it will need to consider total number of movements per day, the duration, number per hour and time of flights (day/night). These are relevant considerations when current environmental assessments are undertaken in relation to conventional aircraft operations over communities living near airports or under flight paths....	TMR recommends that the Commonwealth regulate the following matters to ensure consistency in the management of airspace, protection of obstacle limitation surfaces and enforcement of exclusion zones and assist in the management of RPA/UAM noise impacts. • An Australian design standard for noise emission by weight class (where operated in an urban area and for commercial use) NoiseRegulation@infrastructure.gov.au.
s.2.6, p.8	s.2.6 However, in the case of noise generated by drones, there are good arguments for the Regulations to	

		be amended to allow such noise to be regulated by State/Territory noise laws. Many drones are not like other aircraft with the ability for drones to operate far closer to people on the ground and operating shorter distances than other aircraft. The proximity of drone operations to the community in built up and residential areas raises the question of whether states/territories or local government are better placed than the Commonwealth government to regulate drones in terms of their suburban noise intrusion, which could be achieved by amending the Regulations to permit the application of State/Territory laws to noise emitted by all/some drones.'	• Provide flight zones where commercial operations are permitted (60-80 metres AHD) and curfews. The height should be based on, but not limited to, the noise emission potential of the weight class, as well as any other safety and privacy aspects. • Note that the enforcement of flight zones for commercial operations may require the installation of transponders on all drones above a certain weight class, logging of flight paths and maintenance of flight path logs.
3.	s.2.7 (e), p.9	e. Benchmarking acceptable noise levels for overflying different land use areas (including residential areas) having regard to acceptable noise levels permitted from other similar noise generating equipment under State/Territory legislation.	TMR seeks clarification that it is proposed that the Commonwealth set benchmarks for overflying different land use areas. TMR supports this approach.
4.	s.2.7 (f)	f. Allowing noise regulation of drones by State/Territory Governments where this is consistent with the application of their regulations to other types of noise disturbance from operating equipment and not inconsistent with Commonwealth legislation.	TMR's preference is that drones over 250 grams be considered aircraft to ensure consistency in the management of impact of RPA/UAM. Queensland would seek to manage the impact of RPA/UAM aircraft noise around landing sites (operational bases) through its land use planning system.
5.	s.3.1, p.11	In essence what is currently planned for UAM aircraft operations: ... • utilises physical infrastructure which can be ... unused land surrounding highway interchanges to form the basis of a distributed network of dedicated operating sites...	Note: In Queensland, UAM aircraft operators would require approval from TMR to undertake an activity in, or above, state-controlled corridors. TMR would also need to ensure RPA/UAM activities were not creating a road safety hazard by causing distraction to drivers in close proximity to a state-controlled road, particularly areas with high driver attention needs such as interchanges.

6.	s.3.7 (d) (e), p.13	(d) <i>Allowing noise regulation of UAM aircraft by State/Territory Governments using their environmental protection regulation where this would be consistent with the application of these regulations to other types of aircraft such as at landing sites and not inconsistent with Commonwealth legislation.</i> (e) <i>Requiring Australian Noise Exposure Forecasts to be produced by the aircraft operator around landing and take-off sites to identify and manage potential noise impacts.</i>	TMR supports a similar approach to airport regulation: - Commonwealth regulation of noise generated by RPA/UAM aircraft. - National standards and guidelines for all state and territory jurisdictions: - For RPA/UAM noise management as they relate to points of origin and destination. - On managing the impacts of RPA/UAM aircraft noise around landing sites (operational bases), for example through the National Airports Safeguarding Framework or similar. - State/Territory regulation RPA/UAM aircraft landing sites (operational bases) as a land use by the state and devolved to local governments where appropriate. It is noted that requiring ANEF to be produced by the aircraft operator may be problematic as multiple UAM aircraft operators may use a single landing site. TMR supports an approach similar to airports where the responsibility for preparing an ANEF should rest with the manager of the RPA/UAM landing site (operational base).
7.		(e) <i>Requiring Australian Noise Exposure Forecasts to be produced by the aircraft operator around landing and take-off sites to identify and manage potential noise impacts.</i>	Given the potentially different nature of RPA/UAM noise, TMR supports determining a nationally agreed position (and guideline) for measuring RPA/UAM aircraft noise at a RPA/UAM aircraft landing site (operational base), including thresholds where mitigation is required and location near a noise sensitive land use is incompatible.
8.	s.3.7 (e), p.13	(e) <i>Requiring Australian Noise Exposure Forecasts to be produced by the aircraft operator around landing and take-off sites to identify and manage potential noise impacts.</i> Drone noise, drone noise perception and the potential noise minimisation in the urban context, are relatively new areas of research (Watkins et al. 2019).	TMR recommends that further research is undertaken to explore an 'ANEF' or similar framework suitable for identifying and managing the impacts of RPA/UAM noise on development and existing uses and protecting RPA/UAM operations. The agreed framework will require regulatory strength to enable: Effective implementation in land use planning and development assessment.

	Further research is required to determine the adaptability of the Australian Noise Exposure Forecasts (ANEF) for aircraft noise to identify and manage the impacts of RPA/UAM noise on development and protect RPA/UAM operators once they are successfully operating. The National Airports Safeguarding Framework states that the Australian Standard AS 2021-2015 Acoustics – Aircraft Noise Intrusion – Building Siting and Construction (AS2021) recognises that the 20 ANEF and 25 ANEF zones do not capture all high noise affected areas around an airport, and that the ANEF contours are not necessarily an indicator of the full spread of noise impacts, particularly for residents newly exposed to aircraft noise.	Clear demonstration of compliance with regulations by development proponents.
9.		TMR seeks national guidance on land use planning and development assessment matters for RPS/UAM landing sites (operational bases), including location requirements, impacts to be considered and managed and assessment standards and requirements.

QPS comments: Issues paper- Air Navigation (Aircraft Noise) Regulations 2018 – Remotely Piloted Aircraft

	Section, page	Issue, comment	Recommended action
10.	General comment	The Queensland Police Service (QPS) notes the issue paper.	The existing regulations do not apply to particular types of operations, including emergency services. The QPS use RPA for a variety of reasons, including crime scene examination, disaster response, search and rescue and in relation to the management of high risk incidents. The continued inclusion of this exemption is necessary to enable the QPS to continue to provide the Queensland community with high quality policing services through the use of RPA.