Submission 90 – Confidential

## Infrastructure Planning Guidelines for Drone Delivery Services

## Public Consultation Draft, November 2022

I am writing in response to the above Planning Guidelines,

As a resident of the once quiet but still leafy suburb of Brookfield situated in the 'Green Belt' of Brisbane, I am horrified to learn that the Federal Government Department of Infrastructure is once again foisting unwanted aviation noise and nuisance upon unsuspecting residents of Australia.

I have only just completed the exhausting and time-consuming exercise of writing a submission for the draft PIR for Brisbane Airport Corporations NPR which extensibility concerns the incomprehensible manner by which Airservices Australia (AsA) and Brisbane Airport Corporation (BAC) have created a noise pollution issue the likes we have never encountered before.

Too my horror, the Department of Infrastructure now wishes to compound our problems by allowing the Aviation Industry, in particular the UAV Aviation Industry to 'write their own rules' and pollute (noise, visual and environmental) yet another layer of the air and space above our homes, areas of leisure and workplaces. Does anyone in this department have a moral compass or an inch of empathy or is it the case that money and profits only matter? From my dealings so far with the Brisbane Airport fiasco, the latter seems to be the case!

I notice in a lot of publications spruiking the positives of Drone Delivery Services, the experiences of the COVID19 Pandemic serve to justify the need for Drone Delivery Services (DDS). I and countless others beg to differ. As Covid restrictions have almost disappeared and life is getting back to 'normal', the type of DDS being trialled in Logan, QLD, is an unnecessary service catering to those who cannot make the effort to get organised. As has been broadcast nationally on Channel 9's 'A Current Affair', DDS's have been utilised by selfish residents ordering up to 8 times an hour, items of junk food to be delivered to their premises on a whim. There appears to be no consideration for the neighbours who must suffer the annoyance of relentless noise pollution from the delivery drones. Social media is awash with residents complaining about the irritating nuisance noise, many relaying their frustration at not being able to have their complaints validated by the operator nor government authorities charged with the responsibility of dealing with such complaints. The addition of DDS's to neighbourhoods will act to fracture rather than build neighbourly bonds such as those developed during the harshest times during the pandemic. Most people now days do not know their neighbour but that changed during Covid lockdowns as people helped each other and acted in selfless ways. One of the reasons put forward as a positive reason for DDS's by the industry is that deliveries of single items would save car journeys. Good neighbours lend and share things with their neighbours, such as 'the cup of sugar', so maybe the car journey would never have been contemplated, just a shout-out to the neighbour. How about walking to a shop and getting some exercise. DDS's will just lead to an unhealthier society, both physically and mentally, which in turn adds to the burgeoning health budget of our nation.

Psychological studies have shown the strong links between emotions of anger and anxiety with heightened selfish behaviour. Noise from delivery drones will ultimately exacerbate peoples anxiety and anger resulting in a less cohesive society. The UN has published papers about the risk unwanted noise poses to humans which include hypertension, heart attacks, stroke to name a few. Children's educational outcomes suffer. Will DDS's be banned from flying close to or delivering to schools? Junk food is just a click away for anyone, children included, to consume on regular basis when DDS"s are allowed free reign in our suburbs.

Many residents of Brisbane, being afflicted by the horrific consequences of a government authority unwilling to enact real noise abatement controls for Brisbane Airport such as a curfew and a movement cap, are aghast at the thought of yet another layer of aviation madness and intrusion upon their 'castle', their homes, their SAFE SPACE!

Low Ambient Noise areas such as where I reside, immersed in nature and controlled by environmental legislation from all three levels of government, have background noise levels far below the suggested 40dB-50dB for residential areas. We now have aircraft noise from the NPR reaching 75db-80db+ every 2-3 minutes for hours at a time. NO ONE from the Department of Infrastructure nor Airservices Australia has bothered to physically visit our area and truly experience the extreme noise we are experiencing day after day. Can you blame us for being apprehensive about the prospect of the very same authorities being given the powers to deal with the noise complaints that will be generated by the addition of DDS's to our area? Through FOI it has been revealed that AsA has a sneaky manual available for all Complaints Officers in order to placate or ignore the many complaints filed by residents. Will this corrupt practice be adopted for DDS noise complaints as well?

It doesn't take much effort to find an abundance of research/articles about how drone crashes have caused many 'wildfires' in the USA. Just this year a wildfire caused by a drone crash decimated 52 acres of forest in Colorado with 300 residents requiring evacuation from their homes. Thirty firefighters were required to contain a wildfire that destroyed 200 acres for forest in Arizona in 2018.

Climate Change is making our bushfire seasons in Australia longer and more dangerous. Drone Delivery Services just don't make any sense in any area of Australia that is prone to bushfires. Drones have the potential to start fires when they crash and even when they land on a combustible surface such as dry grass. Over heating motors and batteries of drones are the prime reason for ignition of fire unintentionally. However unintentional, the potential for catastrophic fire danger is real. To add to the danger that drones pose when they crash, damaged Lithium-ion batteries can leak corrosive fluids that can pollute the soil and harm wildlife and the environment.

A WING delivery drone crashed into 11kV high-voltage powerlines causing 2000 residents to lose power in Browns Plains, Logan in September 2022. The drone caught fire and burnt for 45 minutes. Imagine if this had happened in a bushland setting, the consequences could have been life threatening if the drone fire had ignited vegetation below. If a Lithium polymer battery is on fire it should never be attempted to be extinguished with water. Instead, a fire blanket, sand or a powder extinguisher should be used. How are DDS operators planning to mitigate this very real and potentially life-threatening issue. What sort of Public Indemnity Insurance will the DDS operators be required to hold?

Three very important questions need to be answered by WING as a result of the delivery drone crash less than 3 months ago:

- 1. Why was the drone flying near/over high-voltage powerlines as DDS's are supposed to have flight plans that avoid such situations?
- 2. Why didn't the on-board sensors work to manoeuvre the drone in order to avoid colliding with the powerlines?
- 3. DDS's have a human operator supposedly monitoring all the delivery drones, why then couldn't the human operator intervene to prevent the collision?

How does the Department of Infrastructure propose to ensure that CASA-licenced and certified operators are being trained to a standard so that such incidences as the crash mentioned above do not occur? A drone crashed into a Sydney High-rise apartment in January 2021, injuring the occupant of the apartment with shards of glass from the smashed window. The drone operator was CASA-licenced and certified!

As previously mentioned, I live in a rural residential suburb of Brisbane surrounded by natural bushland. The environment is protected by legislation from all three levels of government. For the residents of this and surrounding rural residential suburbs, even trimming a tree branch sometimes involves approval from authorities. We are in a 'Koala Priority' area. Anthropogenic noise is an important environmental stressor that is rapidly gaining attention among biologists and ecologists. Chronic and frequent noise interferes with animals' abilities to detect important sounds, whereas intermittent and unpredictable noise is often perceived as a threat. Delivery Drones will be perceived as a threat. A recent study on the effect of intermittent and unpredictable noise on zebra finches found that birds were vulnerable to excessive noise and showed signs of stress that are often linked to rapid aging and shorter life spans. A meta-analysis on the effects of noise on more than 100 species, including amphibians, arthropods, birds, fish, mammals, molluscs, and reptiles, found that anthropogenic noise was a serious form of environmental change and pollution that affects both aquatic and terrestrial species. The introduction of DDS's into our rural residential area will affect the biodiversity of the area. Is the perceived right of a citizen to have a can of coke or a cup of coffee delivered by drone a fair trade-off for the destruction of our flora and fauna? If you have to think about it, then I fear for our planet.

I fear that the well-funded and powerful Aviation Industry is having undue influence on government policy. From reading the Public Consultation Draft, it appears as if the Unmanned Aerial Vehicle (UAV) industry were given a blank piece of paper and asked to write their own rules.

Please consider EXTREMELY carefully the ramifications of letting this unnecessary industry ruin more of Australia.

Drones assisting the Health Services and our Defence Force are a different matter and I have no issue with drones being utilized to facilitate important and lifesaving requirements of these institutions, but I draw the line at the type of drone delivery service that is being proposed in this Draft Public Consultation document.