

**Australian Government** 

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Department of Infrastructure, Transport, Regional Development, Communications and the Arts



Infrastructure planning guidelines for drone delivery services

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### Introduction

### Infrastructure Planning Framework

The Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the department) is continuing its work with state, territory and local governments to support the integration of drones and Advanced Air Mobility (AAM), such as electric vertical take-off and landing vehicles, into the community and broader transport networks.

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The Infrastructure Planning Framework (the Framework) provides a set of guidelines to support nationally consistent infrastructure and planning decisions relating to emerging aviation technologies. The Framework aims to create a consistent and seamless process for operators and infrastructure developers to navigate the required regulatory approvals and requirements across jurisdictions. The Framework will also provide guidance for planning authorities to understand the implications of emerging aviation technologies and make informed decisions for their communities.

The Framework will include two components:

- 1. The first component (this document) focuses specifically on drone delivery services using small sized drones (<25kg).<sup>1</sup>
- 2. The second component (to be developed) will apply to medium to large sized drones and AAM (>25kg).

The department will work with stakeholders to develop draft consultation guidelines for medium to large sized drones and AAM, noting the scope of infrastructure requirements will be much broader than those required for small sized drone delivery operations.

### Drone delivery guidelines

### Background

Drones, also known as remotely piloted aircraft systems, are an emerging technology that have a wide variety of potential applications. Drone delivery services are already approved and operating in several locations in Australia. These services are expected to become more common as technology, regulatory frameworks and the drone industry continue to mature.

Drone delivery services currently operate out of both dedicated depots and existing commercial sites, such as shopping centres. These services typically do not require extensive infrastructure to support operations, and can be relatively easily accommodated within existing planning structures. Infrastructure that may be required specific to drone deliveries include dedicated pads for loading, take-off and landing of aircraft, and charging facilities. Control facilities for drone operations do not need to be co-located with other drone delivery infrastructure.

<sup>1</sup> Small sized drones are categorised in line with the Civil Aviation Safety Authority's <u>drone weight categories</u> to include those weighing less than 25kg.

### Purpose

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The drone delivery guidelines are intended to support a nationally consistent approach to infrastructure and planning decisions for drone delivery services. Principal responsibility for planning and land use management remains with state, territory and local governments which will consider development proposals for new drone delivery services.

This document steps through the regulatory requirements for drone operators and provides guidance for planning authorities to make informed decisions when assessing existing or proposed land use for drone delivery services in their local community. They are intended to complement a range of other <u>policies and programs</u> to address community concerns and support the responsible development of the emerging aviation technology sector.

For the purpose of this document, the department has adopted the following definition of drone delivery services:

The use of drones weighing less than 25kg to deliver small packages (including, but not limited to, medical supplies, pathology samples, small goods and consumables) to customers from a local delivery hub.

As the market evolves, it is expected that drone delivery services will operate at greater scale and complexity, with operations taking place from dedicated hubs over a sustained period. This definition may be reviewed in the future as the scale of drone operations increase.

### Scope

Broader employment and workplace relations matters are the responsibility of the Department of Employment and Workplace Relations and the Fair Work Ombudsman. As a result, consideration of employment conditions, safety and rights for drone delivery workers sits outside the scope this document. A 2022 Gig Cities <u>research report</u> highlights a number of recommendations for both policymakers and platform companies to ensure adequate oversight and regulation of the gig economy. This may be relevant to the emerging drone delivery sector, particularly as it expands and includes a number of touch points with existing transport and logistics networks.

### Implementation, evaluation and review

The department will take the following steps to manage the implementation, evaluation and review of the drone delivery guidelines:

- Circulation of the drone delivery guidelines to local governments to support implementation.
- Provision of guidance material and online resources on the <u>drones.gov.au</u> portal to assist local governments make informed planning decisions.
- Evaluation of local, state and territory government implementation of the drone delivery guidelines 12 months after release of the guidelines.
- Review of the drone delivery guidelines following publication to accommodate changing circumstances and technologies.





## Infrastructure planning guidelines for drone delivery services



## Infrastructure planning guidelines for drone delivery services

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### The Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the department) has developed infrastructure planning guidelines for drone delivery services.

### Purpose

- 1. This document provides guidance to Commonwealth, state, territory and local government authorities on the aviation regulatory framework as it applies to drone delivery services, and makes recommendations regarding the infrastructure and land use planning considerations required to support drone delivery operations using small sized drones (<25kg).
- 2. This document is intended for use by planning officials when they are considering development proposals for drone delivery services, and drone operators when navigating the required regulatory approvals.
- 3. Whilst the guidance in this document is based on current experiences with drone delivery services, it may also be relevant for infrastructure required to support other types of drone services using small sized drones.

### **Regulatory framework**

### Australian Government responsibilities

### Safety and noise

4. The Australian Government is primarily responsible for aviation regulation, particularly as it relates to <u>safety</u> and <u>noise</u>. It is also developing <u>policies</u> and processes to address drone security, privacy, environmental impacts and spectrum requirements.

### Security

5. The Australian Government is taking a by-design approach to <u>security</u> and community safety relating to the operation of drones. This includes policies and processes to address the physical and cyber risks of these technologies and their systems.

### Privacy

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6. The department is developing <u>drone privacy guidelines</u> to assist drone operators operate in accordance with privacy laws and community guidelines. These will provide general guidance on considerations for drone pilots, but will not constitute legal advice. It is the responsibility of drone operators to ensure that they operate in accordance with legislative requirements relating to surveillance devices.

### **Environmental impacts**

- 7. The Australian Government has limited responsibilities related to land-use planning, other than in relation to <u>environmental regulations</u>, and directly controls land use in selected areas, such as federal airport sites and <u>Commonwealth national parks</u>.
- 8. The <u>Civil Aviation Act 1988</u> and <u>Airspace Act 2007</u> outline obligations to take environmental considerations into account.
- 9. The Environment Protection and Biodiversity Conservation (EPBC) Act 1999 applies when a proposal by a Commonwealth, state or territory agency has the potential to have a significant impact on a matter of national environmental significance.
  - a. It is not expected that current or planned drone delivery operations are likely to trigger the need for assessment under the EPBC Act.
  - b. This will be monitored as the sector grows and the scale of operations increase to determine if EPBC Act assessments for drone operations are required.
- 10. Further information for local governments on the applicability of Australian environmental law can be found on the <u>Department of Climate Change, Energy, the</u> Environment and Water website.

### Spectrum

11. Operators should ensure that drone devices' radio links are appropriately licensed and compliant with standards set out by the Australian Communications and Media Authority. For more information visit the spectrum policy webpage.

### State, territory and local government responsibilities

- 12. State, territory and local governments have principal responsibility for planning and land use management, as established under the Australian Constitution, including integration with broader transport networks.
- 13. Development proposals should also be assessed under relevant state and territory rules, including environmental laws, workplace health and safety, and legislation prohibiting the use of drones around secure sites, such as correctional facilities.

### Safety

14. The <u>Civil Aviation Safety Authority</u> (CASA) is responsible for regulating all safety aspects of civil aviation, including drone flights.

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- 15. CASA is responsible for regulating the safe operation of drones used for delivery services. This includes the aircraft, pilot licensing and operator certification.
- 16. Safety regulations for drone operations may be different from those which apply to traditional aviation. The regulations include consideration of risks associated with the operation of drones, remaining clear of other aircraft, risks to people and property on the ground, risks from building generated windshear and turbulence, other physical obstacles that may impact on safe navigation outcomes, and compliance with airspace restrictions during emergency situations.
- 17. These risks are managed through CASA's commercial drone operation regulatory approval processes. Drone operators must meet certification, licensing and registration requirements before flying. Additional approvals may be required depending on the type of operation conducted. Operators should contact CASA if they are unsure of which approvals are required.
- 18. Drone delivery operators currently approved to fly in Australia have submitted a safety case to satisfy CASA requirements that their drones are reliable, can operate safely, and meet all safety requirements, including documented practices and procedures. This includes measures to mitigate safety risks in the event of an emergency, such as:
  - a. If a drone breaches the boundaries of a programmed flight, as a precaution, the licenced operator overseeing operations may instruct the drone to land immediately if it is safe to do so.
  - b. In the unlikely event a problem occurs, drones may automatically land slowly, flashing lights to help people on the ground see them clearly. Drone delivery operators also have emergency response plans in place whereby crew will be sent to the landing site to ensure it is safe and to retrieve the drone.
- 19. Planning authorities may <u>contact CASA</u> to confirm that potential service providers have the appropriate safety approvals for their operation.

### Noise

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### Drone noise regulation and approvals process

- 20. The noise created by drones in all phases of flight, such as take-off and hover, is regulated by the department under the <u>Air Navigation (Aircraft Noise) Regulations</u> 2018 (the Noise Regulations).
- 21. It is not recommended that planning authorities include provisions in their local planning schemes to regulate drone noise, as this is already regulated by the department.<sup>2</sup>
- 22. In some limited circumstances, the regulation of drone noise may not fall within the scope of the Noise Regulations.
  - a. Drone delivery operators should confirm the applicability of the Noise Regulations in the jurisdiction in which they intend to operate.
  - b. If you are unsure of the applicability of the Noise Regulations to a drone delivery service, please contact the department.

### Residential noise regulation in Australia

- 23. Residential noise in Australia is regulated by state and territory governments. Local government policies are expected to reflect the regulatory approach in their jurisdiction.
- 24. A summary of residential noise regulatory approaches in Australia is presented in **Table 1** and is intended to be used as a guide to how different noise impacts are managed.

<sup>2</sup> The department will contact the relevant local government authority to familiarise them with the noise approval and complaints management process.

### Table 1:Summary of residential noise regulatory approaches in Australia (adapted from<br/>Environmental Protection Authority Victoria 2018)

Jurisdiction	Definition of unreasonable noise during prohibited times			Restrictions on noise emission outside of prohibited times		
	Fixed plant	Domestic activities	Construction	Fixed plant	Domestic activities	Construction
Australian Capital Territory	Above the noise standard for a noise zone prescribed under the Environment Protection Regulation 2005 <sup>3</sup>					
New South Wales	Audible within habitable room		More than 5dB above background	Noise not to be 'offensive' Objective limits to define offensive may be specified in some council areas		Noise targets apply, also required to take all reasonable efforts to minimise noise
Northern Territory	Audible within habitable room		More than 5dB above background	Above 45dBA <sup>4</sup>		More than 5dB above background
Queensland	More than 3dB above background	Audible within habitable room		More than 5dB above background	Audible within habitable room	
South Australia	Audible within habitable room			Noise should not be unreasonable		
<u>Tasmania</u>	Above 40dBA	Audible within habitable room		Above 45dBA	Noise should not be unreasonable	
Victoria	Audible within habitable room			Noise should not be unreasonable		
Western Australia	Noise limits prescribed by <u>Environmental Protect</u> (Noise) Regulations 1997			Protection	Noise should not be unreasonable	

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<sup>3</sup> Noise standards are the maximum level of noise that may be emitted by an activity, as measured at the compliance point.

<sup>4</sup> A-weighted frequencies account for the relative sound level perceived by the human ear.

- 25. The definition of unreasonable noise varies between jurisdictions, but is typically based on the time of day and noise source, such as fixed plant, domestic activities or construction.
  - 26. As part of the drone noise approval process, the department considers the noise impacts of drone delivery services on residential areas in line with local regulatory approaches (see Drone noise approvals process).

### Noise impacts of delivery drones

- 27. The noise impacts of delivery drones in residential areas are typically experienced during overhead flight and delivery. When flying overhead, drones are typically audible from a distance of 100 metres and may be heard for up to 7 seconds.
- 28. The perceived noise level of drones inside and outside during overhead and delivery scenarios is outlined in **Table 2**. Measurements are based on independent noise testing of drone delivery operations in Australia using methodologies approved by the department (see footnotes). These noise levels may change as the industry matures.

Noise receiver location	Overhead flight (40m from receiver)⁵		Delivery scenario (30m from receiver) <sup>6</sup>		
	Average	Maximum	Average	Maximum	
Outside	43dBA	53dBA	60dBA	74dBA	
Inside (windows open)	33dBA	43dBA	50dBA	64dBA	
Inside (windows closed)	13-18dBA	23-28dBA	20-25dBA	34-39dBA	

#### Table 2: Overview of drone noise impacts during operation in residential areas

29. For reference, the Commonwealth noise limit for passenger vehicles, which are typically used for delivery services, is 74dB.<sup>7</sup> This is consistent with the maximum noise level perceived when outside during a drone delivery scenario.

<sup>5</sup> Overflights measurements were assessed against a methodology which resembled procedures for measuring helicopter noise for noise certification purposes, as defined by Chapter 11 of ICAO Annex 16.

<sup>6</sup> Delivery simulations were measured in accordance with AS 1055 Acoustics—Description and Measurement of Environmental Noise.

<sup>7</sup> Vehicle Standard (Australian Design Rule 83/00 – External Noise) 2005.

### Drone noise approvals process

- 30. The Noise Regulations were amended in December 2021 to streamline drone noise management. As of 1 July 2022, commercial drone operators are required to complete an <u>assessment form</u> as the first step to obtaining a noise approval.
  - a. Drone delivery services will typically require a full assessment process to gain a noise approval as they are more likely to require repeated flying over noise-sensitive sites.

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- 31. A range of factors can influence the noise impacts experienced in different locations, including local topography, ambient noise levels, cumulative noise impacts, and the effectiveness of drone noise abatement measures.
- 32. The department considers a range of matters relating to noise impacts as part of the full operational approval process including, but not limited to:
  - a. drone model and measurement of noise emissions
  - b. operational details, such as location and hours of operation
  - c. noise abatement strategies
  - d. community and local government engagement
  - e. complaints management processes.
- 33. The department will typically require drone operators to undertake independent noise measurement of their aircraft in operation as part of the noise approval process, unless existing measurements for the type of aircraft being used are available.
- 34. As part of the noise approval process, the department may impose <u>operating</u> <u>conditions</u> on drone delivery services, such as:
  - a. drones must only fly during daylight hours
  - b. drones must not overfly declared heritage or environmentally sensitive areas, as defined by the relevant Commonwealth, state or territory environment authority.<sup>8</sup>

<sup>8</sup> The department will contact local governments to seek information on environmentally sensitive sites within the proposed operation area and the rules which apply to drones in these areas.

- 35. The department may impose reporting requirements to help monitor noise impacts, such as:
  - a. aircraft movements (e.g. how many flights were undertaken in a calendar month)
  - b. community feedback and noise complaint management (e.g. quarterly reporting on feedback received by the operator and/or the responsible local, state or territory government, including how feedback has been responded to)<sup>9</sup>
  - c. engagement with local authorities.
  - 36. Drone delivery operations which are likely to have a significant impact on residential areas may be required to undertake a public consultation process with applicants required to arrange activities, such as public meetings, media releases and letterbox campaigns.
  - 37. Noise approvals for drone delivery operators are re-assessed on an annual basis with the potential for earlier review if operators do not meet the conditions of their approval.
  - 38. If you have any questions about the department's noise approval process, please email dronenoise@infrastructure.gov.au

### International standards for managing noise impacts

- 39. Internationally, there are no mandated noise aviation standards for emerging aviation technologies, such as drones.
- 40. The International Civil Aviation Organization (ICAO), which is responsible for building aviation capacity through the creation of policies and standards, has adopted a balanced approach to aircraft noise management. This includes: reduction of noise at the source, effective land-use planning and management, noise abatement operational procedures, and operating restrictions.
- 41. In the absence of international noise standards for drones, the department has adopted an approach consistent with ICAO's advice on managing drone noise impacts (see Drone noise approvals process).

<sup>9</sup> Local governments should also be aware of jurisdictional requirement to report on the environmental impacts of drone delivery operations.

### Community feedback and complaints management process

- 42. Feedback from the community, including complaints about drone noise, plays an important role in how the department manages drone noise.
- 43. The department will consult with local governments as part of the noise approval process to ensure community feedback is managed and addressed appropriately.
- 44. Noise complaints regarding drone delivery services may be submitted to the operator, the responsible local government, or the department.

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- 45. As a condition under current noise approvals, the department requires quarterly reporting from operators on all drone noise complaints, whether received directly, or by another level of government.<sup>10</sup> The department also seeks reporting on noise complaints from local governments.
- 46. Community feedback about noise from drones may result in the department:
  - a. requesting additional information from drone operators and discussing noise mitigation strategies
  - b. adding additional conditions to a drone operator's approval to mitigate noise impacts (e.g. limitations on the time of day drones may be operated, the types of drones that can be used, or the frequency of flights).

### Land use planning considerations

### A flexible approach to development approvals

- 47. Local governments have principal responsibility for planning and land use management at the local level, with plans expected to be consistent with applicable regional and state planning policies.
- 48. Local governments should consult with state planning and development, emergency, law enforcement, or other relevant agencies to ensure new operations do not present a conflict of interest or create any amenity issues.
- 49. A flexible approach will help when considering development proposals for drone delivery services, including broad community engagement and consultation to support social licence.

<sup>10</sup> In 2022, the department was notified of 44 noise complaints across all drone operations in Australia. Over the same period, tens of thousands of drone deliveries were made.

- 50. As with any new development proposal, local governments should consider and balance the costs and benefits of drone delivery services in their community to inform decisions on a case-by-case basis.
  - 51. Early engagement with the community and key stakeholders is critical when considering development proposals for new drone delivery services (see <u>Principles for</u> effective community consultation engagement).
  - 52. The land use planning considerations outlined below are intended as guidance only to support local governments make informed decisions about drone delivery services in their community.

### Planning considerations for drone delivery services

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- 53. In general, drone delivery services currently do not require new or complex infrastructure for consideration in land-use planning processes.
- 54. It is not recommended that planning authorities develop or require specific land-use categories or planning controls for small sized drone delivery infrastructure.
- 55. Planning controls for other forms of aviation infrastructure such as airports or helipads are not appropriate for considering approvals of drone delivery infrastructure, as drones are significantly less complex than traditional aircraft such as helicopters or passenger planes.
- 56. The drone delivery aspect of operations can be considered as ancillary to either existing or proposed land uses.
  - a. Where drone delivery infrastructure is co-located with existing land uses such as a shopping centre, it is recommended that planning processes treat drone delivery infrastructure as ancillary to the primary purpose of the development where the drone delivery infrastructure is located.<sup>11</sup>
  - b. For dedicated drone delivery facilities, warehouse or depot use categories may be an appropriate dominant use. For drone delivery services operating from commercial sites, the existing commercial land use category can remain the dominant use.
  - c. Where drone delivery infrastructure is located on brownfield or greenfield sites, it is recommended that land use categories are limited to the specific nature of the activities carried out and products which are being delivered from the site.

<sup>11</sup> To ensure public safety, access to drone delivery sites co-located in areas with high pedestrian activity should be restricted to essential personnel, via rooftops or separated carparks, for example.

- 57. This approach has been sufficient to manage the relevant land use planning implications of current drone delivery services, including considerations such as parking, loading access and traffic.
- 58. This may not be appropriate in all circumstances given the disparate approaches taken by local governments. Planning authorities are encouraged to consider ancillary uses on a case-by-case basis to confirm suitability for new drone delivery services.

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### Siting and separation considerations

- 59. Local governments should consider accommodating drone delivery operations within existing land use zones where they are unlikely to cause a significant noise impact.
  - a. Planning authorities will need to consider the environmental noise regulations that apply in their jurisdiction and the potential noise impacts of drone delivery services, including on neighbouring land uses, which are outlined below.
  - b. CASA will separately assess the safety impacts of proposed operations, including flight frequency, population density, proximity to controlled airspace, and risk buffers to apply contingency and emergency procedures.
- 60. Commercial delivery drones, for which measurements are available, typically produce an average of 60dBA, and a maximum of 74dBA, at a distance of 30m during take-off and landing (see **Table 2**).
- 61. This noise profile is not substantially different from what is commonly experienced in commercial and light industrial areas, such as normal conversations (60db), loud conversation (70dB), kerbside heavy traffic (80dB) and construction vehicles (85dB).<sup>12</sup>
- 62. A separation distance between drone delivery hubs and noise-sensitive areas, such as residential or environmental areas, may be required for planning and/or consultation purposes.
  - a. Ramos-Romero et al. (2022) have developed a <u>modelling framework</u> which may be useful in determining appropriate separation distances to mitigate the community noise impacts of different drone models.
  - b. An appropriate distance will depend on the local environment, ambient noise and proposed drone technologies or operations.
- 63. Planning authorities should consider cases put forward by operators which demonstrate how noise can be mitigated to acceptable levels.

<sup>12</sup> Safe Work Australia.



- 64. The assessment of development proposals for new drone delivery services should also consider the impact of future developments and changes to neighbouring land uses, including providing appropriate protections to ensure the continuity of operations.
- 65. If planning authorities are concerned about the potential noise impacts of drone delivery infrastructure or operations on nearby noise-sensitive receivers, it is recommended they contact the department at dronenoise@infrastructure.gov.au (see Community feedback and complaints management process).

### **Further information**

66. For further information and advice regarding drone delivery services, please contact the department at drones@infrastructure.gov.au





## Regulatory approvals process for drone delivery services



## Regulatory approvals process for drone delivery services

This flowchart outlines the recommended order of regulatory approvals for establishing drone delivery services in Australia and provides guidance to assist drone operators and planning authorities understand their role at each stage of the process.

### Safety

**Drone operators** are required to apply for a <u>remotely piloted aircraft operator's</u> <u>certificate</u>, <u>beyond visual line-of-sight approval</u>, and a <u>remote pilot licence</u> from the Civil Aviation Safety Authority (CASA).

- A specific operations risk assessment will be required for operations that do not meet the characteristics of a standard scenario.
- Such assessments will typically be required to fly over a specific geographic area, fly over people, operate beyond visual line-of-sight, and allow operators to oversee more than one aircraft.

**Planning authorities** may contact CASA through the <u>online enquiries portal</u> to confirm that service providers have the appropriate safety approvals for their operations.

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### Land use planning

**Drone operators** should approach local governments early to begin the planning and development approval process.

- The guidelines can help inform local governments about the Commonwealth regulatory environment in which they will operate, including the role of CASA and the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the department).
- Where relevant, operators should share previous experiences with local governments regarding operational oversight, development approval and land use permissions, or engagement with the department to manage community noise complaints.
- Planning authorities should consider accommodating drone delivery services within existing land use zones where they are unlikely to cause a significant noise impact.

• A separation distance between drone delivery hubs and residential areas may be required for planning and/or consultation purposes.

**Planning authorities** are encouraged to consider ancillary uses on a case-by-case basis to confirm suitability for new drone delivery services.

• Local governments have not required noise approvals to be in place before providing development approval, but are aware of the department's role and what its noise approvals permit.

If planning authorities are concerned about potential noise impacts on nearby noisesensitive receivers from drone delivery infrastructure or operations, they may contact the department (dronenoise@infrastructure.gov.au).

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### Noise

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Commercial **drone operators** are required to complete an <u>assessment form</u> as the first step to obtaining a noise approval.

• Drone delivery services will typically require a full assessment process to gain a noise approval.

Planning authorities can <u>contact the department</u> to confirm service providers have the appropriate noise approval for their operations.

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### **Ongoing operations**

Drone operators may commence operations once all required approvals have been granted by the responsible authority.

CASA and the department will continue to work with operators and local authorities to ensure operations adhere to safety and noise regulations and community feedback is managed and addressed appropriately.

**Note:** The approvals process outlined above is intended as a guide only, with the sequence of steps based on experience from current drone delivery services in Australia.





# Principles for effective community engagement

### Principles for effective community engagement

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## Effective public engagement is critical to understanding and addressing community concerns relating to drone delivery services.

Operators and local governments should undertake outreach and education activities early and inform the community about proposed drone delivery services. Public feedback on assessments, alternatives and/or decisions should also be sought through consultation mechanisms. Drone operators should play a pro-active role in this process to support local governments deliver positive outcomes for the community.

The steps below provide guidance on effective community engagement to achieve positive outcomes for all stakeholders.

### Engage early with the public and key stakeholders

It is recommended that local governments engage early to understand the potential impacts of drone delivery services, including with:

- The public and key stakeholders to understand key issues and potential impacts of drone delivery services.
- Drone delivery operators to understand their procedures and past experience with development approvals or land use planning permissions.
- The Civil Aviation Safety Authority (CASA) to understand the safety approvals process.
- The Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the department) to understand how drone noise approvals and community feedback are managed.
- Local governments with prior drone delivery experience to understand strategies for effective community consultation.

### Provide timely opportunities for public engagement and constructive input

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It is expected that the engagement process is well-planned to facilitate community input in a timely and inclusive manner.

- Local governments should communicate information in a clear, concise and easily accessible manner to facilitate community-focussed feedback.
- Strategies may include focus groups, distributing flyers or creating a dedicated project webpage (e.g. the shared e-scooter trial webpage by the City of Ballarat).
- Local governments should refer to their existing community engagement strategy to ensure a consistent approach.
- This includes planning to avoid 'engagement fatigue', whereby community members feel over-consulted but not listened to.
- Information should also be provided on how community feedback will be incorporated and impact outcomes.
- The <u>Local Government Hub</u> contains useful resources and case studies for local governments to assist them in planning and implementing effective consultation strategies.

### Explain how public input influenced outcomes and provide avenues for ongoing feedback

It is important that any recommendations emerging from the consultation process be adopted, or a public explanation provided as to why they were not.

- Following the commencement of operations, local governments should continue to engage with the community to ensure feedback is managed and addressed appropriately.
- If there are land use planning changes, local governments should consult key stakeholders and balance the needs of the drone delivery service with those of the community.
- Local governments should contact the department to communicate any nonsafety issues, including noise complaints, and contact CASA for any safety-related concerns.

### DOCUMENT CONTROL

Revision date	Version number	Changes made
September 2021	0.1	Initial consultation draft
March 2022	0.2	Second consultation draft (incorporation of stakeholder feedback, including from industry, states and territories, and Commonwealth agencies)
July 2022	0.3	Interim final draft (incorporation of feedback from states and territories)
November 2022	1.0	Public consultation draft (incorporation of feedback from industry stakeholders)
April 2023	1.1	Revised final draft (incorporation of feedback from public consultation)
October 2023	1.2	Final release (incorporation of feedback from industry, state, territory and local governments)



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