

An issues paper for the review of the National Airports Safeguarding Framework (NASF) Guideline C: *Managing the Risk of Wildlife Strikes in the Vicinity of Airports*.

Introduction

The National Airports Safeguarding Advisory Group (NASAG) is undertaking a review of Guideline C: *Managing the Risk of Wildlife Strikes in the Vicinity of Airports*, which forms part of the NASF.

This issues paper is the first step in the consultation process. It discusses potential opportunities for improving the guideline. NASAG is inviting submissions from aviation industry and land use planning stakeholders on the guideline and the topics raised in this paper.

What is the purpose of the review?

The review has been prompted by feedback on Guideline C from industry stakeholder discussions and submissions to the 2019 NASF implementation review. The feedback has identified potential issues and opportunities for improvement in the guideline, which are discussed below.

The review aims to:

- respond to issues raised by key stakeholders
- update the guideline in line with current planning policy and practices around Australia
- improve the guideline's clarity, accessibility and usability
- ensure the guideline supports implementation at State, Territory and local government levels.

The review focuses on the substantive content of the Guideline C. Implementation and enforcement of the guideline are out of scope for this review. They are separate matters that are the responsibility of each State and Territory government.

What is the National Airports Safeguarding Framework?

The NASF is a national framework that aims to improve aviation safety and amenity outcomes, by providing guidance for land use planning in the vicinity of airports. It has implications for those working in aviation, town planning, residential or commercial development, building construction and related industries.

The NASF is composed of a set of seven overarching principles and nine guidelines aimed at supporting State and Territory governments to manage relevant land use planning matters. The guidelines are focused on the following aviation safety matters:

- noise impacts
- windshear and turbulence risk
- wildlife strike risk
- wind turbine risks
- lighting impacts
- airspace intrusion
- protecting aviation facilities
- protecting strategic helicopter landing sites
- public safety areas at the end of runways.

The purpose of the NASF is to support and enable the implementation of best practice land use planning around airports regarding community amenity and safety, to provide guidance to State and Territory and local government decision-makers and to provide greater consistency and certainty to landowners and developers.

Australian State and Territory governments are implementing the NASF guidelines through land use planning systems in each jurisdiction.

More information on the NASF can be found at www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-safety/aviation-environmental-issues/national-airports-safeguarding-framework

What is the National Airports Safeguarding Advisory Group?

NASAG is a national body comprising State and Territory Government planning and transport agencies, the Australian Government Department of Infrastructure, Transport, Regional Development, Communications and the Arts, the Department of Defence, the Civil Aviation Safety Authority, Airservices Australia and the Australian Local Government Association.

NASAG is responsible for developing and maintaining the NASF. NASAG monitors the implementation of the NASF at the State and Territory government level.

What is Guideline C?

Wildlife strikes and avoidance manoeuvres can cause major damage to aircraft and pose risks to the community and aviation safety. Guideline C supports State, Territory and local governments to develop and review policy to manage wildlife-attracting land uses near airports, thereby minimising the risk of collisions between wildlife and aircraft.

It establishes a set of guidelines for managing new and existing land uses that increase the risk of wildlife strikes within 3km, 8km and 13km of airports. It identifies incompatible land uses and land uses that require mitigation or monitoring actions within airport buffer zones.

Guideline C was developed in 2012 and last updated in 2014. In August 2019, following stakeholder feedback, NASAG members noted a review of Guideline C would increase its practical application and agreed to undertake a review of the guideline.

The guideline and its attachments can be found at www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-safety/aviation-environmental-issues/national-airports-safeguarding-framework/national-airports-safeguarding-framework-principles-and-guidelines.

What is the purpose of this issues paper?

This issues paper takes the first step in consulting with stakeholders to capture feedback to help inform the review of Guideline C. Its purpose is to prompt stakeholders to consider opportunities to improve the guideline and submit feedback to be considered as part of the review.

It describes key content of Guideline C, discusses issues raised by stakeholders to date, identifies potential opportunities for improvements and poses discussion questions for consideration by aviation and land use planning stakeholders.

The following sections of this issues paper are structured around the key components of Guideline C:

- Section 2 addresses the guidelines themselves, paragraphs 14 to 24 focus on the specific actions and responsibilities.
- Section 3 addresses the attachments, focusing on land uses, activity types and airport buffers.
- Section 4 addresses other parts of Guideline C.

Submissions and next steps

NASAG is seeking submissions from aviation and land use planning stakeholders on the topics raised in this paper or any other matters relating to the content of Guideline C.

Following the consultation period, submissions will be published on the NASF portal. A revised Guideline C will be drafted taking stakeholder submissions into consideration. Once finalised, the draft revised guideline will be considered for endorsement by NASAG.

Submissions are invited via email to safeguarding@infrastructure.gov.au by COB 16 December 2022.

Guideline - actions and responsibilities

Paragraphs 14 to 24 of Guideline C primarily provide advice on actions to monitor and mitigate wildlife hazard risks around airports.

Much of this advice includes clear actions and roles for planning authorities and airports. However, stakeholders have identified that some areas of responsibility between airports and planning authorities are ambiguous. Some paragraphs, particularly paragraphs 20 and 21, may benefit from rewording to clarify actions, roles and responsibilities.

There may be an opportunity to improve the order, placement and grouping of these paragraphs. Some principle-based and background paragraphs may sit better in other parts of the guideline.

Stakeholders have also identified that land use planning and environmental management practices, and the use of expert advice, have evolved since the guideline was published. There may be opportunity to update some paragraphs to align with current practices.

Table 1 summarises each paragraph and discusses opportunities for change.

Table 1: Guideline Discussion

Paragraph summary	Discussion
14. There is a need to strengthen arrangements for management of off-airport hazards.	Scene setting paragraph might be better placed earlier in the guideline.
15. ICAO has developed advice on high-risk land uses.	This information might be better placed in a background section or footnote.
16. Attachment 1 provides guidance on land uses and risk mitigating actions for land in the vicinity of airports.	There is an opportunity to clarify and strengthen key actions and responsibilities, including explicit guidance when and how to apply Attachment 1 for existing and proposed land uses.
17. Pre-existing land use is difficult to change so airport operators should work with planning authorities to mitigate risk of existing land uses.	This is a general obligation for airport operators to work with planning authorities to mitigate existing land uses. There is an opportunity to consider whether the obligation should be clarified to apply equally to planning authorities.
18. The guidelines can help with site selection for new airports.	Opportunity to strengthen this opportunity ('can') to an obligation ('should').
19. Airports certified under the Civil Aviation Safety Regulations must document wildlife management procedures and have a wildlife hazard management plan (WHMP)	This paragraph restates an existing statutory obligation on certified airports for on-airport risk management. There is an opportunity to consider how this paragraph can be used to contextualise the remainder of the guideline, which focuses on off-airport land use planning.

Paragraph summary	Discussion
20. Land within the 13km airport buffer should be regularly monitored with action plans to mitigate any unacceptable increase in risk.	<p>Opportunity to clarify actions and responsibilities for existing land uses, including monitoring, reporting, identification and management of specific scenarios, including construction, intensive agriculture and the presence of colonising species.</p> <p>Opportunity to improve links to Attachment 1 table.</p>
21. Airport operators should work with planning authorities and councils to establish mechanisms to identify and prevent land uses that would cause hazardous wildlife activity. This could include regular consultation, outreach and advice, between stakeholders.	<p>There is an opportunity to strengthen these roles and obligations and consider the balance between airport operators and planning authorities.</p> <p>Actions may be updated to better align with current land use planning and engagement practices.</p>
22. Airport operators should negotiate with planning authorities and land-owners regarding monitoring and action plans.	<p>Stakeholders have raised the need for more clarity on actions, responsibilities and roles.</p> <p>Opportunity to improve links to Attachment 1 table.</p>
23. Airport operators should maintain and consult records of all wildlife hazard management activities.	<p>Opportunity to separate and clarify responsibilities to retain records and to conduct an annual review.</p>
24. Planning authorities should consult with airport operators and relevant experts to ensure mitigation measures are undertaken for proposed land uses.	<p>Stakeholders have emphasised the need to call out landscaping and design as key mitigation measures and the need to take advice from experts on such matters.</p> <p>Stakeholders have suggested that mitigation measures should be considered to determine whether a proposed land use is incompatible.</p>

Discussion questions

1. How could guidelines be reordered or changed to be clearer or more usable?

2. What additional guidance would improve the clarity of the guideline (e.g. detail around landscaping and design)?

3. How could the guidelines be updated to better align with current planning and engagement practices?

4. What changes could clarify roles and responsibilities for planning authorities and airport operators?

Attachments - land uses, activity types and buffers

Attachment 1 sets out:

- a range of land uses
- the wildlife attraction risk of each land use
- risk mitigation actions for existing development within 3km, 8km and 13km buffer
- compatibility and risk mitigation actions for proposed development within 3km, 8km and 13km buffers.

Risk mitigation actions included in the table are 'no action', 'monitor', 'mitigate' and 'incompatible' (the latter for proposed development only). There is some alignment between these actions and the guidelines, but there may be opportunity to clarify and strengthen the links between the risk mitigation actions and specific paragraphs of the guideline.

There is an opportunity to review the list of land uses with a view to amend or expand the list in line with current land use policies across Australia. Stakeholders have suggested that some uses identified in Attachment 1 as 'incompatible' should be acceptable if properly enclosed, designed and/or mitigated in line with expert advice.

Stakeholders have suggested adding more specific detail for managing risks, particularly within the 3km buffer.

There has been some discussion from stakeholders regarding whether mitigation actions set out in Attachment 1 should apply broadly and strictly to create consistency and certainty, or be responsive and flexible to site-specific measures.

The 3km, 8km and 13km buffers are in line with some editions of the ICAO Airport Services Manual and Airport Planning Manual. The ICAO manuals specify that these buffers should be measured in concentric circles centred on the Airport Reference Point (ARP), however stakeholders have suggested that these are better measured from the edge of each operational runway. The Brisbane Airport buffer zone map in Attachment 2 appears to map buffer radii from the edges of the runways rather than in concentric circles around the ARP.

Discussion questions

5. How should the land use and activity types listed in Attachment 1 be improved?

6. How should the actions in Attachment 1 (e.g. monitor, mitigate) be clarified?

7. How should Attachment 1 address the balance between certainty and flexibility?

8. What additional information would make Attachment 1 clearer or more usable?

9. How should airport buffers be calculated and utilised?

Other parts of Guideline C

Preliminary

The preliminary sections of the guideline contain the guideline's purpose, why it is important and how it should be used. It sets out roles and responsibilities regarding managing wildlife hazard risks, including obligations from international conventions and national policy. Finally, there is a section of key considerations for managing wildlife strikes near airports.

There may be opportunities to update, focus and streamline these sections, such as:

- updating any out-of-date facts and references to national and international guidance (for example the updated CASA Manual of Standards Part 139).
- more clearly expressing a problem statement and risk management principles regarding the management of wildlife hazards, noting that NASF is focused on off-airport land use planning.
- clarifying responsibilities and roles for wildlife risk management in various land use planning scenarios (for example, managing existing land use risk around existing airports, assessing proposed land uses around existing airports and land use planning for new airports.)

Background information

This section includes a range of statements describing the problem of wildlife strikes, benefits, purpose, functions and content of the guideline and stakeholder obligations and opportunities. There is potential to consolidate this content with the preliminary sections to improve readability and reduce repetition.

Glossary

The guideline includes a glossary of terms. There may be potential to improve clarity by adding or updating terms and definitions.

Discussion questions

10. What additional information would make the guideline clearer or more usable?

11. How could the guideline structure be improved?

12. How could the guideline better align with current planning and engagement practices?

13. What changes are needed to ensure facts and references are correct and up-to-date?

14. What references or terms should be included or updated in the glossary?
