



SAFEGUARDS FOR AIRPORTS AND THE COMMUNITIES AROUND THEM

AUSTRALIAN AIRPORTS ASSOCIATION RESPONSE TO THE DEPARTMENTAL DISCUSSION PAPER

1.0 INTRODUCTION

In December 2008, the Minister for Infrastructure, Transport, Regional Development and Local Government released a Green Paper towards the development of a National Aviation Policy White Paper.

As a part of the policy development process, and as a result of the many submissions received from stakeholders, the Minister has released a number of discussion papers prior to the release of the White Paper.

This response from the Australian Airports Association (AAA) relates to the Discussion Paper released on 23 June 2009 - Safeguards for Airports and the Communities Around Them.

This Submission addresses the specific issues and questions raised in the Discussion Paper and enhances the original AAA submission to the Department on the Green Paper.

Please note – it may well be that some individual member airports could have a different view on some matters canvassed in this submission. Should that be the case, we would expect that particular airport to raise those issues in their own individual submission, and we ask that those submissions be given full consideration in their own right.

2.0 CONTEXT

The National Aviation Green Paper acknowledged the need for better land use planning around Australian airports. It identified that there were planning discrepancies at most Australian airports and that very different land use planning regimes were currently affecting the operation and future development of critical Australian aviation infrastructure. It was noted that this situation had the potential to affect the safe operation of aircraft at Australian airports.

The current Commonwealth Government has recognised the need to coordinate a unified approach with the support of the States and Territories, through COAG, to allow for the secure and safe development of aviation infrastructure at Australia's airports.

*The AAA fully supports such a unified approach for **all** Australian airports, not just federally leased airports.*

This submission sets out the AAA's responses to the questions raised in the Discussion Paper in the same order as presented.

3.0 OFF AIRPORT LAND USE PLANNING

The discussion paper contains a number of questions regarding ANEFs and AS2021. These are:

- 1. Does the ANEF system provide an effective basis for planning in noise affected areas?*
- 2. How effective is the ANEF system as a land use planning standard for greenfield developments around airports?*
- 3. Are the acceptable levels of aircraft noise for particular developments identified in AS2021 consistent with current community expectations?*
- 4. How can the current planning arrangement to address developments in noise-affected areas around airports and under flight paths be improved to take account of community expectations, while also providing for the reasonable growth of aviation activity at airports?*
- 5. For developments around the major capital city and freight airports, should state governments have to refer residential development within a defined buffer zone to the Commonwealth Transport Minister or Secretary for approval?*

The AAA, in response to the Green Paper, indicated that the current ANEF system was severely flawed as a means of indicating where aircraft noise impacts occurred and also as a land use planning tool, when used in conjunction with AS2021. The AAA strongly recommended that a complete review of the ANEF system should take place:

"commit to replacing the outdated ANEF system with a new system for assessing and managing aircraft noise in relation to background noise by using measurable units which can be readily understood by communities and all three tiers of Government involved in land use planning around all airports."

The current discussion paper advances that there should be an examination of the value of the current ANEF system. The AAA suggests that the time has arrived for the ANEF and other aircraft noise systems to be examined to see which system will best provide airports, local, State and Territory Governments and surrounding residents with appropriate information about aircraft noise. There should not be any attempt to reconfigure the current ANEF system as it stands. It is imperative that all stakeholders agree on the policies and principles of whatever system should eventually be in place. In particular, the review should establish, at the outset, clear objectives and end uses of such a system and the desired outcomes in relation to land use planning.

Given that aircraft noise impacts occur sometimes at great distances away from airports and the issues of frequency and volume of noise are not adequately incorporated into the current ANEF System, it is suggested that any new system needs to be based on a more detailed planning and design process before any protocols are developed to address both the policy and procedure requirements.

It is also noted that a "one size fits all" approach may not be the best way to proceed and that greenfield airports need to be treated differently to airports where extensive residential developments have been allowed to occur at the boundaries of airports by successive local, State and Territory Governments.

A number of new residential developments have been proposed in greenfield areas under the flight paths around some of Australia's major airports, including Brisbane, Canberra and Perth Airports. These proposed developments are in accordance with Australian Standard AS 2021, yet are located directly under the flight paths in areas where Airservices Australia, the airlines and aviation industry experts are unanimous that noise complaints will occur and future residents will seek changes to flight paths or the imposition of other operational restrictions on the airport. This clearly demonstrates how the ANEF system is failing airports around Australia, especially airports with residential-free land under the main approach and departure flight paths.

The Commonwealth's Aviation Green Paper clearly identified the need to maintain a network of curfew-free airports around Australia to enable (among other things) the ongoing viability of an express overnight freight network. Clearly, as evidenced by existing complaints by residents around Australia, overnight flights have the added potential to be disruptive to residents living under flight paths, and this includes residents that are beyond the ANEF 20 line. This is particularly the case given night freight activity may only involve a small number of aircraft per night, insufficient to trigger a "response" from the ANEF system, yet more than enough to disturb/wake a resident living directly under the flight paths. The ANEF system is therefore inadequate as a measure to ensure that flight paths at non-curfew airports are protected, and to ensure the maintenance of a curfew-free network of airports around Australia.

The Commonwealth Government's 1999 Environmental Impact Statement for the (former) proposed new Sydney Airport at Badgery's Creek also acknowledged that people well below 20 ANEF could still be impacted by aircraft noise. The EIS proposed that "new urban areas would not be allowed to establish on Greenfield sites that might be subject to noise levels greater than 15 ANEF". Notwithstanding the EIS requirement not to build homes within 15 ANEF, a full 10 ANEF points below the 25 ANEF standard deemed as acceptable elsewhere (which is an approximate halving of the average 24-hour noise level per annum), and notwithstanding the urgent need for a solution to aviation capacity constraints in the Sydney Basin, the Badgery's Creek Airport proposal is still unacceptable to the community and to the Commonwealth.

Clearly, this indicates that aircraft noise is still perceived by the community to be a problem beyond ANEF 15, and further undermines the use of the ANEF system as a planning tool in response to noise sensitive land-use above 15 ANEF.

The question of the community and residents' expectations needs to be examined closely. This is particularly so in areas where residential developments have been established around airports for many years and residents have become accustomed to aircraft noise. This situation contrasts strongly to areas well outside the airport boundaries where occasional overflights create sharp responses from those residents rarely exposed to aircraft noise.

The original ANEF system was based on studies which are more than 30 years old and it is suggested that community attitudes and aviation technology have changed since then. In addition, considerable data and research has been conducted on the impacts of aircraft noise on sleep disturbance and livability. This research should be reviewed in the Australian context as part of any review of the ANEF system.

The continued use of AS2021 is also questionable given the flawed nature of the ANEF modelling system. Setting restrictions on development types based on the current version of AS2021 is similarly flawed as the outcomes envisaged when the ANEF system was developed have almost certainly changed and the nature of urban densification and redevelopment was not envisaged at the time of the writing of the AS2021 categories. Again, after the review of the method of describing aircraft noise, then the acceptability of different types of developments in areas affected by aircraft noise should be undertaken.

Current community expectations have to our knowledge not been surveyed in a large-scale, statistically relevant study to assess exactly what they are and why. Again this should be undertaken as a part of the suggested review.

The review as recommended by the AAA should also consider the use of “ultimate capacity” projections as mandatory for airports when local and State and Territory Governments are considering land use planning controls around airports. This will eliminate the “incremental creep” approach fostered by the current requirements under the existing Airports Act 1996 and Regulations.

The AAA contend that if a review of the ANEF system produces a valid and workable system for dealing with aviation noise and land use planning, then it is better for the Commonwealth (through COAG) to require that planning schemes around airports contain assessment processes and tabulations for allowable and disallowable development types and in which areas. This must be initially agreed to by the States and Territories and then legislated by State and Territory Governments in their respective planning laws. Only then can the assessment and approval, or otherwise, of proposed developments be effectively and consistently made by State, Territory and local Governments. It would however be useful for the Commonwealth to retain a process for appeals by affected parties, including developers or airports, to ensure that the application of the legislated process is transparently applied.

4.0 OPERATIONAL AIRSPACE

- 6. Should the current protection of airspace regulatory provisions be strengthened and broadened to cover all CASA-Certified and Registered aerodromes?*
- 7. How might state, territory and local government planning rules help protect airports from encroachment by unsafe intrusions into airspace?*

In Australia there has recently been a move away from the traditional “hub and spoke” system of airline networking. This move has resulted in many non-capital city and regional airports having new or increased frequency RPT services.

As this method of networking may eventually be a long-term phenomenon under a carbon-constrained economy, airspace protection should be applied to all CASA-Certified and Registered aerodromes

The AAA fully supports the strengthening and broadening of the airspace regulatory provisions to cover all CASA-Certified and Registered aerodromes.

It is imperative for the long-term viability of aviation infrastructure in Australia that there is a clear and simple regulatory regime that prevents penetrations of the OLS and PANS-OPS surfaces around airports. This must be a national regulated system with provision for clear lines of communications for planning applications, assessments by airports and decision making by appropriate authorities (CASA). There must also be an appeals mechanism for airports and airlines to the Commonwealth for approved penetrations where that airport or airline believes the approval will affect the current or future capacity of the airport.

5.0 TURBULENCE AND WIND SHEAR

- 8. Should there be a consistent industry standard for mechanical turbulence and wind shear? If so, should the standard be proscriptive or allow for a case by case assessment?*
- 9. Should expert modeling reports on turbulence and wind shear be mandatory for developments in close proximity to runways and who should bear the cost?*

The assessment of potential wind shear effects on airport operations is considered essential to the viable operation of airport infrastructure. For on-airport proposed developments, the assessment should be made as a matter of course for any developments within a defined area around runways. For off-airport developments, the same should apply and a definition of the areas to be included should be made based on expert aviation input including airports and airlines with the relevant regulatory authority (CASA).

The off-airport areas to be included in the assessment for wind shear must be included in regulation by State, Territory and Local Governments to ensure that such assessment is applied to all new developments meeting the agreed criteria in the areas of concern.

The definition of the process of assessment should be standardised using expert opinion and validated by the relevant regulatory authority (CASA). Given the above, the AAA firmly believes that the assessment should be mandatory for proposed developments in both the on-airport and off-airport defined areas.

The method (or methods) of assessment should also be prescribed and undertaken to a relevant standard by suitably qualified and experienced service providers.

The AAA proposes that the proponent of any development should bear the cost of any assessment reporting for calculating the likely impacts of wind shear.

The AAA is becoming increasingly concerned for the need to include assessment of the impact of heat plumes and high velocity stack emissions from point sources in and around airports. This concern applies to newly-proposed developments and also to changes to existing emission sources. Processes for notification of such developments are generally not readily available to airports. It is recommended that such processes should be established with State and Territory governments for notification to airports and CASA for any such new development or change to an existing emission source.

6.0 WILDLIFE HAZARDS

- 10. Given variable regional circumstances for birds and flying foxes, would a recommended standard zone (eg. 15km radius) be appropriate?*
- 11. What other planning issues might arise in safeguarding against birdstrike?*

The Australian Airports Association Bird and Wildlife Hazard Management Working Group has adopted a recently developed Bird Risk Assessment Model for this purpose.

The model is unique and highly flexible, with characteristics recognized by the above group, that supported the model's expansion so that it can be adopted by any aerodrome nationally. This model is freely available to any airport in Australia.

7.0 WIND TURBINES

- 12. What guidance do state, territory and local governments require on the sighting of wind farms and the potential impacts on aviation?*
- 13. Should developers of wind farms be required to provide CASA with a report on the potential impacts on aviation and aviation infrastructure of the turbines?*

In sections 4 and 5, we have discussed the declaration of areas around airports where development of a kind that could affect the operation of the aviation infrastructure needs to be notified and assessed before approvals are given. The AAA agrees with the suggestion in the Discussion Paper that all proposed wind farm developments within a 30 km radius of an airport need to be notified to both CASA and the airport operator for assessment and approval.

As proposed for the protection of airspace, the future process for assessing wind farm developments must be a regulated system with the provision of clear lines of communication for planning applications, assessments by airports and airlines and decision making by appropriate authorities (CASA). There must also be an appeals mechanism for airports to the Commonwealth for proposed wind farm developments where they believe an approval will affect the current or future capacity of the airport.

We understand, subsequent to the release of the Discussion Paper, that CASA (through its 'Operations Group' in Brisbane) has awarded a contract to a consultancy to examine, in detail, all of the issues associated with the sighting and development of wind farms. CASA has assured the AAA that we will be afforded every opportunity to provide meaningful and technical input to the assessment process. Accordingly, at the time of submitting this response, we are awaiting further advice from CASA on how they perceive our involvement.

8.0 TECHNICAL FACILITIES

- 14. Should development of technical facilities near aerodromes (say within 5 km) require automatic referral to CASA for assessment of impact on radar and navigation systems?*
- 15. What additional guidance do state, territory and local governments require on the sighting of technical sites and the potential impacts on radar and navigation systems?*

The AAA agrees with the position advanced in the Discussion Paper that any technical facilities within a 5 kilometer radius should be subject to mandatory assessment and approval by the relevant authorities (CASA and Airservices Australia).

CASA already has standards relevant to this issue, however local and State and Territory Governments may not be aware of the standards or the processes associated with referral and assessment. The Commonwealth should, through COAG, address this issue by requiring consistent regulatory reform for this significant safety issue in State, Territory and local Government planning schemes.

9.0 LIGHTING AND PILOT DISTRACTIONS

- 16. Are CASA's current requirements sufficient, and what additional guidance might state, territory and local governments require regarding lighting and pilot distractions?*

CASA and Airservices Australia should undertake regular reviews of the existing standards to address issues such as laser lights and high intensity lighting and revise standards as appropriate and when necessary.

As stated above, for technical facilities, local and State and Territory Governments may not be aware of the standards or the processes associated with referral and assessment. The Commonwealth should, through COAG, address this issue by requiring consistent regulatory reform for the issue in State, Territory and local Government planning schemes. The impacts on aviation safety are self-evident.

10.0 PUBLIC SAFETY ZONES

17. *Should an approach based on the identification of public safety zones be introduced to help ensure that new developments around the ends of runways do not lead to undue levels of risk?*
18. *For which airports might such public safety zones be identified – all airports or only major airports with regular airline traffic?*
19. *What methodology and criteria should be applied in defining the boundaries of a PSZ?*
20. *What sort of additional controls might be imposed for new developments in identified PSZs?*
21. *What sort of steps might be taken to ensure the identification of a PSZ does not unduly affect the value and enjoyment of existing properties within the zone?*

The concept of Public Safety Zones is inherently reasonable as a long-term measure to correct poor land use planning around airports that has taken place in the past and protect airports where such inappropriate development has not yet occurred. However, the introduction of the concept to existing developments around airports is fraught with many dangers.

Public Safety Zones should primarily be designed on a risk assessment of individual airports i.e. a case by case basis. This is a technically sound proposition, however, the general public and many government stakeholders do not understand the process of risk analysis or are able to assess the risk assessment outcomes in terms of other risk 'Zones' in areas surrounding airports. Hence the proposition has the potential to be highly emotional and politically inflammatory unless handled carefully and with great sensitivity.

This issue is clearly one to be resolved at COAG as it requires a consistent approach, and if adopted, needs to be implemented across Australia. Such an approach should recognise that any assessment must be undertaken on an airport by airport-specific basis. If such a consistent approach is taken, then all airports ought to be included.

As discussed above, the methods to be used should be based on an agreed risk assessment model.

Additional controls to be applied could refer to the outcomes of the review of AS2021 which should also be linked to this proposal. If the Australian Standard suggests land use compatibilities, then such a recommendation in the Standard should reflect the outcomes of the risk assessment as well as noise intrusion.

It is inevitable that the declaration of Public Safety Zones around airports which restrict certain types of development, particularly those airports with extensive urban developments surrounding the airport, will invariably result in claims for losses incurred or compensation by affected parties. The Commonwealth, States and Territories need to consider the implications of declaring such Public Safety Zones and how they will deal with such claims. The AAA does not believe that the Airports should contribute in any way to any claims for perceived losses or compensation as a consequence of the introduction of Public Safety Zones by the Commonwealth.

11.0 CONCLUSIONS AND RECOMMENDATIONS

In general the AAA agrees and fully supports the Commonwealth in proposing better protection of Australian Aviation infrastructure. There is a clear need for improved regulation to be driven by the Commonwealth and reflected in consistent legislation at the State and Territory level. This consistent legislation needs to be actively enforced and incorporated into local government planning schemes around all Australian airports.

There needs to be much clearer lines of notification and assessment for proposed developments of the types identified in the Discussion Paper. Once the proposed development has been clearly identified in the planning phase, an open and rigorous assessment can then occur.

There is an overdue need to completely revise the existing land use planning regime around airports, commencing with a clean slate, and developing protocols and standards relevant to Australia in 2009.

It is apparent that there are many off-airport issues included in this discussion paper which all deal with areas affected by aircraft movements. It is recommended that rather than having a similar number of acts, regulations, standards and processes to deal with, a consolidated approach to defining uses, airspace protection, wildlife management areas, and public safety zones are amalgamated into one piece of legislation for implementation by the States and Territories. The AAA sees this as a highly desirable opportunity for the Commonwealth to play an important leadership role in the future development of Australian aviation.

The AAA is willing to discuss any aspect of the submission with the Department should any areas need clarification or expansion and would welcome the opportunity to be part of any industry working group to progress the issues raised in the Discussion Paper.