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Mr Nicholas Dowie  
Planning and Environment Section  
Airports Branch  
Department of Infrastructure, Transport, Regional Development  
And Local Government  
GPO Box 594  
CANBERRA ACT 2601

Dear Mr Dowie

The Board of Airline Representatives of Australia (BARA) has reviewed the Discussion Paper titled *Safeguards for airports and the communities around them* (the Discussion Paper). BARA's comments in relation to the Discussion Paper are set out below. I apologise for the lateness of the response.

1. Planning for compatible development

(i) *Does the ANEF system provide an effective basis for planning for noise affected areas?*

BARA maintains that the ANEF system has only limited application in assessing where aircraft noise impacts occur. It is not an effective tool for planning purposes as it does not identify the impacts of aircraft noise around airports. Further, the ANEF system is outdated, having been devised in the 1980s. It fails to account for recent technological improvements that have resulted significant reductions in aircraft noise.

In BARA's view the ANEF and other aircraft noise systems should be reviewed to determine a new basis for representing aircraft noise effects.

(ii) *How effective is the ANEF system as a land use planning standard for greenfield developments around airports?*

The ANEF system performs poorly as a planning standard for greenfield developments around airports. While it may have some limited value in assessing the impact of noise on existing noise affected areas it cannot usefully address issues such as the effects of the timing and frequency of aircraft movements for new developments around airports. History demonstrates that noise complaints emerge from new residential developments around airports, despite the application of ANEF noise levels of 20 or less.

BARA's concern is that the failure of the ANEF 20 model can lead to noise sharing arrangements, aircraft movement caps and curfews at airports. These constraints on airport operations impose a high cost on airports, airlines and the broader economy. Yet there are presently cases of approved planned residential developments near to Brisbane and Canberra airports. BARA is concerned that, while these

developments may comply with ANEF guidelines, they could have serious long term adverse effects on the operations of Brisbane and Canberra airports.

BARA maintains that state and local governments should be provided with clear legislative planning guidelines for developments under airport flight paths or in noise affected areas. Further, they should be required to refer such developments to the Commonwealth Minister for Transport for approval.

(iii) *Are there acceptable levels of aircraft noise for particular developments identified in AS2021 consistent with current community expectations?*

BARA is unaware of any meaningful study having been undertaken to assess "current community expectations" as they apply to aircraft noise. Perhaps a large scale and statistically robust study should be undertaken. In the absence of such a study it is almost certainly impossible to judge what might represent a balance between community concerns about aircraft noise and the increase of aviation activity at airports in the future.

(iv) *How can the current planning arrangements 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?*

Planning arrangements need to recognize that the factors affecting noise impacts at airports differ between airports. It is not feasible to expect a generic solution to apply effectively across all airports. The approach at each airport should be assessed individually. Furthermore, where noise mitigation approaches are applied at airports, they should be reviewed periodically because factors affecting noise impacts can change over time. Ongoing assessment of the need for noise mitigation measures is necessary because measures such as curfews, noise sharing arrangements and movement caps affect the operational efficiency of airports and airlines and limit the capacity of airports.

Factors that should be addressed in considering specific measures to apply to individual airports include:

- (a) the location of the airport relative to residential and other development,
- (b) the range of approaches and flight paths, especially with respect to opportunities for noise sharing and recognition of those that are highly noise affected,
- (c) the opportunity to use ATM technological solutions to limit noise impacts, and
- (d) the aircraft fleet – type and mix – that uses the airport.

A review of the above (and other relevant airport-specific factors) may result in development of airport operating protocols that avoid the need to resort to curfews, but at the same time provide noise affected residents with relief from noise impacts at night and early morning. Importantly, such a review could result in fewer and less severe constraints being imposed on the airport's operations, thereby improving overall operational efficiency.

Previously, in submissions to the Government regarding the operation of the former noise levy at Sydney Airport, BARA has argued for a covenant to be included on the titles of noise affected residences. BARA again raises this option as a worthwhile procedure. Such a system should apply to both existing residences and greenfield developments, so that purchasers are made aware of current and possible future noise issues.

(v) *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?*

BARA endorses the proposal to establish a referral system. However, the principles of the system must be agreed to by the state and territory governments and legislated in their planning laws.

The referral system should not be limited to noise issues. It also should address matters relating to obstacles to aircraft, interference with navigational or communications equipment and the creation of smoke, dust or turbulence hazards.

## 2. Protection of operational airspace

- (vi) *Should the current protection of airspace regulatory provisions be strengthened and broadened to cover all CASA-Certified and Registered aerodromes?*

BARA supports the strengthening and broadening of the airspace regulatory provisions to cover all CASA-Certified and Registered aerodromes. The future protection of airspace must be assured so that all aerodromes can operate safely and efficiently. This is particularly important given the recent history of growth of aviation activity to regional airports in Australia. There have been significant increases in passenger numbers and aircraft movements and aircraft size to regional airports. The trend is likely to continue, even to the extent that some regional airports could expand international aviation services. Therefore, airspace protection for all aerodromes is vital regardless of present aviation traffic levels.

The airspace regulatory provisions also need to encompass and protect approach and departure procedures at airports that will emerge as a result of the introduction of new and emerging air navigation technologies. The ICAO Global Air Traffic Management Plan sets out those emerging technologies and the requirements associated with them. The deployment of RNS and GLS systems has already commenced and will progressively replace land based navigation aids.

- (vii) *How might state, territory and local government planning rules help protect airports from encroachment by unsafe intrusions into airspace?*

The Federal Airspace Protection Regulations must be duplicated in state, territory and local planning regulations. It should be a requirement of a nationally consistent regulatory regime for developments that might result in unsafe intrusion into airspace to be referred to a nominated, appropriate Commonwealth Government representative or agency so that an assessment might be made of whether a development is inconsistent with airspace protection regulations. The Commonwealth Government representative or agency should have the power to stop a development from proceeding if it does not comply with the airspace protection regulations.

## 3. Turbulence and wind shear

- (viii) *Should there be a consistent industry standard for mechanical turbulence and wind shear? If so, should the standard be prescriptive or allow for a case by case assessment?*

BARA maintains that the assessment of potential turbulence and wind shear effects on airport operations is particularly important for developments within a defined area around runways. In the case of off-airport defined developments, there should be a requirement for turbulence and wind shear assessment included in state, territory and local government planning regulations. Such regulation should apply to all new defined developments.

It is likely, however, that a prescriptive standard will not be effective, as the size, shape and proximity of other structures will affect turbulence and wind shear effects. Nevertheless, a standardised process of assessment should be developed based upon consistent criteria which would trigger such assessment.

- (ix) *Should expert modeling reports on turbulence and wind shear be mandatory for developments in close proximity to runways and who should bear the cost?*

BARA maintains that off-airport developments close to runways should be required to undertake modelling by appropriately qualified persons of turbulence and wind shear impacts. As noted above, the reports generated by the modelling exercise should form part of the overall development approval process. Obviously, cost of the modelling and reporting should be borne by the organisation/individual proposing the development.

BARA assumes, of course, that airport operators will give due consideration to turbulence and wind shear ramifications of developments on the airport.

#### 4. Wildlife hazards

- (x) *Given variable regional circumstances for birds and flying foxes, would a recommended standard zone (eg. 15km radius) be appropriate?*

BARA maintains that defined developments and activities within a specified radius of an airport should be reviewed for wildlife hazards, particularly bird life implications. However, a single specific zone may not be appropriate for all circumstances. The “zone” may vary according to particular characteristics of each airport location.

- (xi) *What other planning issues might arise in safeguarding against birdstrike?*

BARA does not suggest that full responsibility for wildlife hazard assessment should fall on the airport operator. However, due diligence needs to be adopted and BARA understands that the Australian Airports Association has developed Bird Risk Assessment Model that can be adopted by any aerodrome nationally. If the Model is deemed effective then it should form a part of airport planning arrangements.

The successful application of the AAA Model probably would be dependent on input from local government and specialist agencies with relevant information relating to future development. The application of the Model and the assessment process to be undertaken by other developers also would be assisted by the development of detailed national assessment guidelines. The Commonwealth Department of Transport should be the likely agency for reviewing assessments by both airport operators and developers. An arbitration process also would be required.

#### 5. Wind turbines

- (xii) *What guidance do state, territory and local governments require on the siting of wind farms and the potential impacts on aviation?*

BARA supports the proposal in the Discussion Paper that all proposed wind farm developments within a 30km radius of an airport should be notified to both CASA and the airport operator for assessment and approval. Similarly, arrangements need to be put in place to ensure wind farm developments are notified to Airservices Australia and the Department of Defence to determine whether the development would interfere with navigation, surveillance and communications systems. Nationally consistent regulations in state, territory and local government planning regimes need to be devised in order to ensure awareness of assessment requirements. BARA believes that the Commonwealth Government has a responsibility to address this requirement, probably through the COAG process.

- (xiii) *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?*

BARA maintains that such assessments should be carried out in conjunction with existing environmental assessments.

#### 6. Technical facilities

- (xiv) *Should development of technical facilities near aerodromes (say within 5km) require automatic referral to CASA for assessment of impact on radar and navigation systems?*

BARA agrees with the proposal in the Discussion Paper that any technical facilities within a 5km radius of an airport should require automatic referral to CASA for assessment of impact on radar, communications and surveillance systems. However, it should be noted that, presently, a large number of radars, navigation aids and communications facilities are located off-airport. On the other hand, in the future the move to satellite navigation systems and ADS-B may mitigate the effects of technical facilities.

- (xv) *What additional guidance do state, territory and local governments require on the siting of technical sites and the potential impacts on radar and navigation systems?*

Nationally consistent regulations in state, territory and local government planning regimes need to be devised in order to ensure awareness of assessment requirements. BARA believes that the Commonwealth Government has a responsibility to address this requirement, probably through the COAG process.

#### 7. Lighting and pilot distractions

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

As with technical facilities, nationally consistent regulations in state, territory and local government planning regimes need to be devised in order to ensure awareness of appropriate lighting standards to apply within a defined radius of an airport. Similarly, BARA believes that the Commonwealth Government has a responsibility to address this requirement, probably through the COAG process.

#### 8. Public safety zones and third party risk

- (xvii) *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?*

BARA maintains that a process for identifying PSZs should be introduced in Australia. The potential for loss of life and property in the event of an accident on take-off or landing demands such an approach, especially in the case of greenfield sites at the end of runways. However, the application of such a process to existing developments around airports would probably have serious consequences. Further, declaration of PSZs around airports would restrict certain types of development. Therefore, pursuing this option needs to be considered very carefully. In particular, the likelihood of the declaration of PSZs resulting in claims for compensation needs to be considered. BARA would not want to see airport operators being required to contribute to any such claims.

*(xviii) For which airports might public safety zones be identified – all airports or only major airports with regular airline traffic?*

BARA believes that, as the identification of PSZs relates to public safety, the process should apply at all airports, regardless of whether they currently have RPT operations. It was noted earlier that there is a trend to increasing operation of air services to regional airports. Therefore, planning regimes should accommodate the possibility of significant growth in passenger traffic at all airports.

*(xix) What methodology and criteria should be applied in defining the boundaries of PSZs?*

The identification of PSZs should be conducted on a risk assessment basis for each individual airport. A uniform approach would be unsuitable because different airports have different operating requirements due to the nature of developments that surround them. These operating parameters need to be considered in determining the boundaries of PSZs. Future operating parameters arising from likely and possible technological advances in ATC and aircraft design also should be considered.

*(xx) What sort of additional controls might be imposed for new developments in identified PSZs?*

Approvals for new developments in identified PSZs should be consistent with the approvals process for developments around airports or developments within noise affected areas. An appropriate Commonwealth Government agency, in conjunction with input from CASA, should have responsibility for approval of such developments.

*(xxi) 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?*

In matters of public safety, such as the identification of PSZs, commercial interests are subservient. In any event, BARA questions whether the identification of a PSZ would have any material impact on values of residential properties around airports. In the case of existing commercial properties the identification of a PSZ could possibly result in restrictions on the permitted use of the land. However, such restrictions apply for various reasons in all jurisdictions in Australia. In the case of new developments near the end of runways, BARA would expect that a reasonable, consistent and national planning regime would reject them on the basis of noise impacts and safety grounds in any event.

Please contact the undersigned on 02 9299 9919 on matters related to the contents of the submission.

Yours sincerely



Warren Bennett  
**Executive Director**