SAFEGUARDING AVIATION INFRASTRUCTURE – DISCUSSION PAPER
ADELAIDE AIRPORT LIMITED RESPONSE

1 Does the ANEF system provide an effective basis for planning in noise affected areas?

At the moment it is the only tool recognised in the Australian Standard 2021 for the protection of varying classes of inhabited buildings available. Research into the development of the NEF (America) and adapted to Australia has shown that the methodology was flawed in that the science in developing it has been identified as questionable and it is not a true measure of noise pressure.

Adelaide Airport would recommend that further investigation into the feasibility of adapting the N70 modelling concept be undertaken by industry and the three levels of Government.

2 How effective is the ANEF system as a land use planning standard for Greenfield developments around airports?

As indicated above, it is the only tool currently recognised as being of any value. Having said that it remains at the discretion of State, Territory and Local Governments to take heed of that guidance in any planning protocols that they may have in place.

3 Are the acceptable levels of aircraft noise for particular developments identified in AS2021 consistent with current community expectations?

Only if the guidelines as listed in AS 2021 are complied with. The N70 concept mentioned above actually provides the public with an acknowledgement that they do actually hear noise – the ANEF on the other hand implies that if you are on the "right" side of a contour you do not hear noise which is of course a false indication. The ANEF process creates problems that the TNIP N70 concept would minimise.

4 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?

Most city and GAAP airports while originally remote from residential developments have been surrounded by urban sprawl due to poor planning principles by State Territory and Local Governments – there are also examples of where housing is placed directly under flight paths near airports but light industry and recreation open space are placed in "quiet" zones parallel to runways.

State Territory and Local Government also need to be encouraged to undertake long term re-zoning programs to remedy the existing anomaly.

Any airport currently in open space or a green field development should be protected by appropriate zoning or precinct guidelines in State Territory and Local Government planning mandates.

The planning curricula at relevant tertiary institutions is possibly in need of a review and to develop an appreciation of the value to social and economic principles that airports bring and to adjust their teaching methodologies accordingly.

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?

No – if State Territory and Local Governments are aware of the socio economic benefits that aviation brings to their states and territories then they should be able to introduce suitable procedures within their own State Territory and Local Govt planning rules for development in the vicinity of their airports and to ensure the future growth and contribution to their state or territory.

6 Should the current protection of airspace regulatory provisions be strengthened and broadened to cover all CASA Certified and Registered aerodromes?

As the low cost carrier phenomenon continues to identify new and varied destination pairs and governments of all persuasions agree on the social and economic benefit that an airport affords to the communities they serve, then it would seem obvious that airspace protection at all certified airports needs to be a serious consideration.

7 How might state, territory and local government planning rules help protect airports from encroachment by unsafe intrusions into airspace?

Through the COAG discussion forum agreement is obtained that in each state territory and local government planning regime, a simplified version of each airports Obstacle Limitation Surface(OLS) and Precision Approach Navigation Operations(PANS-Ops) foot print be overlaid on a regional plan identifying the height limit tolerances before approval need to be sought. Should a proposed development intrude either of these limits then they need be referred to the local CASA office for sign off and/or approval.

The onus should be on the developer to prove that any development is not detrimental to aviation safety and operations – or at least be required to recompense the airport for undertaking any impact analysis on his/her behalf.

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

There should be an expectation/directive (CASA?) that airport operators and developers on or in the vicinity of airports be cognisant of the likely impact of wind shear and to be required to undertake case by case assessments on developments above a pre-determined height width and breadth base measurement.

Similarly, industry in consultation with CASA needs to develop some guiding principles in respect of Hot Air plumes from chimney stacks on new projects and which may well be retro-fitted to existing developments.

9 Should expert modelling reports on turbulence and wind shear be mandatory for developments in close proximity to runways and who should bear the cost?

As mentioned in #8 above each airport would be different and a minimum acceptable development size and location would be determined – any development outside those standards would require a modelling report as part of the development cost.

10 Given variable regional circumstances for birds and flying foxes, would a recommended standard zone (e.g. 15 km radius) be appropriate?

The Australian Airports Association Bird and Wildlife Management Working Group has adopted the Adelaide Airport - **Bird Risk Assessment Model**
The model is unique and highly flexible, characteristics recognized by the Australian Aviation Wildlife Hazard Group, that supported the model's expansion so that it may be adopted by any aerodrome nationally. Adelaide Airport Limited is making this model freely available to any airport in Australia

11 What other planning issues might arise in safeguarding against bird strike?

Refer to the model referenced in 10 above.

In the process of using the above referred model other important management issues should come to light such as netting of open water facilities in the vicinity of an airport, management of food scraps and indeed general waste transfer points.

12 What guidance do state territory and local governments require on the siting of wind farms and the potential impacts on aviation?

Suggest that the remedy would be addressed by the recommendation identified in #7 above.

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?

Refer to #7 and # 12 above.

14 Should development of technical facilities near aerodromes (say within 5 km) require automatic referral to CASA for assessment of impact on RADAR and navigational systems?

It would seem that if non aviation related technical facilities had the capacity to affect RADAR and Navigational Facilities then they would be generating emissions that would adversely affect community activities and would most likely not be approved within close proximity to residential or other community operations - where an airport is remote then any such proposal would need to be aware of the likely impacts

on aeronautical equipment – this will require notices in relevant planning standards at State Territory and Local Government levels for referral to the likes of CASA.

Airports also identify no go zones around and in the vicinity of Navigational equipment on the field and plan accordingly.

CASA already has standards for these issues and they should be the requisite guidelines and the body to which referrals are made.

Note:- The assessment of this discussion paper may well be an ideal catalyst to also initiate a review of the associated CASA Standards and Regulations – many of which are dated and were introduced as "nice to haves" in years past and the industry has grown and changed significantly in the recent years.

15 What additional guidance do state territory and local governments require on the siting of technical sites and the potential impacts on RADAR and navigational systems?

Refer to the CASA Standards

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

As technology advances the improved equipment will most likely require less protection than currently exists – it is suggested that Airservices Australia and CASA identify the required standard and offer suitable remedies.

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?

This matter needs to be addressed at COAG level as the impacts are clearly outside the boundaries and responsibilities of airport operators and will require significant risk analysis by state and territory administrations.

18 For which airports might such public safety zones be identified – all airports or only major airports with regular airline traffic?

This matter is rather emotive and must be the subject of competent risk analysis – indications in Australia would suggest that the likelihood is inconsequential.

19 What methodology and criteria should be applied in defining the boundaries of a PSZ?

Competent risk analysis and if not warranted do not press the issue for political or emotive outcomes.

20 What sort of additional controls might be imposed for new developments in identified Public Safety Zone's?

See 17 above.

21 What sort of steps might be taken to ensure the identification of a PSZ does not unduly affect the value and enjoyments of existing properties within the zone?

Refer to 17 above.