

PROPOSALS- Any Proposal Can Be Implemented In Stages

It is unethical to privatize an industry and allow the operatives to avoid paying for known social and medical harms of their operations. There is currently a deliberate regulatory vacuum regarding the impact of aircraft operations on the general public to avoid dealing with the complexities of this issue.

The senate inquiry has revealed it is now necessary to more appropriately balance industry and community needs with regard to aviation operations and infrastructure.

1 IMMEDIATE Monitor noise impacts to promote genuine accountability in reductions

AirServices timeline of consultations is not a metric to monitor progress in reducing noise impacts. Noise sharing is not a noise reduction strategy, just a symptomatic treatment without addressing the cause. ANEF is not a metric appropriate to assessing noise impacts and should be replaced with more suitable measures as noted in later sections of this document.

(A) Implement properly maintained *noise monitoring stations* at intervals of 1 km under every major flight path up to 30km from the airport. This data should be keep a record of flight numbers and noise levels and times and be publicly available. It should be used to calibrate theoretical modelling of noise impacts (currently used models are clearly inaccurate). Measuring noise levels is a fundamental requirement for addressing noise impacts.

(B) Replace ANEF with a more appropriate non-averaged metric that measures noise harms/impacts/disturbances. As one suggestion, create a full set of *baseline scalable noise Nabove frequency-noise contour maps* to assess current levels of impact and to assess future progress. The current presentation of noise impacts is confusing, misleading and unnecessarily complex. It makes it impossible for community members to assess impacts or the likely effect of proposals to change these. See appendix.

(C) Publish a monthly report on overall noisy residential overfly total distances for each region affected by flight noise. This is an easy to understand monthly proxy for noise *impacts* would be the total number of flight path km per month for all flights where any part of the flight (arrival or departure) tracks over any residential area in the particular city/region under 6500ft from the ground. This should apply to aircraft from all airports (public, private, commercial and GA)

Such a monthly report of low residential flight track km would be a proxy for progress in actually reducing the cause of noise – low residential overfly. It does not assess harms or the total number of persons affected (which is orders of magnitude more difficult to adequately compute), and it is crude, but the figures would easily available and show progress towards reducing noise or the lack thereof.

2 IMMEDIATE Sponsor independent qualified research of the nature, extent and costs of noise impacts

with a view to (a) understanding the full extent of noise impacts for each different airport in Australia both numerically and sociologically (b) quantifying the social, medical and economic costs of these impacts to guide policy decisions (c) establishing an acceptable level of impact harms for 98% of potentially affected populations.

This research should be supervised by a committee containing both industry and community representatives in equal proportion, and be funded by government. There should be a commitment to use the research to guide policy. The results should be submitted in a report to government within 18 months, and the full contents of the results and recommendations should be publicly available.

3. IMMEDIATE Create an effective community engagement body and refocus AirServices on flight management functions only

AirServices has too much conflict of interest to manage community engagement regarding flight noise, and has used external consultants for complex flight path design (as evidenced by their engagement of TRAX). Suggested that both these functions are removed from AirServices which should focus exclusively on efficient and safe flight management in Australian Airspace, including for all GA airports. This would be in keeping with their funding source.

A. *Removing all community consultations from the conflicted AirServices* (which should focus on flight management) and appoint an independent government funded body for this function, with powers to require documents, and staffed with engagement and technical experts without any direct ties to industry. See (B)

B. *Create a new independent body for Community Aviation Engagement:* An independent government funded body to assess and develop solutions related to community concerns about the impact of aviation (including noise and competition), to balance the inordinate influence of private industry on aviation policy. Its role would be to define, discover, clarify, and actively promote community interests and concerns in shaping policy regarding aviation matters, and report findings and suggestions transparently to the minister, the parliament and the general public.

This body should have powers to require documents related to the public interest, and be staffed with engagement and technical experts without any direct ties to industry. It should be comprised of a team of specialists covering the fields of community engagement/business consulting, survey design, data science/analytics/statistics, economic impacts, acoustic monitoring and science, social and environmental health and medicine, counselling, data analytics and mapping representation, aviation technical operations (without ties to local industry), web design, social media marketing/advertising, public relations and lobbying, media press release and report writing.

C. *Engage competent consultants (e.g. TRAX international) to develop and modify flight paths,* OR create a competent authority in Australia to perform this function. The consultant organization should not be funded by industry and should take account of the interests of all stakeholders and the legal requirements in developing airspace designs to maximize efficiency and operations taking into account the needs of all stakeholders including the community.

4. URGENT The current *Noise Action Plan* should be revised to potentially deliver measurable reductions in noise impacts over the whole city in spite of increasing traffic

The current plan can not by its design deliver real noise reductions and it is inconsistent, unethical and non evidence based without any metrics justified by research. It is already failed to deliver any benefits after two years of world class engagement. It's designed to keep citizens in a state of false hope.

Its concept is invalid and the methodology is invalid (even if the concept were accepted). Splitting flight paths is not possible by more than 1-2k within 15km from runway alignment so the most heavily impacted persons get no relief. Apart from minor tweaks like flight path adjustments which only potentially benefit less impacted persons, noise sharing is the main strategy.

The belief that masking noise harms by sharing them is a valid solution to noise impacts, even while continuing to increase the overall burden of aviation noise pollution is a farcical and illogical policy prescription. Even apart from that, the methodology is flawed. "Sharing" a known harm which remains undefined (noise impacts) among undefined populations (no noise measurement of various options) using a method that is undefined (no metrics) is admitted by AirServices to be a subjective political judgement.

5. IMMEDIATE Commission independent research on the full economic social costs and public benefits of a variety of operational restrictions

Currently the Department has not used any method to assess the costs and benefit of policy decisions regarding operational or other restrictions on unimpeded aviation operations. It has relied on advocacy PR economic impact studies that are clearly flawed in favour of avoiding restrictions. These use the wrong methodology and ignore costs to the community, while overstating the alleged benefits of unimpeded operations.

There is no proper examination of a likely dynamic response to a variety of potential restrictions e.g. curfews, caps of various levels etc. on major airports as a guideline for policy decisions.

This economic data can supplement ethical and moral considerations of harm. This research should use an appropriate methodology (CB study of public costs and benefits), and be overviewed as to the data and methodology by respected economists who have no conflicts of interest through industry connections, and take account of all significant costs and benefits of a policy option.

6. IMMEDIATE Redefine aircraft safety

Expand the definition of aircraft safety to include additional consideration of the health and safety of any members of the public potentially directly affected by aircraft operation on the ground or in the air while it remains in Australian airspace. The current definition of aircraft safety relates solely to the integrity of machine and its operatives and passengers.

This would bring the definition of aviation safety in line with that related to the operation of all other types of machinery potentially affecting the public. Penalties should apply to deter non compliance or compensate for flouting expanded safety procedures and regulation.

7. URGENT Impose direct and immediate restrictions on night operations at all airports for any night flights affecting more than say 10 persons at noise level over 60dB (those persons must be compensated as per point 17)

This is urgently necessary to reduce the known enormous harms and distress of frequent night awakenings on health, productivity, amenity, education etc. Some regional airports may be exempt due to traffic/population levels /runway orientation or achieve special exemptions determined by signed agreement of all potentially affected residents.

Note that if the flight can be operationalized to affect almost no residents or produce less noise, this is not the same as a blanket curfew. There should be a grace period of 3 months to allow an appropriate adaptive adjustment to schedules or flights. Confirmed travellers can be fully compensated by government.

Regulate night noise directly with a legislated curfew or outcomes based mandate from 9.30pm to 6.30am. Do not maintain the fiction that children or adults sleep like robots from 10pm-6am on schedule. That leads to sleep deficits. This policy apart from being an ethical necessity would support other government policies to promote sleep health in Australia as deficits cause economic, health, and productivity costs in the tens of hundreds of billions annually. Allowing night time sleep disruptions from aviation while trying to prevent them from other sources is a fundamental policy contradiction.

Note: Emergency flights are of course exempt but these should be restricted to genuine time restricted flights, not just general use of any emergency services aircraft for 'operational' convenience.

Immediately disallow any organization to sponsor flights causing significant disruptions to citizens due to the time, nature of the aircraft, height of flight or other factor, without a full cost benefit study of demonstrating that this flight is in the public interest and produces no significant harm to any segment of the population.

8. IMMEDIATE Mandate prioritizing the issue of airport slots in non-curfew hours to essential freight flights or commercial flights originating or terminating at regional airports

Use a designated list of important regional airports for this policy which would promote proper regional development in precedence to less necessary questionable economic benefits of international flights, private flights or interstate flights to non regional areas. If necessary, regional flights for the general public can be subsidized, excluding contracted flights from large corporations e.g. mining etc.

9. NEAR FUTURE Impose financial measures to promote ESG in Aviation and support infrastructure renewal

- (a) *A one off increase in tax on aviation fuel from about 0% to 10% as a socially responsible environmental levy – mandate its use in equal portions for infrastructure improvement to reduce low residential overfly and support clean engine development (monitored – no pie in the sky carbon capture hydrogen schemes) .*
- (b) *IMMEDIATE An additional airport tax of \$500 per track Km over any designated residential area under 7000 ft OR where noise on the ground exceeds 65dB in such residential areas (to encourage quiet planes and higher altitudes and avoiding residential areas)*
- (c) *Increase tax on avgas by 10%pa (with 20% overall discount on non leaded avgas) for next 10 years to force fleet renewal and prevent the scandalous unmonitored use of leaded avgas.*
- (d) *Remove other direct and indirect subsidies which make highly environmentally damaging air travel artificially cheap.*

10 IMMEDIATE Require industry (airports and airlines) jointly develop and implement operational plans to measurably reduce noise impacts

The proxy is to reduce residential overfly under 7000ft by 5-10%pa or face more and more restrictive caps if the plan fails to achieve this outcome. One year for the first results. Until they pay and actively participate in direct and immediate noise reductions, they will not use their expertise to seriously address the issue. Suggest that if they do not develop a plan which delivers results, cap restrictions will be imposed to force the same outcome.

11. MEDIUM TERM Impose caps on flights at airports if other measures do not provide actual noise reductions

This would allow a greater use of operating procedures such as SODPROPS that avoid low residential overfly. This should be done in stages and subject to the previous point requiring industry action to reduce noise levels by a target amount. Suggested initial level at BNE is about 80 flights per hour, to be reviewed annually.

12. IMMEDIATE: Force a proper duty of care and accountability in conducting impact studies leading to infrastructure and flight path approvals.

Implement laws to hold financially accountable those persons or corporations or businesses which have not followed due process in the development of noise studies or environmental impact studies / assessments leading to public harm from aircraft noise, if the study can be conclusively shown to be misleading, incomplete, selective, based on unreasonable assumptions or not otherwise following acceptable guidelines. Breaches should be able to be prosecuted up to 5 years after completion of such studies, not merely 29 days as at present.

13. IMMEDIATE Force privately run airports to comply with updated levels of (or even previous ministerial approval conditions) regarding noise impacts

Contract renewal should be subject to reasonable conditions, not a rubber-stamp. Private airport contracts are reviewed every 5-10 years and the government must use this to assess compliance with appropriate community, legal and operational expectations, and be ready to change or revoke the current lease arrangements. Force airports to review noise impacts by comparing current measured impacts with previously (falsely / using wrong assumptions) performed modelling of impacts, and *demand* a plan (with timelines and outcomes specified) to address the differences.

14. MEDIUM – LONG TERM Reduce total air traffic over residential areas in excess of reductions created by operational modifications or direct restrictions

E.g. Move freight and non essential emergency services or GA flights to a less sensitive location (note that Archerfield is not suitable for a GA airport due to its proximity to residences in all directions). Perhaps new freight airports can be built in suitable areas or on reclaimed land within 100K of major cities, or further out on rail networks as long as the infrastructure is designed to not impact local citizens.

15. IMMEDIATE-MEDIUM TERM Ban private / GA training flights / tourism operations using jet or turboprop aircraft over residential areas.

These should be moved to GA airports where large populations are not affected. Ban short haul non essential flights of less than 200km if it originates or departs from airports within residential areas.

16. MEDIUM TO LONGER TERM Provide 75% government funding and mandate 25% industry contribution for redesign / addition of infrastructure

The purpose would be to mitigate noise harms and compensate for previous inappropriate approvals. This is to allow a greater percentage of operations over non residential areas in a wider variety of weather and traffic conditions where this would lead to significant community benefit (proper CB study required)

A prime example would be the potential recommissioning and lengthening of the decommissioned cross-runway in Brisbane which would allow more flights over the water in low traffic periods (e.g. night). Estimated about \$5bn start to finish, equivalent of what the airport is spending on their expansion plan (terminals, shops, parking, automation and other such money spinners which will coincidentally probably reduce jobs) even as they spend \$0 on noise reduction.

17. MEDIUM TERM Mandate that airports should offer financial compensation to residents where noise cannot be mitigated to an evidence based safe level after restrictions are applied.

This compensation should be without conditions (not forced/not conditional subject to guidelines) to either resume a property at full market value for any resident who (after the inquiry's recommendations are implemented) - say by June 30 2025 - is affected by an average of more than 50 flights per 24 hour period / more than 5 flights per night period at an average noise level of over 60dB, OR if elected by the owner of an established and inhabited residence (of longer than 2 years occupancy) to pay a one off cost of up to \$80,000 in compensation at that address for install full soundproofing of the residence to reduce aircraft noise to less than 50dB on average, with a solar installation to compensate for increased ongoing electricity need for AC.

18. MEDIUM TERM Develop a master plan of air transport in each regional area

This should encompass all airports in the region and take into account noise and pollution and the redefined safety as top priorities rather than merely basing designs on operational efficiency and profits.

Consider a wide range of alternatives for other measures if the siting and orientation of infrastructure does not allow significant improvements over the current arrangements. Consider alternatives to air travel as currently conceived.

19. MEDIUM TERM Revise Aviation Legislation and Policy Documents

The Australian approach of modelling noise prior to development and then having no specific limits on noise from residential overfly is a licence for the industry to socialize noise costs to the community. Noise data provided by manufacturers to enable the certification of aircraft in Australia has virtually no bearing on the actual noise residents experience.

There is currently nothing within the Civil Aviation Safety Regulations 1998 that specifically deals with CASA's regulation, approval, or administration of airspace or with design or designation of airways or air routes. After more than a quarter century, the applicable section says "Note: This Part heading is reserved for future use."

This allows virtually automatic approval of flight paths and that only those significant changes to flight paths arising from alterations to runways require Minister's approval. Very significant alterations to flight paths, including for example to accommodate increased capacity or changes to air navigation technology are effectively unregulated and able to be made by the applicable commercially-driven airport operators (and the 'for profit' air traffic services provider, AirServices Australia) without requiring serious community input or consultation. A clear case in question is the 2018 approval of flight paths for NPR in Brisbane, which has led to this being the most complained about airport in Australia.

The current framework requiring an EIS is insufficient to account for the economic and social factors of a proposed development.

A. *Rewrite the poorly conceived cliché ridden Aviation White Paper* so as to re-integrate international good practice and standards, take account of the hundreds of community submissions on noise and operations which were totally ignored, create proper community consultation, redefine safety, rethink aviation priorities aligned with reality rather than technocratic fantasy thought bubbles, reduce public waste on irrelevant vanity projects, and give citizens greater rights than koalas over the location of flight paths. This document is a prime example of simplistic first order static thinking which does not consider a minimal number of likely scenarios to enhance the robustness and validity of the illogical ideological (rather than practical) objectives.

B. *Revise the primary and designated legislation related to aviation law and associated guidelines* (now outdated) including the documents directly related those related to the establishment and role of AirServices, while taking into account modern reality and appropriate regulatory controls to protect community interests.

C. *Revise and update the requirements for Environmental Assessments (for flight path modifications) and Environmental Impact Studies* (for infrastructure) to update the procedures, and include proper . The existing documents and laws were incompletely repurposed from general environmental requirements and do not fully apply to aviation.

D. *Develop or adopt a new standard for noise monitoring for use in planning.* The ANEF has been recognised as inadequate metric for assessing noise for decades and ANEF and other modelled or calculated smoothed noise metrics are subject to manipulation, make unwarranted assumptions, and have been shown to incorrectly predict noise harms.

20. LONG TERM Provide subsidized fast and convenient alternatives to air travel

Especially for shorter haul journeys, and tax shorter haul flights to compensate. Provide high speed rail alternatives for longer travel on major routes e.g. HSR 200km per hour BNE syd 4 hours direct trip maybe one stop Newcastle: if 10 minute city check in the total journey is 4 ½ hours, just 1-2 hours longer than going to BNE, checking in, waiting, flying and getting to SYD city from airport the other end. Can be heavily subsidized \$100 flat two-way fare. Added advantage of saving the environment and forcing genuine competition.

21. MEDIUM TERM Test community acceptance of drones/air taxis to monitor safety, noise levels and other factors

These tests should be performed with appropriate and transparent community consultationand abide by the outcome of NOT allowing their operation if there is significant disturbance to more than a specified number of persons as a result of each flight. *Mandate noise levels of less than 60dB for any person other than the direct recipient of the operation.* In practice this might mean small drone ports a sufficient distance from any residents, necessitating a drive and parking arrangement.

22. SHORT TERM Invite industry to work with communities genuinely on these issues to provide data and evidence backed suggestions

Industry input is obviously necessary to guide the implementation of and assess reasonable timelines for and the provision of appropriate financial support and incentives where these seem reasonable to help with the inevitable adjustments in bringing a largely privileged and unrestricted industry in line with appropriate controls. It is time to create outcomes that benefit all citizens and not just private corporation and a group of relatively well off frequent flyers to allow for the profitable and beneficial growth of aviation in Australia over the next decades.

APPENDIX – N-ABOVE NOISE MAPPING

Produce a full set of N-above scalable noise contour maps of Brisbane Airspace within 40km of the Airport to replace current fragmented data regarding noise impacts as a one off baseline say using 2023-4 data.

Most community members are confused there is no single place where the data for flight noise loudness, frequency, numbers (max and average) is clearly available for any location and presented in an easy to understand visual format.

A baseline model presented in this format would be 1000 times more accessible to residents than the current presentation of the current inaccurate and fragmented baseline model. S

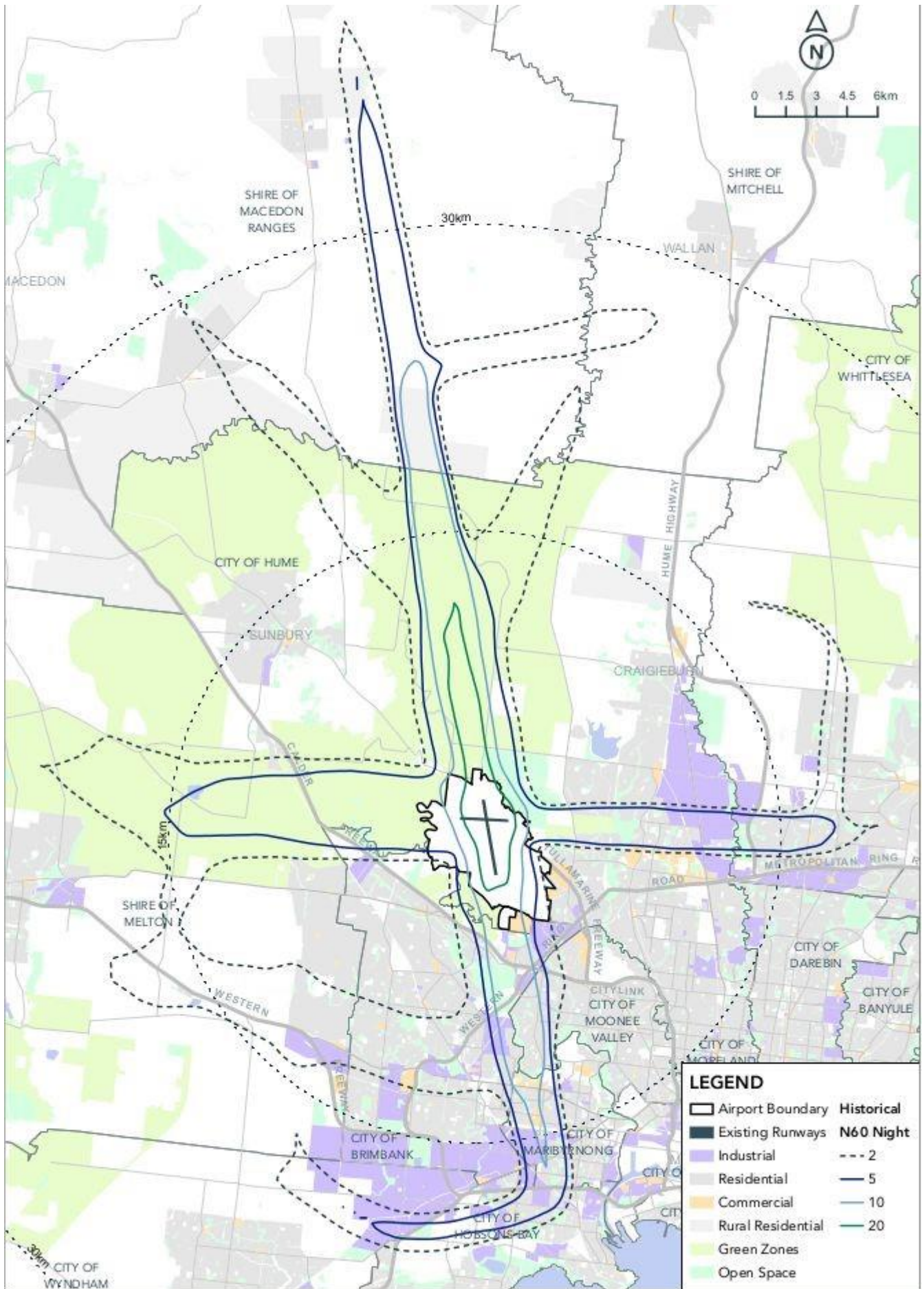
Suggestion:FOUR scalable N-above frequency contour maps of Brisbane airspace based on N60, N70 dB noise-above contours for (1) daytime south winds (2) night time south winds (3) day time north winds (4) night time north winds.

This maps could show flight totals (frequency) and maximum noise levels (dB) for a full year 2023-4 for the given wind condition (or the most recent data set of 12 months of data) at any location based on noise levels and flight numbers. If the current aircraft mix can be included in creating the maps that is ideal, else use a typical wide bodied aircraft. The maps should be based on best-practice noise modelling using a non averaged measure of loudness N_{max} (for the full range of aircraft overflying a location under that flight condition), AND the modelled data should be calibrated against the extensive noise monitoring data that AirServices has already collected.

EXAMPLE BELOW (The zoning as shown in this example is not important as it is a land planning map not a baseline model - just the frequency numbers 2, 5, 10, 20, 50 etc - for Brisbane 4 maps need to be produced for day/night times and south/north wind conditions as the areas affected are very different in each case).

Even two sets for 60dB and 70dB is probably sufficient initially, but addition of the level at which noise starts to be quite disturbing to many persons viz 65dB would also be useful.

This example below is not scalable with pins for a given location, and does not specify wind direction, but the nature and format of presentation is clear.



THE RATIONALE FOR THESE RECOMMENDATIONS

CURRENT METHODS TO DEAL WITH AIRCRAFT NOISE HAVE FAILED AND IT IS ILLOGICAL TO CONTINUE WITHIN THE SAME FRAMEWORK.

A paradigm shift is required that addresses the causes rather than merely band-aiding the symptoms, for the long term sustainability of industry for the benefit of all stakeholders.

The current public frame is that: Aviation is essential, its positive effect on competitiveness, investment and jobs is unquestionable, noise is an inevitable by-product of living in a modern society, any negative impacts on the environment will soon be mitigated with 'green aviation' advances, and the best people to regulate this very technical space are the industry experts who will make modifications to operations to improve outcomes (where practicable), but the operations themselves should remain unregulated and unimpeded to allow social benefit.

The reality of the aviation frame is more properly that the major beneficiaries of aviation policy leading to artificially cheap fares (and the main cause of harm to the environment) are frequent flyers, as well as the privatized quasi-monopolistic airports, airlines and tourism operators. The major losers are citizens directly affected by aviation operations as well as all taxpayers who pay directly and indirectly for the regulatory freedoms, tax breaks, subsidies, environmental pollution, congestion, added infrastructure costs etc. to a highly favoured industry and which are unacknowledged.

The major cause of noise harms is low residential overfly, which is not essential with proper infrastructure design and operations, aviation expansion is not essential, alternative less polluting forms of transport exist for much intra-country travel, and the pollution and emissions are almost impossible to abate in the near future.

The positive economic and jobs impacts are vastly overstated, the economic data flawed and cherry picked and completely unchecked by government with independent cost-benefit studies (as required by good policy practice), and the negative consequences are studiously ignored or downplayed in framing policy discussions.

THE NOISE ACTION PLAN AS A NON SOLUTION

People engage with the Noise Action Plan because

- (a) they are desperate for even minor relief
- (b) they falsely hope their voice will make a difference to the outcome

The noise action plan has failed to deliver anything after two years of world class engagement. The set of possible outcomes is undefined, confusingly presented, and there are no goals, metrics or timelines for results, or any accountability. It's designed to keep citizens in a state of false hope.

Its concept is invalid and the methodology is invalid (even if the concept were accepted).

Noise spreads about 5km either side of an aircraft track attenuating about 3dB over this distance. A typical large aircraft at 4000ft (i.e. 15km from the airport) produces over 70dB on the ground. Splitting flight paths is not possible by more than 1-2k within 15km from runway alignment so the most heavily impacted persons get no relief.

Apart from minor tweaks like flight path adjustments which only potentially benefit less impacted persons, noise sharing is the main strategy.

If this were proposed for chemical pollution (ie continue to *increase* dumping but spread it around more) it would be ridiculed

Treating the symptoms while increasing the cause: The belief that masking noise harms by sharing them is a valid solution to noise impacts, even while continuing to increase the overall toxic burden of aviation noise pollution, or without any evidence base for overall harms of various sharing options, is a farcical and illogical policy prescription. How is this a solution, especially in the face of increasing traffic.

Even apart from that, the methodology is flawed. "Sharing" a known harm which remains undefined (noise impacts) among undefined populations (no noise measurement of various options) using a method that is undefined (no metrics) is admitted by AirServices to be a subjective political judgement and it is unclear whether community input has any bearing on the outcome as the way feedback is used is also undefined. How does this qualify as valid?

Air Services so called \$50m *Noise Action Plan* is a plan to reduce the undefined and unresearched euphemistically labelled noise *impacts* which the same organization assessed five years ago as 'not significant'. This plan operates under the assumption of no operational restrictions which means that it CANNOT succeed since the fundamental cause of aviation noise is not addressed.

Noise sharing is analogous to having two broken shoes that pinch the feet and solving the problem not by getting new shoes, but just changing feet so that the pinch is in a different place. Industry loves talk of noise sharing and quiet planes (in the future a few decibels only, barely noticeable, and certainly not compensating for traffic increases) because it enables them to continue to socialize the costs of noise mitigation without taking any meaningful action to reduce noise (i.e. low residential overfly).

PARADIGM SHIFT REQUIRED

Minor tweaks without getting to the root cause of the fundamental problems will not solve the issues.

Aviation policy in Australia is unnecessarily fragmented (geographic and regulatory). It is also based on assumptions using data and modelling provided by private industry which remain unchecked by government and historically has been dramatically wrong, without consequences to those providing the assumptions and forecasts but with serious consequences to citizens.

Aviation noise is a well-researched significant cause of harm to health e.g. cardiovascular, education, social amenity, sleep deprivation, and normal amenity of living in a quiet environment. It is known to be more annoying and harmful than other sources of noise of the same intensity. This research is not acknowledged in public policy in Australia. Aviation noise causes significant mental and physical distress to many citizens and their families. Merely providing a suicide hotline for sufferers is not an ethical solution.

In spite of this, there are currently NO policy regulations regarding the level of noise from aircraft that citizens on the ground can be exposed to, with regard to loudness, or frequency of occurrence or timing. This is a unique omission which does not apply to any other types of sources of noise. Kolas have more noise protections than people in the current Aviation White Paper which has removed all reference to international standards (ICAO Balanced Approach to Aircraft Noise)

Aircraft safety is properly acknowledged as the primary driver of decisions regarding aviation policy and operations. But aircraft safety is narrowly and wrongly conceived as being merely of the integrity of the aircraft itself. This astounding regulatory omission allows the impact of aircraft operations on the health and safety of the general public i.e. citizens on the ground to be completely ignored. Such lack of regulation does not apply in any other field of equipment operations and it unsurprisingly favours only

the industry and its direct customers since an costly ethical duty of care to the general public can be ignored.

Lack of regulation of aviation noise seems to be based on a utilitarian approach to public policy: a detriment to some is allowed in order to provide a greater public good. But this is based on a vague concept where there are no accepted metrics for the levels or thresholds of harm of aviation noise, no plan to research these, and no independent and impartial economic and social studies of claimed benefits: even the assumptive and partial economic metrics used to justify opposing restrictions are obviously hopelessly flawed.

The economic impact studies used by industry to forestall any limitations on their operations are (a) the wrong methodology - a cost benefit study is the appropriate way to assess public interest (b) inflate jobs and economic benefits using linear forecasts and ignoring obvious changes like automation which will reduce jobs (c) assume aviation must meet demand using lower airfares as a given (d) omit all costs to the community and ignore the considerable direct and indirect subsidies (e) conflate a mixture of policy options (e.g. curfews and caps) (f) does not explore any alternative reasonable policy options but just assumes a binary Y-N static rather than adaptive response to restrictions by industry (e.g. not considering rescheduling and prioritizing regional flights). (g) contains they are best described as public relations.

The department has uncritically accepted these studies as justification for policy inaction on aviation noise, without ANY other evidence base, in contradiction to the government's own requirements that independent cost benefit studies should inform major public policy decisions.

The noise and health harms are compounded by improper infrastructure siting decisions based on the past acceptance of industry forecasts of overstated economic benefit and understated noise and other impacts, in spite of citizen protests. The result is infrastructure in locations and orientations that maximize operational efficiency and profits, but ignore citizen safety and amenity. Citizens pay the penalty for those wrong decisions, not those unethically manipulating the approvals process with biased and flawed forecasts and consultations.

AN UNPALATABLE POLITICAL TRUTH BUT A MORAL OBLIGATION

If you accept that aircraft noise is an ongoing harm.

Not dealing with this problem is akin to deliberately causing significant harm to many tens or hundreds of thousands of Australian residents on an ONGOING basis. The utilitarian approach to public policy does not justify the casual unethical assumption that 24/7 aircraft noise is acceptable. In any case there are no independent cost benefit studies to allow its proper application.

Nothing will change until industry is forced to confront the currently socialized costs of their operations. The harms of frequent night awakenings to health and the economy have not been costed so they can be conveniently ignored, even by economic measures alone.

**THERE IS ONLY ONE WAY TO REDUCE AIRCRAFT NOISE HARMS TO THE COMMUNITY AS A WHOLE:
reduce low residential overfly based on evidence of an acceptable level of harms.**

This will not be achieved voluntarily.

The government has to stop permitting the approval of flight paths allowing more than a certain number of daily/nightly occurrences of low residential overfly (say 6500ft above ground over an evidence based level of acceptable noise where the noise level is about 65dB under the path = over 60db for a 5km swathe).

As a logical follow-on those facts mean it is necessary to create a long term plan to (a) re-site airports

- (b) send some traffic to other airports with less potential impact
- (c) send more traffic over ocean (not over green areas unless almost totally uninhabited)
- (d) modifying infrastructure to allow directing traffic over water
- (e) managing fleets and operations so that operation is under the mandated noise level(f) subsidize alternative means of transport and stop subsidizing air travel from the airports with the most problems

You also should not rely only on industry sponsored (economic /environmental /noise) modelling which has proven wildly inaccurate in the past (to the benefit of industry and detriment of residents). Proper methodologies and independent studies are needed to assess the public benefits of any proposals. E.g. the SODPROPS promise of the majority of flights over water has been an open lie since 2007. 50% over water corresponds to 0% use of SODPROPS by flight numbers and the current level of use is only a few percent above that, and it is gradually becoming inoperable due to traffic constraints.

A NOTE ON RESTRICTIONS

There are two methods of *mandating* noise reductions:

- (a) you need to mandate noise outcomes e.g. not more than one night awakenings (e.g. flight with noise level over 65dB for any resident within 50k of an airport) or not more than xx flights under 6500 feet within 5k of any specific area per day

OR

- (b) you need to mandate certain operational restrictions e.g. must fly over the water, must relocate traffic to another airport, must impose curfew, must impose caps so that capacity allows flight paths to be away from residential areas, particularly at night.

In theory the former (a) is better because while it will initially invariably lead to similar restrictions as option (b), this restriction is not permanent because industry might be able to and will be inspired to redefine operations in such a way as to not damage citizen health. For example they might reschedule, mandate quieter modern smaller aircraft that can fly higher faster, only allow airlines that care about citizen outcomes over profits, build new infrastructure, change operational procedures etc.

In practice the latter (b) may be preferred because it has been the accepted method of reducing noise harms in the past. However, noise is just one aspect of operations so this method is inefficient and does not force the industry to innovate to operate within the intent of the restriction without reducing their operational options. Since operations is highly technical, the industry also has to largely self regulate and in the past has used many 'escape routes' to avoid actual restrictions like citing safety or other factors which are equally important in operations.