

30 November 2023

Ms Belinda Jeffery
Director, Aviation White Paper Project Office
Aviation White Paper
Department of Infrastructure, Transport, Regional Development, Communications and the Arts
GPO Box 594
Canberra ACT 2600

Via email: aviationgreenpaper@infrastructure.gov.au

Dear Ms Jeffery

Re: Aviation Green Paper – Towards 2050 – Northern Territory Government perspective

The Northern Territory (NT) Government welcomes the opportunity to provide a submission to the Australian Government's Aviation Green Paper. Sharing our local perspective will ensure NT's unique operating environment is taken into account during the development of long-term national aviation policies.

Below are the topics suggested for consideration in the development of the Aviation White Paper:

1. Safety and security charge (SSC)

According to the Aviation Transport Security Regulations, Darwin Airport is rated as a 'designated airport'. At this level, all baggage and goods are screened using CT x-ray, while all passengers are screened using body scanners. Security requirements at 'designated' airports (including Sydney, Melbourne and Brisbane) are the same as tier 1.

While Alice Springs is defined as a tier 2 airport (i.e. all baggage and goods screened using multi-view x-ray, and at least 50 per cent of passengers and staff screened using body scanner, with the rest screened using walk-through metal detector and explosive trace detection); it is required to screen at a tier 1 level. This is likely due to its proximity to the Joint Australian-US Defence Facility Pine Gap.

In the case of airports in the NT, the passenger volumes are generally significantly lower than airports of the same security risk rating interstate, leading to a higher per-passenger cost outcome.

The NT Government views aeronautical security as an issue and interest for all of Australia, so cost recovery should be amortised across passenger volumes and shared by all airports of the same security ranking. This may result in a slightly higher (likely to be immaterial) charge for airports with mass volume traffic, however, will vastly reduce the unit cost for airports with lower passenger volume, such as those in the NT.

Sharing safety and security charges across all airports within the same security rating will create a more even access to air travel for all Australians by overcoming the disadvantage of higher air travel costs for Australians living in regional cities. This strategy may also result in indirect benefits. There is anecdotal evidence to suggest the high cost (and limited availability) of air travel to be a barrier to NT's population growth and retention strategy. The amelioration of this (high cost) obstacle could encourage Australia's residents to place regional cities, such as Darwin and Alice Springs, higher on the list when considering migration options. This supports population dispersal away from overpopulated major Australian city centres.

2. Disability access

There are three major gateway airports in the NT, with two (Alice Springs and Uluru) not having aerobridge facilities, despite having frequent jet aircraft operations. Without aerobridge, boarding and disembarking from jet aircraft is difficult for people with mobility challenges. The current solution of boarding/disembarking on a hydraulic lift is not ideal, particularly during inclement weather.

Challenges are also observed at regional and remote airports in the NT. Most of these airports are serviced by small aircraft, which present access challenges for passengers requiring mobility aids. While some remote airports (such as Milingimbi and Elcho Island) are capable for larger aircraft operations, these airports are not equipped with the necessary infrastructure or trained personnel to provide disability support services. Recently, the NT Government provided a grant to the remote Maningrida community for the installation of a wheelchair lifter, to assist with safe access for boarding aircraft at the Maningrida certified aerodrome.

While the Green Paper acknowledges the need for further improvements by way of standard policy and provision to pathways, it also indicates the Australian Government "*expects the aviation sector will need to make substantial additional and ongoing investments to make services accessible...*" This alludes that airport operators will need to fund the infrastructure needed to achieve this goal, ranging from capital expenditure, operational costs and maintenance.

The NT Government seeks the Australian Government to provide the necessary support and funding for the development of low-cost solutions that could be implemented in airports with low passenger volumes that will not have the capacity to fund the initial investments and ongoing costs due to the relatively low usage incidence.

It is recommended that the Australian Government contemplate a demarcation of roles that expedites the transition of national airport infrastructure to all-ability access, whereby Government takes the lead on human rights matters such as inclusive social infrastructure and airports focus on the ongoing operations and commercials of their airport.

3. Cabotage

The NT has a vast geography and is thinly populated, so attracting domestic and intra-Territory routes are often commercially challenging. While the NT Government is supportive of cabotage laws to protect

the Australian aviation industry and jobs, it is of the view that there are benefits to maintain a special dispensation pathway that considers the application of foreign-owned airlines to operate (and carry passengers) on domestic Australian routes by way of consecutive cabotage. As an example only, this could include Darwin-Ayers Rock Airport.

4. Passenger Movement Charge (PMC)

Australia's PMC is amongst the highest departure tax in the world and unfairly impacts travellers departing Darwin International Airport due to the shorter international flight distances. For example, A\$60 (or A\$70 from 1 July 2024) may form a large portion of an airfare from Darwin to Bali, Dili or even Singapore.

NT Government recommends the Australian Government consider a policy or structure similar to the United Kingdom's Air Passenger Duty, where the amount is based on distance travelled. It could also consider an option to differentiate the amount of tax paid by passengers travelling in premium cabins, such as Business Class.

5. Sustainable Aviation Fuel (SAF)

As an island, Australia is highly reliant on airfreight so the development of SAF policies will need to ensure the movement of these critical goods are not undermined, from import and export viewpoints. From an NT perspective, Darwin is Australia's only major city geographically located in Southeast Asia. Our location and unique relationships with Southeast Asia are recognised in the Australian Government's Southeast Asia Economic Strategy. As such, the NT Government encourages the Australian Government to advocate for an international approach to SAF with consistent inbound and outbound policies, or at a minimum, prioritise consistency with top trading countries.

The International Aviation Transport Association recognise that Southeast Asia will become the world's largest aviation market by 2050. The global focus on carbon emission reduction has resulted in a number of aviation markets, notably the European Union and the United States, introducing policies relating to the uplift and use of SAF. It is likely that this trend will expand to other markets either through government policy or market demand.

The NT is well placed to be Australia's leader in the development of SAF. Our vast land mass lends itself to being the place to grow feedstocks required for biofuel production. Much of this land is located on Aboriginal Estates thereby having a positive investment impact for First Nations people. Our future pipeline of sustainable energy projects, such as the Middle Arm Sustainable Development Precinct, will allow SAF to be developed using other sources or techniques including through the development of hydrogen. The NT Government has committed funding to undertake a feasibility study on the development of a SAF industry hosted in the Territory. This industry, while beneficial to the Australian market, would be focused on export to the region as well as serving local defence requirement.

As global demand for cleaner fuels grows, low carbon jet fuel produced on home soil will be a key for airlines to achieve net zero emissions by 2050. It can be used in existing aircraft engines and airport refuelling infrastructure to cut carbon emissions by more than 80 per cent. Demand for SAF in Australia is increasing with domestic airlines making SAF commitments, for example, Qantas has set a SAF target of 10% by 2030 and 60% by 2050.

The abundance of renewable resources, vast land area and potential for biofuel production in the Territory has been identified as an opportunity for the NT Government to facilitate private sector investment for the establishment of a SAF industry.

The NT Government is undertaking a feasibility study exploring the potential for the NT to play a key role, both as a source of feedstock and as a SAF producer as an emerging industry for the NT.

Consideration is also encouraged in how SAF would be implemented in regional and remote airports. Most of these airports are located in remote locations, subject to supply chain and electrical supply constraints due to existing infrastructure, which may present challenges in generating or storing SAF in remote locations.

Government investment in infrastructure to support the development of a sustainable aviation industry in Australia will be required to expedite the required transition to meet current targets without having a significant impact on the cost base of operations. Without Government support, it is likely that the cost of transition will drive airfare pricing up and volumes down, with a disproportionately higher impact on the long routes, which are synonymous with the NT.

Despite a commitment to high SAF volume targets and aggressive adoption timelines, limited global production means demand will surpass supply. As SAF feedstocks are relatively low, it is recommended that the Australian Government promote a sliding scale minimum share of SAF's at Australian airports commencing at 2 per cent and progressively moving up in line with the Australian net zero commitments.

6. Maximising aviation's contribution to net zero

Australia should develop decarbonisation plans for the aviation industry with consideration of both domestic and international requirements. Aligned approaches of flight origin/destinations is crucial to avoid multiple strategies imposed on airlines, potentially further increasing the cost of airlines operating in the NT and more broadly. It is recommended that an international decarbonisation approach for consistent policies or, at a minimum, prioritize alignment with key trading partners.

To inform decarbonisation policies, Australia can leverage existing information and establish review timeframes that account for international policy developments. These policies should encompass all aspects of aviation, including airlines, airports, and ancillary activities, recognizing the vital role of airlines and airfreight in serving regional and remote areas, particularly in the NT.

Decarbonisation policies should not only address environmental concerns but also maximize economic opportunities, provide incentives for action, and reward early adopters. For instance, Darwin International Airport's parent company, Airport Development Group, has set a net-zero emissions target by 2030, with the airport already boasting a solar energy capacity of 7.75MW and additional solar projects (11MW+) in development.

Government investment in aviation-related decarbonisation infrastructure and systems is essential to meet both NT and national emissions reduction targets and support industry efforts. Without such support, there is a risk of increased airfare prices and decreased passenger volumes, disproportionately affecting already poorly served routes in the NT.

7. Remote and regional access

The Green Paper's acknowledgement of the importance of aviation in servicing the needs of remote and regional areas is welcomed. The NT's remote isolated Aboriginal communities in particular, including

those that are island based, rely heavily on air services for the delivery of essential goods and services as well as to support aero-medical evacuations and natural disaster response. During the annual wet season when roads are often closed for many months of the year or have restrictions imposed, aviation is often the only means of timely access to larger servicing towns or the delivery of crucial freight.

A priority for the NT Government is to ensure remote communities have year-round, safe and equitable access. As such, the NT Government assists with funding the maintenance and upgrading of approximately 68 strategic aerodromes located in remote communities, expending approximately \$7 million annually to deliver safety related works. The NT Government relies on and benefits greatly from the Australian Government's Remote Airstrip Upgrade Program (RAUP), to support this commitment. Other aerodrome operators throughout the Territory, including Aboriginal organisations and remote station operators, are also reliant on this program to ensure their aerodromes remain open and safe. Importantly, RAUP funding not only supports accessibility, but underpins the ability for Governments to continue to deliver Closing the Gap commitments.

As outlined in the Green Paper, the Australian Government intends to continue to provide targeted support for regional and remote aviation through programs such as the Regional Aviation Access Program (RAAP), complementing state and territory schemes, which the NT Government welcomes.

The recent implementation of updated CASA regulations (Part 139 (Aerodromes) Manual of Standards 2019) in August 2022, has resulted in a number of the Territory's certified aerodromes not meeting the current standards. While the grandfathering clause deems these aerodromes compliant under previous standards, any changes to accommodate higher-category aircraft will trigger a requirement to align with the current standards. This requirement hinders the future growth of aircraft operations at numerous remote community aerodromes, as aligning these aerodromes with new standards will require substantial investment for infrastructure upgrades.

These aerodromes play a pivotal role in supporting essential services and the ability to respond effectively to emergencies, and are crucial for enhancing the resilience and sustainability of remote communities. While the NT Government welcomes the Australian Government's support through RAUP, the available funding is limited and comes with a cap per project. This constraint impedes the NT Government's ability to deliver necessary upgrades.

The NT Government advocates for the Australian Government to increase funding for this program or establish new funding programs to ensure essential support is provided for critical aerodrome infrastructure upgrades, to provide long-term certainty through extended dedicated funding programs. A strategic five-year funding program, structured similarly to road funding initiatives, would significantly contribute to more effective planning. This approach ensures greater assurance for the remote aviation industry and the future development of aerodrome facilities.

8. Australian Border Force presence at regional airports

While Alice Springs Airport has the capability to operate as a First Point of Entry, it is not permanently serviced that way. As such, human resources and infrastructure (for international arrivals/departures) are not readily available at short notice, with resolutions often attracting substantial cost implications.

Throughout the 2000s, Tourism NT had a number of opportunities to work with Japan Airlines on tourism charters to Alice Springs. While eventually successful, there were instances or major obstacles, including repositioning customs, immigration and quarantine staff from interstate airports, further complicated by cost associated with travel, allowances and accommodation. These challenges hinder aviation attraction at smaller airports such as Alice Springs. A trial program that supports border force temporary positioning to smaller airports for short-term opportunities may be in the national interest

and contribute to regional development outcomes or realisation of large scale capital or infrastructure programs.

9. Role of government and agencies

There are two airports in the NT that serve as RAAF bases, that is Darwin and Tindal (Katherine), which operate concurrently as a civilian airport. This creates a unique environment and relationship that can significantly impact NT's aviation development growth, planning and logistics.

As an example, Darwin Airport has been undergoing runway works and maintenance throughout 2023 (and 2024), which required a number of airlines to re-consider introducing new flights to Darwin, and others to cancel or re-time flights. The NT appreciates these works are essential to guarantee the safe operations of airports, and have been kept up-to-date by regular briefings from the Department of Defence. The NT Government would like to see this important partnership continue to ensure Darwin Airport continues to meet the needs of civilian airport users into the future.

Separately, Darwin hosts "Exercise Pitch Black" biennially over a three-week period, with the next one scheduled for 2024. These exercises historically take place over the July, August or September periods, which is the busiest tourism season for Darwin. In past exercises, Darwin had hosted up to 2,500 personnel. While some personnel are accommodated in government housing or camps, a substantial portion are housed in hotel accommodation. This has severe impacts to Darwin's tourism sector as it reduces the number of available hotel rooms for tourist visitors, drives hotel rates up, which in turn reduces visitor numbers and spend in the NT economy. It is understood the Department of Defence has taken over the Manigurr-ma Village at Howard Springs to house defence personnel, however local hoteliers still have an expectation foreign airforces will utilise commercial accommodation. The NT Government recommends reviewing the exercise dates and consider non-peak demand periods, ideally outside June to September months, and/or strongly encouraging exercise participants to use the Manigurr-ma Village.

10. Australian Noise Exposure Forecast (ANEF)

ANEF may be an effective modelling tool to illustrate noise impacts where aircraft movement is consistent throughout the year. However, ANEF modelling has limited utility for airports with infrequent aircraft movement, or where aircraft activities operate for a short period of the year (for instance joint user facilities that have limited yet intensive military operations).

A combined (civil/ defence) ANEF that averages infrequent aircraft movement across the year therefore does not provide a true indication of aircraft noise expected to occur on a daily basis.

There are substantial costs associated with providing noise attenuation in building design to mitigate noise impacts associated with aircraft activity. As states and territories rely upon noise modelling to inform land use planning, it is important the modelling is reflective of actual predicted noise impacts.

11. Drones

The NT Government has identified drones as one of the emerging digital technologies that can play a critical role in achieving the government's vision of a \$40 billion economy. The NT Government is proactively implementing policies and initiatives that support the uptake of drone technology, Advanced Air Mobility (AAM) and the emerging aviation industry more broadly. The NT Government can support the Australian Government's objective to position Australia as a leader in the uptake and development of emerging aviation technologies and boost engagement in the Pacific. We are uniquely positioned to

grow a specialised drone industry in the Northern Territory that can support significant advancements in the test-bedding and development of drone technology and manufacturing.

The Territory provides the perfect location to develop and test drone-based solutions for passenger and freight mobility. The Northern Territory has a range of comparative advantages that make us uniquely placed to drive growth and innovation in the emerging aviation technologies. These include our climate, uncongested air space, sparsely populated regions, proximity to growth markets in Southeast Asia, as well as research and development capabilities. Drones have the potential to address many of the Territory's unique challenges, while also transforming traditional sectors such as agriculture and mining.

The NT has a growing drone industry and ecosystem, with local drone skills, capabilities and capacity that can facilitate training, skills development, as well as trial and testing of drone technology for the regulating and managing of airspace, air traffic, and aviation safety and security. The NT Government is supporting the local drone industry through the development of a Drone Industry Strategy and the establishment of the NT Drone Industry Network, with membership comprising industry, academia, government and civilians with a shared interest in developing and leading a strong ecosystem in the Territory.

Drones present significant opportunities for the Territory's regional and remote communities in terms of economic benefits, employment, and enhanced service provision. With our rich Aboriginal heritage, the NT Government also sees a unique opportunity to work with Aboriginal organisations to lead the development of culturally appropriate drone training and protocols for use of drones on country.

Ground-breaking research is already underway through the North Australia Centre for Autonomous Systems (NACAS), NT Department of Health and iMOVE CRC to deliver medical supplies to remote communities, helping to reduce the impacts of isolation and inequality across geographic regions. Other innovative projects, such as Beyond Visual Line of Sight (BVLOS) aerial mapping within Kakadu National Park, are also being undertaken by the Commonwealth Department of Climate Change, Energy, the Environment and Water.

However, significant advances in both the regulatory environment and technology will be required to scale such services to become financially viable. The NT Government strongly advocates for a risk-based approvals process that prioritises safety whilst also acknowledging the reduced risk profile of operating drones in remote and sparsely populated areas. This will support drone innovation, particularly for BVLOS operations which are required to for the industry to reach its potential in the NT.

To support the large number of small businesses and start-ups in the drone industry, the NT Government supports additional investment in funding schemes and grant programs, such as the Emerging Aviation Technology Partnerships Program, and is exploring opportunities to support emerging aviation pilot projects in the future.

The NT Government recognises the potential of drones to engage students in STEM subjects. However, the current use of drones in schools is ad-hoc and largely reliant on individual teachers. A more standardised approach to integrating drones into the curriculum and upskilling teachers would increase engagement and ensure students have the necessary STEM skills to prepare them for the future workforce.

12. North Australian Centre for Autonomous Systems (Charles Darwin University)

In 2022, Charles Darwin University (CDU) partnered with the Royal Melbourne Institute of Technology (RMIT) to create the CDU-RMIT Testlab within the North Australia Centre for Autonomous Systems (NACAS) at CDU's Casuarina Campus. This collaborative space serves as a hub for transformative

technologies in NT and the wider Asia Pacific region, specifically focusing on Uncrewed Autonomous Systems (UAS).

Situated strategically in Darwin, NACAS is dedicated to cutting-edge research and comprehensive training in UAS. The facility features a state-of-the-art aerospace engineering facility in Darwin and extensive flight test areas, including a 4000-hectare site north of Katherine and a 5000-hectare area 30 minutes from Darwin International Airport.

NACAS functions as a key nexus for academia, government, and industry, providing an ideal environment for UAS manufacturers to test products and align them with the evolving needs of end-users. Recognising the growth potential of autonomous technologies in Australia, NACAS aims to bridge the gap between academic and engineering advancements in NT and nationwide.

The CDU-RMIT Testlab and NACAS have initiated various projects, including those related to remote community medical delivery, coastal surveillance, fire mapping, search and rescue, and agricultural and environmental mapping. Ongoing support for these initiatives ensures that the NT plays a significant role in advancing Australia's air mobility future through the development, testing, and commercialisation of innovative technologies for enhanced service delivery across Australia.

13. Amphibious Aerospace Industries

The NT Government is supporting Amphibious Aerospace Industries Ltd (AAI) in the production of the Albatross G-111T seaplane. This initiative aligns closely with the Australian Government's ambition to grow manufacturing capabilities and marks Australia's entry into the manufacture and exporting of a medium scale commercial aircraft capable of taking off and landing on land, snow, ice, and water.

Although the Albatross G-111T has not been commercially manufactured for six decades, it remains highly regarded by sectors such as defence, tourism, border security, and search and rescue. AAI, an Australian company who owns the Type Certificate rights to produce the G-111, is collaborating with the Japanese company ShinMaywa to revitalise and enhance the Albatross and manufacture the modern version, the Amphibian G-111T.

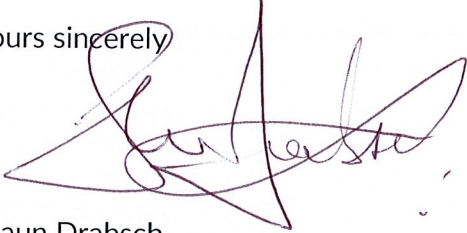
The NT Government has committed \$10 million to this project, anticipating the creation of approximately 300 direct jobs. AAI will capitalise on ShinMaywa's existing expertise in amphibian aircraft manufacturing to design and produce the transport category plane. Additionally, AAI intend to establish an integrated ecosystem for an extended supply chain, working with other companies in the G-111T supply chain, and collaborating with the NT Government to develop an advanced aviation manufacturing precinct in Darwin—the first of its kind in Australia. This will provide opportunities for supply chain partners to bring certain technologies and processes such as Hot Isostatic Pressing into Australia and these will benefit businesses operating in other sectors such as 3D printing who are unable to produce certain parts due to the absence of this technology in-country.

While the Albatross has a storied history, commercial manufacturing of the aircraft ceased in the 1960s with the rise of the commercial jetliner sector. Despite the lapse in production, market studies indicate a substantial demand for a modern version of the Albatross and this has highlighted the G-111T's potential to fill a recognised gap in the global tourism, border security and remote and regional aviation market without the need for expensive on-ground air-strip and landing facilities.

In consideration of the future air mobility needs of Australia and the broader Indo-Pacific region it is recommended for the Australian Government to recognise the important initiative of AAI and support the establishment of critical aerospace manufacturing capabilities in NT and Australia.

We look forward to continuing to work with the Australian Government in response to strategic aviation policy matters. For further discussions on the matter, please contact Rachel Telford, Senior Director Aviation and Strategy, on telephone 08 8999 3922 or email rachel.telford@nt.gov.au.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Shaun Drabsch', written in a cursive style.

Shaun Drabsch
Chief Executive Officer