

17 March 2023

Mr Jason Dymowski,
Assistant Secretary, Aviation White Paper and Reform Branch
Department of Infrastructure, Transport, Regional Development, Communications, and the Arts
GPB Box 594
CANBERRA ACT 2601

By email: Jason.Dymowski@infrastructure.gov.au
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Dear Mr Dymowski,

Consultation on Aviation White Paper Terms of Reference

Thank you for your invitation to Aviation / Aerospace Australia (**A/AA**) to provide a submission on the Terms of Reference (**TOR**) for the forthcoming Aviation White Paper (**White Paper**). A/AA welcomes the invitation to provide a response and participate in the White Paper process.

A/AA is a not-for-profit and independent national association, with an overarching objective to contribute to the long-term health and sustainability of Australia's aviation, aerospace, and space sector. Our [members](#) are a broad subsection of the Aviation, Aerospace and Space industry, spanning from small and medium enterprise (SME) to major industry primes, airlines and universities.

The intended outcome of the Whitepaper is noted and A/AA considers that the areas of focus set out in the TOR are appropriate to support the intended outcome of the Whitepaper.

It is acknowledged that several subject matter areas have been identified in the 'Scope and Themes' section of the TOR, and while all areas are appropriate for exploration, this response focuses on those Scope and Themes of priority interest to A/AA and its members and in the areas where A/AA is already actively engaged and contributing to the sector.

Scope and Theme 1:

Aviation's role in economic development, trade and the visitor economy – general, domestic, regional and international aviation

A/AA encourages the Department, in preparation of the Green Paper, to ensure the significant role of the aerial work and unmanned aircraft sectors (existing and future) across all levels of general, domestic and regional aviation is not forgotten in the review, in particular noting the contribution that it makes to the Australian economy and regional communities (firefighting (rotor-wing in particular); aeromedical; aerial agriculture, delivery of essential provisions to regional communities, disaster relief (again, rotor-wing) etc) now and into the future.

The education sector is a key component and enabler of the aviation and aerospace sector but also a contributor to the economy in itself. A/AA partners RMIT University and Swinburne University both provide aviation training not only to domestic students, but also international students, and RMIT

University recently announced partnerships with Vietnam Airlines and VietJet to train pilots at their Bendigo base. Research and Development is another key component of economic activity that supports the Aviation and Aerospace sector. One good example is CSIRO and Boeing's 34 year award winning partnership, in which more than \$200 Million has been invested in joint research projects that deliver real solutions for aviation and aerospace industry and create economic benefits and employment for Australians. A/AA encourages the Department to include consideration of the education and research sector in preparation of the Green Paper.

Scope and Theme 2:

How to maximise the aviation sector's contribution to achieving net-zero carbon emissions including through sustainable aviation fuel and emerging technologies

A/AA has taken a leading role in maximising the aviation sector's contribution to achieving net-zero carbon emissions across all sectors of the industry through the creation of our [GreenSkies initiative](#) and committee. GreenSkies is an initiative by Aviation/Aerospace Australia to promote action on sustainability in the aviation, aerospace, and space sectors in Australia.

GreenSkies is (and will continue to be) a critical forum for bringing together a wide range of industry stakeholders, increasing the engagement particularly for organisations who are not advanced in their ESG journey, and creating a framework for current and next generation professionals to provide solution-focused action and a responsible approach to short-term and long-term industry needs.

A/AA strongly supports this TOR Scope and Theme but would urge the Department to view this TOR with a wide lens noting that there are multiple pathways (beyond SAF) to decarbonisation which the aviation, aerospace and space sectors can pursue / implement and broad engagement across the university sector, small and medium enterprise, large enterprise, defence primes and the space sector will be critical to the transition to a net zero economy. Hydrogen fuel cells, electric Advanced Air Mobility (AAM), and digital engineering and sophisticated digital twins are examples of other key technological developments that need to continue to advance to move the sector towards net-zero carbon emissions.

Scope and Theme 3:

Changing aviation technologies and ways to position our policies, regulations, and systems to encourage update and manufacturing of new, more efficient, transport technologies.

A/AA universally supports the TOR exploring this Scope and Theme. Revolutionary change is coming in the aviation and aerospace and space sectors with the constant flow of rapidly changing aviation technologies. While changing aviation transport technologies are central to industry wide net-zero progress it is also widely understood that the sector can bring significant social value and benefits through R&D, early adoption, and intergenerational acceptance of emergent transport technologies.

A/AA's supports the emergent technology section across the full spectrum of its activities, but in particular through its GreenSkies, NextGen initiatives, and support for the university sector. The Aerostructures Innovation Research Hub (AIRHUB), an advanced development collaboration between industry and research, is a good example of the university and industry coming together to work on utilising digitisation to develop intelligent manufacturing processes, using advanced composite materials to design and produce innovative aerostructures. AIRHUB was borne out of Victorian Government funding and has seen Swinburne University collaborate with industry partners such as Boeing, Marand Precision Technology and Quickstep Holdings to accelerate technology development

that enables more efficient, cost effective and sustainable manufacturing of aerospace components. This research hub shows government support can help drive collaboration across industry and universities to advance local industry.

Scope and Theme 5:

How to support and regenerate Australia's general aviation sector.

Aviation/Aerospace Australia strongly supports the Department's proposal to develop and implement strategies to support (ideally now but also into the future) Australia's general aviation sector.

A/AA acknowledges the significant contribution that Australia's general aviation sector makes to the Australian aviation, aerospace and space ecosystems and is proud to engage collaboratively with our industry partners on critical issues relevant to the sector. Workforce, education, flight training and the promotion of Australian SMEs, plus their R&D programs, university partnerships and educational pathways and sector wide employment opportunities are all active engagement points between A/AA and the GA-sector. With over 40-member organisation across aviation aerospace, and space, A/AA is uniquely placed to engage and support these critical sectors and looks forward to considering further (and responding to) the Department's Green Paper proposals to support (and regenerate) the GA Sector.

Scope and Theme 6.

Future industry workforce skills and training requirements

A/AA is committed to improving productivity and resilience within the economy by developing and implementing programs targeting workforce skills and training requirements and through industry advocacy¹. The theme A/AA currently hears most frequently from members across all elements of the industry are challenges around skilled talent pipeline. Our [NextGenNetwork initiative](#) and direct skills and training pathways bring together whole of sector organisations and individuals to address the future pipeline, talent retention, and skills shortages in tangible ways including events such as the Teach the Teachers Summit and the creation of Fundamental Short Courses², designed with the Victorian Government to fill the gaps to learning new skills for people of all ages and professional capacities in the sectors. Our Space Mission 2040 competition in collaboration with the Australian Space Agency has increased our access to regional and remote schools across the country and fosters early industry engagement which has been identified as critical to student's ongoing STEM engagement throughout their junior – senior schooling years.

We are also a leading organisation in the promotion of gender diversity and the participation of women, diversity of thought, and diversity of identity, within the aviation, aerospace, and space sector in Australia. For the last 10 years through the [Women in Aviation/Aerospace Australia](#) initiative, A/AA has meaningfully engaged across industry on diversity and inclusion, and the frameworks for information gathering to identify barriers to diverse groups of people engaging or re-engaging with the sectors.

The Barriers to the Pipeline Research Project, funded through the Australian Government's Women in the Aviation Industry Initiative, has helped us to better understand the landscape for women in

¹ A/AA also highlights the gaps identified by industry in advocating for Commonwealth Supported Places on behalf of our members, STEM Outreach from primary schools to tertiary education, and industry site visits.

² These courses are currently pending accreditation Certificate III in collaboration with Swinburne University of Technology.

the industry and we are currently working with RMIT University, Monash University, and UNSW to publish a final report. Through the Take Me Higher campaign, WA/AA can connect and collaborate with STEM outreach, student engagement from primary to tertiary institutions,

In light of A/AA's diverse and impactful engagement that A/AA has had to date, it will come as no surprise that A/AA supports the Government's proposal to investigate reforms needed to improve, both immediately and into the long term, productivity across the aviation, aerospace, and space sectors and A/AA looks forward to considering further the Department's proposed economic reforms in this area in due course.

Conclusion

The team at A/AA would be happy to provide the Department with further assistance, engagement or information to support this response. If you do have any questions or would like to discuss, please do not hesitate to contact A/AA Head of Strategy & Partnerships [Josh Castronova](#).

A/AA look forward to continued engagement and the opportunity to provide the Department with further comment / feedback, upon the release of the Green Paper later in 2023.

Kind regards,



Sarah McSwiney (she/her)

Chair

Aviation/Aerospace Australia



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APPENDIX

Aviation/Aerospace Australia

Brief:

The national association for the Australian aviation, aerospace, and space industries. A/AA is a not-for-profit and independent association, with an overarching objective to contribute to the long-term health and sustainability of Australia's aviation, aerospace, and space sectors. A/AA is committed to building industry sustainability by fostering innovation, organisational diversity, and B2B partnerships.

A/AA is led by a diverse board of industry leading individuals with experience across the breadth of the aviation, aerospace and space industry³ who are uniquely placed to provide deep strategic insights into trends, needs and future forward thinking within each of the sectors that A/AA represents.

Partners: Boeing Australia, RMIT University, Swinburne University of Technology, Thales Australia

A/AA Events:

- ❖ Celebrating Pride in Flight Panel Discussion
- ❖ Reaching Higher Mentor Matching Program
- ❖ A/AA & RMIT Masterclass Webinar (Aviation)
- ❖ A/AA & Swinburne Space Industry Virtual Conference Series
- ❖ A/AA Rotary Wing Webinar – Emergency Services & Defence
- ❖ Airspace Awards
- ❖ Chair's Dinner & SME Dinner
- ❖ A/AA Boardroom Breakfasts
- ❖ A/AA Cyber Security Webinar
- ❖ A/AA Beyond COVID-19 Webinar
- ❖ A/AA Digital Technologies Transformation Webinar
- ❖ A/AA Site Tours



Women in Aviation/Aerospace Australia

Brief:

Women in Aviation/Aerospace Australia (WA/AA) is an initiative to promote the issue of gender diversity and the participation of women within the aviation, aerospace and space sector in Australia and a network for women to connect with industry peers, inspire future generations to join the industry, and excel in their chosen careers. This year marks our 10-year anniversary.

A/AA is proud to take a leading role in celebrating and promoting diversity in the workplace generally, and the Women in Aviation/Aerospace Australia program is designed to help the industry change the status quo in relation to the participation of women in this exciting and dynamic sector.

The objectives of the initiative are to inspire more women to pursue careers in the sector, encourage women to pursue career progression within the sector, raise awareness of gender diversity issues, provide support and professional development opportunities for those already working in the sector and support human resource professionals in attracting and retaining women in the sector.

³ [A/AA Board Directors details](#)

Some of the ways WA/AA achieves this is through our No Other Career Can Take You Higher campaign, and the Barriers to the Pipeline Research Project. The Barriers to the Pipeline Research Project has been funded through the Australian Government's Department of Infrastructure, Transport, Regional Development and Communications 'Women in the Aviation Industry Initiative' to help us better understand the landscape for women in the aviation, aerospace and space industries

WA/AA Sponsors: Airservices Australia, Australian Army, Royal Australian Air Force, Lockheed Martin Australia, Monash University, Virgin Australia

WA/AA Events

- ❖ WA/AA National Summits
- ❖ Barriers to the Pipeline Research Project
- ❖ Space Mission 2040 Grade 2 Competition
- ❖ International Women's Day Breakfasts
- ❖ Women in A/AA Webinar Panel Discussions
- ❖ WA/AA Coffee Catch Up
- ❖ Girls in Aerospace & Defence RMIT Initiative
- ❖ WA/AA & GE Champions of Change Breakfast
- ❖ WA/AA & ANU Institute for Space Breakfast
- ❖ Top Gun: Maverick Screenings
- ❖ Chat@6 with Women in A/AA



NextGenNetwork

Brief:

The NextGenNetwork (NGN) is an initiative of A/AA, for individuals who study or work within the aviation, aerospace, or space industries. Supported by some of the largest employers in Australia, NGN is a space where young professionals can come together, understand, and engage in aviation, aerospace, and space, to build a network and support one another through the early stages of their careers and beyond.

NGN brings together under 35s and industry professionals across a yearly calendar of events and projects such as the NGN Altitude competition, Drinks with the Boss, Professional Online Career Seminars, and annual events such as networking, professional development, and site tours across Australia.

NGN Events

- ❖ NGN Altitude Competition
- ❖ NGN Professional Online – Career Seminar
- ❖ NGN Drinks with the Boss
- ❖ Trivia Nights
- ❖ Site Tours



GreenSkies

Brief:

GreenSkies is an initiative by A/AA to promote action on sustainability in the aviation, aerospace, and space sectors in Australia. GreenSkies aims to bring together leading organisations to facilitate solution-focused discussions, collaborations, projects, events, and networking opportunities. The objectives of this initiative are to:

- Create a framework for members to network and engage on issues relating to the sustainability and future of aviation, aerospace, and space sectors in Australia
- Encourage organisations to establish, and individuals to seek out, sustainable career pathways as workforces transform
- Collaborate with stakeholders and organisations in creating white papers tackling key issues
- Raise awareness of the opportunities and challenges of sustainability in the aviation, aerospace, and space sectors
- Provide support and professional development opportunities for those already working in the sector
- Support small and medium businesses in addressing sustainability challenges within their capabilities
- Facilitate events designed to bring the industry together to understand and engage on the current and future landscaped of sustainability in the sectors

GreenSkies Events

- ❖ GreenSkies Sustainability Summit



Skills & Training

Brief:

Under this initiative A/AA have created the Fundamental Short Courses to provide all the foundational skills and knowledge needed to help careers in aviation and aerospace take off. The Short Courses have been developed by some of the industry’s most experienced and well-regarded professionals, providing invaluable skills training in core industry functions. These courses were designed with the Victorian Government and Swinburne University to help fill the gaps to learning new skills for people of all ages and professional capacities in the sectors.



Members

<p>Australian Army BAE Systems Australia Boeing Australia RMIT University Brisbane Airport Corporation Civil Aviation Safety Authority Cirium Royal Australian Air Force InFlight Graphics Hallam Senior College Lovitt Technologies Australia Moorabbin Airport QBE Insurance Australia Swinburne University of Technology Thales Australia Monash University Australian Industry Standards Martin-Baker Australia</p>	<p>Pegasus QinetiQ Australia Latrobe Regional Airport Royal Flying Doctor Service Sikorsky Australia Airservices Australia Australian Navy It's Rocket Science Adventures Griffith University Learn To Fly Melbourne MicroTau MoovinV USA Lockheed Martin Australia Plan Safe Dovetail Electric Aviation The Australian National University Institute for Space Envirosuite</p>
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