

Eve Air Mobility (Eve) welcomes the release of the Australian Government's Terms of Reference for a revised National Aviation Policy White Paper and appreciates the opportunity to provide an initial submission. With recent innovation and progress being made in the Advanced Air Mobility (AAM) industry through alternative forms of propulsion, including sustainable aviation fuels (SAF), electric and hybrid propulsion, this is a timely revision to the white paper. The revision will play an important role as Australia continues to prepare the regulatory landscape for the aviation industry and that aviation plays a key role in Australia achieving net zero emissions by 2050.

Eve is a new, independent company dedicated to accelerating the global Urban Air Mobility (UAM) ecosystem. Benefitting from a startup mindset and backed by Embraer's more than 50-year history of aerospace expertise, Eve takes a holistic approach to the UAM industry by developing and providing an agnostic portfolio of solutions. The company is developing a fully electric vertical take-off and landing (eVTOL) aircraft, a comprehensive global services and support network, and a unique, aircraft-agnostic Urban Air Traffic Management (Urban ATM) solution tailored to the complexities of the low-level operating environment and supporting ground infrastructure.

As of March 2023, Eve has the largest public-order backlog in the industry having secured Letters of Intent (LOIs) for 2,770 eVTOLs from 26 launch customers across the globe. Our partner portfolio is comprised of major airlines, aircraft operators, ridesharing platforms, leasing companies, UAM infrastructure and technology companies. In short, it covers the full spectrum of ecosystem players, critical for the realization of electric aviation. Eve's Australian customer base includes Sydney Seaplanes, Nautilus Aviation, Microflite, and HeliSpirit who intend to operate Eve's eVTOL aircraft throughout Australia.

The Australian Government has taken an aggressive stance to achieve net zero emissions by 2050 with the Long-Term Emissions Reduction Plan that takes a technology-based approach towards achieving this goal. The plan is backed by significant government investment over the next decade that could be further leveraged through additional private and public investment for green technologies. Further, in September 2022, Parliament cemented its position with the passage of legislation that enshrines the government pledge to reduce carbon emissions by 43% by 2030 and to net zero by 2050.

As we contemplate the role that emerging aviation technology can play in achieving net zero emissions, it is important to highlight the significant work that the Australian Government, Airservices Australia and the Civil Aviation Safety Authority (CASA) has accomplished to date. Australia has been on the forefront globally with their regulatory approach for AAM operations throughout the country. During the past several years, the Australian government, Air Navigation Service Provider (ANSP) and regulator have released several critical documents in preparation for electric vertical take-off and landing aircraft to begin operations. Eve (and Embraer's innovation incubator, EmbraerX) is pleased to have been able to contribute to this work. Eve has been and remains committed to be an active contributor to Australian AAM concepts, strategy, policy, and implementation.

In December 2020, Airservices Australia and EmbraerX published their Urban ATM Concept of Operations (CONOPS). The CONOPS explored new and practical concepts to safely facilitate the introduction of the UAM industry. Using the City of Melbourne, Australia as a model, the CONOPS examined how existing air traffic management solutions can initially enable UAM operations while simultaneously preparing for scale of operations through new traffic management technologies.

In May 2021, the Australian Government published the National Emerging Aviation Technologies (NEAT) Policy Statement setting the stage for how the government will support those looking to adopt and integrate emerging aviation technologies, including AAM. With a proactive, whole-of-government approach, the NEAT Policy Statement underscored the government's commitment to this emerging industry.

In July 2022, The Remotely Piloted Aircraft Systems (RPAS) and AAM Strategic Regulatory Roadmap was published and outlined CASA's approach for these regulations for the next 10 to 15 years. CASA took a deliberate approach in producing the roadmap ensuring that this was coordinated with industry experts. With a mindset that this roadmap will need to evolve to keep pace with aviation technology advancements, the roadmap provides a plan to safely integrate drones and eVTOLs into Australia's airspace and the future regulatory system needed to enable operations to safely scale with expected demand.

Finally, in November 2022, CASA released the Guidelines for Vertiport Design – Draft Advisory Circular document under comment through the end of March. Eve is currently preparing comments that will be submitted ahead of the deadline. Once finalized, this document will provide guidance for the necessary infrastructure for the AAM industry.

With the last publication of Australia's National Aviation Policy White Paper in 2009, updating this policy document is a critical and a positive declaration by the government to reexamine and update the existing aviation regulatory landscape while also incorporating emerging technologies. AAM has the potential to provide new transportation opportunities for residents and visitors alike to Australia while providing numerous benefits using eVTOLs. With quieter, zero-emission eVTOLs, Australia can have increased connectivity throughout the country while providing new jobs for this sector of the aviation industry and increased economic development.

Eve is pleased to see the broad scope and themes in the Terms of Reference while incorporating emerging technologies such as eVTOLs throughout. To ensure that the white paper fully encompasses the needs of the AAM industry, it is important that it also examines the following topics:

- UAM-enabling ground infrastructure and multi-modal transport connectivity.
- Activating underutilized spaces and connecting underserved communities.
- Support the modernization of Australia's general aviation sector with the adoption of new technologies such as eVTOLs.
- Ensure coordinated effort across Federal and State Government for long-term electric grid preparation to meet electrification demands for all modes of transportation. This should also consider expected demand for AAM increasing as community acceptance grows from initial launch operations.
- Enable the integration of future network and traffic management services for UAM which can safely and efficiently be provided by industry in-coordination with legacy air navigation services. Services provided by Australia's ANSP are unlikely to evolve quickly enough and deliver the required levels of economic efficiency required to enable the rapid evolution of the emerging aviation industry.
- Data policy standards that can inform future policy considerations.
- Identify funding streams for infrastructure planning, AAM testing facilities and other areas for long-term support to help the new industry's benefits be realised.

- Community engagement to ensure the benefits of new aviation technology can be understood and societal support is realised.

Through close engagement with global partners, government departments and regulators, Eve has an in-depth understanding of the unique challenges in developing the required infrastructure and regulatory environment suitable for safe and scalable eVTOL operations. AAM - and in particular Eve's eVTOL - is a practical means to achieve zero-emission flights this decade, which is something that is not so easily achieved by other parts of the aviation industry. We look forward to continued engagement with the Australian Government to ensure that Australia and the AAM industry are well positioned for success and working towards achieving net-zero emissions by 2050.