

Vertiport Design and Operations Technical Working Group Tasking Instructions

The Vertiport Design and Operations Technical Working Group (VDOTWG) is established and operates in accordance with the Terms of Reference of (determined by the Aviation Safety Advisory Panel (ASAP) dated November 2021 (as amended from time to time).

Background

The impending introduction of the Advanced Air Mobility (AAM) industry is foreshadowed in the RPAS and AAM Strategic Regulatory Roadmap (the roadmap). The roadmap identified six regulatory areas, of which vertiports fall within the infrastructure area. Through the Roadmap, CASA has committed to 'develop guidance material, design requirements and regulations for vertiports and other infrastructure required to support AAM operations'. To enable potential vertiport operators to identify and procure landing sites, obtain necessary planning approvals, and design and construct vertiports in time for the estimated mid 2025 deployment of commercial AAM operations suitable aviation safety guidance is required in a timely manner. Industry has indicated a sense of urgency for CASA to provide guidance for vertiport design.

CASA has established the Non-conventional Aerodrome Regulatory Framework Working Group (NCARFWG) to develop introductory Advisory Circulars (AC) to support the introduction of vertiports. The NCARFWG is a CASA internal working group, with terms of reference that includes the delivery of a regulatory framework concept.

The first of three ACs, for delivery in the near term, is focused on vertiport design. CASA intends to publish a draft version of AC139.V-01 v1.0 Guidelines for Vertiports - design on the Consultation Hub for a period of three months to seek industry feedback. This feedback will be used to inform technical working groups and CASA.

In 2024, additional ACs for the operation, and for the maintenance, of vertiports should be developed. The compressed timeframe available to meet these requirements means it is likely that the three ACs will be promulgated prior to complementary information being published by the International Civil Aviation Organisation (ICAO).

Whether to require vertiports to obtain full certification or adopt a lighter-touch approach is a critical CASA policy issue requiring early consideration. As the potential to certify vertiports has been identified as an industry desire, a key regulatory outcome is to deliver a proposed regulatory framework that will support certification in those cases where it is required. Work undertaken by the NCARFWG will also be considered by the TWG to help inform policy and regulatory materials.

Purpose

The VDOTWG will advise on options for regulatory oversight of vertiports that will provide a satisfactorily safe environment for AAM aircraft.

The VDOTWG will:

- Provide industry sector insight and understanding of future needs and challenges
- provide current, relevant technical expertise for the development, analysis and review of legislative and non-legislative solutions to identified issues
- provide industry sector insight and understanding of cost structure, industry viability and risk controls and control effectiveness
- assist with the development and review of draft regulations, guidance materials and other supporting materials



Aviation Safety Advisory Panel

• provide endorsement and/or conditional endorsement of draft regulations, guidance materials and other supporting materials for consideration by the ASAP and CASA.

Key principles

AAM is an emerging aviation industry sector with technology likely to develop rapidly. This is a key feature of the time horizons outlined in the roadmap. While initial vertiports are likely to emulate non-complex aerodromes with facilities necessary to support crewed aircraft in visual meteorological conditions, the TWG will eventually consider all-weather and uncrewed operations as the industry continues to evolve.

To support fit for purpose, cost effective facilities that are safe for the operation of AAM aircraft, key regulatory principles the NCARFWG are working towards are:

- Performance based outcomes based on the operations and aircraft the facility intends to support
- landing site certification based on industry needs rather than mandated triggers
- scalable and flexible aviation safety regulations for vertiport design and operations.

TWG outcomes

Example of 'TWG Outcomes':

- 1. The TWG is to evaluate whether options for regulatory oversight of vertiports will provide a satisfactorily safe environment for AAM aircraft achieve the identified policy intent and are implementable by the Australian aviation industry.
- 2. The TWG is to advise the ASAP whether to endorse the draft CASR Part 139V concept regulatory framework.
- 3. The TWG is to provide any further recommendations or advice to the ASAP.

CASA	Technical Working Group Members
 Organise meetings and workshops, and produce agendas, papers and 	 Commit to supporting the project objectives and timeline
supporting materialsFacilitate meetings and workshops	 Engage and collaborate constructively at all times
Record insights and findings	Prepare for working group activities by
 Communicate openly and consistently with working group 	reviewing agendas, papers and supporting materials
members about project status and issues	 Provide timely and considered advice in meetings, and between meetings as
Respect the time of all working group	required
members by minimising work required to achieve outcomes	 Respond to requests for feedback on draft materials within agreed timeframe

Roles and responsibilities



Aviation Safety Advisory Panel

Confidentiality

All discussions and materials from TWG meetings should be treated as confidential. Premature dissemination of information may dilute TWG processes, particularly if discussion points remain unsettled or documents are not ready for public consultation.

Reporting arrangements

At the conclusion of the meeting, or soon thereafter, recommendations and reports of the TWG will be provided to the Chair of the ASAP, through the Secretariat.

Consensus

A key aim of the Technical Working Group is that a consensus be reached, wherever possible, in the finalisation and preparation of advice for the Aviation Safety Advisory Panel and CASA.

The Technical Working Group will be guided by the ASAP Terms of Reference (Section 6) with respect to determining and documenting consensus.

Planned TWG dates

The first TWG meeting will be scheduled after the TWG is formally established by the ASAP in March 2023, and the first meeting is likely to be a video conference meeting to provide fair access to international and domestic participants.

Membership

Members of the TWG will be appointed by the ASAP Chair, following ASAP processes. It is recommended that the membership of the *VDOTWG* consist of the following persons:

- Working group lead: CASA project representative x 1
- proposed vertiport operators
- original Equipment Manufacturers (OEM)
- government agencies (Federal, State or Local)
- vertiport designers.

Requests for changes to the membership will be made to the Chair of the ASAP, through the Secretariat.

Attendance and Travel

The initial VDOTWG meeting is intended to be virtual using video conferencing and Microsoft Teams to allow representation fair and equitable access of those not centrally located in Australia and for those not in Australia.

The project does not have a budget to support travel for CASA personnel, or industry representatives.

If the VDOTWG determines face to face meetings are preferred, a budget variation request will be required to support the costs of travel for CASA staff and for hosting the event. Industry participants are unlikely to be funded for travel or accommodation.

If ASAP and CASA determine face to face meetings are desired, the likely location for such events is the CASA offices in Canberra or any capital city nominated by the VDOTWG. Industry participants would be self-funded.