USAN In-Person Meeting – 03 June 2024
RACV Royal Pines, Gold Coast

Airservices hosted an in-person meeting of the Uncrewed Services Advisory Network (USAN) on Monday 3 June 2024 at RACV Royal Pines, Gold Coast.

Members were invited to attend for the opportunity to engage directly with Airservices and participate in conversations on a range of matters including:

- Shaping the sequencing and timing of the delivery of services by Airservices to industry sectors and organisations;
- Contributing to the conversation for Airservices to better understand the needs of industry and how Airservices might align its strategic roadmap;
- Sharing concepts and discussing opportunities for Airservices to investigate that could help build and expand businesses and operations for industry; and
- Sharing knowledge and experience to shape the future of aviation in Australia.

This meeting was run as a one-day workshop with USAN members and Airservices representatives assigned across five (5) table groups for activities.

Discussion

1. Welcome and Introductions

- Luke Gumley, Head of Transformation Uncrewed Services and Chair of USAN, welcomed everyone to the first in-person USAN meeting and introduced Alasdair Cameron from Oliver Wyman as the facilitator for the day.
- Alasdair provided an overview of the day and the objectives in accordance with the agenda.
- Table groupings for the day had specific themes, stakeholders, and/or industry groups to consider when addressing questions within the agenda items:
    - Table 1: Government
    - Table 2: Traditional aviation (crewed aircraft)
    - Table 3: Uncrewed Aircraft Systems (UAS)
    - Table 4: Advanced Air Mobility (AAM)
    - Table 5: Infrastructure Services
- A list of the members assigned to each table is provided in Appendix A.

2. Icebreaker Activity

- A brief icebreaker activity was held to enable attendees to learn more about each other and the experiences individuals will bring to the day's discussions.
- The activity also set the scene for the next discussion item on aviation users.

3. Understanding Users of Aviation:

- The broader aviation ecosystem is an integrated environment, where decisions made by/about one set of users will have implications for everyone.
- The aim of this discussion item was to build a collective understanding of the range of aviation users, recognising that uncrewed operations do not happen in isolation.
- Participants were asked to brainstorm individually and as a group on the range of aviation users within their respective sectors, and then present information about the users and how they currently fit within the ecosystem.
- The list of users as presented by each table is as follows:
    - Table 1 (government): Air Navigation Service Providers (ANSPs), regulators, the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the Department), the Air Transport Safety Bureau (ATSB).
    - Table 2 (traditional aviation): Airlines, general aviation, sport/recreational, training, space, emergency services, Defence.
    - Table 3 (UAS): UAS Service Suppliers (USSs), recreational pilots, agriculture, commercial operators, medical and emergency services.
    - Table 4 (AAM): Vertiports, vehicle manufacturers, AAM operators.
    - Table 5 (infrastructure services): Airports, vertiports, maintenance providers, manufacturers, data service providers, electronic flight bags (EFBs).

4. Definitions of Success:

- When thinking and speaking about new and emerging airspace users, the concept of ‘integration’ with and into the broader aviation system is often raised.
- Participants worked in their respective table groups to define a future ‘integrated’ vision, while considering how it differs from the landscape today, what might be common aligned objectives, and any specific examples that can be drawn upon for discussion.
- The key themes identified through the discussion included Services, AAM, UAS, and Enabling Capabilities.
- Services:
    - Airports
        - Ground infrastructure established – In the right place, at the right time.
        - Sound commercial models that support business viability and profitability.
        - Airspace requirements are met that support viable commercial models and industry needs.
    - USS
        - Reliable and accurate data and data sources to support operator needs.
        - Systems interoperability to reduce cost and complexity.
        - Sound commercial models that support business viability and profitability.
        - Healthy competition within the industry to drive innovation and reduce costs.

        - Broad coverage of services to support operations and operator use cases.
        - Systems scalability and agility to meet increased demand for services and to support new and emerging use cases.
        - Simplified regulations to reduce barriers to entry for new entrants into the service provision marketplace.
    - Vertiports
        - Integration into existing passenger services and infrastructure.
        - Sound commercial models that support business viability and profitability.
    - Manufacturing
        - Clear guidance on equipage and standards.
        - Sound commercial models that support business viability and profitability.
        - Scalable operations to meet increased demands and volumes as this sector grows.
        - Proportional certification and streamlined regulatory pathways and requirements.
- AAM (includes urban and regional air mobility)
    - Social licence hurdles overcome, in relation to noise, privacy, crewed and uncrewed operational issues.
    - New ground infrastructure in place to support air operations.
    - Network and flow management in place to support operations and transport efficiency.
    - New digital flight rules (similar to VFR and IFR rules) require staged roll out.
    - Predictable airspace and ground access.
    - Multi-modal transport integration.
    - Airspace definition that supports integrated traffic management.
    - Equipage standards and requirements set to apply to all operating aircraft.
    - Clear and streamlined pathway to airworthiness certification.
    - Electronic conspicuity (relates to equipage standards).
    - Mission prioritisation, including fair and equitable access to and use of airspace.
    - Sound commercial models that support business viability and profitability.
- UAS
    - A range of enablers required for a successful ‘integrated’ future will include:
        - Surveillance
        - Electronic conspicuity (e.g. Remote ID)
        - Airspace integration of UTM and ATM systems/operations.

        - Execute roadmaps including the Australian Future Airspace Framework (AFAF).
        - Strategic and tactical deconfliction through FIMS
        - Equitable access to airspace.
    - The end-state for integrated airspace will see equitable access for all operators and missions, with fit-for-purpose qualification requirements and permissive regulations, including operations within a permissive social environment.

5. Roadblocks to Success:

- Following the previous exercise to define a collective vision of success, participants shifted their focus to identifying barriers and factors hindering progress.
- Participants considered issues, concerns, unknowns, and unresolved matters which might prevent or delay the realisation of the vision of success.
- This discussion also looked to surface a common understanding of dependencies, accountabilities and impacts.
- Groups of ‘roadblocks’ were identified as follows:
- Services:
    - Airports
        - Uncertainty around industry requirements – given the novel nature of the technology, requirements continue to evolve, making planning difficult.
        - Factors such as demand for services, commercial viability, airspace design and operations, and regulation remain unresolved and continue to evolve.
        - Owners of this roadblock include industry, airports and regulators.
    - Vertiports
        - Social license remains an issue, with location effectiveness, usability, infrastructure requirements/considerations, and commercial viability also being major considerations.
        - Owners of this roadblock include industry and local government.
    - USS and Data
        - Agreed datasets to enable a broad set of USS functions still undefined.
        - Real-time situational awareness will be required, and this might be difficult to achieve.
        - Policies that support commercial viability will be required.
        - Owners of this roadblock include industry, Airservices.
    - Manufacturing
        - There is uncertainty around policy mandates, regulatory risks, and commercial viability hindering the growth of manufacturing capabilities.
        - Standards and equipage requirements are still unknown.
        - Owners of this roadblock include CASA, industry and government.

- AAM
    - Resourcing and capability within government to support collaboration and alignment with all stakeholders remain constrained.
    - Government initiatives such as the Aviation Policy Group (APG) and CASA's AFAF need to drive policy and framework outcomes.
    - There is insufficient clarity over the provision of traffic services (between government and non-government organisations).
    - Government priorities remain unclear to many participants.
    - Airservices needs to articulate with greater clarity its strategic roadmap, and priorities around air traffic control (ATC) and noise.
    - Alignment with international standards.
    - Differences in priorities within the industry and uncertainty about outcomes (e.g. bold claims amidst changing timelines).
    - Infrastructure provision including power/energy, security, multi-modal transport, and land planning guidelines represent significant developments and investment.
    - Regulation development by CASA and state/local governments needs to keep pace with technology and industry requirements.
    - Noise issues remain a major concern, especially where social licence is sought.
    - There are concerns about 'visual pollution' as aircraft occupy airspace around population centres.
    - To be successful, AAM requires a fundamental change to air traffic management in Australia.
- UAS
    - Participants identified that the lack of mandatory ADS-B zones are an impediment to industry growth at scale.
    - Processing times (e.g. for RPAS Operator's Certificate, Beyond Visual Line of Sight approvals) remain too high.
    - There is a lack of airspace usage information.
    - There is a lack of trust in operators.
    - There is a lack of understanding by operators of risk.
- Participants discussed some mechanisms to 'unlock' and overcome the roadblocks identified:
    - The government's Aviation Policy White Paper – to give clarity on the policy position for airspace usage and management.
    - Safety reviews.
    - Implementation of delegation models.
    - Increased surveillance to capture data and provide usage information.
    - Education at government and user levels.
    - Accreditations – company, code of conduct, pilot qualifications.

    - Data sharing.
    - Industry compliance model
    - Technical working groups.
- Enabling factors that will contribute to the achievement of success include:
    - An environment that maintains and enhances safety and security, while encouraging new users and industry entrants.
    - An environment that facilitates sustainable growth and innovation.
    - Effective government engagement and coordination.
    - Open and equitable access to airspace.
    - Coordinated regulatory framework across all levels of government.
    - Contemporary regulatory framework tailored to operational requirements (i.e. not one-size-fits-all).
    - Sustainable business model for operators and service providers.
    - Even playing field, including for government-provided services.
    - User-centred design for digital and automated services, including 'single front door'.

6. USAN Action Plan

- To conclude the day the group discussed and formulated an Action Plan and assigned potential action items for collaboration.
- Collectively, the USAN agreed on four potential key outcomes and agreed upon approaches moving forward:
    1. RPAS/AAM Industry Action Plan
    2. CASA/ASA/Department Joint Taskforce
    3. FIMS/UTM/Integrated Airspace Roadmap
    4. Education strategies and approaches; Glossary.
- USAN also agreed on the following action items:

Action	Assignee
Develop AAM/RPAS Industry Action Plan • Planning certainty for vertiports • Industry reference centre	Jackie Dujmovic Phil Swinsburg
Develop FIMS/UTM/Integrated Airspace Roadmap that steps out the key actions required to deliver the UTM ecosystem in Australia	Airservices / Courtney Meares-Whitty
CASA to provide update at next meeting about:	Will Whitelaw

• Clarity of where AFAF work is up to and the next steps • View of the RPAS/AAM regulatory roadmap	
Education • Develop approach for education Initiatives with industry and government • Glossary of key terms to be drafted, following release of UTM Action Plan	Sasha Nikolic Courtney Meares-Whitty Will Whitelaw
Explore opportunity to develop forum or mechanism for greater alignment of Department, CASA, ASA (who is doing what) potentially through a joint taskforce	Airservices / Sasha Nikolic

Appendix A: Attendance

Name	Company	Attendance	Table No.
Luke Gumley (Chair)	Airservices Australia	Yes	1
Reece Clothier (Co-Chair)	Boeing / Australian Association for Uncrewed Systems (AAUS)	Apology	-
Alasdair Cameron (Facilitator)	Oliver Wyman	Yes	N/A
Sharon Marshall-Keeffe	Airservices Australia	Yes	5
Bridget Kehoe	Airservices Australia	Yes	2
Min Hwang	Airservices Australia	Yes	3
Courtney Meares-Whitty	Airservices Australia	Yes	4
Joseph Houchin	Airservices Australia	Yes	N/A
Sasha Nikolic	Airservices Australia	Yes	2
Josh McGregor	Airservices Australia	Apology	-
Katie Wilkinson	Airservices Australia (Frequentis)	Yes	4
Adam Welsh	DJI	Yes	1
Benedict Lyons	Department of Infrastructure, Transport, Regional Development, Communications and the Arts	Apology	-
Brendan Williams	Boeing	Yes	2
Daniel Mackey	Wing Aviation	Yes	1
Daniel Smith	Qantas	Apology	-
Dario Valenza	Carbonix	Yes	2
David Rylance	Fire Rescue Victoria	Yes	4
David Cole	FlyFreely	Yes	5
David Lamb	AMSL Aero	Apology	-
Greg Tyrrell	Australian Association for Uncrewed Systems (AAUS)	Yes	5
Jackie Dujmovic	Hover UAV	Yes	3
Jonathan King	AVCRM	Yes	1

Name	Company	Attendance	Table No.
Julian Fraser	Australian Helicopter Industry Association	Apology	-
Marty Peters	Recreational Aviation Australia	Yes	2
Nathan Lewis	Department of Defence	Apology	-
Paul Hardy	Surf Life Saving Pty Ltd	Yes	3
Philip Swinsburg	Wisk	Yes	3
Rob Weaver	Eve Air Mobility	Yes	4
Scott Hamey	SkyLink UAS Pty Ltd	Apology	-
Scott Mitchell	Virgin Australia	Apology	-
Tim Boyle	Brisbane Airport Corporation	Yes	5
Will Whitelaw	Civil Aviation Safety Authority	Yes	4

Appendix B: Agenda

Session	Timing
1. Welcome & Introductions	09:00 – 09:15 (15min)
2. Icebreaker Activity	09:15 – 09:30 (15min)
3. Understanding Users of Aviation	09:30 – 10:45 (1hr 15min)
Break	*10:45 – 11:00 (15min)*
4. Definition of Success	11:00 – 11:30 (30min)
5. Roadblocks to Success	11:30 – 12:45 (1hr 15min)
Lunch	*12:45 – 13:30 (45min)*
Roadblocks to Success (continued)	13:30 – 14:30 (1 hour)
6. USAN Action Plan	14:30 – 15:15 (45min)
Break	*15:15 – 15:30 (15min)*
USAN Action Plan (continued)	15:30 – 16:30 (60min)
7. Wrap Up & Close	16:30 – 17:00 (30min)