

Senior Integration and Test Engineer

Position Detail			
Reports To	WSIA Integration and Test Manager	Group	Service Delivery
Classification	TPB3C	Location	Melbourne
Reports – Direct Total	0	Term	2 Years Fixed Term

Organisational Environment

Airservices is a government-owned organisation providing safe, secure, efficient, and environmentally responsible services to the aviation industry.

Each year we manage over four million aircraft movements carrying more than 156 million passengers and provide air navigation services across 11 per cent of the world's airspace.

Airservices has two major operating centres in Melbourne and Brisbane and a corporate office in Canberra. We operate 29 air traffic towers at international and regional airports and provide aviation rescue fire-fighting services at 27 Australian airports.

We are committed to continuing to improve our business by providing our customers with services they value and embedding new ways of working and technology investments to further innovate and optimise.

The Western Sydney International Airport (WSIA) Change Program is responsible for the planning, development, and implementation of Airservices' service delivery expansion at WSIA. The WSIA Change Program is delivering various aspects of Airservices' capabilities to enable WSIA to open in 2026: Digital Aerodrome Services (DAS) (including initial DAS capability at Canberra), Airfield Systems (AS), Aviation Rescue and Fire Fighting Services (ARFFS), and Airspace change.

The WSIA Change Program engineering response is a complex framework of roles and responsibilities spanning multiple engineering domains and specialities. These include several aviation and air traffic domains, such as tower, airport surface, aeronautical information, as well as fire control; many operational systems, such as Tower Control and Fire Control systems, voice communications systems, and monitor and control systems; and various specialty domains, such as Safety Management, Human Factors, Networks and Integration, and Verification and Validation (V&V).

Primary Purpose of Position

As the Senior Integration and Test Engineer, you will be responsible for defining interface requirements, integration and testing of the Airservices systems at WSIA and DAS at Canberra. This role includes integration planning and process definition; interface requirements determination, integration and test document review, revision, and eventual endorsement; and coordinating a variety of internal and

external stakeholders to ensure an effective test. The role ensures that the Aerodrome systems at WSIA are integrated with connected internal and external systems; and that Program-external stakeholders are advised and consulted every step of the way.

Accountabilities and Responsibilities

Position Specific

- Determine, develop and document interface requirements for the systems at WSIA and DAS
- Review artefacts required for integration with other Airservices systems, with external systems, and with each other
- Coordinate with program vendors to ensure the integration of all systems with connected Airservices systems and with external systems at Canberra and Western Sydney airports
- Track the status of planned changes and upgrades to connected Airservices systems and external systems; advise these changes to the technical and program management
- Jointly responsible for the production of the following:
 - Airservices Interface Requirements,
 - Airservices integration test plans, procedures and test reports
- Review formal vendor authored integration and test related documentation, such as ICDs, Test Plans, Test Reports, Traceability Matrix.
- Assist with coordination as directed by the System Integration and Test Manager – the Airservices human, equipment, and facilities resources for test campaigns, both vendor-based (contractual) and Airservices-internal (e.g. User Acceptance Testing)
- Witness and conduct integration testing for WSIA systems and DAS
- Be proactive in identifying and exploring risks, issues, and opportunities in integration and testing activities; and work within the Risk Management framework to ensure these integration-related risks are identified, tracked, and mitigated or controlled appropriately
- Ensure that all work conducted within the integration and test space complies with WSIA Program technical, operational, and program governance, processes, and standards
- Manage the efforts of DAS and other tower systems integration experts and test experts
- Immediately report integration-related issues that are unresolvable at your level to the WSIA Technical Authority, the WSIA Operations Authority, or the Aerodrome Program Manager

People

- Maintain an effective working relationship with other Airservices staff to ensure there is effective coordination of all activities in support of organisational objectives
- Maintain productive relationships with WSIA Program leadership, relevant Airservices lifecycle sustainment managers and engineers, and business and regulatory points of contact - to ensure effective coordination of all activities in support of the commissioning objective;
- Provide integration and test related guidance to Aerodrome program management and WSIA engineering leadership
- Form ad hoc and long-term teams of experts, with received delegation and in collaboration with other WSIA Program leads, to identify, track, manage, and execute the commissioning objective.

Compliance, Systems and Reporting

- Support implementation of enterprise governance systems and policies, including safety, environmental, WHS, risk and compliance.

Safety

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- Demonstrate safety leadership and behaviours consistent with enterprise strategies and manage
- the transition outcomes in accordance with WHS accountability requirements.
- Demonstrate safety behaviours consistent with enterprise strategies

Key Performance Indicators

Efficient, Effective and Accountable

- Develops and promulgates interface requirements, expectations, and outcomes
- Builds and maintains effective working relationships
- Takes responsibility for actions, outcomes, and people
- Achievement of WSIA Program integration and testing objectives.

Safety

- Identification of safety related risks
- Compliance with regulatory standards, safety, risk, environmental, and all relevant standards.

Key Relationships

- Aerodrome Platform Engineering Management
- WSIA Engineering and Operations leadership
- Counterparts in the ARFFS program of works and WSIA Airfield systems
- Counterparts in business units responsible for connected Airservices and external systems, such as lifecycle sustainment, ENMP (networks), and the OneSKY Program
- WSI and CBR airports

Skills, Competencies and Qualifications

- **Essential:** Tertiary qualification (i.e. Bachelor's degree) in engineering, computer science or Information Technology.
- **Preferable:** Certified Professional with Australia Computer Society or CPEng in ITEE/Systems Engineering or equivalent.
- **Essential:** Experience with multiple systems in their technical acquisition lifecycle, including integration and testing.
- **Preferable:** At least five years' experience in designing, specifying, acquiring, testing, or managing system interfaces, integration, or networks.
- **Essential:** At least three years' experience in formal product testing: some integration testing is desired.
- **Preferable:** Demonstrated knowledge and experience in integrating and commission air traffic management system in Australia and/or Overseas.
- **Essential:** Demonstrated ability to work at an acquisition program tempo, to employ a risk-based approach to deliverables and milestones if needed, and to deliver outcomes on time
- **Essential:** Demonstrated ability to develop and present innovative solutions and influence outcomes.

Performance Standards and Behaviours

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As a member of Airservices, you will consistently demonstrate performance standards and behaviours that meet our Code of Conduct. This includes:

- Treating everyone with dignity, respect, and courtesy
- Acting with honesty and integrity
- Acting ethically and with care and diligence
- Complying with all Airservices' policies and procedures, and applicable Australian laws
- Disclosing and taking reasonable steps to avoid any actual, potential, or perceived conflict of interest
- Behaving in a way that upholds our vision, mission, and values, and promotes the good reputation of Airservices.