



OneSKY Australia

Transforming air traffic management to meet the needs of the future.

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OneSKY Operations Lead



About Airservices

Australia's Air Navigation Service Provider (ANSP)

We provide safe, secure, efficient, and environmentally-responsible air navigation and aviation rescue fire fighting services to the aviation industry.



11% of global airspace

More than 3.9m air traffic movements (2024-25)

More than 156m airline passengers per year



Air Traffic Management

Safely and sustainably delivering customer and community needs in our airspace



Aviation Rescue Fire Fighting Service

The valued first responder at Australian aerodromes

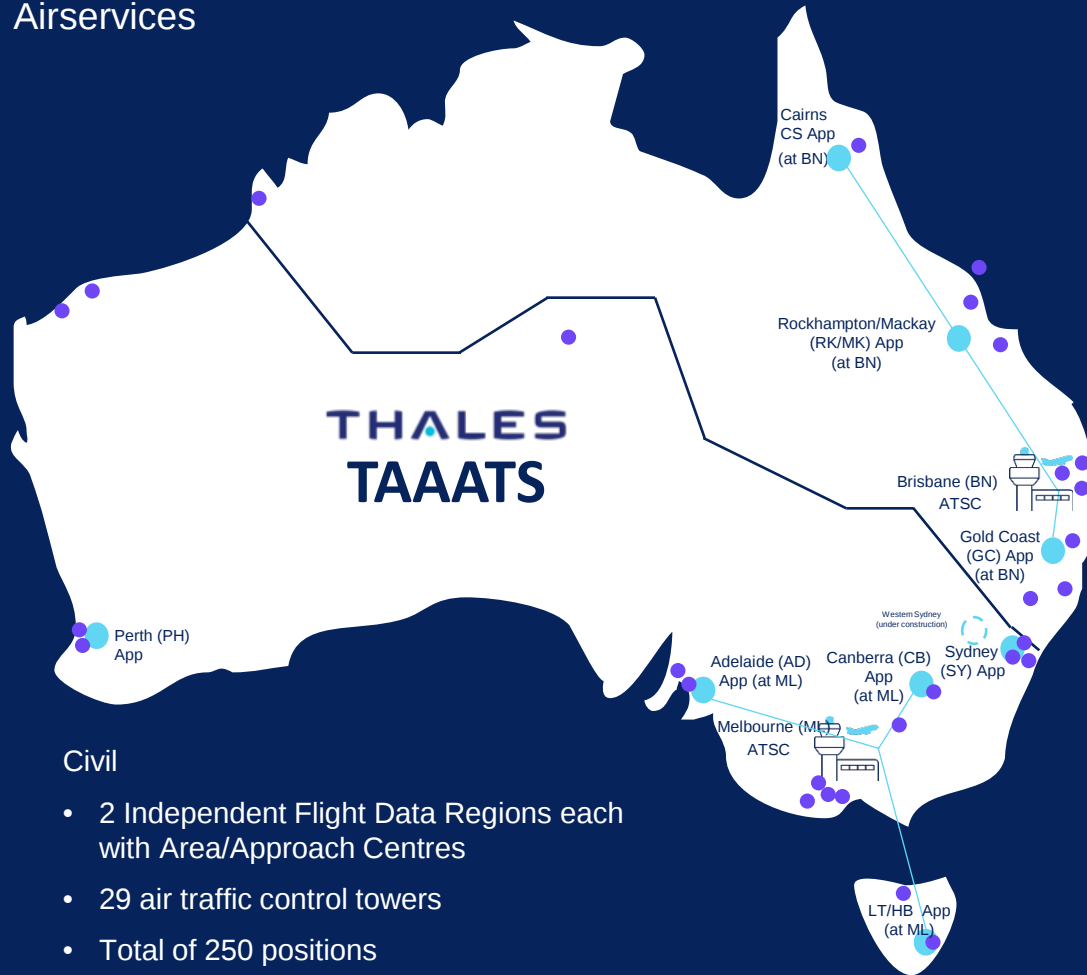


Support Services

Digitally enabled business powering internal outcomes and customer performance

Current - Australian air traffic management service providers

Airservices



Civil

- 2 Independent Flight Data Regions each with Area/Approach Centres
- 29 air traffic control towers
- Total of 250 positions
- Commissioned in 1999

RAAF (44 WG)



Defence

- 12 independent locations
- Total of 95 positions
- Commissioned in 2002

The Opportunity

Airservices: The Australian Advanced Air Traffic System (TAAATS)

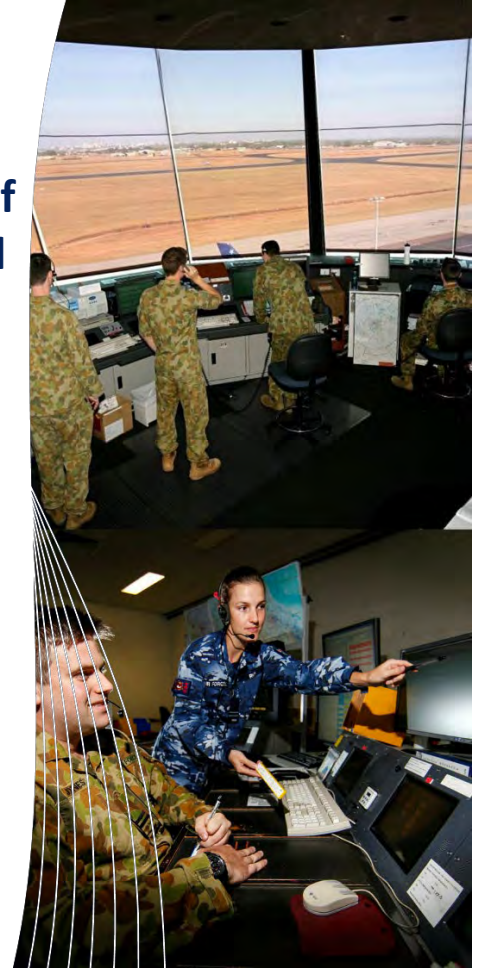
Defence: Australian Defence Air Traffic System (ADATS)

OFFICIAL

Develop and implement a national, harmonised civil-military ATM system, enabling economies of scale for the upgrades and refurbishment of civil and military ATM infrastructure

The joint operating concept will cover:

- system interoperability requirements;
- systems sustainment and follow up development;
- future service delivery methods and infrastructure;
- cooperative workforce planning;
- a sound governance framework;
- military principles, international civil treaties and global standards; and
- common operational and technical requirements (and any unique Defence requirements).



Greater Civil / Military cooperation

2009 National Aviation Policy White Paper
[Flight Path to the Future](#)

2009 Defence White Paper
[Defending Australia in the Asia Pacific Century – Force 2030](#)

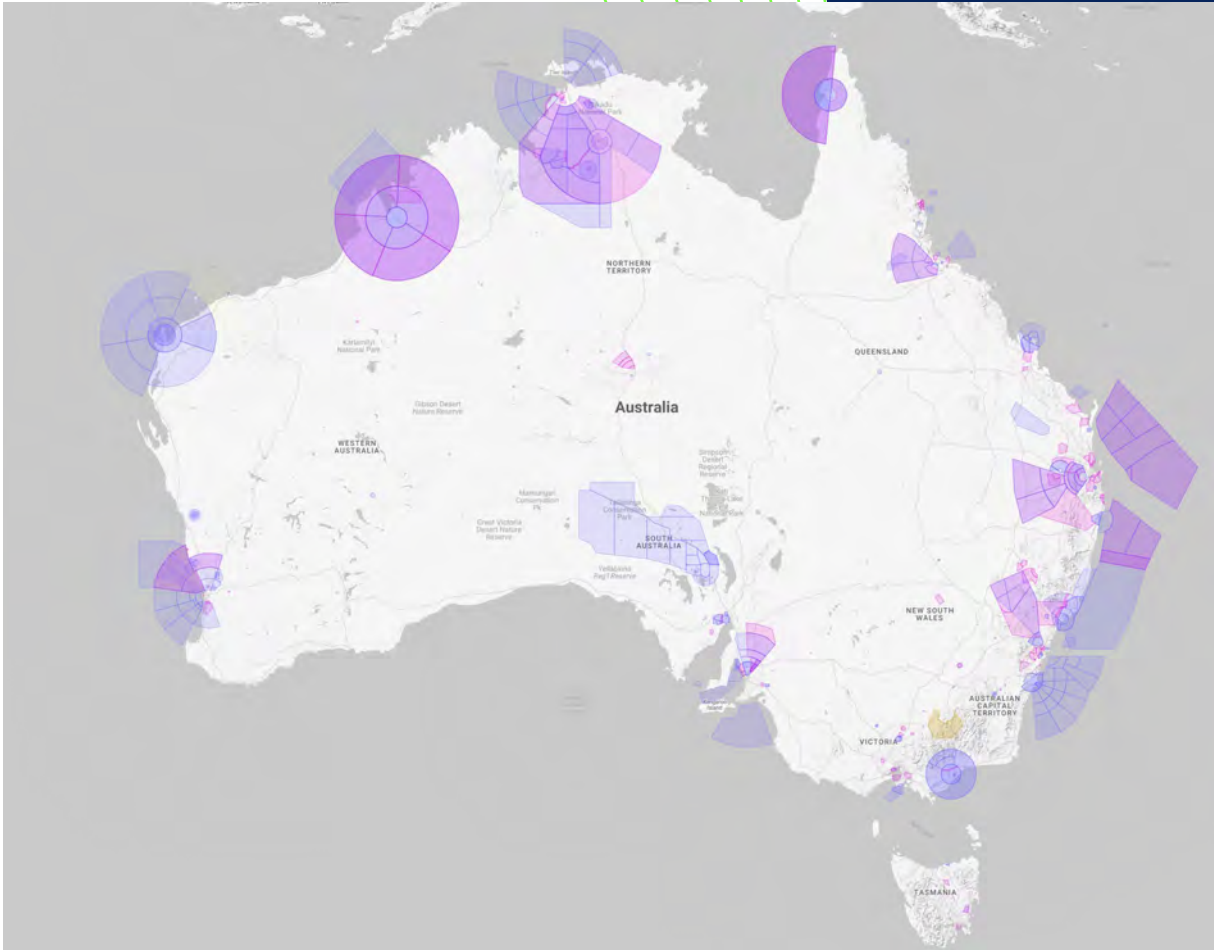


OFFICIAL

Air Traffic Control differences

Civil and Defence

Area of interest	Airservices Australia	Defence
Focus	Customer and efficiency benefits	Capability
Workload	Predictable	Unpredictable
Aircraft trajectory	Predictable	Unpredictable
Controller airspace	Often large	Generally small
Integration	Airport and airline ops	Stand alone (+ shared civil airports)
User preferred routes	Big impact to enroute	Serviced through restricted airspace
Security Posture	Unclassified	Classified



OneSKY Australia

A partnership between Airservices Australia and Defence to harmonise civil and military air traffic management into single seamless service provision, utilising a single integrated Civil Military Air Traffic Management System (CMATS).

This will deliver \$2.713 billion AUD in economic benefits to airspace users, ensuring Australia is in a position to:

- meet future air traffic requirements
- maintain and improve defence capability
- continue to meet national security measures
- allow all airspace users to leverage environmental, capacity, efficiency and capability benefits.

Benefits



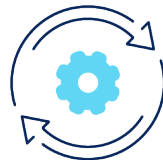
Route Optimisation



Trajectory Based
Operations



Flexible Use of
Airspace



Business Continuity



Enhanced Productivity



Partnership Approach

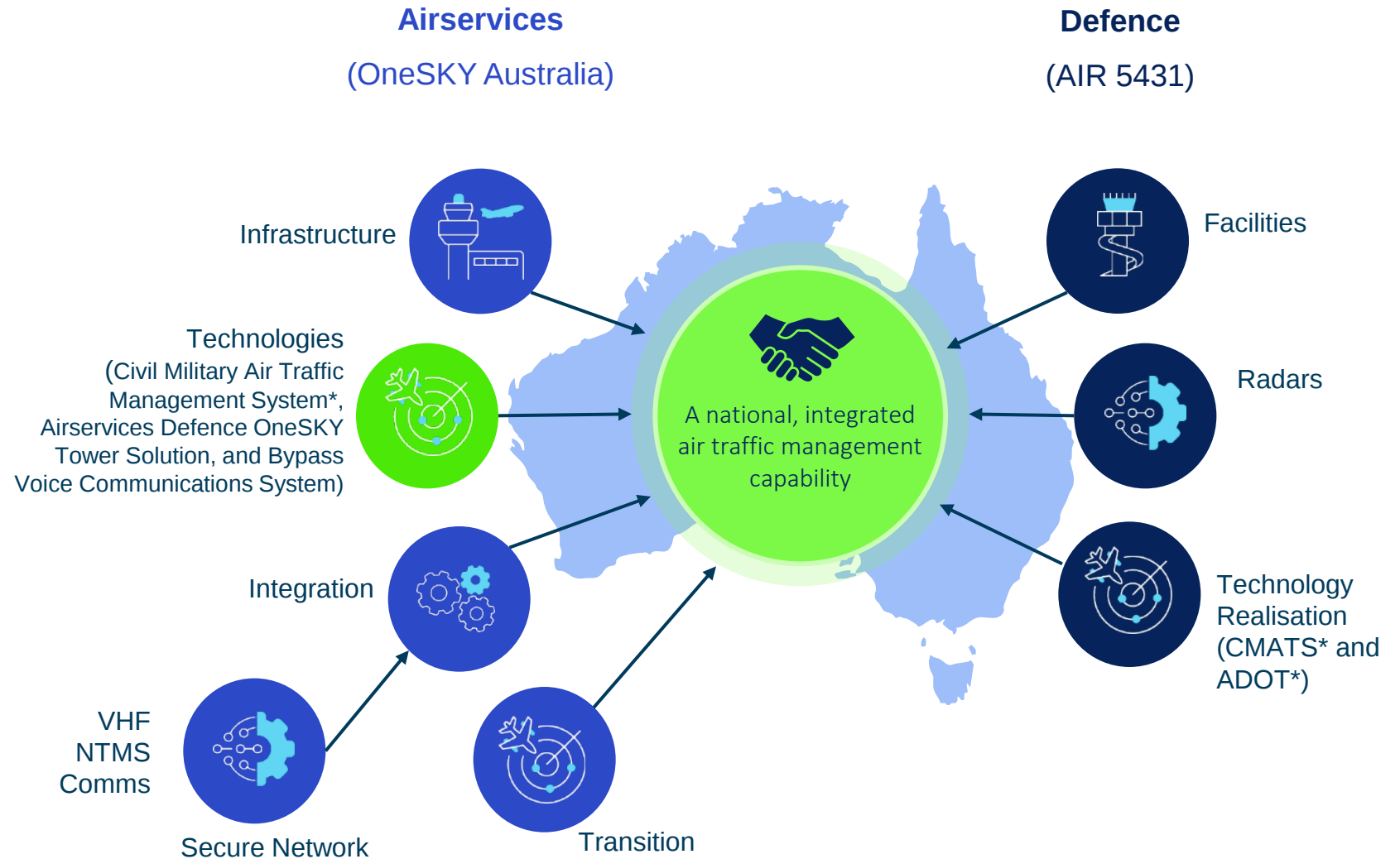
Airservices is the **Lead Agency**

- Active decision making on CMATS
- Contract Authority with Thales

Defence is the **Supported Agency**

- Active participation in decision making

Civil Military Air Traffic Management System is the enablers for the transformation



*CMATS and ADOT on-supply to Defence

OneSKY CMATS and ADOT locations

Civil Military Air Traffic Management System and Airservices Defence OneSKY Tower

A national integrated capability – multiple locations enabling common civil-military situational awareness through seamless sharing of airspace data and secure information.

-  Airservices Enroute and Approach Services
-  Airservices Approach Services
-  Defence Approach Services
-  Defence Aerodrome Services
-  Ab Initio Simulation Training System
-  Operational Simulation Training System
-  Joint Software Support Facility
-  Airservices Defence OneSKY Tower (ADOT)



OneSKY Australia - \$2.713 billion in economic benefits over 20 years

Route Optimisation



Airspace users can fly preferred routes to suit their needs and use dynamic reroute procedures.

Economic benefit:
\$2,001M

Trajectory Based Operations



Airspace users will be further supported by continuous descent operations during the arrival phase, enabling opportunity to decrease noise, save fuel and reduce carbon emissions.

Economic benefit:
\$217M

Shared Use of Airspace



Providing greater access for all users to available airspace. This enables optimal use of airspace, allowing for better fuel planning, preferred routes and optimal flight levels.

Economic benefit:
\$16M

Business Continuity



Uninterrupted service provision for all portions of the Australian airspace, improving resilience for unplanned events and optimising use of resources.

Economic benefit:
\$291M

Productivity



Optimisation of our resource utilisation to ensure a sustainable workload. Achieved through improved decision support tools and dynamically redesigned airspace.

Economic benefit:
\$188M



Our industry is committed to net zero emissions with Airservices committed to meeting that target by 2050

Current Program milestones and what's next....

Q3 & 4 2026 – Final System Verification campaign (R1)

2027 – Site V&V and OT&E

Q4 2027 – commence airspace transition.....

Design, development, V&V of Release 2 **(R2)**:

- Additional and enhanced capability
- Scheduled for introduction into service 2030



Technical Capability Enhancements



Conflict Detection – Long Term Conflict Detection (LTCD) and Medium-Term Conflict Detection (MTCD)

CMATS introduces:

- LTCD – automated conflict detection support for low and no-surveillance airspace
 - Process conflicts in the CMATS Area Of Interest (AOI)
 - Process conflicts using Off Track Deviation (OTD)
 - Process conflicts for Formation flights accounting for formation extent
 - Allows controllers to online dynamic definition of a portion of airspace to increase vertical separation standard
- MTCD – conflict detection support tool for high density airspace (R2)
- Aircraft to Airspace (SUA) conflict detection (R2)

Benefits



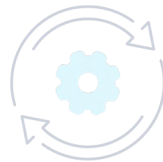
Route Optimisation



Trajectory Based Operations



Flexible Use of Airspace



Business Continuity



Enhanced Productivity



CMATS introduces an Area of Interest (AOI):

- Creation of Flight Data Record for flights entering AOI, generated from:
 - FPL ATS Message,
 - AIDC CPL message,
 - ICAO CPL message, or
 - AIDC ABI message
- Allows for conflict detection between jurisdiction aircraft and boundary traffic operating in the AOI
- Greater controller situational awareness.

Benefits



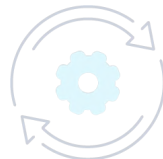
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Business Continuity



Enhanced Productivity



Single Flight Data Region (FDRG)

CMATS:

- Single FDRG - all available information related to the evolution of all flights known to CMATS
 - Removes messaging across the current YMMM/YBBB FIR boundary
 - Improves arrivals management across the boundary
- Single system and Flight Data Processing linking Defence and Airservices:
 - Reduces coordination burden between Military Approach/TWR and surrounding Civil Sectors
 - Improved efficiency and airspace utilisation
 - Introduction of Arrivals Management (AMAN) into Darwin, Townsville and Williamtown

Benefits



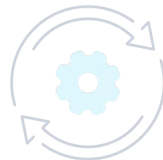
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Trajectory Based Operations



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Business Continuity



Enhanced Productivity



Improved Safety Net Alerting

In addition to existing safety net alerting, CMATS introduces:

- Violation of Controlled Airspace (VCA) Alert
- Improved DAP Selected Altitude Monitoring (DSAM)
- Formation Flight management
 - Conflict Detection management based on formation extent
- Wake Turbulence Advisory Function (WTAF) (R2)

Benefits



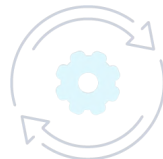
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Enhanced Productivity



Enhanced system integration:

- CPDLC – messaging will be linked to the Flight Data Record and presented to controller via the aircraft label
- Improved support of DARP:
 - Datalink (CPDLC) route change request can be trailed for conflict detection
 - If coordination has been completed the system will automatically upload the amended route into the Coordination window for the controller:
 - CDN automatically generated with amended route request, in preparation for controller coordination action.
- Greater integration of Arrivals Management (AMAN)
 - Information from Arrivals Management (AMAN) shared with controllers via indications and changes in the aircraft label.
 - Introduction of 'What If' tool – allows Flow to trail a change to arrival sequence or airport configuration prior to executing the change.

Benefits



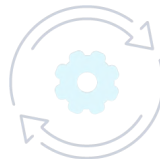
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Enhanced Productivity



Special Use Airspace (SUA) – Automated NOTAM Processing

Current process:

- NOTAMs are manually entered into TAAATS by ATC Supervisors
- Duplicate entry of the same SUA required across system partitions
- Independently management across Defence and Airservices

CMATS process:

- SUA NOTAMs automatically processed by the system
- No duplication of entry across partitions or agencies (Defence/Airservices)
 - Reduces likelihood of human error
 - Support Flexible Use of Airspace
- ATC Supervisory task reduction

Benefits



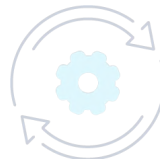
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Enhanced Productivity



System Flexibility

Current System:

- Controlling roles can **only** be moved within a partition
- Separate partitions are required for Approach and En Route

CMATS system:

- Flexibility to move any controlling role to any location within the system

Benefits



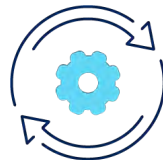
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Business Continuity



Enhanced Productivity



Airspace Transition



Opportunities:

Standardisation:

Where possible, the transition will be used to standardise procedures and ways of working.

Introduction of CMATS presents an opportunity to:

- Standardise procedures between Defence and Airservices Australia;
- Standardise operating procedures between Melbourne and Brisbane FIR;
- Leverage the joint system to remove duplication of tasks.

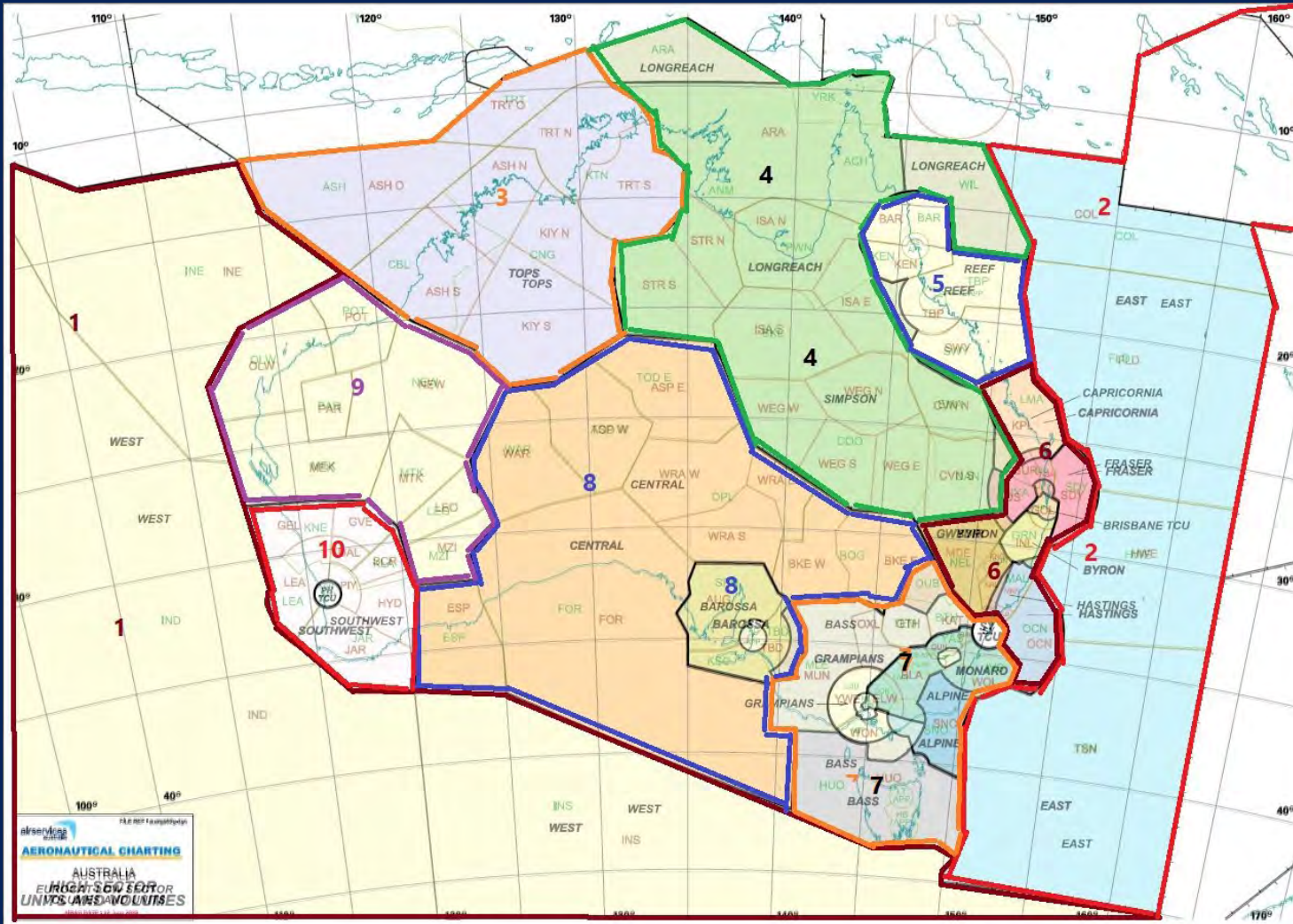
Benefit realisation:

To maximise the benefit delivered by OneSKY, procedures and ways of working will be progressively reviewed and updated.

This work will occur incrementally:

- During CMATS procedure development (currently underway);
- during the transition into operational service; and
- post transition as part of ongoing procedure and training reviews.

Service Transformation Concept



Indian	1	Melbourne
East	2	Brisbane
Tops	3	Brisbane
Longreach	4	Brisbane
Simpson	4	Brisbane
North Qld. TCU	5	Brisbane
Reef	5	Brisbane
Capricornia	6	Brisbane
Fraser	6	Brisbane
Brisbane TCU	6	Brisbane
BNA/CG TCU	6	Brisbane
Byron High	6	Brisbane
Byron Low	6	Brisbane
Gwydir	6	Brisbane
Hastings	6	Brisbane
Alpine	7	Melbourne
Bass	7	Melbourne
Grampians	7	Melbourne
Melbourne TCU	7	Melbourne
CB TAS TCU	7	Melbourne
Monaro	7	Melbourne
Sydney TCU APP	7	Sydney
Sydney TCU DEP	7	Sydney
Central	8	Melbourne
Adelaide TCU	8	Melbourne
Barossa	8	Melbourne
West	9	Melbourne
Southwest	10	Melbourne
Perth TCU	10	Perth

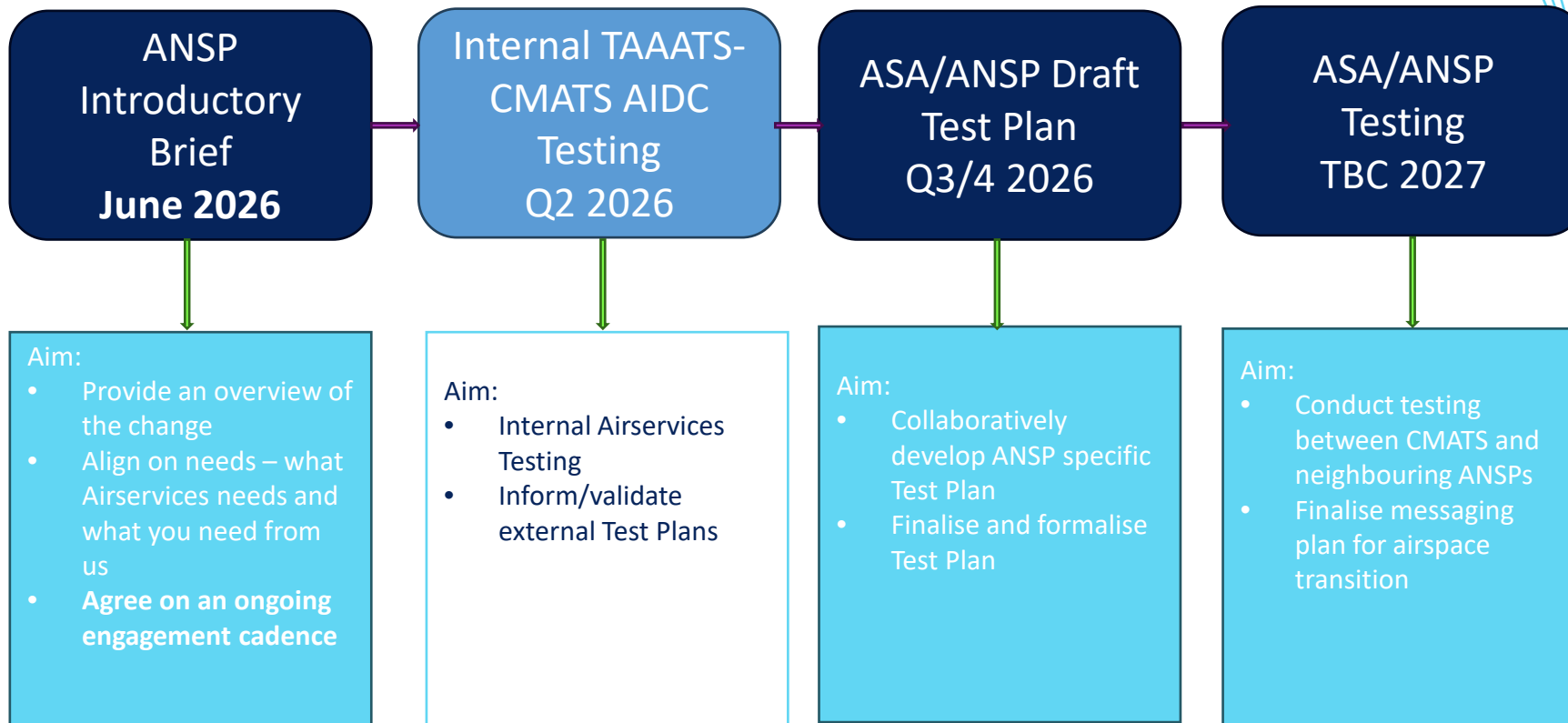
Considerations:

Minimising impact on our neighbouring ANSP

OneSKY is commencing engagement with neighbouring ANSPs to develop AIDC testing needs:

- First draft test plan Australia/External ANSP is currently in development.

Proposed schedule of engagement:



What we would like to take away from ISPACG...

A Point of Contact with each ANSP who can assist with:

1. Coordination of the June 2026 introductory brief, and
2. Ongoing engagement.



Thank you