# Problem Statement

At Perth in Western Australia aviation leading out of the 2020 pandemic continued to grow year on year.

Through 2023 GDP compliance for Perth dropped to as low as 54% with demand often reaching 38-40 arrivals per hour when the capacity for Perth airport is restricted to 24 AAR.

Following an event where approx. 120 arrivals presented in a 3hour period resulting in airborne delays of well over 60min in airspace not designed for those delays and significant diversions to alternate aerodromes with multiple days for fleet recovery, Airservices were asked to investigate the root causes and suggest a plan for improvement.
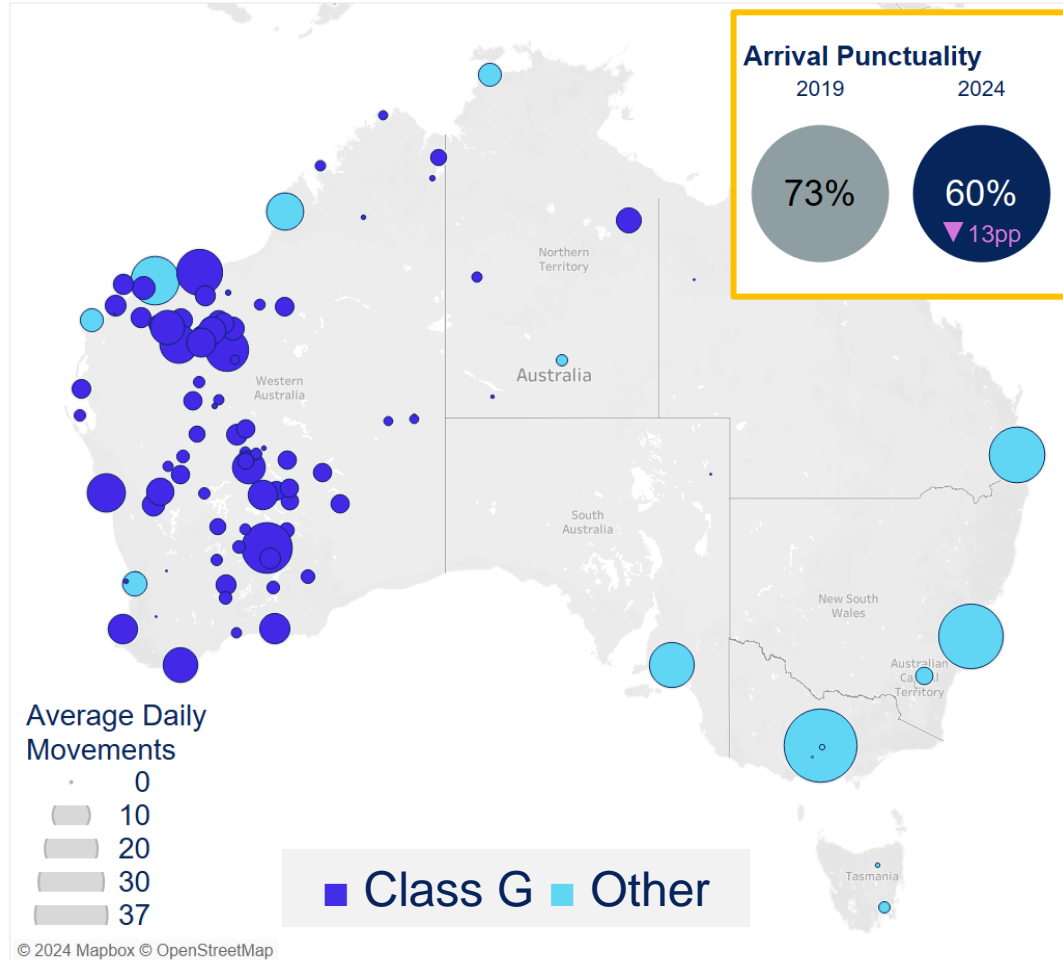
**What we found:**

- With the increasing growth, strategic slots at Perth (managed by the Slot Coordinator on behalf of Perth Airport) were becoming difficult to book at the times the flights wanted to operate so they aligned with mining contracts for staff and equipment movement. Alignment was essential for the mining companies due to the high demand on facilities at shift change and the cost of mis-alignment.

- As a result, operators would gain a strategic slot for a time that was available but scheduled pre-tactically at a time that was mis-aligned, usually by hours, to that slot. This would then result in the need to activate a GDP by demand due to the demand profile at peak times of the day.

- Compliance with GDP's from uncontrolled ports was difficult to manage with non-compliance driven by both contractual demand and capacity restrictions at the uncontrolled ports.

- Active management of the strategic slot scheme was not appearing to occur with no penalties issued for consistent non-compliance and operators continuing to operate non-compliant with some even operating at the IATA level 3 port without a strategic slot despite being based there.
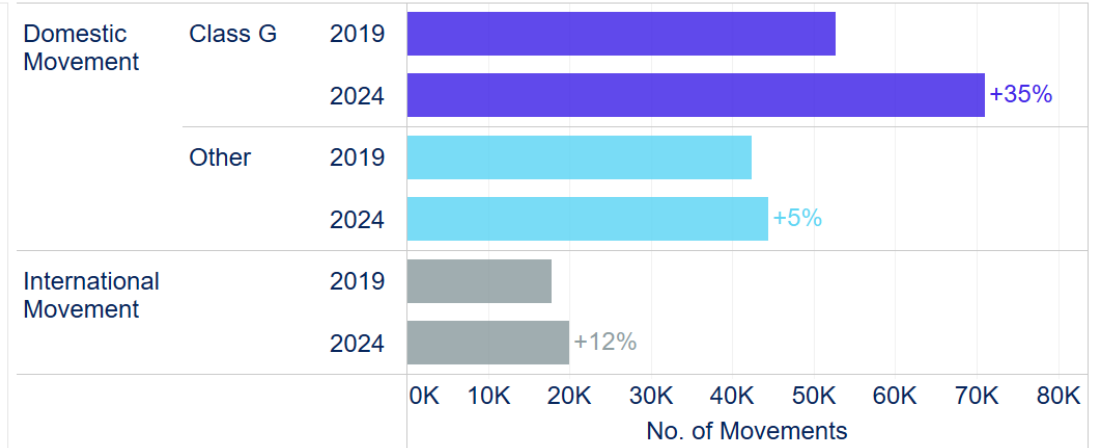
# Perth traffic growth and demand

airservices
australia

Domestic flights in Perth's network are predominantly driven by flights to and from Class G aerodromes, which have grown by 35% since 2019. Compared to 2019, there has been a 13 percentage point drop in punctuality due to strategic overdemand in peak periods by operators not adhering to strategic airport slots, along with GDP non-compliance.

## Perth Domestic Network by Aerodrome Type - October 2024



**Arrival Punctuality**

| 2019 | 2024 |
|------|------|
| 73% | 60% ▼ 13pp |

**Average Daily Movements**

- 0
- 10
- 20
- 30
- 37

■ Class G  ■ Other

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## Perth Year Movements by Aerodrome Type - January to October



| Domestic Movement | Class G | 2019 | |
| | | 2024 | +35% |
| | Other | 2019 | |
| | | 2024 | +5% |
| International Movement | | 2019 | |
| | | 2024 | +12% |

No. of Movements

## Perth Available Capacity Utilisation



Overdemand

2019  2023  2024
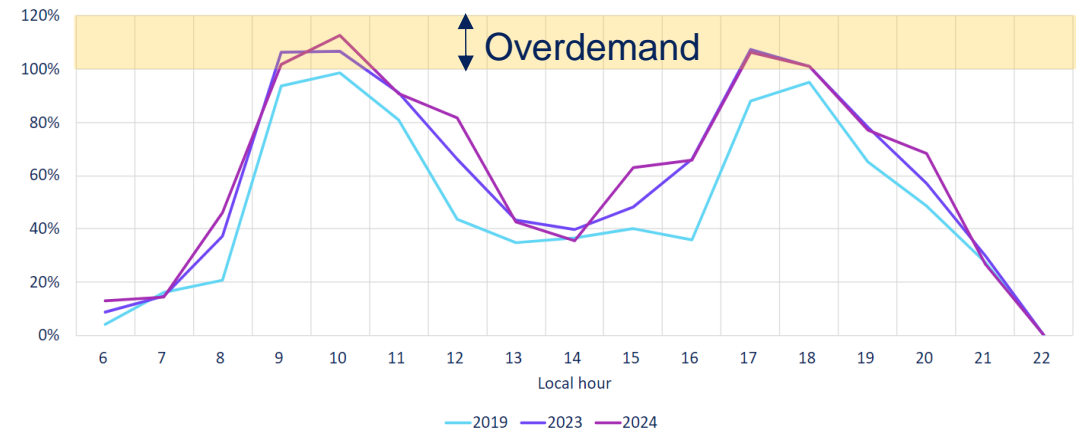
Source: Airservices ODAS. Capacity utilisation data for Tuesday-Thursday only, where data for 2024 covers January only.

# GDP non-compliance at Perth Airport

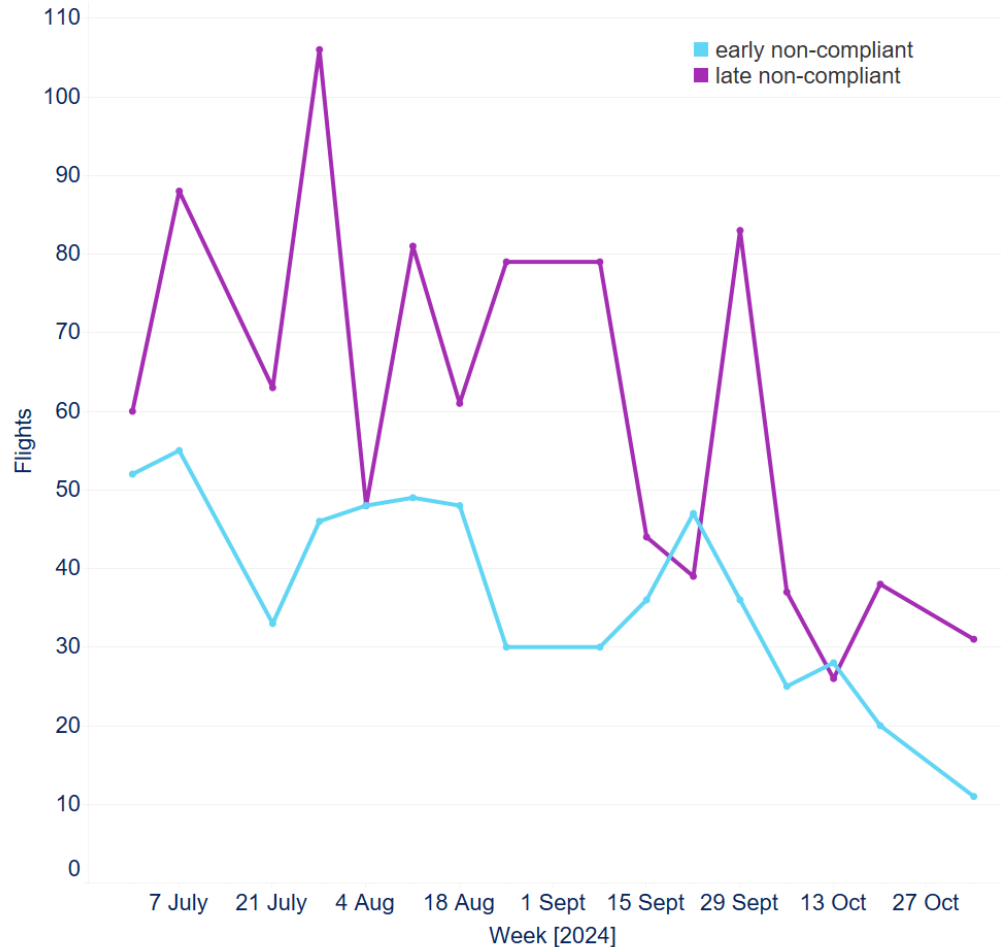Since industry engagement began in July, GDP non-compliance at Perth Airport has been steadily improving, with operators across the board reducing non-compliance by 60%.

## GDP Non-compliant Flights



Legend: ■ early non-compliant ■ late non-compliant

X-axis: Week [2024] — 7 July, 21 July, 4 Aug, 18 Aug, 1 Sept, 15 Sept, 29 Sept, 13 Oct, 27 Oct
Y-axis: Flights (0–110)

## GDP Non-compliant Flights by Operator

| Operator | 30 June 24 | 07 July 24 | 21 July 24 | 28 July 24 | 04 Aug 24 | 11 Aug 24 | 18 Aug 24 | 25 Aug 24 | 08 Sept 24 | 15 Sept 24 | 22 Sept 24 | 29 Sept 24 | 06 Oct 24 | 13 Oct 24 | 20 Oct 24 | 03 Nov 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Network Aviation | 24 | 42 | 21 | 30 | 22 | 31 | 26 | 26 | 26 | 16 | 20 | 30 | 18 | 13 | 13 | 16 |
| Virgin | 21 | 23 | 10 | 37 | 16 | 32 | 27 | 28 | 27 | 23 | 22 | 20 | 13 | 13 | 13 | 10 |
| National Jet Express | 11 | 13 | 9 | 17 | 9 | 9 | 10 | 8 | 4 | 7 | 4 | 14 | 3 | 7 | 8 | 4 |
| Skippers | 13 | 13 | 8 | 16 | 8 | 13 | 4 | 9 | 10 | 6 | 6 | 4 | 5 | 3 | 5 | 1 |
| Alliance | 8 | 9 | 11 | 9 | 9 | 9 | 8 | 6 | 9 | 5 | 4 | 10 | 5 | 6 | 4 | 3 |
| Maroomba Airlines | 7 | 11 | 6 | 5 | 8 | 8 | 9 | 8 | 7 | 2 | 8 | 5 | 2 | 1 | 1 | |
| Rex Airlines | 4 | 8 | 10 | 6 | 5 | 3 | 6 | 5 | 3 | 3 | 2 | 6 | 4 | 2 | 4 | |
| Penjet | 5 | 7 | 7 | 5 | 5 | 8 | 6 | 4 | 5 | 4 | 3 | 2 | 1 | 1 | 3 | 1 |
| Qantas | 3 | 2 | 2 | 3 | 3 | 4 | 1 | 4 | | 3 | 7 | 7 | 4 | 1 | 2 | 2 |
| HeavyLift Cargo Airlines | 3 | 7 | 4 | 10 | 1 | 4 | 5 | | | | | | | | | |
| Aerlink | | | | | | | | 1 | 6 | 3 | 3 | 7 | 3 | | 2 | 3 |
| Western Sky Australia | 3 | 2 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | | 2 | 1 | 2 | 1 | 1 |
| Airnorth | 1 | 1 | | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | | |
| Aus West Airlines (2010) | 1 | | 2 | 2 | | | | | 4 | 2 | 1 | 2 | | 2 | | |
| Jetstar | | 1 | 1 | 2 | 2 | | 2 | 1 | 2 | 1 | | 2 | | 1 | | |
| Nexus Airlines | | | | | | 3 | 2 | 3 | | | 1 | | 1 | | | |
| Aviair | 4 | 1 | | 2 | 1 | | | | | | | | | | | |
| Star Aviation | 1 | | | | 1 | 1 | | | 1 | | 1 | 1 | 1 | | | |
| Maxem Aviation | | | 1 | 1 | 1 | 1 | | | 1 | | | | 1 | | | |
| Avcair | 2 | 1 | 1 | | 1 | | | 1 | | | | | | | | |
| Revesco Aviation | | | 1 | | | 1 | | | 1 | | 1 | 1 | | | | |
| Priority Shark Bay | 1 | 2 | | 2 | | | | | | | | | | | | |
| Skytraders | | | | | | | | | | | 1 | | | 1 | 1 | 1 |
| VietJet Air | | | | 1 | | | | 1 | | 1 | | | | | | |
| Corsaire | | | | | | | | | 2 | | 1 | | | | | |
| Sunshine Air Services | | | | | | | | | | | | 1 | | | | |
| Jet Travel Australia | | | | | | | | | | | | 1 | | | | |
| Airflite Aviation | | | | 1 | | | | | | | | | | | | |
| Total | 112 | 143 | 96 | 152 | 96 | 130 | 109 | 109 | 109 | 80 | 86 | 119 | 62 | 54 | 58 | 42 |

Flights: 1 — 42

Source: Airservices GDP non-compliance logs.

# Initial approach to driving compliance

- Using airport landing or associated charges data, Airservices has identified considerable **discrepancy of actual flights operated when compared to the ACA slots allocated across all operators at Perth. This data has been shared with ACA, Perth Airport and operators.**

- In September Airservices advised they would be actioning two changes to AIP for ATFM at Perth:
  - Removal of access to Harmony for operators who were grossly non-compliant with the ACA slot; and
  - Up to 60min delay or the next available slot for aircraft departing late non-compliant with their COBT.

- GDP non-compliance and performance improved in Perth in October with GDPs not being required at times where there had previously been significant oversubscription and non-compliance . Following the suspension of those measures previous behaviour has returned with significant oversubscription and non-compliance.
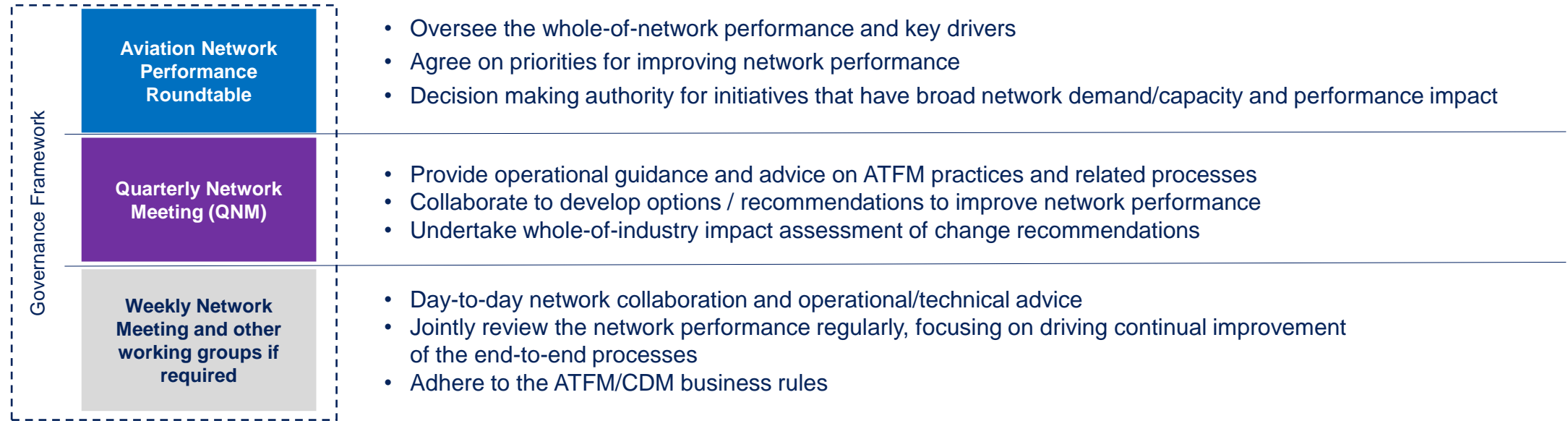


| | | Tuesday | | | Wednesday | | | Thursday | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Yes | No | No match found | Yes | No | No match found | Yes | No | No match found |
| QFA | Qantas Group | 4,559 | 99 | 103 | 4,365 | 103 | 140 | 4,496 | 104 | 168 |
| VOZ | Virgin Australia | 2,904 | 58 | 33 | 2,912 | 36 | 45 | 2,798 | 32 | 40 |
| UTY | Alliance | 946 | 14 | 10 | 866 | 61 | 11 | 847 | 21 | 11 |
| JTE | National Jet Express | 744 | 41 | 33 | 603 | 155 | 102 | 871 | 68 | 55 |
| RXA | REX | 390 | 13 | 6 | 395 | 5 | 4 | 393 | 11 | 4 |
| PY | Skippers | 155 | 153 | 171 | 213 | 84 | 152 | 166 | 144 | 255 |
| PJ | Penjet | 79 | 119 | 68 | 42 | 179 | 16 | 50 | 235 | 43 |
| MB | Maroomba | 255 | 70 | 32 | 252 | 43 | 43 | 293 | 39 | 13 |
| HT | Aerlink | 110 | 3 | 8 | 157 | 11 | 22 | 234 | 17 | 13 |
| ST* | Star Aviation | | | 150 | | | 96 | | | 132 |
| ANO | Air North | 77 | 30 | 2 | 81 | 18 | 5 | 34 | 7 | 23 |
| CT | Nexus | 130 | 46 | 2 | 93 | | 7 | 47 | 47 | 8 |
| TFX | Team Global Express | 29 | 12 | 2 | 33 | 11 | | 32 | 12 | |
| BRS | Aus West Airlines | | | 31 | | | 59 | | | 51 |
| RV | Revesco Aviation | 26 | 7 | 4 | 33 | 6 | 9 | 29 | 2 | 4 |
| WSK | Aerohire | | 6 | 60 | | 37 | 76 | 60 | 38 | 41 |
| SND | Skytraders | 1 | 4 | 5 | 13 | 1 | 4 | 5 | 1 | 1 |

- Data includes cancelled flights
- ACA Digital Itinerant Register flights not included
- ST (Star Aviation) has no matches as their ATFM submission uses aircraft registration (VH-xxx) but flight numbers for IATA slots (STxxx)

*Data based on ACA and ATFM data between Jan – Oct 2024*

# Network performance governance structure and guiding principles

**Governance Framework**

| | |
|---|---|
| **Aviation Network Performance Roundtable** | • Oversee the whole-of-network performance and key drivers<br>• Agree on priorities for improving network performance<br>• Decision making authority for initiatives that have broad network demand/capacity and performance impact |
| **Quarterly Network Meeting (QNM)** | • Provide operational guidance and advice on ATFM practices and related processes<br>• Collaborate to develop options / recommendations to improve network performance<br>• Undertake whole-of-industry impact assessment of change recommendations |
| **Weekly Network Meeting and other working groups if required** | • Day-to-day network collaboration and operational/technical advice<br>• Jointly review the network performance regularly, focusing on driving continual improvement of the end-to-end processes<br>• Adhere to the ATFM/CDM business rules |

**Guiding Principles**

• Commitment to improving outcomes for the travelling public and protecting the industry's social licence

• Building a shared understanding of the role of ATFM/CDM and contribution from industry participants to optimise the network of networks

• Considering the entire aviation industry perspective when making network decisions and recommendations

• Demonstrating cross-industry collaboration to contribute complementary data to build trust in our industry, and grow our collective capabilities

# Recommendation 1 – Presented by Qantas Group and Virgin Australia

## Background

- Industry has been advocating to improve and reduce airborne delays into Perth for the past 12-18 months.
- Analysis has found that many flights operating in to Perth do not have an ACA slots or are not compliant with their ACA slot.
- Noting the limitations of Airservices in restricting flights/enforcing penalties, a number actions need to be taken to improve On Time Performance at Perth.
- The below actions have been endorsed at the Quarterly Network Meeting on 15 November 2024.

## Strategic/Long Term Actions

1. Industry-wide increased focus/communications targeted at addressing non-compliance.
2. Review usability/effectiveness of using the ACA Before File into Harmony, with a business rule to move a slot in Harmony.
3. Additional penalties for flights with a non-compliant ACA slot. Those flights identified with a non-compliant ACA slot to receive 60 minutes airborne delay regardless of being early or late non-compliant.
4. Perth Airport to establish Slot Compliance Committee in accordance with the IATA World Airport Slot Guidelines.
5. Staged approach for late non-compliant flights (e.g. 15 mins, 30 mins and so on).
6. Finalise and publish an endorsed compliance exceptions list.

## Tactical Actions

1. Airlines to continue to upload their schedule to Harmony the day prior.
2. Airservices to perform a schedule comparison between airline files and ACA Before File and produce an Exceptions Report.
   - Airlines accept that there may be a delay to running of the GDP's to allow this to occur.
3. Air Services to remove flights identified without an ACA slot in the exceptions report
4. Airservices to adjust Earliest Off Block Times (ELOBT's) in Harmony to match ACA times.
5. Airservices to run GDP every weekday based on ACA slot demand, for a trial period of 1 month to be reviewed monthly
6. Airservices to publish ACA non-compliant flights.
7. Those flights that are non-compliant with their ACA slot, to update their ACA slot through the NOMC.
8. Airservices to enforce additional non-compliance penalty of 60mins airborne holding only to non-compliant flights in the exceptions report.
9. All other flights subject compliance measure's as per current AIP

# Recommendation 2 – Presented by Airservices

To address the noted issue of airlines uploading schedules not in compliance with their ACA slot assignment, Airservices proposes the following in relation to **PH only**:

I.   NOMC will use a fully compliant ACA BF supplied daily by ACA to load an ACA slot approved schedule into Harmony prior to running the GDP for PH

II.  There is to be no manipulation (manual or automatic) of slots by operators prior to GDP assessment

III. Operators who have historically proven to be consistently and grossly non-compliant with uploading compliant schedules or, who consistently fail to follow II, may have Harmony access changed to read only. If this occurs any slot changes (ACA or GDP) must be made through the NOMC.

IV. If following the assessment a GDP is proposed:

    I.   GDP and therefore COBT's will be published in Harmony based off the ACA slot schedule

    II.  Post GDP publication operators are to manage COBT's IAW current procedures with associated early/late non-compliant delays applying.

V.  If there is no GDP:

    I.   Operators are to manage ACA slot compliance IAW current agreed procedures (AIP GEN 1.9 2 – Strategic – Schedule Coordination)

**VI.  To "bed the process in" GDP's will be run Mon-Fri for 3 months with the inclusion of the following rules:**

    I.   If a flight has been entered into Harmony by an operator and does not have a matching ACA slot, NOMC will change the ELOBT to a time at the end of the GDP

    II.  If a flight who should have an ACA slot presents tactically with no Harmony slot the flight will be considered as early non-compliant

**Addendum: A review on compliance trends will occur after 2 months of Mon-Fri GDPs. If compliance with and, appropriate management of, ACA/GDP slots does not occur a staged non-compliance penalty will be deployed in line with the proposed 1 Nov changes for late non-compliance.**

Please note:

• To manage workload and ensure a high level of accuracy/consistency technical work will need to be undertaken by ACA, Industry and Airservices therefore a commencement for this solution is recommended in January 2025.

• Information on changing to read-only access will need to be coordinated with operators will occur with

• Operators who do not comply with II will have access to Harmony changed to read only.

# Outcome of the proposals

**Following consultation and agreement at the Aviation Network Performance Roundtable:**

- We enacted a hybrid approach of the solutions presented by both the airlines and Airservices

  - A 3-month trial of GDP's reverting to being run Mon-Fri has been enacted no matter the need for the GDP

  - Operators still upload their schedules using their current systems

  - Airservices designed a compliance tool to assess uploads against IATA strategic slots. If an upload into the system is:

    - Misaligned from the IATA strategic slot by less then 120min then the flight is moved to its correct slot

    - Misaligned from the IATA strategic slot by more then 120min or who do not have a slot are cancelled from the program and treated as a pop-up following the program run

    - Any upload that has been re-aligned or cancelled will be subject to 60min airborne holding if they are non-compliant with their assigned COBT

  - Following the running of the compliance tool GDP's are run and COBT's issued that are aligned to the IATA strategic slot.

**Result:**

- 8 weeks into the 12 week trial we have seen:

  - GDP compliance increase to approx. 88%

# Results

**So have wee seen an improvement?**

- 8 weeks into the 12-week trial we have seen:

  - GDP compliance increase to approx. 88% average with the highest compliant day so far of 94% which was also one of the busiest day during the trial

  - Through 2023/24 we would publish approx. 20 airborne holding NOTAMS per month on the busier days of Tue-Wed-Thur advising holding had increased above the ERSA published delays and were up to 40min or more for 2-3 hours per NOTAM

  - During the trial there have only published 2 NOTAMs for the same busy days and each have been for delays of 20-30 min for less than 1 hour

  - The slot coordinator has been working closely with airlines to align slots and free up unused slots so that operators can better align schedules with contracts

  - Overall operator feedback has been that crews are keen to operate compliant as they see airborne delays significantly reduced

  - Workload for ATC has reduced and they are more easily able to accommodate changes to the program

Whilst the trial is due to end in May 2025 and we return to GDP by demand, the operators are aware a return to the non-compliant behaviours seen in 2023/24 will result in the activation the daily GDP and stringent tactical and strategic penalties being used.

# Thank you

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