

# Wellington Airport DMAPS Recommendation and Decision Paper

### 5 December 2024

### To: Matt Clarke, Wellington Airport Chief Executive

# From: Ayolt Wiertsema, General Manager Aeronautical Operations and Phil Rennie, External Relations Manager

### Introduction and background

- This paper seeks a decision from you on whether to confirm to Airways that Wellington Airport sees no reason to re-consider the Divergent Missed Approach Protection System (DMAPS) Instrument Flight Procedure (IFP); OR whether the airport considers that one or more of the other flight path options should be further considered.
- Changes to flight paths for northerly jet departures from Wellington Airport were made in December 2022 as a result of a new system called DMAPS.
- DMAPS was initiated and developed by Airways, New Zealand's air navigation service provider. The flight paths for Wellington Airport to implement DMAPS were agreed to by Wellington Airport and approved by the Civil Aviation Authority.
- The main aim of this change was to improve safety in relation to aircraft that are unable to land for any reason, by having departing jet aircraft diverge (i.e. turn left) during climb on the flight path.
- Wellington Airport was asked in accordance with rule 173.201(d) of the Civil Aviation Rules (CARs) whether it agreed with the DMAPS IFP. Wellington Airport agreed to DMAPS on 9 August 2022.
- As part of giving that approval, Wellington Airport accepted the safety, operational and environmental benefits outlined by Airways. We also understood there would be no aircraft operating in areas they hadn't before (i.e. aircraft have always flown over Khandallah and Broadmeadows to an extent).
- We understood there would be no impact on our Air Noise Boundaries (the areas immediately surrounding the airport). We also understood there are no applicable

regulatory rules or requirements in legislation (including the RMA) or the District Plan for noise effects outside our Air Noise Boundaries.

- However, we went above and beyond our requirements by commissioning acoustic experts Marshall Day to model the expected noise impacts. This modelling was informed by a noise monitor installed in Khandallah. This modelling concluded the noise impacts would be "noticeable" but considered "reasonable".<sup>1</sup>
- In general, the flight plan changes have meant fewer departures over Newlands and more over Khandallah and Broadmeadows.
- Negative public reaction arose after DMAPS was implemented, particularly from some residents in Khandallah and Broadmeadows over noise impacts.
- Wellington Airport discussed the issue with local residents including the lobby group Plane Sense Wellington. Wellington Airport and Airways then agreed to install four noise monitors across the northern suburbs in 2023 to provide more detailed information on the impacts of the changes.
- Following this, the airport asked Airways, who design and maintain flightpaths, to develop alternative options for public consultation. Feedback was sought in our consultation on four options:
  - 1) Maintaining the current flight paths (i.e. DMAPS)
  - 2) Changing the northerly route for jet departures before 7am to fly between Horokiwi and Korokoro
  - 3) Changing the northerly route for jet departures to a similar route used before December 2022 over Newlands Ridge
  - 4) Any other proposal raised through this engagement process.
- This public consultation ran from 20 September to 5 November. The results were summarised in the earlier paper provided to you *"DMAPS Submission and Survey Results Summary Paper"*. This included the results of over 2500 public submissions and submissions from a range of industry bodies including airlines, airports and Airways.

<sup>&</sup>lt;sup>1</sup> This report (and subsequent Marshall Day reports) are publicly available on our website.

# **Executive Summary**

Of the four options considered, we recommend that you agree that Option One (status quo) is Wellington Airport's preferred northern flight path for jets and communicate to Airways is that it does not see sufficient reasons to reconsider its earlier decision to agree to DMAPS because it is:

- The safest of the options consulted on (including Option Three under an IFP) to maintain current (and future) capacity
- The most efficient option in terms of:
  - o increased capacity and better service
  - reduced travel times
  - o reduced fuel use and cost
  - reduced emissions
  - o reduced delays, both airborne and ground-based

While the above factors are the key factors to consider in making the decision, it is also noted that the DMAPS IFP:

- Is likely to affect the fewest number of people with noise events above 65 decibels<sup>2</sup>
- Is strongly supported by the aviation industry
- Is the most favoured option from our public consultation.

Further, the only other option, as indicated by Airways in its submission, that could deliver the same or similar safety benefits to Option One is Option Three using an IFP, which would result in a reduction in aircraft movements to significantly below pre-2022 levels. This would involve such a reduction in services that it is not considered feasible.

It is possible that this new information from Airways on Option Three could affect the level of public support (positively or negatively) for Option One. However, even if it did (and it is quite possible that it might not have any material impact either way), Option One would still be favoured for the reasons above.

Overall, these factors make a very strong and compelling case for the status quo. It would be extremely hard to justify recommending another option given these factors and the serious problems identified with the other options consulted on.

The rest of this paper outlines the framework for this decision, the relevance to the judicial review application that has been brought by Plane Sense, the further work undertaken (including the public consultation), Airways' advice and industry views, and analyses these factors in more detail.

<sup>&</sup>lt;sup>2</sup> More information on this is provided on page 19.

### Framework for your decision

As noted above, the decision you are making is which of the flight path options consulted on is Wellington Airport's preferred option and therefore whether to confirm to Airways that Wellington Airport sees no reason to re-consider the DMAPS IFP; or whether it considers that one or more of the other flight path options should be further considered.

The decision to agree to DMAPS was made under Rule 173.201(d) of the Civil Aviation Rules (**CARs**) which provides:

"An instrument flight procedure must not be designed for an aerodrome or heliport unless the operator of the aerodrome or heliport agrees in writing that the aerodrome or heliport may be used for IFR operations using the intended instrument flight procedure."

The CARs do not specify any factors for Wellington Airport to consider in making a decision on whether to agree under Rule 173.201(d) or specify any process for Wellington Airport to undertake.

Therefore, it is broadly open to Wellington Airport to agree to an IFP under Rule 173.201(d) as it sees fit.

Having said that, it is suggested that factors that Wellington Airport should consider are:

- Safety of the IFP for aircraft and others
- Efficiency of the IFP for airport usage and air traffic management, including under different conditions, and effects such as impacts on travel time, fuel use and cost, delays and emissions

At the very least, Wellington Airport should not agree to an IFP that it knows is unsafe.

Wellington Airport does not need to undertake its own significant investigations into these factors. In considering these factors, it would be permissible for Wellington Airport to rely on information provided by Airways, unless there was some clear reason why that information was not reliable.

It would be permissible for Wellington Airport to take into account the following, but it is not required to and these factors should not be considered to override any safety or efficiency considerations:

- Impacts of an IFP on local communities, including the impact on the airport's relationship with its local communities; this could include effects on local amenity (e.g. from noise).
- Other environmental impacts
- Industry views
- Public feedback and impact on the airport's relationship with its local communities.

Some submitters raised concerns about the impact of the DMAPS IFP on property values. This is not considered a relevant factor to your decision but, even if it were, the impact on property value is not clear, may only be temporary and arise from publicity as much as actual noise impacts, and would be similar across other flight paths. Furthermore, even if there were a relevant impact, that would not outweigh the reasons in favour of the DMAPS IFP (if there are other considerations which favour the DMAPS IFP).

The decision you are making now, as noted above, is to decide which of the options consulted on is Wellington Airport's preferred option and, in light of that, whether to confirm to Airways that Wellington Airport sees no reason to re-consider DMAPS or whether it considers that one or more of the other flight-path options should be more closely considered instead.

You are not actually making a new decision under Rule 173.201(d) (which is only possible, in any case, if Wellington Airport was asked by Airways to approve a new IFP). Despite that, in considering the decision before you, it is suggested that you consider the factors outlined above as if this were a decision on whether or not to agree under Rule 173.201(d).

# Relevance of the judicial review by Plane Sense

By way of a statement of claim dated 29 July 2024, Plane Sense initiated proceedings under the Judicial Review Procedure Act 2016 and the Declaratory Judgments Act 1908 against Wellington Airport in connection with its agreement to the DMAPS IFPs in August 2022, and against Airways, Aeropath and the Director of Civil Aviation for their respective roles in the DMAPS IFPs.

Plane Sense alleges, among other things, that Wellington Airport's written approval of the (then) new DMAPS IFPs was:

- unreasonable without any prior consultation
- in breach of residents' legitimate expectation that such changes involving aircraft noise would not be approved unless residents under the flight paths had been consulted
- based on a mistake of fact

• disproportionate, unreasonable, perverse and in defiance of logic.

Although Wellington Airport initiated the further work on reviewing DMAPS before Plane Sense commenced its judicial review, your decision on the matters in this report are potentially relevant to the possible resolution of the judicial review. However, it is suggested that you should not take that into account as a factor in making your decision, and instead make your decision only considering the factors outlined in the "Framework for your decision" section.

# Further work undertaken

The further work undertaken by Wellington Airport has involved:

- **Public consultation**. This is outlined in the accompanying report entitled "DMAPS Submission and Survey Results Summary Paper". In summary the process followed was:
  - Public consultation officially began on 20 September when a media release was issued and a dedicated page on Wellington Airport's website went live. This page included a survey form and a wide range of background material including noise modelling reports.
  - Feedback was collected by asking the public to complete a short online survey form or respond by email or by written response to our postal address.
  - Respondents were asked to rank the four options in order of preference, and follow-up questions asked reasons for that preference along with any further comments or suggestions.
  - A physical brochure explaining the options was mailed to 20,000 households across the northern suburbs.
  - Consultation was extended several times due to delivery issues, eventually closing on 29<sup>th</sup> October and 5<sup>th</sup> November for Korokoro residents.
  - A survey of 500 randomly selected people from across the northern suburbs was also carried out.

In summary, Option One (status quo) was the most popular choice as first preference (49.78%), more than twice the level of Options Two (24.26%) or Three (23.24%). The results are summarised below:

Option	First Rank Votes	Second Rank Votes	Third Rank Votes	Fourth Rank Votes	Total	Average Favour Score
Maintaining the current flight paths	49.78%	15.71%	16.89%	17.62%	2463	2.07
	1226	387	416	434		2.97
Changing the northerly route for jet departures before 7am to fly between Horokiwi and Korokoro	24.26%	44.22%	20.41%	11.12%	2465	2.81
	598	1090	503	274		
Changing the northerly route for jet departures to a similar route used before December 2022 over Newlands Ridge	23.24%	30.13%	36.86%	9.77%	2466	2.67
	573	743	909	241	2400	2.07
An alternative option (please specify below)	3.55%	9.58%	25.52%	61.35%	2453	1 55
	87	235	626	1505		1.55

- **Further advice from Airways**: This is also described in the accompanying report entitled "DMAPS Submission and Survey Results Summary Paper". In summary, Airways' advice was firmly in support of the status quo: "We prefer this option above options 2 and 3 from both safety and efficiency perspectives. Option 1 retains DMAPS as a comprehensive and predictable system for safety, while also delivering significant efficiency and sustainability gains for the Airport, airlines and passengers."
- **Industry views**. This is also described in the accompanying submission summary report. In summary, industry views were also strongly in favour of the status quo for reasons of safety and efficiency; concern was expressed that safety could be compromised by choosing an alternative option.
- **Noise monitoring**. The process and results of the noise monitoring is described in the previous submission summary report. A finding of the noise monitoring report by Marshall Day was that Option One (status quo) would likely affect the fewest people in terms of flights above 65 decibels:<sup>3</sup>

Number of events	Option 1 Status quo	Option 2 Northeast SID (6-7am)	Option 3 Pre-DMAPS
1 to 9	58,204	60,749	65,931
10 to 19	22,316	20,756	29,570
Total	80,519	81,505	95,501

<sup>&</sup>lt;sup>3</sup> This report (and other Marshall Day reports) is publicly available on our website. As explained in more detail below, the number of people affected by Option Three under an IFP is expected to be the same due to similar jet movements.

# Analysis of factors

# Safety

As noted above, safety is (and should be) a primary concern in any decision about flights paths and IFPs. Improving safety relating to missed approaches was the main reason for which Airways initiated and developed DMAPS.

Airways therefore strongly supports the status quo for the improved safety it delivers. According to their submission, DMAPS has meant a shift from pilots on a missed approach flying a visual circuit to a set flightpath which *"reduces the need for multiple human operators to make ad-hoc decisions in reaction to the event,"* and therefore *"reduces the opportunities for human error causing risk."* 

In 2023 there were 187 missed approaches at Wellington Airport, and one missed approach for every 206 approaches. This works out to one missed approach every second day on average, so this is not an infrequent event.<sup>4</sup>

Airways notes that DMAPS is part of a global shift to predictable, planned and published procedures for missed approaches.

A comparison of safety reports relating to missed approaches at Wellington shows there were 27 safety reports filed in the calendar year 2019, which dropped to just four safety reports in the 18 months following DMAPS' implementation (December 2022).<sup>5</sup>

Airways was critical of the safety implications of the alternative options.

Option Two was labelled "a potentially safety-compromising option":

*"From a system safety perspective, Airways' preference will always be for simplicity. Changing flight paths during specific periods of time heightens the risk of human error, and is generally avoided where practicable."* 

For Option Three, Airways stated that it *"…would no longer accept jet aircraft flying a missed approach procedure to fly manually on a visual circuit."* Because there would not be the same divergent separations as in Option One, Airways have said for Option Three they would instead re-instate longer separation gaps for arriving aircraft in order to protect the missed approach procedure, which would have major negative

<sup>&</sup>lt;sup>4</sup> Information supplied by Airways via email on 13 June 2024.

<sup>&</sup>lt;sup>5</sup> Source: Airways presentation to WIAL, 11 June 2024.

impacts on efficiency and sustainability (the implications of these longer separation gaps are expanded upon further below).

The advice from Airways is that that in order for Option Three to be as safe as option One, Wellington Airport would need to make changes to reduce frequency of flight operations. This would take aircraft movements below pre-2022 levels, which is not considered feasible as discussed below.

We note the Statement of Claim from Plane Sense Wellington that "...there are many other well-established instrument procedure design, air traffic control and airport management options available for achieving safe and efficient aircraft operations at Wellington Airport."<sup>6</sup>

However, according to Airways, they are "...not aware of any other options that would rival option 1 in terms of safety, efficiency and sustainability."<sup>7</sup>

We have also not identified any such options for further exploration in the consultation responses.

The technical information and submissions provided by Airways on the safety benefits of DMAPS must be taken seriously by Wellington Airport given the expertise of Airways, their role as New Zealand's sole air traffic provider and their core focus on safety.

There is no cogent or compelling evidence available to Wellington Airport to doubt the correctness of the technical information provided by Airways in relation to the safety benefit of DMAPS.

Safety is cited by the Board of Airlines New Zealand (BARNZ) as a key reason for their support of DMAPS: *"BARNZ is aware that safety and efficiency gains have been substantial...Safety concerns should be paramount in any consideration of change."*<sup>8</sup>

Safety concerns were also one of the most common reasons for supporting the status quo in public consultation. Sample comments included:

"Safety should be the number 1 priority."

"We hear the aircraft flying over but are ok with it given the safety and efficiency benefits."

<sup>&</sup>lt;sup>6</sup> Plane Sense Wellington Statement of Claim 53.4

<sup>&</sup>lt;sup>7</sup> Airways submission to Wellington Airport consultation

<sup>&</sup>lt;sup>8</sup> The full BARNZ submission is included in the *DMAPS Submission and Survey Results Summary Paper* previously provided to you.

# Efficiency

We recommend that efficiency should also be a strong consideration in your decision. DMAPS and the required accompanying changes to the IFP has delivered a number of significant gains in this area which are outlined further below.

#### Reduced delays and greater capacity

DMAPS allows air traffic controllers to safely reduce the size of the gaps required between approaching aircraft, particularly in poor weather. In the past, they would have held aircraft on the ground or in the air, or slowed them down enroute, especially during peak traffic periods.

As a result, airborne delays have reduced by an average of three per cent per flight despite a three per cent increase in traffic volume at Wellington Airport between 2022 and 2023. At the same time, ground delays have reduced by 80 per cent.

There is also an attendant increase in capacity. Airways outlined in their submission how this is a direct result of DMAPS increasing capacity at Wellington Airport:

"Whereas previous capacity was limited by the missed approach procedure, capacity has now increased on an interim basis to 16 aircraft movements per hour (a 23% gain), and is anticipated to increase to 19 movements per hour in the near future (a 45% gain). This increase is the product of not needing to hold over every second departure opportunity for the missed approach, and of reducing separation between arriving and departing aircraft due to the early divergence between departure and missed approach tracks."

"This means less time waiting on the runway and shorter holding times in the air, with associated savings in fuel costs and reduced CO2 emissions for airlines. It is estimated that ground delays have reduced by 80%."<sup>9</sup>

Airway's submission estimates these improvements are now saving an estimated \$350,000 per annum in direct aircraft operating costs and saving an additional 24,000 minutes per annum in ground delays.<sup>10</sup>

Using a different time period of January-March 2022 to January-March 2023, BARNZ estimates annual time savings from all factors combined to be 187.8 hours per year.<sup>11</sup>

<sup>&</sup>lt;sup>9</sup> Page six of Airways submission

<sup>&</sup>lt;sup>10</sup> Page three of Airways submission.

<sup>&</sup>lt;sup>11</sup> The BARNZ submission is included in full in the DMAPS Submission and Survey Results Summary Paper.

Importantly, the efficiency benefits as against the only other safe northerly flight path, being Option Three using an IFP as suggested by Airways, are even more significant. That option would reduce flight movements per hour to between seven to ten movements, significantly below the pre-2022 figure of 13 flights per hour. The impact of this is further outlined below.

#### Reduced travel times

Jet aircraft heading north and/or to Australia are now taking a slightly more direct route. According to Airways, this optimisation is saving an estimated 28,000 kilometres per year, meaning improvements to flight times for travellers.

#### Reduced fuel use

The submission from BARNZ estimates annual fuel savings will be 268 tonnes per year for airlines.

As a purely indicative figure, using jet fuel price estimates from the International Air Transport Association, this would equate to cost savings of \$405,000 per year for airlines.<sup>12</sup>

#### Reduced emissions

Airways states that "the reduced waiting and holding time, together with aircraft kilometre savings, produces an estimated 380 tonne reduction in CO2 emissions."

Likewise the BARNZ submission estimates projected annual fuel savings of 268 tonnes of CO2 emissions per year.

Reduced emissions was also a common reason given for public submitters in favour of the status quo. Example comments included:

*"I'm a big fan of reducing emissions so much prefer this option, plus the benefits for option 1 far outweigh the benefits for option 3."* 

*"[Option 2] will increase emissions and result in an increased contribution to climate change."* 

*"With the impact of climate change already wreaking havoc we need to do all we can to reduce emissions from transport."* 

<sup>&</sup>lt;sup>12</sup> Converting USD into NZD, sourced from <u>https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet---fuel/</u>.

# Effects on local communities

As noted above, the impact of an IFP on local communities is a factor that you could consider, but are not required to. Further, it is secondary to considerations of safety and efficiency.

It appears that the most significant impact on local communities from the DMAPS IFP is noise. This was clearly the most common issue raised in our public consultation process from supporters (and opponents) of all flight path options.

Some members of the community have reported that they have been impacted by noise since the implementation of DMAPS, particularly in parts of Khandallah, Broadmeadows and Ngaio. This is outlined in considerable detail in our submission summary document.

However, this feedback is not universal and widely varying responses were received from the same suburb, street and even immediate neighbours. This reflects that noise impacts are highly subjective.

We empathise with all of the sentiments expressed during consultation and have listened carefully to all public feedback over the past two years.

However, the unavoidable challenge is that aircraft must fly over residential areas no matter which flightpath option is preferred.

An advantage of the status quo is that of the three specific options consulted on, noise modelling estimates it affects the fewest people in terms of flights registering above 65 decibels.<sup>13</sup>

This is still the case even compared to Option Three under an IFP and the associated reduced aircraft movements that Airways have advised would be necessary (as outlined earlier).

<sup>&</sup>lt;sup>13</sup> According to the report: "To quantify the number of residents affected by each option, we first prepared a map of residential properties in the areas of interest. We used Geographic Information Systems (GIS) software and data including district plan zoning data, unit titles and building footprints to develop the dataset of land parcels containing a dwelling. We have defined a dwelling as a property title with a building located in a zone with residential use. Buildings such as apartments, which have multiple titles, are included as multiple dwellings in our dataset. We have assumed an average of 2.6 residents per dwelling (based on occupancy data from 2018 Census for Wellington Region." The full report including methodology was publicly available as part of our consultation and still available online at <u>https://www.wellingtonairport.co.nz/documents/4492/DMAPS Options Assessment -</u><u>Noise Monitoring Report September 2024 T8t5N8i.pdf</u>

This is because the noise modelling assessment is based on aircraft movements over a 24-hour period in a period in FY24. Actual movements in that period in FY24 were an average of 2.2 jet departures per hour between 7am and 10pm, and an average of 4.4 jet departures overall between 10pm and 7am. Wellington Airport considers this a reasonable estimate of jet movements under all the options that Marshall Day modelled, and also under Option Three under an IFP.

This is because even if there were increased restrictions on the number of flights in and out of Wellington as per Option Three under an IFP, it is reasonable to assume airlines would prioritise retaining the larger jet services to Auckland and Australia rather than smaller regional turbo-prop services. Therefore we would expect a similar number of jet departures as originally modelled.

In summary, we do not expect the lower hourly restriction would affect the daily number of events above 65 decibels in the foreseeable future.

It is also relevant that the noise effects are not in breach of the RMA or other noise abatement procedures prescribed in the CARs, nor any of the planning instruments made under the RMA. The RMA's purpose is to deal with environmental effects of activities.

A potential impact of aircraft noise on property values was raised by a number of submissions and used to advocate for and against each option. As noted above potential impact on property values (whether by increase or decrease) is not considered a relevant factor to your decision.

### Other environmental affects

Other environment effects, being those other than by way of carbon emissions, are also a secondary factor that you could consider, but you are not legally required to.

On the whole, the environmental effects of different IFPs are similar and those effects reduce with increasing distance from the airport.

A small number of public submissions from every suburb expressed concern about the impact of aircraft noise on birdlife, although a smaller number of submissions also disputed any impact.

These impacts are anecdotal and are not supported by cogent evidence. In any event, shifting the flight path would not reduce these impacts but only transfer them elsewhere.

It is also relevant that effects on birdlife and other fauna of activities are dealt with under the RMA. It is notable that the DMAPS IFP would not breach the RMA nor any of the planning instruments made under the RMA (nor, for that matter, would any other alternative IFP).

It is therefore suggested that this factor should not affect your decision.

### **Industry support**

As outlined in the submission summary, there is strong support for the status quo from the wider aviation industry including Airways, NZ Airports, IATA and BARNZ. These are all important stakeholders who work closely with Wellington Airport and would be impacted by any change to the IFP.

#### BARNZ submitted:

"...safety and efficiency gains have been substantial...BARNZ would be concerned if changes were made such that these time, cost, and carbon efficiencies and safety improvements were lost or reduced. Safety concerns should be paramount in any consideration of change, and any unnecessary increase to carbon emissions should also be avoided."

#### **Public feedback**

As outlined earlier, our public consultation ran from 20 September to 5 November with the results summarised in the earlier paper provided to you "DMAPS Submission and Survey Results Summary Paper". This included the results of over 2500 public submissions.

Option One (status quo) was clearly the most popular choice as first preference (49.78%), more than twice the level of Options Two (24.26%) or Three (23.24%). The results are summarised again below.

Noise was the most common reason given for preferences – in general, the majority of responses from each suburb preferred not to have flights overhead. Safety, efficiency and reduced emissions were also common reasons given.

Option	First Rank Votes	Second Rank Votes	Third Rank Votes	Fourth Rank Votes	Total	Average Favour Score
Maintaining the current flight paths	49.78%	15.71%	16.89%	17.62%	2463	2.07
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An alternative option (please specify below)	3.55%	9.58%	25.52%	61.35%	2452	1 55
	87	235	626	1505	2455	1.55

We note that some of the public support for Option One could have been because of the superior safety benefits delivered by Option One compared to Option Three. At that time, Option Three as consulted on involved the use of a visual flight procedure, which would have been clearly inferior to Option One in terms of safety.

Airways has since advised that the Option Three flight path could be implemented using an IFP. To deliver the same safety levels as Option One, however, greater aircraft separation would be needed, reducing aircraft movements below even pre-2022 levels, as discussed above. This would significantly reduce service levels, have other negative effects and may not even be a feasible option.

Accordingly, even if Option Three using an IFP had been set out in consultation, it might not have materially affected the result. In any case, if it had materially affected the level of support for the different options, Option One would still be favoured by Wellington Airport for the efficiency reasons set out in this report.

The results of a random survey of 500 people across the northern suburbs was also covered in our submission summary paper, showing a broad range of opinions depending on which suburb each respondent was from.

This survey found that a majority (57%) of respondents had not noticed a change in aircraft noise (either positive or negative). As with the public consultation, most responses from each suburb preferred not to have flights over their suburb.

### Reasons for not favouring other options

<u>Option Two – Changing the northerly route for jet departures before 7am to fly over</u> <u>less populated areas (between Horokiwi and Korokoro)</u> This option would undermine safety by adding confusion and complexity into air traffic management.

Airways describe it as a *"potentially safety-compromising option"* because it would either involve a manual over-ride of post-7am instrument flight procedures, or an automated switchover – both of which would increase the risk of confusion.

This new flight path would also mean slightly increased travel times, fuel burn and emissions for these flights due to taking a less direct route.

Public feedback from Korokoro was extremely opposed to this option with 289 submissions from just 540 households, by far the highest response ratio of any suburb.

### <u>Option Three – reverting to the northerly route for jet departures used prior to</u> <u>December 2022</u>

Airways have indicated in their submission that if this option was chosen, for safety reasons they would *"no longer accept jet aircraft flying a missed approach procedure to fly manually on a visual circuit as indicated in the consultation document"*. Instead they would require an IFP and re-instate longer separation gaps for arriving aircraft in order to protect the missed approach procedure.

Airways have also advised in response to a request for clarification that in order for Option Three to have the same levels of safety assurance as for the status quo (Option One) there would need to be greater spacing between aircraft. Airways have said that because divergent separations could not be used, capacity would need to drop by six to nine arrivals per hour as compared to Option One.

Theoretically this could possibly preserve the safety benefits of the current IFP but would require amendments to flight schedules to decrease hourly capacity, particularly during morning and afternoon peak hours. The number of flight movements would need to reduce significantly below even 2022 levels, to 7-10 per hour (as compared to 13 pre-2022 and 16 to 19 under Option One).

Wellington Airport would then be severely over capacity as result. Airlines would be forced to amend their flight schedules to offer fewer flights at peak morning and afternoon hours which are the most popular times for travellers and the most lucrative for airlines

This would cause significant inconvenience to the public, higher airfare costs, reduced revenue for airlines and airports and a less efficient air transport system.

This may not be commercially feasible for Wellington Airport and would be highly unpopular with airlines and the public. It could also affect the commercial viability of some airline operations, further undermining Wellington's connectivity.

Due to the slightly more indirect route aircraft would take as a result, Option Three would also:

- increase travel times
- increase fuel use and cost
- increase emissions
- increase delays, both airborne and ground based.

To put it another way, it is not possible under Option Three to deliver the same safety benefits as Option One and also deliver the other benefits that Option One delivers in terms of efficiency, cost and traveller convenience.

Option Three would also:

- likely see more people affected by flights over 65 decibels
- go against the strong views of our aviation industry partners
- be unpopular with some of the local community given just 23.24% of respondents in our consultation chose it as their first option, the lowest of the three options given.

#### Option Four – any other option proposed

As part of the consultation process respondents were given the option of outlining an alternative proposal, and an open comment box for suggestions and comments was provided.

By far the most common alternative suggestion was that aircraft should travel over water as far as possible and then head over the least populated areas. There were several hundred suggestions to this effect.

This proposal is similar to Option Two (heading north before turning between Horokiwi and Korokoro) with the difference being this would be all the time rather than between 6am and 7am, and a number of submissions explicitly stated this.

This is not a preferred option because it would involve substantially increased indirect routes, meaning extended flight times, increased fuel burn, cost and emissions. Not only would it reverse the gains of DMAPS, but it would be substantially worse than pre-December 2022 on all of these metrics.

As noted through our public consultation, an increase in flights over Korokoro and Horokiwi for just an hour a day was unpopular in our public consultation. Public opposition would likely be even stronger to a proposal to divert all northerly jets operating in a northerly wind to this area.

Other suggestions raised, and the problems identified with each are specified below:

- Spread all flight paths over a wider area: this would likely add complexity and reduce certainty, negatively affecting safety.
- Move Wellington Airport to a new location: this has been considered numerous times in the past as part of our Masterplanning process and has always been dismissed on the grounds of cost and practicality.

# Summary of factors - recap

We consider that all of the factors outlined above support Option One (status quo) because it is:

- The safest of the options consulted on (including Option Three under an IFP) to maintain current (and future) capacity
- the most efficient option in terms of:
  - o increased capacity and better service
  - reduced travel times
  - o reduced fuel use and cost
  - reduced emissions
  - o reduced delays, both airborne and ground-based

While the above factors are the key factors to consider in making the decision, it is also noted that the DMAPS IFP:

- Affects the fewest number of people with noise
- Is strongly supported by the aviation industry
- Is the most favoured option from our public consultation

#### Our recommendation

We recommend that you:

- 1. Agree that Option One (status quo) is Wellington Airport's preferred option;
- 2. Agree to confirm to Airways that Wellington Airport sees no reason to reconsider the DMAPS IFP for the reasons outlined in this paper, primarily safety,

efficiency and sustainability, and the secondary benefits of affecting the fewest number of people and being the most popular option from our public consultation;

- 3. Agree this position should be communicated to Airways and internally at Wellington Airport;
- 4. Agree that following the above steps, our position is publicly communicated in the form of a media release with this document and the submission summary document also made publicly available
- 5. Note that this report and the submission summary will be included in the judicial review process currently underway.

# Decision on this recommendation paper

Please select one option:



**I agree** to the recommendation that Wellington Airport's preferred option is option 1 and to continue the current flight path for the DMAPS IFP for the reasons given above, and to the other recommended steps



**I do not agree** to the recommendation that Wellington Airport's preferred position is to continue the current flight paths.

Signature:

Date: 6 December 2024