Proposed amendment to the Air Navigation (Essendon Fields Airport) Regulations 2001

Public Consultation Paper

July 2018
Summary

Purpose

The purpose of this paper is to seek comments through public consultation on a proposal to amend the Air Navigation (Essendon Fields Airport) Regulations 2001 to facilitate newer, larger jet aircraft movements at Essendon Fields Airport (Essendon) while protecting community amenity.
Regulatory Environment

The Regulations

Essendon Airport has some of the most stringent restrictions for aircraft movements in Australia, which were introduced as part of the development of Melbourne Airport in the 1970s. The Regulations establish a regulatory framework for the restriction of aircraft movements at Essendon Airport for large jet aircraft at all times and for other aircraft between the periods of 11pm and 6am.

Permitted operations during non-curfew period

Essendon airport has a maximum aircraft weight limit of 45,000kg. However Regulation 15 permits aircraft greater than 45,000kg to operate during non-curfew periods if they are granted a dispensation. Operators need to demonstrate that: the aircraft cannot land at another airport; the aircraft is scheduled to undergo specialised maintenance or engineering at Essendon Airport; security requirements for the passengers, freight or aircraft are such that Essendon is the most appropriate; and that the aircraft requires special facilities, which are not available at another airport (VIP security, parking, facilitation etc). The number of dispensations for aircraft greater than 45,000kg has been low (3) since the Regulations took effect in 2001. This is primarily due to the fact that aircraft greater than 45,000kg will generally operate into other airports rather than use Essendon Airport due to the complex restrictions of this regulation.

Permitted operations during the curfew period

Regulation 12 permits propeller-driven aircraft not exceeding 8,618kg or propeller-driven aircraft greater than 8,618kg that do not exceed the noise level of 95 decibels on landing on 90 decibels on take-off, to operate during the curfew. Regulation 13 permits helicopters which meet the noise standard specified by the International Civil Aviation Organization as applying to the helicopter type.

Regulation 14 permits any aircraft involved in emergency assistance, an in-flight emergency, a Police Air Wing operation or any aircraft which is granted a dispensation by the Department of Infrastructure, Regional Development and Cities (the Department), to operate during the curfew period.

Regulation 15 permits jet aircraft to be granted a curfew dispensation to operate during the curfew period at Essendon in exceptional circumstances. Circumstances are considered exceptional if the cause of the delay is immediate, unforeseen and cannot be met by alternative arrangements (e.g. landing at another airport).

Fly Neighbourly Agreement

Night-time noise from aircraft operating at Essendon Airport is a sensitive issue for surrounding communities. In recognition of the impact of airport operations a “Fly Neighbourly Agreement” has been developed by Essendon Airport. While the Fly Neighbourly Agreement is voluntary, every aircraft operator at Essendon Airport is signatory to the agreement. The Fly Neighbourly Agreement specifies operational procedures for aircraft operators to minimise the noise impact of operations on surrounding communities.
The proposal

Essendon Airport is the largest base for business aviation aircraft in Australia with 44 of the 150 business jets in Australia based at Essendon Airport.

Proposal – lifting the weight restriction from 45,000kg to 50,000kg for non-curfew operations

Current settings

Currently only jet aircraft less than 45,000kg are permitted to operate at Essendon airport during non-curfew hours. Essendon Airport is the only airport in Australia, which restricts jet aircraft during non-curfew hours by operating weight.

Problem with current settings

Essendon Airport provides vital links for business aviation and is a major employer with both on-airport and off-airport activities. The current restriction on operating weight would not allow new generation business jets to operate at Essendon Airport.

Proposed solution

In order to facilitate growth at Essendon Airport while protecting the community from the effects of aircraft noise, it is proposed to allow aircraft up to 50,000kg to operate from Essendon Airport certified no more than 19 seats and only used for charter services. Allowing these newer, quieter business jets to operate at Essendon Airport would attract business aviation with newer, larger jet aircraft. Advances in aircraft engine and airframe technology have allowed larger jets to operate at similar noise levels as older, smaller jets. Modern aircraft also have more advanced flight navigation systems providing more accurate flight paths, which can reduce noise exposure.

A comparison between the Gulfstream 450 which was one of the larger business jets operating in 2001 and the Gulfstream 650ER which is one of the largest current jets is provided below:

**Gulfstream G450**

<table>
<thead>
<tr>
<th>Maximum Take-off Weight</th>
<th>Take-off (Decibels)</th>
<th>Flyover (Decibels)</th>
<th>Landing (Decibels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33,838kg</td>
<td>87.6</td>
<td>79</td>
<td>93.3</td>
</tr>
</tbody>
</table>
Gulfstream G650ER

<table>
<thead>
<tr>
<th>Maximum Take-off Weight</th>
<th>Take-off (Decibels)</th>
<th>Flyover (Decibels)</th>
<th>Landing (Decibels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>46,992kg</td>
<td>89.6</td>
<td>78.7</td>
<td>89.6</td>
</tr>
</tbody>
</table>

Impacts of the proposal

Public

The public would benefit from newer, quieter aircraft types which while larger than previous generation jets have more advanced navigation systems, which allow for more accurate flight paths to reduce noise outcomes. A limit on aircraft type will also apply to ensure that only aircraft certified 19 seats or less can operate between 45,000kg-50,000kg in response to community concerns about regular public transport aircraft. The restriction to 19 seat aircraft will also ensure there are no additional impacts for transportation around the airport. The number of movements by jet aircraft is approximately 2,900 jet movements per year or 55 per week which is 5.4 per cent of total aircraft movements at Essendon Airport. All operators would need to comply with the Fly Neighbourly Agreement and operators will be prohibited from using greater than minimum reverse thrust to minimise noise impacts.

Aircraft operating with full reverse thrust are on average 10 decibels louder than those with minimum reverse thrust. The figures quoted above for the G450 and G650 include full reverse thrust and full engine power on take-off. It is expected that most aircraft would be between 75-79 decibels about the same noise level as traffic on freeways around Melbourne\(^1\). These newer aircraft types are also subject to more stringent noise and emissions standards which will reduce the overall impact on the community by encouraging operators to adopt newer aircraft types.

During the previous consultation process the impact on property prices was raised, the impact of aircraft noise is only one factor which affects the value of properties. The availability of services in close proximity, public transport, proximity to the central business district, access to schools and hospitals influence house prices. A number of studies\(^2\) have been conducted relation to house prices near Melbourne, Brisbane and Sydney Airport which indicate that increased exposure to aircraft noise has limited correlation with house price values.

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[https://my.melbourneairport.com/Property-values](https://my.melbourneairport.com/Property-values)
Operators

Under current arrangements, business jet operators that have aircraft greater than 45,000kg but less than 50,000kg can have their aircraft certified for operations less than 45,000kg. This process involves the aircraft manufacturer certifying modifications to the aircraft, which would limit the operating weight to less than 45,000kg. The cost of certification ranges from $30,000-$100,000 depending on the aircraft. This is a capital cost which would not be required if the weight limit was raised to 50,000kg.

Raising the maximum aircraft weight limit to 50,000kg permits operators with larger aircraft to use Essendon Airport as an additional base for operations, allowing operators to grow their business aviation services which provides additional employment at Essendon Airport from Fixed Based Operators, ground handling staff, passenger facilitation and licenced aircraft maintenance engineers. These benefits would not be possible under the current restrictions.

Safety

The maximum aircraft weight limit of 45,000kg was stipulated when the Regulations were drafted in 2001 largely as a proxy measure intended to limit aircraft noise. The runway length and structural strength are such that there are no safety concerns with aircraft up to 55,000kg operating at Essendon Airport, and modern aircraft in this weight class have lower noise profiles overall than the aircraft less than 45,000kg which this regulation was originally designed for. The number of accidents for charter aircraft (Australian registered) which includes business aviation is 2.8 fatal accidents per million hours flown, this compares with general aviation which is 9.3 fatal accidents per million hours flown\(^3\). These newer aircraft while larger do not pose any increased safety risk.

Submissions

The Department will be accepting submissions until 31 August 2018. Submissions can also be made directly to your Federal, State or Local Member who can raise these submissions through the Essendon Airport Community Aviation Consultation Group. Submissions can be made electronically to curfews@infrastructure.gov.au or in writing to:

Aircraft Operations
Aviation Environment Branch
Department of Infrastructure, Regional Development and Cities
GPO Box 594
CANBERRA ACT 2601

Your submission, including any personal information supplied, is being collected by the Department for the purpose of gathering stakeholder feedback, in accordance with the Privacy Act 1988 (the Privacy Act). The Department will consider your submission in finalising proposed amendments to the Air Navigation (Essendon Fields Airport) Regulations 2001.

Your personal information will be stored securely by the Department. It may be used by the Department to make further contact with you about the consultation process. Your personal information will not be disclosed to any other third parties, except in the circumstances outlined below.

Submissions, in part or full, including the name of the author may be published on the Department's website at www.infrastructure.gov.au or in the Government’s response, unless the submission is confidential. Confidential submissions (including author name) will not be published. Private addresses and contact details will not be published or disclosed to any third parties unless required by law.

Submissions will only be treated as confidential if they are expressly stated to be confidential. Automatically generated confidentiality statements or disclaimers appended to an email do not suffice for this purpose. If you wish you make a confidential submission, you must indicate this by ensuring your submission is marked confidential.

Confidential submissions will be kept securely and will only be disclosed in the following circumstances:

- in response to a request by a Commonwealth Minister;
- where required by a House or a Committee of the Parliament of the Commonwealth of Australia; or
- where required by law.

Please direct any queries during these consultations to curfews@infrastructure.gov.au.
The Department may also disclose confidential submissions within the Commonwealth of Australia, including with other Commonwealth agencies, where necessary in the public interest.

Please note that in order to protect the personal privacy of individuals in accordance with the Privacy Act any submissions containing sensitive information, personal information or information which may reasonably be used to identify a person or group of people may not be published, even if not marked as confidential.

The Department’s privacy policy contains information regarding complaint handling processes and how to access and/or seek correction of personal information held by the Department. The Privacy Officer can be contacted on (02) 6274 6495.