

Before an Independent Hearings Panel
appointed by Christchurch City Council

under: the Resource Management Act 1991

in the matter of: the hearing of submissions on Plan Change 14 (Housing
and Business Choice) to the Christchurch District Plan

and: **Christchurch International Airport Limited**
Submitter 852

Statement of evidence of Felicity Hayman (Company)

Dated: 16 April 2024

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STATEMENT OF EVIDENCE OF FELICITY HAYMAN

INTRODUCTION

- 1 My full name is Felicity Jane Hayman.
- 2 I am the Environment and Planning Manager in the Planning and Sustainability team at Christchurch International Airport Limited (*CIAL*). I have held this role since March 2018.
- 3 My qualifications include a Bachelor of Science with Honours from the University of Canterbury.
- 4 I have been authorised by CIAL to provide evidence in relation to its submission (#852) and further submissions on the proposed Plan Change 14 (Housing and Business Choice) to the Christchurch District Plan (*PC14*). I am familiar with the content of CIAL's submissions and further submissions.

Scope of evidence

- 5 My evidence will address:
 - 5.1 An overview of Christchurch International Airport (*Christchurch Airport*) operations;
 - 5.2 Reverse sensitivity and incompatible activity issues affecting CIAL operations; and
 - 5.3 CIAL's position regarding use of the Updated Noise Contours in PC14.

GENERAL COMMENTS

- 6 CIAL's relief in relation to PC14 seeks to restrict intensification of noise sensitive activities in areas subject to 50dB Ldn of aircraft noise. CIAL is not seeking to prevent development altogether and it is acknowledged that a certain degree of residential activity is already contemplated in existing residential areas within Christchurch City. Rather CIAL's submission on PC14 is seeking to retain the density standards that are contained in the operative Christchurch District Plan (*District Plan*).
- 7 The outcomes sought in CIAL's submission and in evidence are hugely important for CIAL in order to protect the amenity of affected residents and to protect the safe and efficient operations of Christchurch Airport.

ABOUT CHRISTCHURCH INTERNATIONAL AIRPORT

- 8 Christchurch Airport is the largest airport in the South Island and the second-largest in New Zealand. It connects Canterbury and the wider South Island to destinations in New Zealand, Australia, Asia and the Pacific.
- 9 Importantly, Christchurch Airport operates without a curfew and without restrictions as to the types of aircraft that can use Christchurch Airport. The ability of Christchurch Airport to operate 24 hours a day facilitates overnight freight movements and arrival/departure of international passengers and aircrafts requiring maintenance, and is integral to the future economic and social wellbeing of people and the communities of greater Christchurch and the South Island.

Economic significance of Christchurch Airport

- 10 As explained by Ms Hampson, the activities at Christchurch Airport make a significant contribution to the regional and national economy.
- 11 Christchurch Airport is a significant employment hub with a large variety of businesses located on campus. Among these, the non-passenger services offered by CIAL on campus are highly valued, such as:
- 11.1 Antarctic science programmes and their associated facilities - Christchurch Airport is the departure point for the majority of the world's Antarctic scientists and considerable economic and societal benefits are brought to the region, the country, and the world by the operation of these facilities.
 - 11.2 Christchurch Engine Centre - providing engine overhaul and repair services which continues to attract third party work from around the world.
- 12 Christchurch Airport is also the primary freight hub for the South Island, playing a strategic role in New Zealand's international trade as well as the movement of goods domestically.
- 12.1 Airfreight is becoming increasingly important due to decreased viability, considerable delays and record high prices associated with land transport. A large proportion of freight movements (including all domestic and trans-Tasman movements) into and out of Christchurch Airport occur at night. Each night there are approximately 10 specific freight movements.
 - 12.2 The economic contribution facilitated by imported and exported goods passing through Christchurch Airport is

estimated at \$2.07 billion for the Canterbury region and \$2.7 billion for New Zealand.¹ The value of goods transported through Christchurch Airport makes it the second largest South Island import gateway after the port of Lyttelton and the third largest South Island export gateway after Lyttelton and Port Chalmers.²

12.3 Airlines have become more interested in airfreight as an important revenue stream.³ Christchurch Airport has some of the best infrastructure to serve the growth in the airfreight export market in Christchurch, providing warehousing and freight forwarding facilities, a long runway and no curfew. CIAL is underway with a 30,000m² expansion to its freight apron and 15,000m² expansion of its taxiway, which would bring the total freight apron area to 68,500m². As part of this, by Christmas 2025 we hope to have developed an 800m² express facility for DHL. The facility will deliver (at least) a further 28,000m² of first line air freight facility to accommodate growing demand.

13 Ensuring that it's easy to move high-value goods within New Zealand and to and from international locations via Christchurch Airport provides benefits for Canterbury and the entire South Island.

Transport network resilience and connectivity

14 Airports facilitate a global transport network that is resilient to the effects of natural disasters and extreme weather events. Christchurch Airport provides a key link for both freight and passengers when other land-based networks in the South Island are compromised. For example:

14.1 The Canterbury floods of May 2021 and the significant rain events in Canterbury and the West Coast in 2019 caused significant damage to the land transport network and closed off areas of the South Island from the rest of the country. Aviation, and specifically Christchurch Airport, was relied upon for freight and passenger travel while other parts of the transport network were repaired.

¹ *The Economic Contribution of the Christchurch International Airport*, prepared for Christchurch International Airport Limited by Market Economics Consulting dated 31 August 2023. This analysis applies a base year of 2020.

² *Review of international and domestic freight trends through Christchurch International Airport*, Richard Paling International and domestic airfreight assessment June 2022.

³ Including growth of e-commerce in the retail sector. Christchurch Airport is an important hub for this type of trade given the range of facilities located on or near the Airport campus.

14.2 Christchurch Airport was able to host 2,000 displaced passengers as a result of the closure of Auckland Airport operations following the Auckland floods in January 2023.

15 The ongoing impact of climate change means that New Zealand roads and rail remain susceptible to extreme weather events and natural disasters. This highlights the importance of Christchurch Airport's function to provide a regional, national and global connection when the land transport system is compromised.

The need for 24/7 operations

16 There are a number of reasons why Christchurch Airport must retain its ability to operate 24/7.

17 Firstly, because New Zealand is located at the bottom of the world and because Christchurch Airport is relatively small in the context of the global aviation network, Christchurch Airport is a "slot taker" airport. This means that we have to accommodate certain aircraft into and out of Christchurch when and if it fits into the global aviation network.

18 Christchurch Airport has to work with the "slot maker" airports. These are the constrained airports such as Sydney, Singapore, Los Angeles and Heathrow, as they determine the global aviation schedule. The team at CIAL do a significant amount of work to get routes, services and airlines into Christchurch - it is a significant investment from those airlines to send their aircraft to Christchurch given our geographical location.

19 It is challenging for CIAL to get those airlines to fly to Christchurch and it is therefore critical that we fit in with the global aviation network. This would be incredibly difficult, if not impossible, if Christchurch Airport was subject to operational constraints. In short, if we are unable to accept aircraft at a time that suits the global aviation schedule, certain airlines simply would not come to Christchurch.

20 Secondly, New Zealand needs two 24/7 international airports (Christchurch and Auckland Airports) in the event of an emergency and also to enable maintenance works on the runways. The importance of the emergency function is outlined in the flooding examples above. Furthermore, the operational teams of Christchurch and Auckland Airports work closely to ensure that maintenance works can occur on the runways when required. This is exacerbated by the fact that Auckland Airport only has one runway.

21 Air New Zealand operates a significant amount of maintenance out of Christchurch Airport. Aircraft fly in at the end of the day, engineers work on the aircraft overnight, and it is then put back out

into the aviation network. If Christchurch Airport was not operating 24/7, that maintenance work would be in jeopardy.

22 Finally, the ability for Christchurch Airport to operate 24/7 is also critical in the context of freight – as explained above the majority of the freight services arrive and/or depart during the night.

23 The wide body international services that fly into Christchurch provide freight movements that account for a significant portion of the economic benefits that Christchurch Airport enables. Without these services, the freight opportunities would disappear. This is what happened during the Covid-19 pandemic, with the New Zealand government working with the airlines to establish special freight-only flights due to the importance of airfreight for the movement of goods and therefore the economy.

CIAL's responsibilities

24 CIAL is responsible for ensuring that Christchurch Airport meets all safety and compliance requirements for passengers, visitors and aircraft.

25 My team work alongside stakeholders, regulators and airport users to facilitate on and off airport resource management and environmental issues. For example, we liaise with Airways (New Zealand's air navigation service provider) and the aircraft maintenance sector to ensure Christchurch Airport's noise footprint in the Canterbury region is appropriately managed. We also work with applicants, district councils and acoustic experts to protect Christchurch Airport from reverse sensitivity effects and the establishment of incompatible activities.

26 CIAL undertakes a significant amount of work in the noise management space to ensure we are doing as much as possible to reduce the effects that Christchurch Airport operations have on the community. There is a comprehensive noise management framework in the Christchurch District Plan. All of the relevant information outlining what CIAL does is available on our website.⁴

27 The Christchurch District Plan provides for the establishment and operation of the Airport Noise Liaison Committee (ANLC). The ANLC includes community board members and, among other things, provides an avenue for community concerns about airport noise to be formally raised with CIAL.

28 In relation to complaints:

28.1 When CIAL receives a complaint through the online form, we work with Airways to understand the movement that resulted

⁴ <https://www.christchurchairport.co.nz/about-us/sustainability/noise/>

in the complaint and this is communicated to the complainant. This is usually sufficient but, if not, the complaint is escalated to the ANLC . This has only been required twice and was after the Covid-19 pandemic.

- 28.2 In general, people that lodge a complaint have experienced a change in noise level, or change in the environment that they have come to expect. The complaints we receive are often in relation to helicopters (usually emergency), engine testing, GA night flights (training pilots). These people are generally located really close to Christchurch Airport, or really far away including outside the noise contours.
- 28.3 In my experience, and as advised by our acoustics consultants Marshall Day, the number of complaints is not a good indicator of the number of people that are highly annoyed. Complainants are often a specific type of person, and often have other non-acoustical factors influencing their lives. Complaining about noise becomes an outlet for some people.
- 28.4 Relating to this, I recently visited Texas where it was explained that North American airports have to deal with hundreds of noise complaints. More recently, these airports are having issues with Artificial Intelligence where one person will get a bot that constantly lodges complaints. This demonstrates that the number of complaints is not broadly indicative of community annoyance.
- 28.5 CIAL receives a relatively low number of complaints as there are very few people living in close proximity to Christchurch Airport. Through our success in the planning framework, we have reduced the number of people living in areas subject to 50dB Ldn and therefore the number of people receiving the effects. This reinforces the need for the planning framework to continue to proactively manage reverse sensitivity effects associated with aircraft noise, including by way of restrictions on intensification of noise sensitive activities in areas subject to 50dB Ldn or greater.
- 29 CIAL has an acoustic treatment programme for dwellings within the 65dB Ldn compliance contour (which is overseen by the ANLC). Each year, when the annual compliance contour is measured to show how noisy Christchurch Airport was in the previous year, properties exposed to 65dB Ldn are offered acoustic attenuation. Because we have done such a good job keeping people away from Christchurch Airport, there are very few properties exposed to 65dB Ldn at this time. There are currently 13 properties – we have delivered acoustic treatment to two and we are in the process of doing so for another two.

30 Other management techniques that we adopt include the agreement with Airways that no aircraft depart on the north-west runway (i.e. they only land on it) as that covers existing residential areas. Furthermore, we have a good neighbourhood policy to try and manage night-time training operations to ensure that this is done away from populated areas.

Future growth and developments at Christchurch Airport

31 The most recent revision of the Airport Master Plan (*Master Plan*) (2016) identifies the following expected growth levels to 2040:

31.1 Passenger Movements to grow from 2018 levels of 6.9 Million (5.1 Million Domestic; 1.8 Million International) to 11.7 Million in 2040 (7.6 Million Domestic; 4.1 Million International); and

31.2 Passenger Aircraft Movements to grow from 2018 levels of 72,000 movements (61,000 Domestic; 11,000 International) to 111,000 in 2040 (90,000 Domestic; 21,000 International).

32 We are currently in the process of updating the Master Plan, however the numbers from the 2016 Master Plan do provide an indication that significant growth at Christchurch Airport is expected over time.

33 The aviation industry is currently in a period of change whereby decarbonisation is critical. This is particularly important in the New Zealand context because of our geographical location and the way that our economy is reliant on aviation services.

34 CIAL is actively exploring solutions for its existing and new infrastructure that enables a transition to a low emissions future, most importantly through the decarbonisation of the aviation sector. CIAL believes that the Christchurch Airport campus will be an energy hub for aviation services and other energy intensive activities into the future.

35 As part of this, CIAL is currently developing Kōwhai Park as a platform for creating green energy. The 400-hectare land area adjacent to the Christchurch Airport airfields is proposed to be a hub for renewable energy projects to support CIAL's, and the broader aviation industry's, decarbonisation goals. The purpose of Kōwhai Park is to ensure that Christchurch is an enabler of change.

36 CIAL is committed to providing the infrastructure to support future low emissions aviation decoupled from fossil fuels.

REVERSE SENSITIVITY AND PROTECTION OF CHRISTCHURCH AIRPORT OPERATIONS

- 37 The effects from aircraft noise are felt across Canterbury. The management of noise effects is therefore a cross-boundary issue for all three district councils, as well as a strategic regional issue for the Canterbury Regional Council (*ECan*).
- 38 Airport operations create unavoidable noise that negatively impacts on the amenity and comfort of people living in proximity to runways and predominant flight paths. In this respect, a large body of national and international experience and research demonstrates that if a group of residents are annoyed by airport noise then they are likely to seek to have the operations of airports curtailed either through curfews and/or impose restrictions on the type of aircraft which can operate at those airports. This is especially so when new areas of residential zoning are developed in close proximity to airports (and their associated flight paths) and large groups of new residents move into their 'dream' homes and find that they are adversely affected by aircraft noise.
- 39 For Christchurch Airport in particular, these risks are significant, and this is why CIAL puts so much effort into these processes. As outlined above, the ability for Christchurch Airport to continue to operate without curfews is fundamental to maintain global connections for Canterbury and for Aotearoa. Planning rules
- 40 Reverse sensitivity related to airport noise is managed in planning documents through controls on the density of residential development and other sensitive activities in proximity to airports, through rules applicable to noise contours.
- 41 I am part of the Airports International Council (*ACI*) Noise Task force which includes airport noise managers from across the globe. Through this role I have become aware of significant operational issues that airports around the world are facing because of increasing numbers of people living under flight paths or in areas exposed to aircraft noise. When people move into areas that are already subject to flight paths and aircraft noise, the community response is often to advocate for operational restrictions on the airport.
- 42 Christchurch Airport is in a unique position whereby the planning framework provides strong protection against reverse sensitivity effects. Furthermore, the approach to noise contours for Christchurch Airport, which utilises aircraft noise projection to ultimate capacity (as opposed to a forecast year), was admired by others in the *ACI* Noise Task force group. The Christchurch approach is considered to be best practice, the best way to protect

communities for generations to come, and the best way to provide for intergenerational airport operations.

- 43 For Christchurch Airport, the Canterbury Regional Policy Statement (CRPS) sets the framework for avoiding noise sensitive activities within the Air Noise Contour. This is a unique and fortunate position to be in.
- 44 My team spend a lot of time managing proposals for further intensification of sensitive activities or new noise sensitive activities within the 50dB Ldn Air Noise Contour. It can seem, to those unfamiliar with this issue, that this type of activity would have a no more than minor impact on Christchurch Airport for a single new dwelling. However, on an accumulated basis, sensitive development close to Christchurch Airport can have serious effects on operations.
- 45 CIAL's submission on PC14 seeks a qualifying matter for airport noise, based on areas subject to 50dB Ldn in accordance with the existing planning framework, within which the operative District Plan density standards are retained. It is crucial that further intensification of noise sensitive activities is not enabled in areas subject to 50dB Ldn of aircraft noise both in the interests of community amenity and in order to protect the safe and efficient operation of Christchurch Airport into the future.

NOISE CONTOUR REMODELLING

- 46 Since PC14 submissions were filed, the remodelled noise contours for Christchurch Airport have been agreed between CIAL and ECan's technical experts. This is explained further by **Mr Hawken** and **Ms Smith**.
- 47 I understand that the Section 42A Officer considers that a "Provisional Airport Noise QM" should apply to land within the remodelled contours but that a number of submitters oppose CIAL's relief seeking operative District Plan densities within the remodelled contours.
- 48 CIAL's position, as endorsed by its expert witnesses, is that the remodelled contours represent the best available evidence of the areas that will experience noise levels of 50 dB Ldn or greater both now and into the future as operations at Christchurch Airport develop. As such, the remodelled contours depict the area where new noise sensitive activities should be avoided under the District Plan framework.
- 49 As I have outlined above, CIAL is not trying to stop or stifle development in the District altogether, rather CIAL's submission seeks to retain the operative densities under the remodelled

contours to avoid adverse reverse sensitivity effects on Christchurch Airport operations.

- 50 CIAL is concerned that, if the remodelled contours are not used as the basis for land use controls in PC14, a greater number of noise sensitive activities may be allowed to establish in areas that are inappropriate from an airport noise perspective. Sensitive development close to Christchurch Airport may have serious effects on airport operations, especially when these types of land uses accumulate.
- 51 Ultimately, CIAL cannot afford to wait for the CRPS review, which is some years away from being finalised, before advancing the remodelled contours in district planning processes such as PC14. CIAL has no control over their relative timeframes and it would be inappropriate for CIAL to sit on its hands when it has up to date technical information.

CONCLUSION

- 52 CIAL is committed to continuing its active role in protecting the amenity of the community and managing reverse sensitivity effects to ensure that Christchurch Airport, and all activities on its campus, can operate efficiently and with minimal disruption.
- 53 It is important that these matters are adequately recognised in PC14.

Dated: 16 April 2024

Felicity Hayman