

SUBMISSION TO THE *Strengthening the resilience of Aotearoa New Zealand's critical infrastructure system* DISCUSSION PAPER

Introduction

1. The New Zealand Airports' Association (NZ Airports) welcomes the opportunity to comment on the Critical Infrastructure system resilience discussion document from the Department of Prime Minister and Cabinet (DPMC). It is a valuable for the Government to assess the resilience of all critical infrastructure, and we encourage the Government to do this from a lens that focuses on the role that the relevant critical infrastructure plays in the system, particularly for airports in terms of importance of maintaining core logistics, trade, and transport links. It is also important to acknowledge the legislative and regulatory framework that airports already work within, the recent enactment of the Civil Aviation Act and the regulatory authority of the Civil Aviation Authority.

NZ Airports is the industry association for New Zealand airports, with 46 members¹ including all airports that have regular public transport services. We represent 21 Lifeline Utilities that are listed in Schedule 1 of the CDEM Act and consequently have lifeline utility status. This gives the association a strong interest in critical infrastructure policy developments. We also have a significant amount of value to add to any review because as an industry we have a strong learning environment where members collaborate and share information on long term climate change and resilience issues as well as with respect to tactical and emergency response lessons from significant events (including the flood and cyclone events in the North Island earlier this year).

2. Airports, and the aviation industry more broadly, have high levels of safety regulation and training and while airports operate separately, there are systems and structures in place around contingency and emergency response that mean that airports together form a flexible nationwide transport network.

Legislative and Regulatory Environment

3. There are significant legislative and regulatory layers in place that govern airports, and the aviation system, and how they prepare for and respond to emergencies. For example, Civil Aviation Rule Part 139 governs airports in New Zealand. There are two parts of Rule 139 that apply to emergency planning, specifically rule 139.57 regarding aerodrome emergency plans (AEP), and rule 139.109 for maintaining those plans. The AEP has two objectives; firstly, to minimize loss of life and secondly to return the aerodrome to normal operations as soon as practical.

¹ Our member airports include Ardmore Airport, Ashburton Airport, Auckland Airport, Chatham Islands Airport, Christchurch Airport, Dunedin Airport, Gisborne Airport, Hamilton Airport, Hawke's Bay Airport, Hokitika Airport, Invercargill Airport, Kapiti Coast Airport, Kaikohe Airport, Katikati Airport, Kerikeri Airport, Marlborough Airport, Masterton Airport, Matamata Airport, Motueka Airport, Nelson Airport, New Plymouth Airport, Oamaru Airport, Pauanui Airfield, Palmerston north Airport, Queenstown Airport, Rangiora Airport, Rotorua Airport, Takaka Airport, Taupo Airport, Tauranga Airport, Te Kowhai Aerodrome, Thames Aerodrome, Timaru Airport, Wairoa Airport, Wanaka Airport, Whanganui Airport, Wellington Airport, West Auckland Airport, Westport Airport, Whakatane Airport, and Whangarei Airport.

4. The 21 lifeline utility airports are all certificated by the Civil Aviation Authority (CAA) that they are allowed to provide airport services to airlines operating regular public transport flights. As part of its certification the airport must complete an exposition document that outlines the airport's emergency plans.² Airports can also draw on a reference document by the international Civil Aviation Organization (ICAO) for their planning³. The airport's AEP includes responses for aircraft emergencies such as accidents on or near the airport, security emergencies, for example sabotage or hijackings, and also for natural disasters. The AEP will also set out procedures, duties, roles and responsibilities, and how the plan is to be maintained. The Director of the CAA may decide that other, non-certificated, airports are required to have an AEP.
5. CA Rule Part 139.109 also sets out that the airport must have full scale emergency exercises every two years. This brings together the emergency services that would be responding to an aviation emergency. This exercise process builds the inter-relationships between emergency services and the airport that add a great deal to the airport's resilience.
6. NZ Airports submits that CA Rule Part 139 sufficiently regulates those airports that are designated as critical infrastructure to a very high level of resilience.

Role of Airports in Civil Defence Emergencies

7. Airports, regardless of ownership, have held responsibilities to be part of the Civil Defence Emergency Management system for several decades. Some airports are owned by local authorities who also hold the legal responsibility for providing the CDEM response in their district. Often regional airports are managed by senior council staff, and this automatically brings a level of integration and understanding of airports into CDEM planning. Those airports not owned by local authorities still have a range of obligations. However, with any review of CDEM there is a real opportunity to review the existing process and build a system and structure that means that all lifeline utilities become part of the response and planning in an emergency, and that a core consideration in prioritisation of the CDEM response is to understand the status of the lifeline utility and to consider in terms of the hierarchy of response the priority of keeping these lifeline utilities operational, protecting access to them and the support required.
8. Airports are highly valuable transport nodes for their locality during normal times. During a civil defence emergency, the airport becomes the key transport infrastructure because it enables rapid transport of people and supplies into the affected region and for the evacuation of the injured and displaced out to unaffected areas. New Zealand's geology and soils make all land transport vulnerable along the long distances that linear infrastructure covers.
9. Airports have recently taken on a new role in civil defence emergencies: that of being a welfare centre and a communications hub. Because of the requirements under the Civil Aviation Act and Civil Aviation regulations for airports to have emergency plans and preparations, in order to be resilient and maintain operations as part of the transport network, airports have very reliable power supplies to power airfield lighting and navigation aids to provide safe aircraft landings and takeoffs. This reliability of power supply is delivered by backup generators. The reliable electricity supply enables airports to be the communications hub and a place of refuge for people in distress. During the Auckland

² Refer CAA advisory circular AC139-14

³ ICAO Doc 9137 - Airport Services Manual, Part 7 Airport Emergency Planning

Anniversary Day flooding and Cyclone Gabriel, airport terminals were crowded with people seeking to use the airport's Wi-Fi network to communicate with people they could not otherwise reach because the telecommunications network had failed.

10. The collective experience of airports from civil defence emergencies is that preparation is extremely important to performance during an emergency, not just within the airport and aviation system itself but also planning in conjunction with the local councils, roading authorities and emergency services. Expressing it simply, this takes the form of a tripod: 1) having experienced and/or sufficiently trained personnel who can actually reach the operational site, 2) the entity having done the necessary planning and also established means of co-operation with agencies and other critical partners (especially suppliers), and 3) having the essential supplies needed to operate onsite or accessible. Airports' current role within the CDEM local and regional planning efforts, and Civil Aviation regulations generally, provides some of each of the parts of the tripod.
11. However, NZ Airports is not confident that the current system provides enough assurance that the optimal level of personnel, planning and supplies is always available for smaller and regional airports who may need support. Reliable means of communication – to the rest of New Zealand and to other entities - are also vital for co-ordination and operations. For example, during Cyclone Gabrielle a StarLink communications unit was used by Gisborne Airport.
12. NZ Airports would like to see higher systemic interest by the Government in the resilience of suppliers and supply chains to Critical Infrastructure entities. We think the focus should be on providing that systematic view and support to smaller and regional airports.
13. While the three key parts of preparation can be included in written management plans and be genuinely intended to have constantly available, delivering on their availability requires constant awareness by the organisation about who on staff holds the experience or required training and their availability, who knows the plans and the means of cooperation with other entities, and the stocks of essential supplies such as diesel fuel or wet weather gear.

Resilience and adaptation of Infrastructure

14. The aviation system, including NZ Airports, is highly focused on the changing climate and the resulting weather conditions that will require airports to adapt to higher intensity rainfall, hotter days, and possibly shifts in the prevailing winds. All of those changes will likely require altering airport infrastructure to continue 'business as usual' operations. In addition, sea level rise will affect at least 13 airports in coming years. Alongside that need to adapt to climate change, airports as critical infrastructure entities, will have the additional task of preparing for more severe climatic events and other natural disasters in order to fulfill their responsibilities of returning to operation as quickly as possible and assisting the Civil Defence Emergency Management response and recovery for their locality and wider region.
15. We support the New Zealand Government taking a deeper and broader view of resilience and consequently recognising the need for New Zealand to have overall greater resilience to natural disasters and external interference. The current limited approach to critical infrastructure does not recognise the greatly increased interdependencies – and consequently supply vulnerabilities – that are unavoidable for modern economies using modern technologies. NZ Airports supports taking a broader view of what is critical

infrastructure, noting that the policy process will take place after the Emergency Management Bill has passed into law.

16. NZ Airports suggests that DPMC take a realistic approach to the practical limits of attempting to ensure resilience against all risks or for a very long period of disruption. There is a level of resilience preparation and investment in infrastructure for resilience that becomes clearly impractical and unachievable. For example, infrastructure owners are prudently prepared for the current one in 100-year rain-event, could be asked in light of higher rainfall intensities due to a changing climate to prepare for what would be considered as the one in 250 -year rain event, but infrastructure owners cannot practically build infrastructure that is resilient for the one in 1000-year rainfall event. Similarly, New Zealand cannot stockpile the supplies of essential goods (necessarily government-controlled and determined stockpiles) for a long period (e.g., greater than six months) of halt to all imports. In practical terms, deciding what supplies are essential and for what purpose, and then stockpiling those items, would be a constantly changing and extremely political task.

Approach to resilience performance

17. NZ Airports believes that it may be worth exploring a dedicated agency for resilience performance across all of the critical infrastructure sectors rather than rely on each sector's regulator to fulfill the function of ensuring that the sector's entities are adequately prepared and have current planning, resources and staffing to fulfill their obligations. However, we would need to understand how such an agency would work and to ensure it doesn't replicate airports' existing obligations.
18. Sector regulators and policy ministries who have the responsibility of ensuring critical infrastructure entities in their sector are prepared for natural disasters and other threats are often resource constrained. Ensuring resilience capabilities in their sector may sometimes be a lower priority than the core business of the regulator or policy ministry.
19. NZ Airports suggests that the independent resilience agency applies to the emergency services and the government agencies with a role in emergencies the same level of performance responsibilities and auditing that the critical infrastructure entities undergo. The justification for this is that the performance of government agencies will be as equally critical as any of the entities in the critical infrastructure sectors. It would be extremely prudent to ensure that those agencies' preparation and performance are audited regularly on the same basis as the private sector entities. This is another strong argument for having a dedicated resilience agency that can hold accountable other parts of government and local authorities. Without an external agency checking the preparedness of government agencies, there is a higher likelihood of those agencies inadequately preparing for an emergency or failing during it.
20. We also suggest national resilience would be improved if there was greater transparency about how Critical Infrastructure entities and government agencies such as NEMA, CAA or the NZDF performed during emergencies. NZ Airports think there is great merit in holding public reviews (post event) of NEMA and other agencies, as well as including Critical Infrastructure resilience. These reviews should be timely, thorough, and independent.
21. NZ Airports welcomes the commentary in the discussion document regarding infrastructure investments for enhanced resilience taking place in the course of the usual lifespan of

current infrastructure, i.e., no new builds simply to meet a resilience requirement but the replacement and redesigns will be built with greater resilience in mind.

22. Resilience expenditure is a legitimate business expense, as is meeting all regulatory requirements. Consideration should be given by the Government to treating such resilience expenditure favorably in the tax system, such as with accelerated depreciation rates and/or treatment similar to research and development expenditure. NZ Airports notes that the Government gives a 15% tax credit for eligible and approved research and development expenditure. This should be considered by the NZ Government as a means of encouraging more rapid investment in resilient infrastructure.
23. New Zealand's three major airports (Auckland, Wellington, and Christchurch) are regulated under the 1986 Commerce Act to follow business price setting rules. Other airports, particularly regional airports, follow a similar price setting methodology as a matter of good practice. The impact of the Commerce Commission's input methodology and price setting regulations restricts the ability of regulated entities to build and charge for investments outside of 'business as usual' use by their customers, i.e., investments in resilience is for a possible future public benefit and cannot be included in price setting by airports. Airports cannot recover their investments in resilience if bound by current interpretations of the Commerce Act.
24. Competition law may also hinder the sharing of information between commercial entities before and during an emergency. Airlines found it difficult to find out the fuel stockholdings of aviation fuels by the three supply companies during recent supply disruptions. This is being addressed in the Fuel Industry (Improving Fuel Resilience) Bill which NZ Airports supports.
25. NZ Airports would welcome the development of a comprehensive and well-structured framework for prioritising essential supplies to critical infrastructure entities so they can maintain operations. This would require CDEM committees to have some understanding of what each critical infrastructure entity in their area required for its operations. One particular need during emergencies is adequate diesel fuel for generators, vehicles and other machinery. That raises a longer-term issue for when New Zealand de-carbonises the land fleet: how will emergency generators and vehicles be fueled when diesel is no longer widely available?
26. NZ Airports would welcome a more systemic and greater focus on cyber-security for critical infrastructure entities. However, we note that cyber is a highly technical and evolving area and in order for critical infrastructure entities to become a harder target for cyber threats, they will need some regular guidance and education as to what adequate protection and good security looks like as the cyber threat alters.
27. As noted above, resilience planning and preparation is a specialised area of expertise, and New Zealand's overall resilience would be improved if there was a pool of such advisors in the suggested resilience agency. Critical Infrastructure entities will need practical training and assistance from the resilience agency to know what is needed, and what is not.
28. The Government needs to be mindful when (or if) setting resilience standards for Critical Infrastructure entities, that the entities need to know clearly what scenarios the standard is preparing for. To state this another way, standards for Critical Infrastructure entities need to prepare for credible events and/of credible scale.

29. If Critical Infrastructure airports are directed to plan for a specific level of resilience, the Resource Management framework needs to be flexible enough to allow that outcome to be achieved. That could, for example, result in competing tensions between national policy documents prepared under the RMA (or the new legislative reforms that are underway), and the Government's policy of improving infrastructure resilience.

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