



Levies Assumptions Review Final report

Civil Aviation Authority

5 July 2024



FUELLING PROSPERITY

We passionately believe that the flow-on effect from focusing on helping **fuel the prosperity** of our clients significantly contributes to ensuring that our communities, and ultimately our country and all New Zealanders, will enjoy a more prosperous future.

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Purpose of this document

Civil Aviation Authority (CAA) have engaged KPMG to undertake testing and validation of the assumptions associated with Aviation Security Service (AvSec) fees and levies.

Our scope



The scope of work is to validate the assumptions behind the business rules applied to Quintiq. While not modelling Quintiq inputs or outputs, business rules that enable AvSec to meet its statutory, international and operational constraints and directives to fulfil its function will be assessed.

In particular KPMG has been asked to test and validate the assumptions associated with fees and levies in relation to:

1. Legislative requirements
2. Rostering of personnel
3. Operational requirements
4. Collective employment agreement conditions
5. Answer the questions within scope posed by the Ministry of Transport

Summary of process and findings



We examined the eight areas requiring AvSec FTE increases over the next three financial years

Category of FTE increase	FTE increase
1. Enhanced Security - AIT body scanners to meet international standards	54.4
2. Demand increase - passenger volumes	55.9
3. Demand increase - flight schedule timings	45.8
4. Enhanced Security - NPS insider threat to meet international standards	22.8
5. Support functions - enhanced planning, training (National Office)	2.0
6. Scope increase - behaviour detection for USA mutual recognition	4.0
7. Scope increase - wider operation of explosive detector dogs	12.0
8. Service level increase - 2hr check-in for international passengers	2.2
Total	199.1

1 For each area of FTE increase, we have examined drivers underpinning the FTE increase, categorised into:

- Changes in Legislation international standards, ministerial direction
- AvSec Operating Manual
- Location specific changes
- Rostering requirements
- Increases in passengers
- Changes to flight schedules
- Other

2 We have reviewed and documented assumptions arising from identified drivers, through review of documentation, walk through of Quintiq and stakeholder interviews.

3 We have made an assessment based on our confidence in the evidence whether the assumptions made are reasonable.

There were three core assumptions that cut across all proposed increases

Is the FTE increase linked to a legislative requirement, international standard or Ministerial direction?

To give assurance that each FTE increase is grounded in a legitimate expectation for AvSec, we:

- **Reviewed the relevant legislation** (Civil Aviation Act 1990, Civil Aviation Rules)
- **Reviewed statutory directives** (multiple Letters of Direction from the Director CAA to AvSec)
- **Reviewed operational procedures** to confirm how these are interpreted in practice (AvSec Operating Manual and some additional SME context through interviews)
- **Interviewed SMEs and reviewed background documentation** to confirm that this direction aligns with international standards

Key findings

We have been able to verify that all FTE increases are directly linked to either legislation, international standards or direction from the Minister. We discuss the legislative framework for CAA on slide 13.

Are the workforce demand assumptions driving the size of the increase reasonable?

To verify the assumptions that drive the size of the increase required to meet the expectations of AvSec, we:

- **Reviewed operational procedures** to confirm required staff per activity (AvSec Operating Manual and some additional SME context through interviews)
- **Reviewed duties and workforce data** that was used to calculate each line item increase (spreadsheets from SMEs and some additional SME context through interviews)
- **Interviewed SMEs and reviewed background documentation** to verify the assumptions that drive how AvSec allocate staff to undertake required duties on any given day
- **Interviewed SMEs and reviewed background documentation** to understand how AvSec forecast daily workforce demand over the three year forecast period

Key findings

We have been able to verify that the workforce demand assumptions driving the FTE increases are well understood in the business and reasonable. We also are able to verify that these assumptions are the basis for the size of the FTE increases. There are necessary uncertainties with predicting AvSec's operational workforce demands three years in advance, which is explained from slide 26.

Are the rostering assumptions that drive the size of this of the increase reasonable?

To verify the assumptions that drive the FTE requirement related to rostering (i.e. ensuring effective coverage during hours of operation, factoring in leave/training/breaks/etc), we:

- **Interviewed SMEs and reviewed background documentation** to understand AvSec's operational needs that influence rostering
- **Interviewed SMEs and reviewed background documentation** to understand how these operational needs are inputted into their rostering, scheduling and workforce management tool, Quintiq
- **Reviewed rostering contingency data** (spreadsheets from SMEs and some additional SME context through interviews)
- **Reviewed collective bargaining agreements** as they related to rostering

Key findings

We have been able to verify that the assumptions underpinning rostering are reasonable for AvSec's operational needs. We discuss this from slide 37.

Line by line, we found that each proposed FTE increase was based on reasonable assumptions

	FTE increase over next three years	Can we link FTE increase to legislation/standard/directive?	Are the workforce demand assumptions driving the increase reasonable?	Are the rostering assumptions driving the increase reasonable?	Comments
Enhanced Security - AIT body scanners to meet international standards	54.4	✓	✓	✓	
Demand increase - passenger volumes	55.9	✓	✓	✓	
Demand increase - flight schedule timings	45.8	✓	✓	✓	
Enhanced Security - NPS insider threat to meet international standards	22.8	✓	✓	✓	
Business risk - sustainable rostering for recruitment & retention	0	N/A	N/A	N/A	Note: while in our initial scope, this line item has since been removed by CAA from it's future cost base increases
Support functions - enhanced planning, training (National Office)	2.0	✓	✓	✓	
Scope increase - behaviour detection for USA mutual recognition	4.0	✓	✓	✓	
Scope increase - wider operation of explosive detector dogs	12.0	✓	✓	✓	
Service level increase - 2hr check-in for international passengers	2.2	✓	✓	✓	

Our detailed findings cover the key assumptions that form AvSec's business rules in Quintiq

Expectations

AvSec obligations

- Legislative requirements
- International standards
- Ministerial direction
- Location requirements/ constraints

Minimum FTE required

The minimum number of FTE required for AvSec to carry out its core duties (both passenger and non-passenger related) to meet its statutory and operational requirements.

Workforce demand

Lane capacity constraints

- Duties required - Average time to perform duties impacts efficiency
- Technology - type of technology impacts lane efficiency
- Location limitation - Size/ configuration of location impacts technology/how duties are performed

Lane throughput

Lane throughput is set by AvSec and tells us the number of people that can be screened over an hour period in a single lane - if the demand exceeds this, a new lane is opened.

Demand data

- Passenger numbers
- Flight schedule

Work demand forecast

Passenger throughput informs the work demand modelling to help AvSec plan the lanes and workforce required to meet demand at any given time and to limit wait time. This is based on historical data of flight schedule times, passenger loading per flight and passenger arrival times at the screening points.

Rostering

Contingency cover

- Contingency needed to cover absences due to sickness, leave, trainings
- AvSec needs to ensure continuity of duties carried out over multiple (3-4) shifts in the day (e.g. 6 days on 3 days off)

Rostering rules

To achieve the required AvSec workforce across any given time period, AvSec applies a series of rostering assumptions in addition to the minimum FTE required to provide adequate cover for any absences.

AvSec FTEs required

Our report covers five key findings

AvSec are being asked to do more over the next three financial years

This section will cover:

- What AvSec's obligations are both internationally and domestically
- How these obligations are changing
- How existing obligations will need to scale to continue to meet existing levels of service

Lane throughput assumptions are based on data and professional judgement

This section will cover:

- What is lane throughput and how is it set
- When are new lanes opened
- Key assumptions used to determine the number of lanes required
- Demand-side factors affecting the number of lanes
- Review of lane openings against passenger presentation
- Impact of lane openings on queues.

Workforce demand is difficult to predict and requires constant retesting

This section will cover:

- Passenger demand
- Workforce demand modelling
- Assumptions used for workforce demand modelling
- Historical view of rostering against passenger numbers.

Core rostering assumptions are reasonable

This section will cover:

- Passenger demand
- Workforce demand modelling
- Assumptions used for workforce demand modelling
- Historical view of rostering against passenger numbers

We are able to validate all of our critical questions for each FTE increase

This section will cover

- A summary of how each line item relates to a need for increased FTEs
- Whether the FTE increases answer our key questions
- The type of evidence we examined to verify the underlying assumptions
- An overall assessment of our findings

Finding A: AvSec Obligations

AvSec are being asked
to do more over the next
three financial years



In this section



This section focusses on how AvSec's legislative framework is driving the proposed FTE increases.

This section will cover:

- How AvSec's legislative framework impacts its minimum staffing requirements for all hours of airport operations
- Existing obligations will need to scale to continue to meet existing levels of service



AvSec's legislative framework means it has to respond to more external pressures

In order to keep our skies safe, AvSec are responsible for screening passengers and securing airports during their hours of operation. They are directed to do this **using the legislative framework to the right**.

To meet legislative requirements, there is a minimum number of staff required for every minute that the airport is open – for example, even if no flights are flying but the airport is open, AvSec need staff working to ensure no one can access a 'sanitised' (ie. screened) area and compromise security.

The **minimum staffing requirements are increasing**, driven by:

- International Civil Aviation Organisation (ICAO) expectations on New Zealand
- An evolving and complex threat environment
- National and international expectations on CAA to have a heightened security posture



International Civil Aviation Organisation (ICAO)

Part of the United Nations architecture, the ICAO sets the expectations for 193 member countries to ensure mutually beneficial aviation safety outcomes



Civil Aviation Act 1990 and Civil Aviation Rules

These establish the core responsibilities of AvSec with regards to screening and securing aerodromes – in line with ICAO requirements



Letters from the Director Civil Aviation

This is the key instrument for CAA to set the operational expectations for AvSec to continue to meet ICAO, legislative, and policy expectations



AvSec Operating Manual

This operationalises legislative requirements per duty per location and is the basis for how many staff are needed to meet legislative expectations per activity.

Increased passenger demand will mean more people are required to meet the same level of service

For every passenger that needs to fly, there are a number of duties AvSec needs to perform to make sure they are meeting their legislative requirements. These duties are described on slide 38.

For example, a passenger in Auckland International Airport will require their checked in luggage to be screened, their carry-on screened and their person screened by AvSec officers before they can board their flight.

As discussed on slide 27, passenger numbers are reasonably expected to increase over the coming years, and AvSec will be required to increase their staff levels to meet this. The relationship between the workforce required and the number of passengers is not linear, however, and the impact of more demand (and the assumptions behind how this translates to the required workforce) is discussed from slide 26.

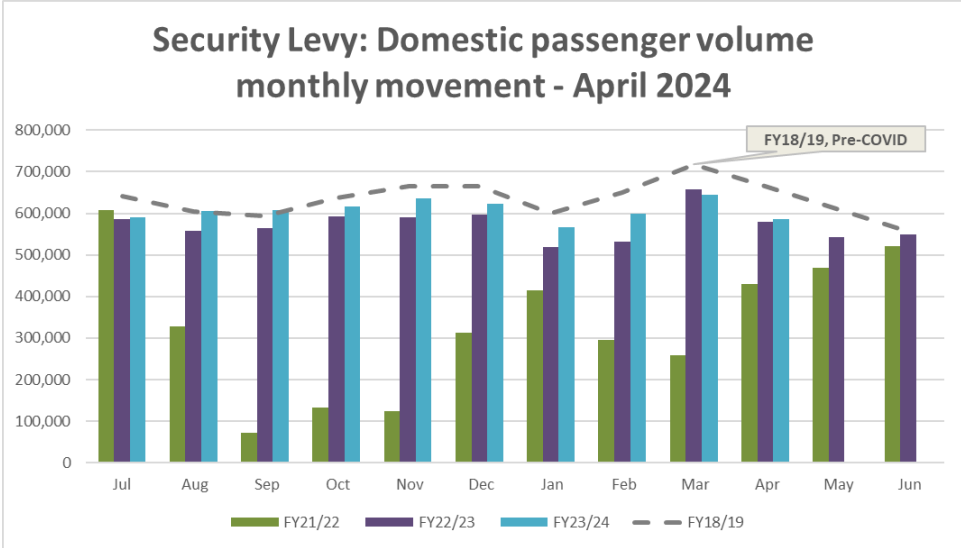


Figure 1: domestic passenger demand is slowly growing back to pre-COVID levels

52%
Of the FTE increase is to deliver the same level of service for more people across longer airport operating hours



Finding B: Lane throughput

Lane throughput assumptions
are based on data and
professional judgement

In this section



This section focusses on lane throughput and it's impact on FTE requirements.

This section will cover:

➤ What is lane throughput and how is it set

➤ When are new lanes opened

➤ Key assumptions used to determine the number of lanes required

➤ Demand-side factors affecting the number of lanes

➤ Review of lane openings against passenger presentation

➤ Impact of lane openings on queues.

↳ Lane capacity constraints

- Duties required - Average time to perform duties impacts efficiency
- Technology - type of technology impacts lane efficiency
- Location limitation - Size/configuration of location impacts technology/how duties are performed

! Lane throughput

Lane throughput is set by AvSec and tells us the number of people that can be screened over an hour period in a single lane - if the demand exceeds this, a new lane is opened.

Lane throughput sets the operational limit for passengers screened in a lane per hour

The number of lanes open is a key variable for AvSec staffing. Each time a lane is opened, it requires a number of staff, whose jobs include:

- Instructing people what to do with their luggage
- Monitoring the walk through metal detector
- Checking the screened bags
- Resolving any issues with carry on baggage or people.

AvSec use a number called **lane throughput** to determine when they will need to open another lane. Lane throughput tells AvSec what the maximum number of people that can be screened in an hour before they open another lane and incur the cost of more staff.

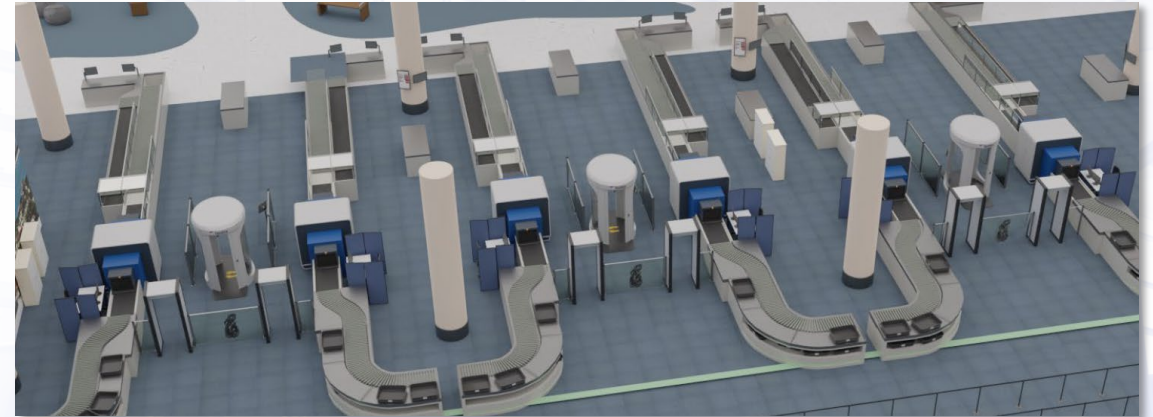


Figure 1: Auckland International Airport screening point layout

For example:

300

Is the lane throughput per hour for Auckland International Airport

This means:

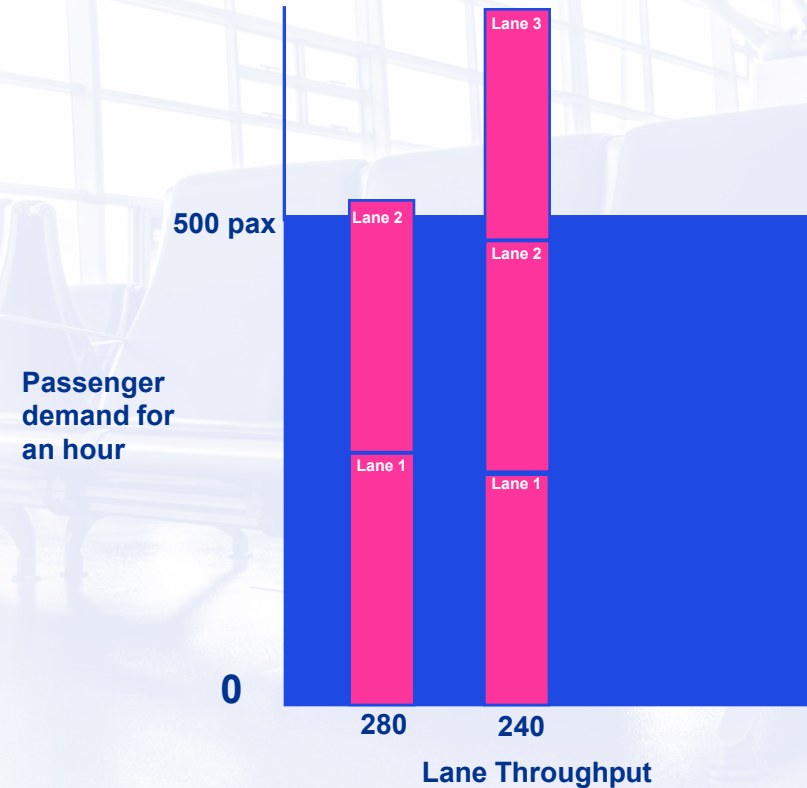
- AvSec management have calculated what the average speed to serve one passenger is in Auckland International Airport, plus a small contingency, and extrapolated it to identify how many passengers can be served in an hour
- Quintiq (the rostering and workforce management tool used by AvSec) has used expected passenger demand (discussed in Slide 22 of this report) to determine how many passengers are going to need to be screened in an hour.
- Quintiq has calculated, using lane throughput and expected demand, the number of lanes that need to be open for that hour, and then rostered staff accordingly
- On the day, local AvSec management will open or close lanes if it appears the expected passenger demand will differ from what is forecast.

The more lanes that open, the shorter the passenger queues, but the more FTE required

For Example

If you have a desired lane throughput of 280 passengers an hour, but you have 500 passengers that need to go through screening, you need to open another lane to meet this demand – requiring AvSec personnel to staff, but reducing wait times of passengers.

If you change the desired lane throughput to 240 passengers, and you still have 500 passengers that need to go through screening, then you need to open another two lanes in that hour span – requiring even more AvSec personnel to staff, but considerably reducing the wait times of passengers.



How does AvSec know if they're opening the right number of lanes?

AvSec perform regular audits of their expected vs actual lane openings to see if they're getting it right.

Increased passenger demand is predicted based on flight schedules and historical peaks so a second lane is planned to be open at this time, and is opened on the day to deal with queues

Most of the demand during the day can be managed using one lane only – but it is most efficient for AvSec to staff for the peaks as is discussed on Slide 21

Two lanes were expected to be open during this period (which will have factored into rostering), but passengers presented slightly earlier than expected. The impact is slightly longer wait times for these passengers.

Two lanes were expected to be open during this period (which will have factored into rostering), but there were no passengers – this could be due to on-the-day factors, including flight cancellations or delays.

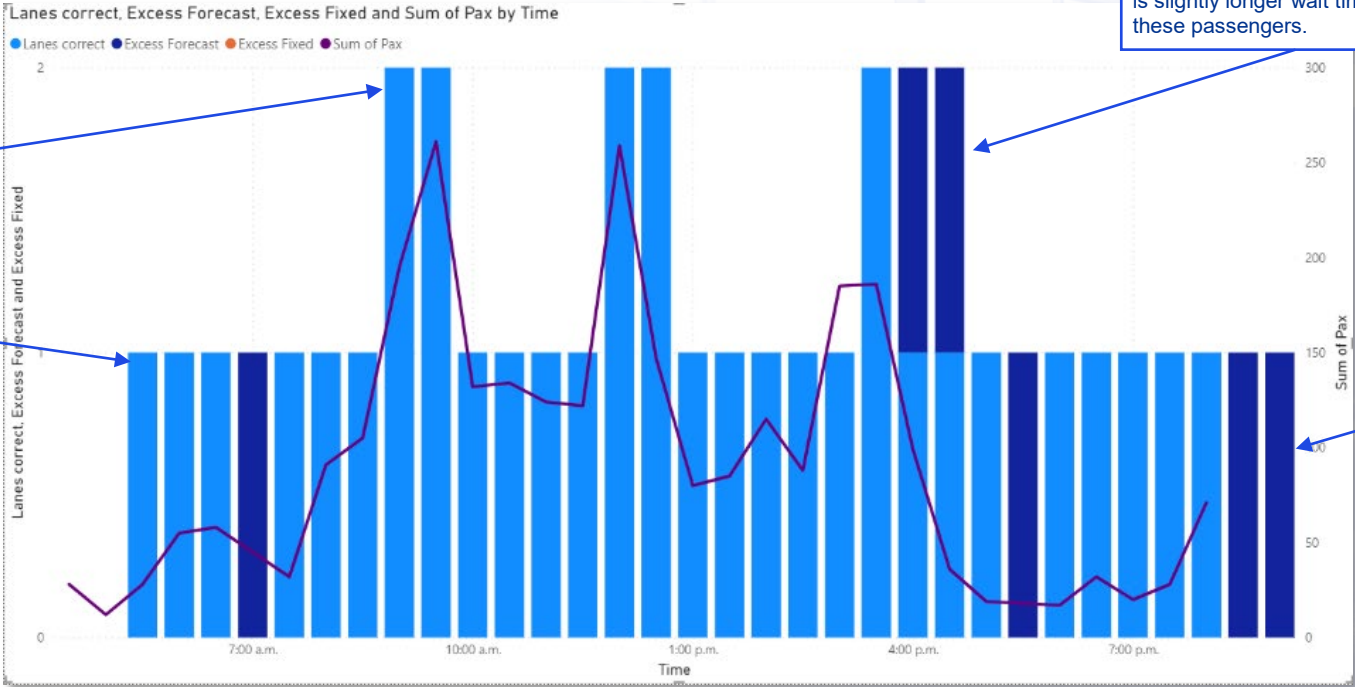


Figure 2: Queenstown domestic screening point volumes and screening lanes needed over a day

How does AvSec know if they're opening the right number of lanes?

CAA measures and reports on queue times as a key performance indicator in its' statement of performance expectations.

AvSec have a public target of an average service time (queue + screening) of under 10 minutes. For this week, every day is under this, which tells us that enough lanes were open to meet required levels of service

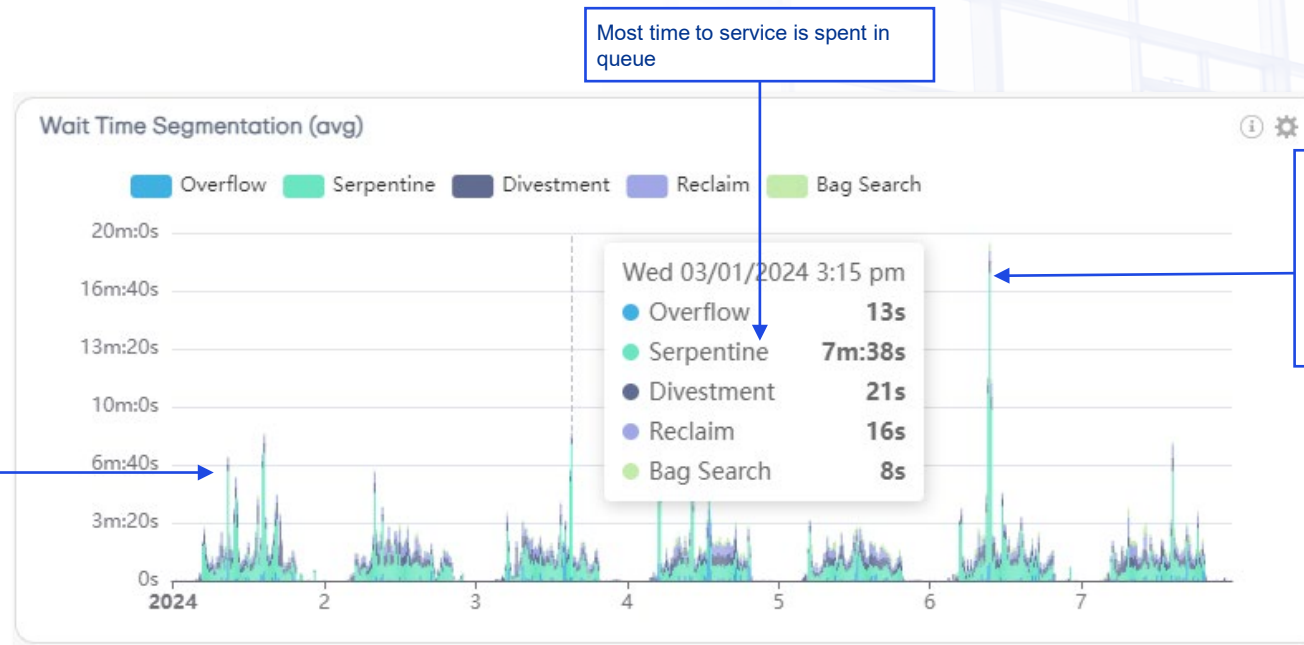


Figure 3: Wellington – queue times throughout day at southern domestic screening point

What operational assumptions drive how lane management translates to FTE required?

There are four key assumptions:

Assumption	Reasoning	KPMG comment
AvSec must staff for the 'peaks' in the day	If 5 lanes are required for the busy periods, AvSec must ensure they have enough screening officers on duty during this time – even if the busy period only lasts a short time and most of the day only 2 are required. When not screening passengers, there are other duties that staff can perform (for example: foot patrols of the terminal, screening bulk goods).	Reasonable – under the existing operational delivery model, part-time and full-time staffing for peaks is reasonable to ensure continuous operation of service. The Collective Employment agreement also stipulates that, for part time employees (which are harder to attract and retain) that a minimum of three hours is required per shift. For full time employees (significant majority), they must average 8.5 hours per shift.
Staffing efficiencies won't always scale with more passenger demand	Additional flights are most often added in peak time periods – meaning that an extra lane is required at the peak rather than at a quieter period where there is already the existing capacity.	Reasonable – see graph on Slide 19.
A lane is only opened if the demand exceeds the lane throughput	Most efficient use of staffing resources – staff are not waiting for passengers if they're not forecast.	Reasonable
Lane throughput is set near the maximum possible operational limit given technology, worker efficiencies and location-specific requirements.	By setting throughput close to maximum operational efficiency (with a small amount of contingency), AvSec will use the least amount of FTE possible to service demand.	Reasonable – we are comfortable that the driver behind business as usual lane throughput numbers is operational efficiency and is not primarily driven by queue time management (noting they are still achieving their queue time expectations – as per previous slide)

What demand variables are taken into account when deciding how many lanes to open?

Passenger demand variables are loaded into Quintiq in the months and weeks prior to a flight. This expected demand is then set against the lane throughput and tells AvSec how many lanes are required to staff.

The demand variables are:

Variable	Size of impact on FTEs required	Reason	How does AvSec plan for this?
Scheduled departure time	Highest	<p>The schedule drives the hours of operation for the airport.</p> <p>If the scheduled departure time is close to other flights, then the passenger demand is condensed into that hour – more lanes may need to be opened to deal with this demand and therefore more FTE required.</p> <p>If the departure time is outside of existing airport operating hours, then more FTE are required across both passenger screening and non-passenger screening. This drives the biggest impact in FTE as there is a fixed cost (to meet legislative requirements) for each hour of airport operation.</p>	<p>Flight schedules are known at maximum six months prior to flight date. As these schedules change in the lead up to a flight, Quintiq will automatically adjust lane and rostering needs. See Slide 30 for other ways AvSec manage uncertainty with their staffing over this time period.</p>

What demand variables are taken into account when deciding how many lanes to open?

Passenger demand variables are loaded into Quintiq in the months and weeks prior to a flight. This expected demand is then set against the lane throughput and tells AvSec how many lanes are required to staff.

The demand variables are:

Variable	Size of impact on FTEs required	Reason	How does AvSec plan for this?
Aircraft type and carrier	Low	Seat capacity is based on aircraft type and is loaded into Quintiq. The bigger the plane, the more passengers that could be loaded onto it, meaning more passengers required to be service by AvSec staff and more lanes open.	Aircraft type and carrier will be known at the same time as the flight schedule is released. See Slide 30 for other ways AvSec manage uncertainty with their staffing.
Expected loadings	Medium	Expected loadings are expressed as a percentage of the maximum seat capacity of an aircraft. The higher the loading, the more passengers would be expected to need screening.	Based on historical data of similar flights, but professional judgement is also used to increase this number if holidays or events would indicate this number should be higher. See Slide 30 for other ways AvSec manage uncertainty with their staffing.
Passenger presentation rates	Medium	Presentation rates tell Quintiq when, in the 90 minutes proceeding the flight, passengers are likely to turn up for screening for their flight based on historical data. This can help identify demand peaks, even if flights aren't scheduled close together.	Based on historical data of similar flights, but professional judgement is used if holidays or events would indicate the standard rates should change (e.g. passengers turn up earlier if there's a public holiday on that day).

Finding C: Work demand forecasts

Workforce demand is difficult to predict and requires constant retesting



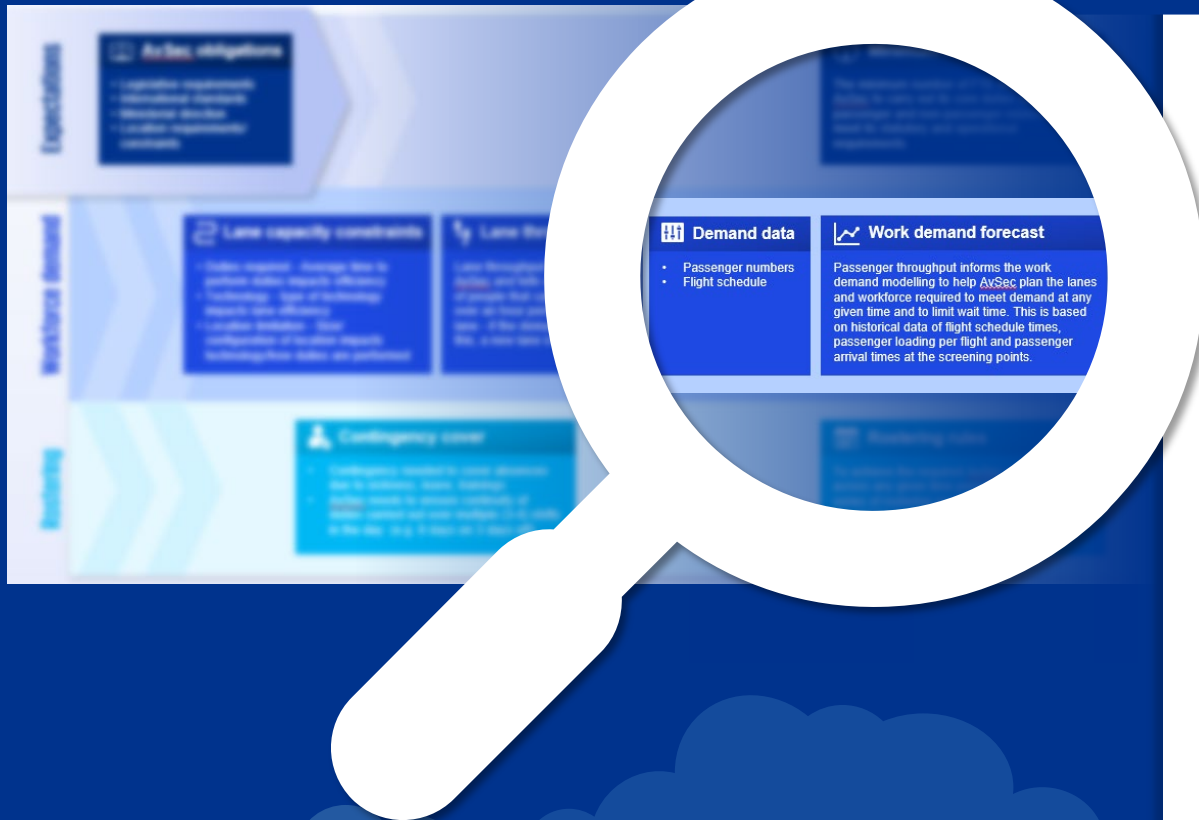
In this section



This section focusses on workforce demand forecasts and it's impact on FTE requirements.

This section will cover:

- Passenger demand
- Workforce demand modelling
- Assumptions used for workforce demand modelling
- Historical view of rostering against passenger numbers.



Passenger demand and workforce demand are indirectly linked

The workforce planning done by AvSec that inform their proposed FTE increase is predicated on a 2.3% growth in passenger demand each financial year over the next three years.

How is a 2.3% increase in passenger demand each year calculated?

CAA is required to forecast passenger demand to understand how much revenue they would expect to receive over a triennium, and whether this is going to cover their cost base. This informs funding discussions with the Minister and Ministry of Transport.

Their passenger demand figure is calculated using:

- International forecasts from the Border Executive Board (supplied by the Ministry of Transport).
- Domestic forecasts created in house. This is calculated using post-COVID recovery figures as a base, and then forecasting using professional judgement based on other industry forecasts and market outlook commentary.

The financial model used to calculate revenue is supplied to the Ministry of Transport.

How does passenger demand translate to workforce demand?

Passenger demand drives both the airport hours of operation and also the number of lanes required to be open – and both of these factors drive the number of FTE that AvSec needs to meet operational requirements.

Because there is:

- a high degree of uncertainty for passenger demand three years out, and
- unknown factors like flight schedules that might change the hours of airport operation,

Forecasting workforce demand for a triennial review must mix both data and judgement. This is discussed on slide 30.

CAA forecast demand using BEB/MOT international forecasts...

BEB are forecasting a 4.9% increase in international passengers each year if “Moderate growth” occurs

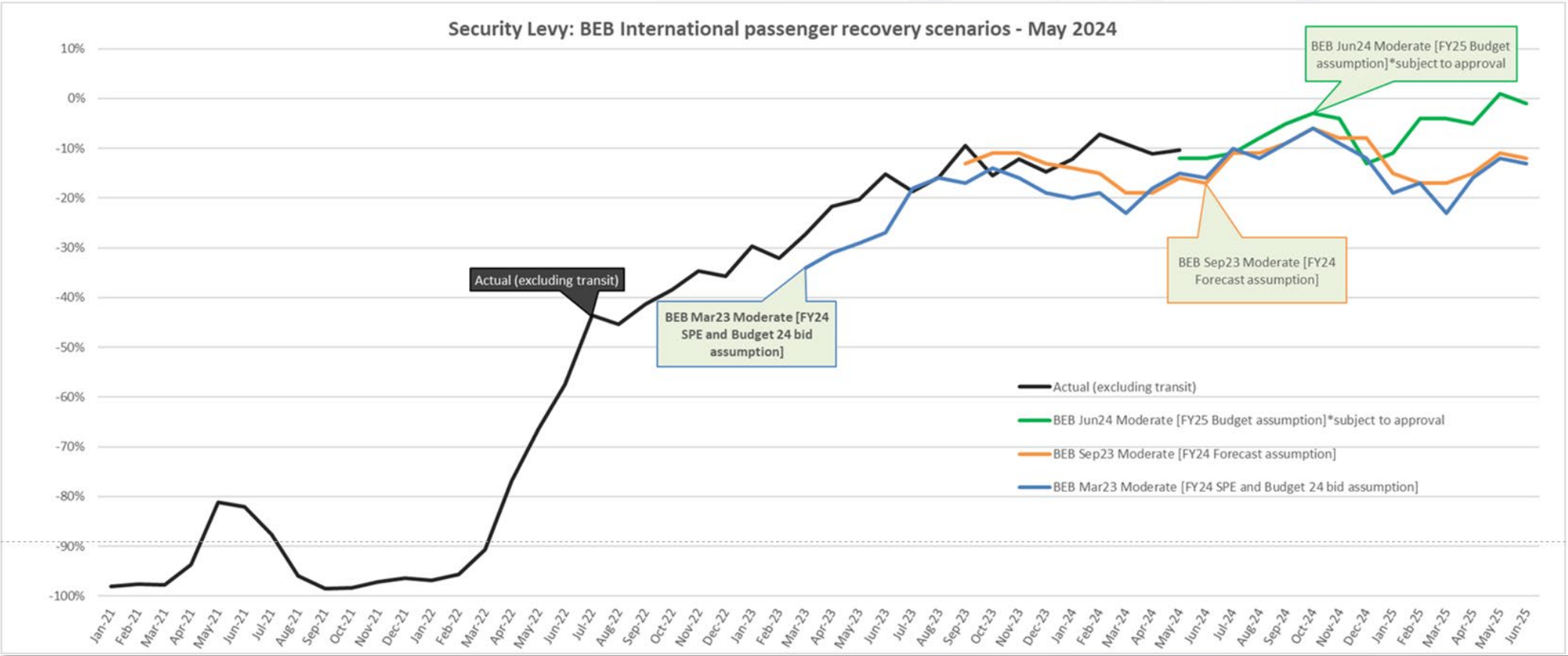


Figure 4: BEB/MOT forecasts for future passenger growth: provided to KPMG by CAA based on CAA Board reporting

... and a mixture of actuals/professional judgement for domestic

CAA are forecasting based on actuals, market research and professional judgement a 1.6% increase each year in domestic passenger demand over the next three years – conservative but in line with recent Air NZ 2024 interim results

Actuals

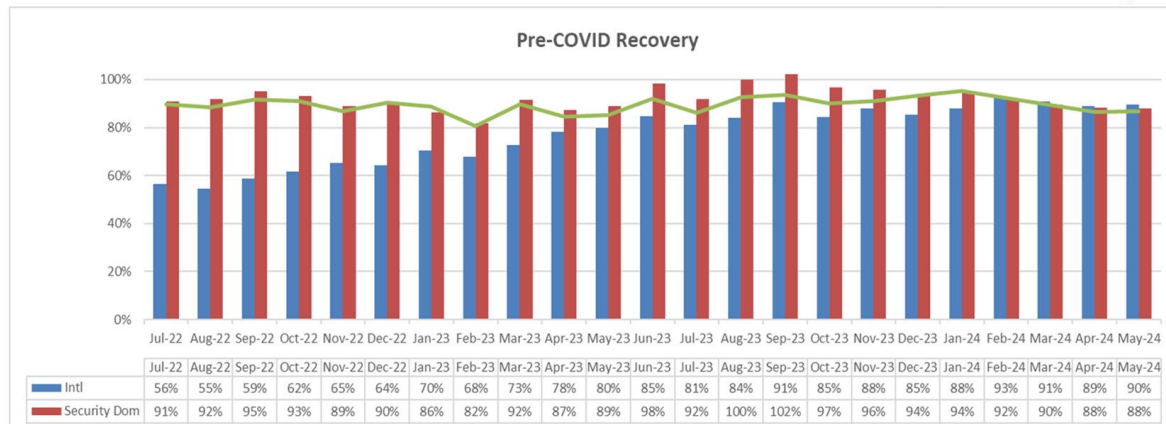


Figure 5: Actuals for international and domestic passenger recovery

Actuals, market research and professional judgement

Demand: ●

Excerpt from Air New Zealand's 2024 interim results

<https://p-airnz.com/cms/assets/PDFs/air-nz-2024-interim-results-analyst-presentation.pdf> :

Domestic demand outlook

- Government and corporate demand has remained soft, SME segment has been resilient
- Targeted reduction in Domestic capacity in Q4 to better reflect current demand profile and improve operational resilience
- Domestic leisure and international connecting demand holding up, but sensitive to price changes
- Fare review underway to adjust selling yields commensurate with inflationary costs required to operate the Domestic network.

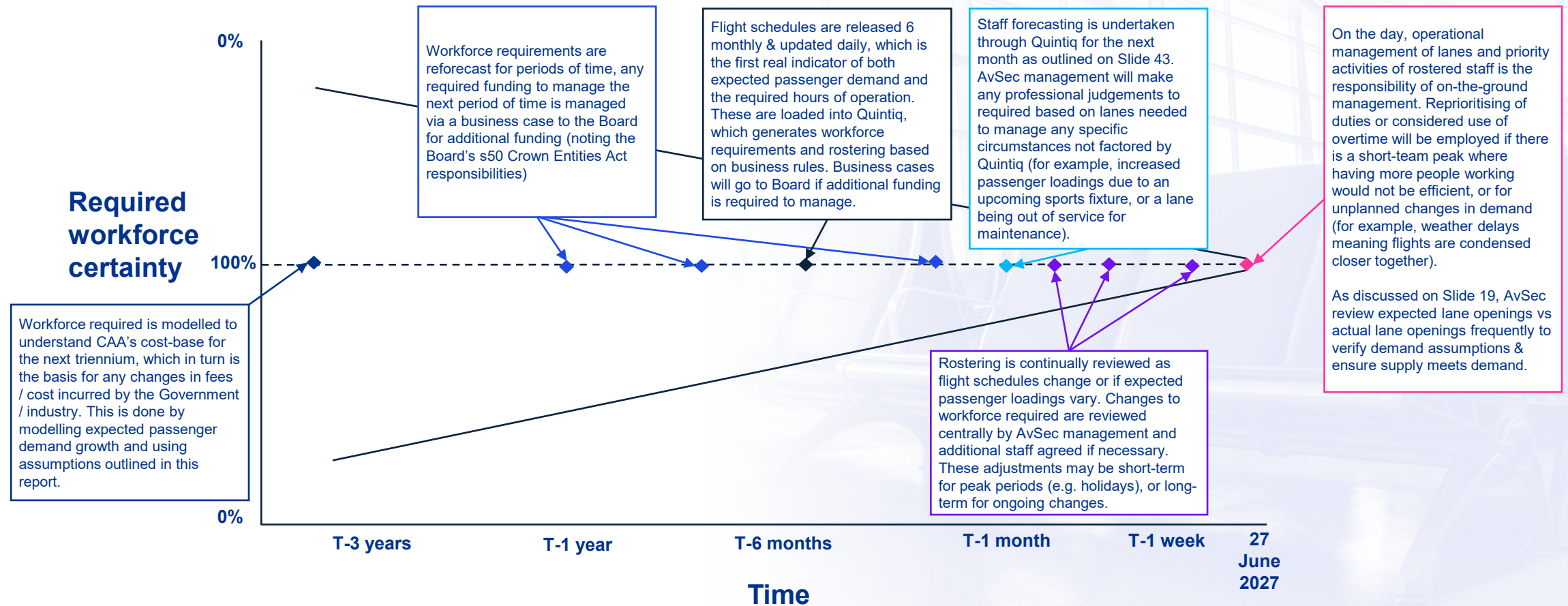
With weak Government and corporate demand, decreasing capacity and increasing prices it is unlikely to see strong demand growth.

Figure 6: In-house analysis by CAA to inform domestic demand forecasts

How does AvSec translate the passenger demand forecast into a workforce demand model?

- To ensure AvSec can perform its duties to regulated standard without service interruption, the required workforce is modelled based on duty demand.
- Airport demand is highly variable – with differencing numbers of staff needed throughout each day and between different days due to flight schedule timings.
- **Demand is accurately predicted up to 6 months in advance where schedules are known & refined over time** if schedules change or passenger loadings vary.
- The reality of long-term schedules being unknown but having large impact on staff needs means **anything beyond 6 months must use reliable assumptions**. Assumptions are informed by historical data on flight demand, duty requirements & passenger flows.

AvSec's workforce requirements are refined as more information is known



To best anticipate workforce demand beyond six months, AvSec use a number of assumptions

Assumption	Reasoning	KPMG comment
How passenger demand varies through the day, i.e. how passengers present at the lanes, is a key input to workforce demand	<p>If the demand utilises existing capacity (ie. a lane is open but only half capacity), then an increase in demand might not translate to any additional FTEs required to service it.</p> <p>Conversely a small increase in demand that affects airport hours of operation could drive significant FTE increase. For example, if there is a new 1am Singapore Airlines flight out of Christchurch, where previously there was no passenger screening demand at this time, AvSec will need to roster staff across the full 90-minute presentation window just for the one flight. This would be in addition to any non-passenger screening roles that would also need to be staffed over this period. AvSec would not find out about this new flight until, at most, 6 months before the flight would take place.</p> <p>What this means for workforce demand is that there is an indirect relationship between passenger demand and workforce demand, particularly where flight schedules are unknown. While an increase in passenger demand is likely to correlate to an increase in staffing need, professional judgement is required to forecast this over a three year period.</p>	Reasonable – as described on slide 41, we are comfortable that there are a number of factors that influence passenger demand for any given day, and that there is not a simple, direct, relationship between passenger volumes and required screening staff. Three year passenger demand forecasts will need assumptions based on professional judgement.

To best anticipate workforce demand beyond six months, AvSec use a number of assumptions

Assumption	Reasoning	KPMG comment
Passenger demand is going to increase between 2024-27	Based on historical data, COVID-19 recovery rates, Ministry of Transport forecasts, industry forecasts, and market commentary, CAA/AvSec are predicting an increase in overall passenger movements over the next three years.	Reasonable – we have sighted Ministry of Transport and Air New Zealand’s forecasts who both project overall passenger demand increases over this time period. Historical, pre-COVID, trends also suggest a steady increase in passenger demand year-on-year.
Passenger demand (for the sake of workforce demand) will increase by around 2% each year	<p>This figure is a combination of professional judgement and data. It leverages CAA’s financial forecast assumptions (which are created using the above inputs), most importantly that:</p> <ul style="list-style-type: none"> - there will continue to be good international growth over the next three years (as is being modelled by MoT) - this will be offset by a soft domestic market, due to factors including a soft corporate market and increase in fuel prices (as is being predicted by Air New Zealand and reflected in recent quarter’s actual passenger screened figures). CAA forecast this will result in ‘vs pre-COVID’ rates of 90%, 93% and 95% over the next three years. <p>CAA assumes international passenger growth of 4.9% a year and domestic passenger growth of 1.6% (extrapolated ‘vs pre-COVID’ rate) - total over the period being 2.3%.</p>	<p>Reasonable – we accept that there are multiple forecasts in the industry and 2% is in line with CAA financial modelling which is based on market analysis.</p> <p>We also note that CAA’s demand forecasts are more conservative than the Ministry’s for passenger demand, and are more closely aligned with Air New Zealand’s outlook as the biggest airline in the country. If CAA took MOT’s demand modelling as the basis for the FTE requirements, they would require more FTE than they have requested.</p>

To best anticipate workforce demand beyond six months, AvSec use a number of assumptions

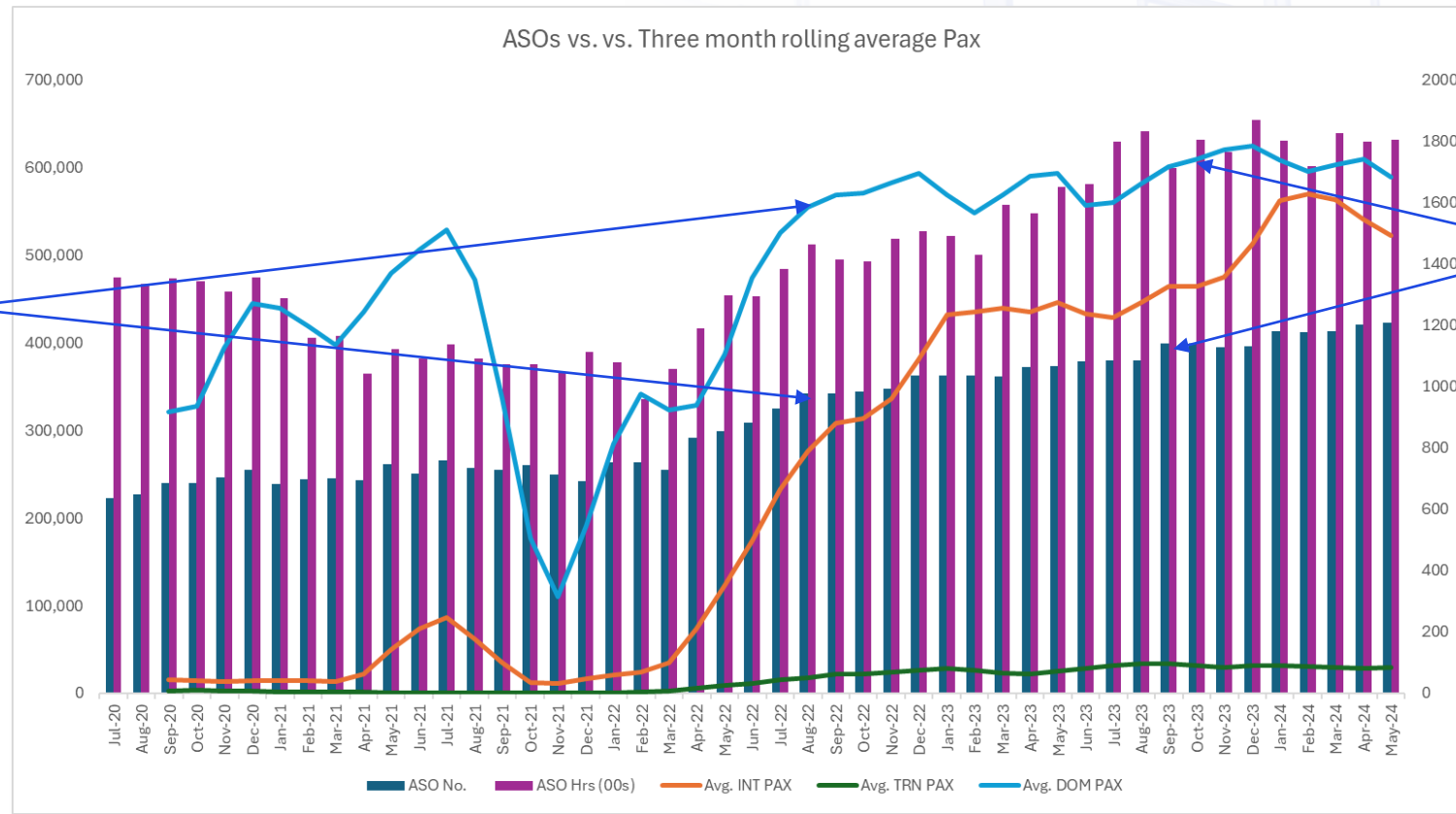
Assumption	Reasoning	KPMG comment
A workforce 2% increase is applied linearly across all existing passenger screening existing duties	This is a professional judgement based off of historical patterns (flight times, passenger flows, duty requirements) and broad direction of passenger demand (ie. it's increasing). As discussed in slide 30, the actual workforce demand is refined over time with controls including business cases to the Board for any additional funding required for staff.	Reasonable – as described on slide 41, we are comfortable that there are a number of factors that influence passenger demand for any given day, and that there is no direct relationship between passenger volumes and required screening staff. Three year workforce demand forecasts will need assumptions based on professional judgement, and 2% appears to be a reasonable assumption given these factors.
No extension of existing airport times have been factored into workforce demand modelling	Flight schedules changes that impact airport operating hours can only be known six months in advance so have not been factored in to FTE calculations. No contingencies have been built into the proposed FTE increases to deal with this uncertainty.	Reasonable – cannot reasonably predict outlier changes to operating hours over the next three years.
Demand will drive an additional lane at Auckland International.	Demand is increasing and there is space at Auckland International to expand into a seventh lane. This will drive additional FTEs to staff in peaks, and would need to include an additional AIT Body Scanner.	Reasonable – this is a project that came up in interviews with multiple CAA SMEs, and seems reasonable given the expected increase in demand in Auckland and existing demand patterns. If a 7 th lane isn't built, it is likely that queue times will increase.

How does AvSec know if it's getting the required workforce right to meet demand?

The graph below shows the number of aviation security officers and their hours of work against the number of international and domestic passengers.

Staff trends (both in ASOs hired and hours worked) generally follow passenger demand.

But this demand isn't proportional, there is still inherent variability due to factors including where the passenger demand falls in the day and seasonal variability (as discussed on previous slides)



There's a lag between hiring of new ASO's and passenger demand – which indicates that AvSec is able to increase supply of staff when they predict it is necessary to deal with anticipated demand. This is especially important as it typically takes 3 months to hire and train a new ASO.

Figure 7: relationship between ASOs (both headcount & hours rostered) and a 3mth rolling average of actual passengers processed

Finding D: Rostering rules

Core rostering assumptions are
reasonable



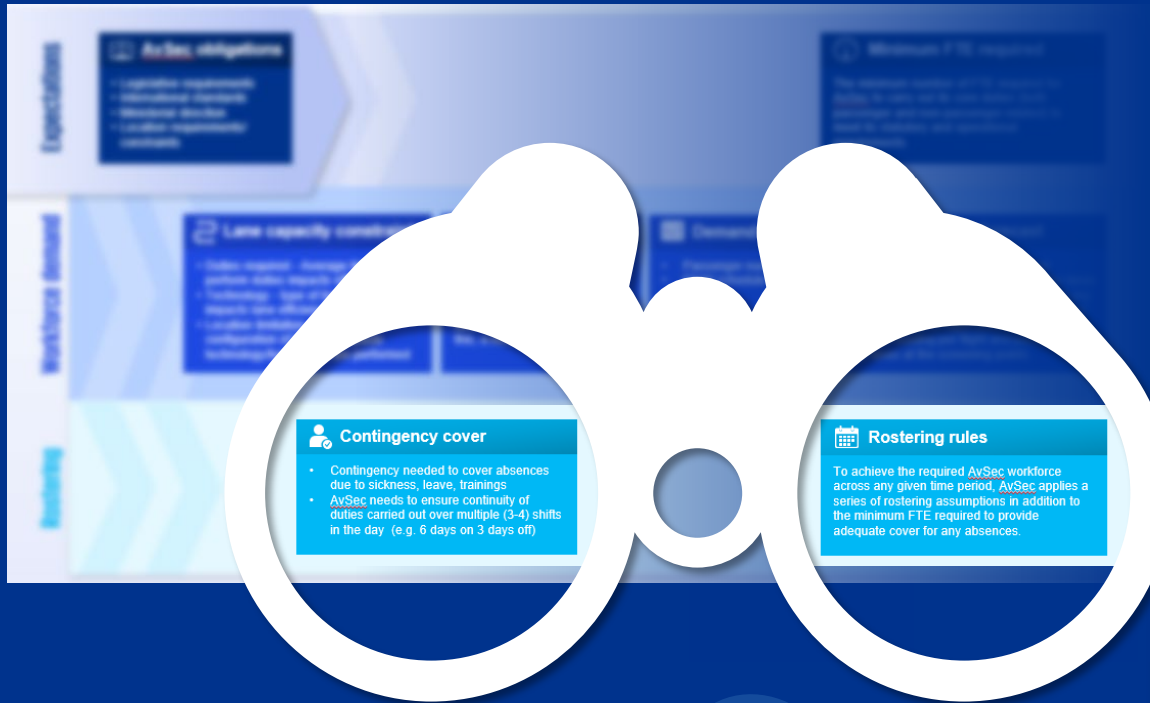
In this section



This section focusses on rostering assumptions and it's impact on FTE requirements.

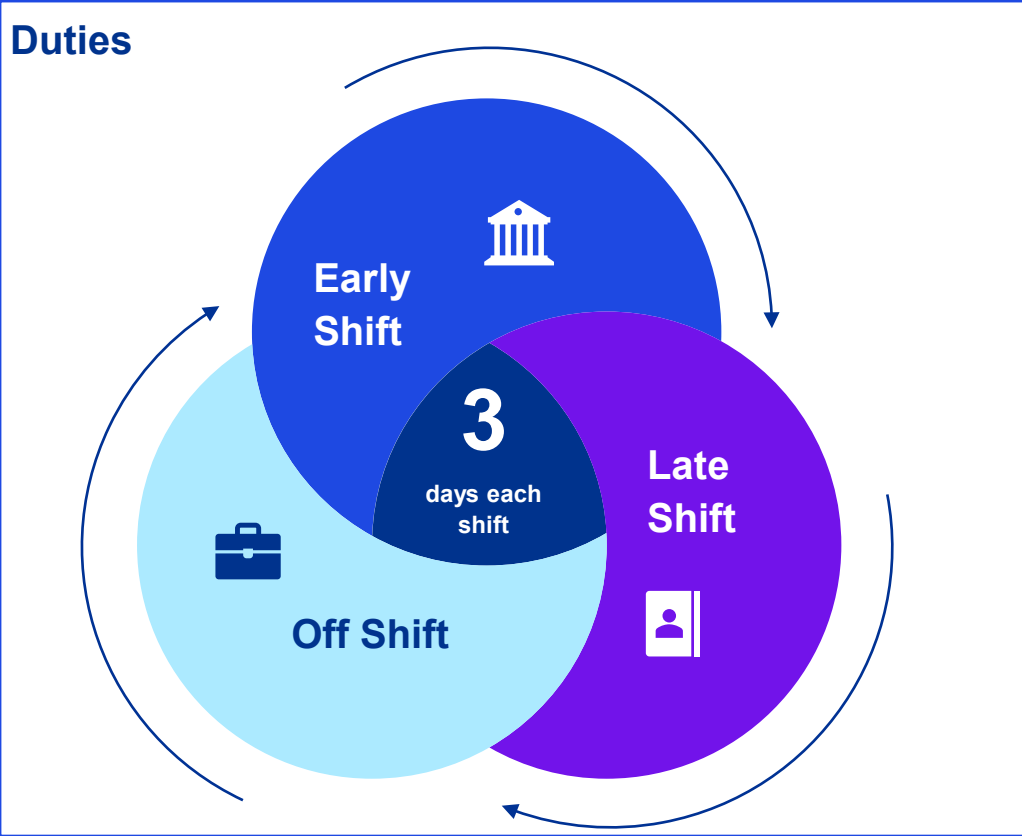
This section will cover:

- Passenger demand
- Workforce demand modelling
- Assumptions used for workforce demand modelling
- Historical view of rostering against passenger numbers.



Rostering Assumptions

To operationalise the workforce demand business rules, AvSec use a 6 days on, 3 days off rostering system. To get the total FTEs required to staff a day, overnights (at airports with later operating hours) and overheads (contingency to manage leave/training/breaks) are added.



These are discussed in detail in the coming pages

AvSec's Duties

To perform their operational duties (as established in the Civil Aviation Act 1990), AvSec's responsibilities are to:

Authorisation / Establishment	Incident management	Control movements	Cooperation
<p>To improve the safety of aviation by the application of specific security measures designed to protect property and persons in designated aerodromes and navigation installations</p>	<p>Incident management includes the managing of any controlled item including seizing and disposal. The management of non-consent, non-compliant and disruptive persons or persons in the commission of a crimes against the Aviation Crimes Act 1972, including detainment, arrest and the use of force</p>	<p>Includes controlling movements by undertaking security vetting (issuing identification) into security / enhanced areas, sterile areas and onto aircrafts</p>	<p>Includes entering agreements and exchanging information both threat specific and for the purpose of enhancing aviation security measures both with domestic agencies, aviation providers and other sovereign states</p>
Security patrols	Capability	Managing restricted items	CA Security Programme
<p>Includes patrols of designated aerodromes and navigation installations perimeters and facilities</p>	<p>Capability includes undertaking research and development for the purpose of improving personnel executing their duties through enhanced training, and introducing where appropriate new equipment</p>	<p>Managing controlled items includes screening, searching and seizing items (restricted or dangerous) from vehicles, passengers, crew members, baggage, cargo, mail and any other items or persons on a designated aerodrome and navigational installations.</p>	<p>Establish operational procedures to prevent the unlawful interference at an aerodrome or navigation installation</p>

These are translated into a series of duties loaded into Quintiq (expanded on in slide 43)

AvSec's Duties

To deliver these services for every day, every year, they divide their frontline services into three chunks – an officer will spend three days rostered on early shifts, then three days rostered on late shifts before having three days off:

Early shift

Performing core duties in the first half of the day (time of day depends on that airport's opening hours, will average 8.5 hours per staff member)

Late shift

Performing core duties in the second half of the day (time of day depends on that airport's opening hours, will average 8.5 hours per staff member)

Off shift

Days off

Night shift

Bespoke shifts outside of the three/three/three model for airports that require staffing (for example, an international flight is scheduled to arrive at 2am and staff are required).

These business rules form the basis of the Quintiq rostering system.

Duties are coded by hours into distinct categories in Quintiq

Passenger (Pax) dependent: duties that are to service passenger demand

Schedule dependent: duties that need to be performed according to the times of the flight schedules per day regardless of passenger numbers, e.g. non-passenger screening or equipment testing.

Officers will record each duty performed in a day – this gives AvSec a rich dataset to understand what their people are doing.

During an officers Early/Late shift rostering, officers also perform other duties that are required due to health and safety requirements (e.g. meal breaks, sick leave), union requirements (e.g. union meetings), and training requirements as outlined in Civil Aviation Rules Part 140.

These are all coded for in Quintiq, and the contingency (e.g. forecast amount of additional FTE required to cover) is built in as **overhead**.

AIT TRG AIT Training	Training	CBS	Employee Dependen
AITD AIT Director	Bend/Stretch	CBS	Pax Dependent
AITDD AIT Director Domestic	Bend/Stretch	CBS	Pax Dependent
AITDI AIT Director INT	Bend/Stretch	CBS	Pax Dependent
AITF AIT Female	Bend/Stretch	CBS	Pax Dependent
AITFD AIT Female Domestic	Bend/Stretch	CBS	Pax Dependent
AITM AIT Male	Bend/Stretch	CBS	Pax Dependent
AITMD AIT Male Domesic	Bend/Stretch	CBS	Pax Dependent
AITPDRT AIT Pat Down Refresher Training	Training	CBS	Employee Dependen
AITR AIT Resolution	Bend/Stretch	CBS	Pax Dependent
AITW AIT Wand	Bend/Stretch	CBS	Pax Dependent
ATM AIT Male	Bend/Stretch	CBS	Pax Dependent
BDF Bulk Duty Free	Search/Load	CBS	Schedule Dependent
BDFT Bulk Duty Free Truck	Search/Load	CBS	Schedule Dependent
BGL5 BG Load 5	Search/Load	CBS	Schedule Dependent
BGS5 BG Search 5	Search/Load	CBS	Schedule Dependent
BGW5 BG Wand 5	Bend/Stretch	CBS	Schedule Dependent
BS Bulk Screening	Search/Load	CBS	Schedule Dependent
BSBDF Basement Screening Bulk Duty Free	Search/Load	CBS	Schedule Dependent
BSD Bulk Screening Domestic	Search/Load	CBS	Schedule Dependent
BSJR Bulk Screening JR	Search/Load	CBS	Schedule Dependent
BSL5 Bulk Screening Lane 5	Search/Load	CBS	Schedule Dependent
BSM Bulk Screening Menzies	Search/Load	CBS	Schedule Dependent
BSNL Bulk Screening NL	Search/Load	CBS	Schedule Dependent
BXR Bulk X-ray	Search/Load	CBS	Schedule Dependent
CBF Close Body Wanding Female	Bend/Stretch	CBS	Pax Dependent
CBM Close Body Wanding Male	Bend/Stretch	CBS	Pax Dependent
CBT Cabin Baggage Tutor	Training	CBS	Employee Dependen
CBTXRT Cabin Baggage Tutor XRT	Training	CBS	Employee Dependen
CONITB Concierge ITB	General	CBS	Pax Dependent
CTIXLP CTiX Lane Practice	Search/Load	CBS	Pax Dependent

Figure 8: an excel output of some of the duties loaded in to Quintiq

How does the duty data break down?

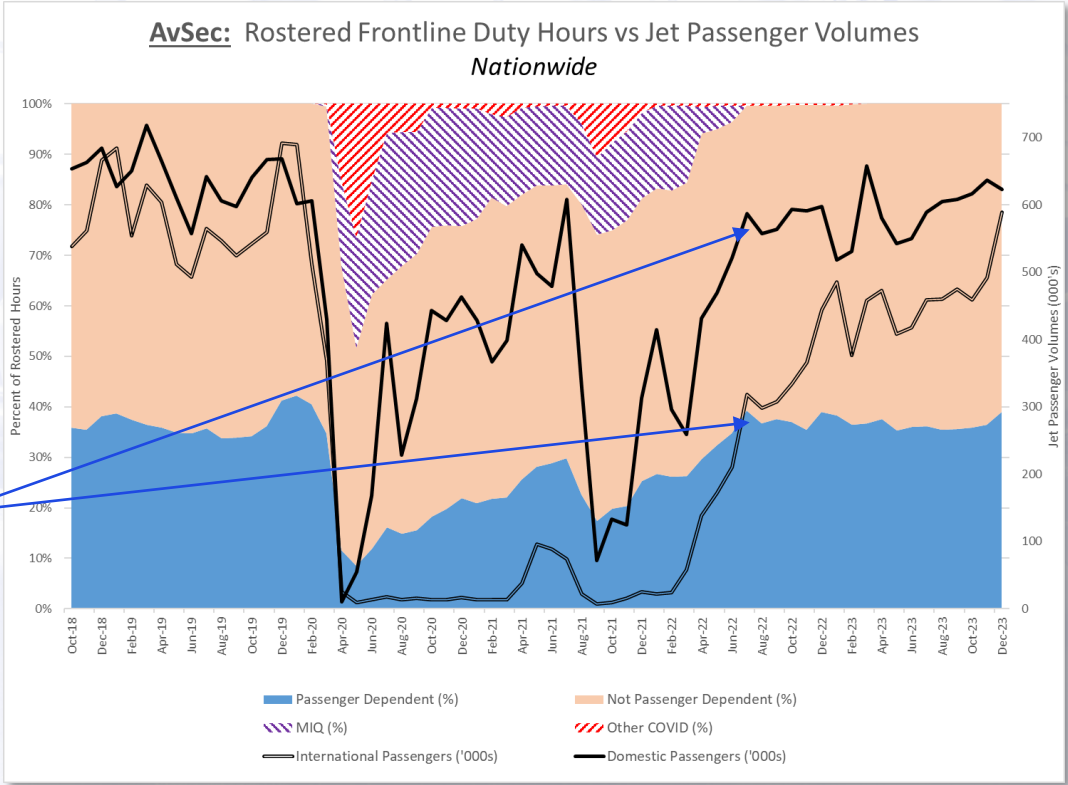
Location	Category	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
All AvSec	TOTAL Rostered Hours	180,553.5	176,641.5	187,071.5	180,327.5	171,928.0	182,675.0
	Passenger Dependent (Hrs)	64,880.5	64,469.5	72,961.5	72,939.5	67,055.0	71,081.0
	Employee Dependent (Hrs)	61,337.0	58,603.0	58,629.0	52,207.0	53,206.5	58,107.0
	Pax Dependent (%)	36%	36%	39%	40%	39%	39%
	Schedule Dependent (%)	29%	29%	29%	30%	29%	28%
	Employee Dependent (%)	34%	33%	31%	29%	31%	32%
	International Passengers ('000s)	490	520	623	637	541	601
	Domestic Passengers ('000s)	616	637	623	566	598	645

Of all hours completed by ASOs, they roughly break down into a 40/30/30 split between duties.

One trend we can see is that as passenger demand goes up for a period of time, so too does the number and percentage of passenger related duties – which gives confidence that the duties are coded in a way that we can rely on the data.

We also see the passenger dependent hours increase as the passengers do but not in a linear way – this is because the way the passengers present during the day will differ (as discussed on Slide 33)

The non-linear relationship between passenger hours required and passenger demand is also shown in this graph. While the trend is a that as passenger demand grows so too does the percentage of time spent on passenger related duties, this relationship isn't linear, for reasons discussed on Slide 26.



Overheads

Overheads are the cover built in to the rostering system to ensure continuity of service while workers are either on breaks, training or leave.

Outside of meal/break times, the following assumptions are built into Quintiq's rostering system:

Statutory holidays	12 days
Annual leave	4 weeks + an additional after 7 years of service (averaged out at each location)
Training	Civil Aviation rules require all AvSec officers to be trained, and for a retesting regime to occur every year to ensure compliance. Training requirements differ per location given the nature of the duties undertaken at the airport.
Sick Leave	12 days
Shift Workers Leave	5 days
AvSec days	3 days
Special purpose (COVID) leave	4 days

All leave assumptions, except for the special purpose leave (a legacy from COVID), are agreed in the Collective Employment Agreement. Other types of leave, like Jury Service or Bereavement Leave are not built into overhead assumptions but are stipulated in the CEA.

How do overheads affect the overall FTE demand?

Below is an example of how workforce demand is forecast once flight schedules are known. As this gets closer to the , the assumptions will be retested as expected passenger demand changes.

Expected FTE required if there were no breaks/leave/training

Christchurch Staffing Needs - 1 to 31 March 2024

Assumed 22.0 days AL

Needs (per shift) 52 x3 **156** Needed at work daily to cover demand (- 50+2NS)

	Days	Staff	Combined		Days	Staff	Combined		Days	Staff	Combined		Days	Staff	Combined
AL	22	156	3432	AL	22	44	968	AL	22	12	264	AL	22	3	66
TRG	11	156	1716	TRG	11	44	484	TRG	11	12	132	TRG	11	3	33
STAT	12	156	1872	STAT	12	44	528	STAT	12	12	144	STAT	12	3	36
SWL	5	156	780	SWL	5	44	220	SWL	5	12	60	SWL	5	3	15
AvSec	3	156	468	AvSec	3	44	132	AvSec	3	12	36	AvSec	3	3	9
Sick	12	156	1872	Sick	12	44	528	Sick	12	12	144	Sick	12	3	36
SPL	4	156	624	SPL	4	44	176	SPL	4	12	48	SPL	4	3	12
	69		10764		69		3036		69		828		69		207
Shifts	243		44.2962963	Shifts	243		12.49382716	Shifts	243		3.407407407	Shifts	243		0.851851852
GRAND TOTAL			216												1

Additional FTE to cover for breaks/leave/training

FTE to cover for the additional 44 FTE (rounded to the nearest multiple of three where possible as ASOs work in teams of three)

Final total of FTE. This is then used to inform discussions in the business as to whether they will have enough staff to cover demand as required.

Finding E: FTE Line Increases

We are able to validate all of
our critical questions for
each FTE increase



In this section

Category of FTE increase		FTE increase
1.	Enhanced Security - AIT body scanners to meet international standards	54.4
2.	Demand increase - passenger volumes	55.9
3.	Demand increase - flight schedule timings	45.8
4.	Enhanced Security - NPS insider threat to meet international standards	22.8
5.	Support functions - enhanced planning, training (National Office)	2.0
6.	Scope increase - behaviour detection for USA mutual recognition	4.0
7.	Scope increase - wider operation of explosive detector dogs	12.0
8.	Service level increase - 2hr check-in for international passengers	2.2
Total		199.1



This section focusses on assessing all eight line items of proposed FTE increases.

This section will cover:

- A summary of how each line item relates to a need for increased FTEs
- Whether the FTE increase is linked to a legislative requirement, international standard or Director's direction
- Whether the workforce demand assumptions driving the size of the increase are reasonable
- Whether the rostering assumptions that drive the size of the increase is reasonable
- The type of evidence we examined to verify the underlying assumptions
- An overall assessment of our findings

Enhanced security: AIT body scanners to meet international standards

Summary

Advanced Imaging Technology (AIT) body scanners were introduced in airports due to new international standard requirements, which has seen an increase of 178.6 FTEs since incremental roll out began in 2019.

In the next three financial years, AvSec forecasts that it requires 54.4 additional FTEs (33 in Auckland, 15 in Queenstown and 9.4 in Christchurch) to service this requirement.

We understand that the increase is driven predominantly by increased passenger demand, which would require more screening lanes to be opened and for longer periods of time. In Auckland and Queenstown, the increase demand would further trigger a new lane to be opened each requiring a new AIT body scanner to be installed.



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, AvSec has a obligation under Civil Aviation Act and Rule Part 140.A5 to ensure any person screened is not carrying or in possession of any unauthorised article. In addition, the Director of Civil Aviation required the roll out of AIT scanners in airports to reflect developments in the international security environment (Letter of direction from Director of Civil Aviation dated 16 January 2018).

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, it is reasonable that an increase of passenger demand over the coming years would require an increase of AIT scanner related duties and therefore increase the number of FTE required.

From interviews and review of the AOM, we have verified that the assumption used in AvSec's FTE calculations that 3 FTE is required for every AIT body scanner that is operational. In addition, we have reviewed workforce data to verify how AvSec allocate FTE to undertake AIT duties based on passenger demand data which fluctuate over any given day in the three locations where additional FTEs are required. A breakdown of the location specific FTE requirements is outlined in the next slide.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, we have reviewed workforce data for AIT body scanner FTEs and it reflects the general rostering assumptions outlined from Slide 37.

Evidence examined

- Civil Aviation Act 1990
- Letter of direction from Director of Civil Aviation dated 16 January 2018
- AOM 5.8 AIT resolution officer duties
- AIT duty hours data



Overall assessment

Our analysis to date has been able to verify that the assumptions driving the calculations for new AIT body scanner FTEs required in Auckland, Christchurch and Queenstown over the next three financial years is reasonable to ensure that AvSec continues to meet its statutory obligations as passenger screening demand increases.



AIT body scanners location specific FTE assumptions

Location	FTE increase	Assumption	KPMG comment
Auckland	33	A seventh lane will be installed in the Auckland International Airport based on passenger demand projections, which would require an additional AIT body scanner and additional staff to operate the scanner. AvSec forecasts it will require 12 additional screening officer FTE for this.	Reasonable given current screening lane configuration shown in Figure 1 shows the need for a new body scanner once a seventh lane is installed and the increase is in line with duties increased and rostering assumptions.
		Demand increase means that existing lanes need to stay opened and staffed for longer in both the international and domestic terminals. AvSec forecasts it will require 18 additional FTE to meet increased demand particularly when it falls during peak hours	Reasonable given longer operating hours in Auckland compared to other airports and additional passengers during peak hours will have significant impact on FTE requirements.
		AvSec forecasts 3 team leaders are needed due to the increase of 30 new screening officers.	Reasonable given that the there Collective Employment Agreement requirements for team leaders to manage 8-12 officers each shift.
Christchurch	9.4	The increased number of FTEs is mostly attributed to moving the 27 part time screening officers (currently 20.6FTE) to full time contracts.	We understand that this shift has already occurred in other locations, reflecting increases in officer duties over time and challenges in retaining part time employees.
Queenstown	12	A new lane will be installed in the Queenstown Airport based on passenger demand projections, requiring an additional AIT body scanner and additional staff to operate the scanner.	Reasonable given current screening lane configuration shown in Figure 2 shows the need for a new body scanner once a fourth lane is installed.
Other locations	0	AIT body scanner staffing requirements not expected to increase in other airports at this stage.	Reasonable acknowledging as per slide 30 full FTE requirements wont be known until flight schedules are released six months ahead.

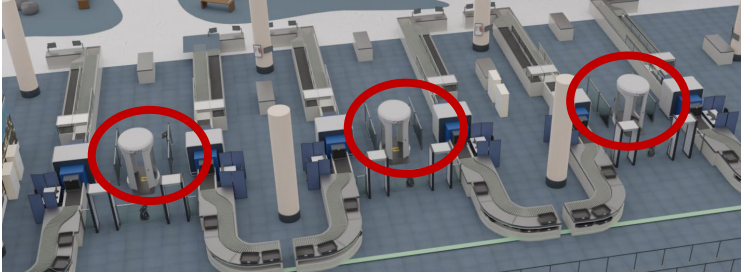


Figure 1: Auckland International Airport screening point layout (currently 6 lanes feeding into 3 AIT scanners circled)

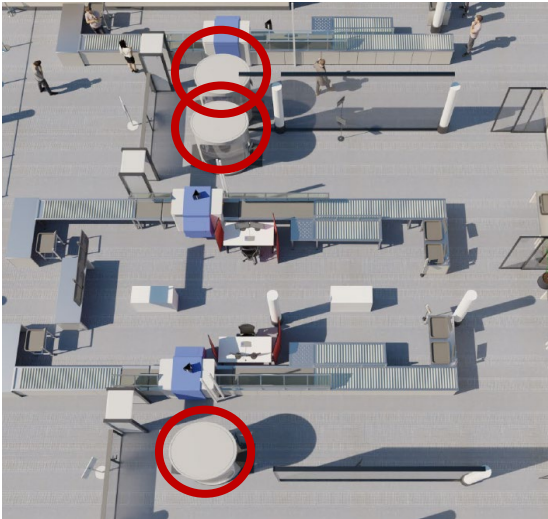


Figure 2: Queenstown Airport screening point layout (currently 3 lanes feeding into 3 AIT scanners circled)

Summary

AvSec forecasts an annual increase of 2.3% in passenger numbers over the next 3 years which has been translated to a 2% increase in all passenger and schedule dependent duties across AvSec's duties that are not otherwise covered in the FTE table. Passenger and schedule dependent duties have been split based on an assumed 55/45 split in these duties – based on historical records.

Therefore, AvSec forecasts the need for a total of 55.9 new FTE (19.6 in 2024/25, 14.9 in 2025/26 and 21.5 in 2026/27) for AvSec to continue carry out passenger dependent duties in accordance with its statutory obligations



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, AvSec passenger dependent duties are linked to AvSec's core responsibilities as found in the Civil Aviation Rules s140. These responsibilities are as set out on slide 38.

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, as discussed from Slide 26 we have verified that the size of increase is reasonable given 2% increase in workforce demand, which is roughly 55% for passenger when split between passenger and schedule dependent duties.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, we have reviewed workforce data for AvSec duties and it reflects the general rostering assumptions outlined from Slide 37

Evidence examined

- AvSec frontline duty hours data
- AvSec Legislative Framework which links AvSec duties/responsibilities to the relevant statutory requirements



Overall assessment

We have been able to verify that the size of FTE increase is reasonable given the forecasted passenger demand increase over the next three years to enable AvSec to continue meeting statutory obligations



Summary

AvSec forecasts an annual increase of 2.3% in passenger numbers over the next 3 years which has been translated to a 2% increase in all passenger and schedule dependent duties across AvSec's duties that are not otherwise covered in the FTE table. Passenger and schedule dependent duties have been split based on an assumed 55/45 split in these duties – based on historical records.

Therefore, AvSec forecasts the need for a total of 45.8 new FTE (16.1 in 2024/25, 12.2 in 2025/26 and 17.6 in 2026/27) for AvSec to continue carry out schedule dependent duties in accordance with its statutory obligations.



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, AvSec schedule dependent duties are linked to AvSec's core responsibilities as found in the Civil Aviation Rules Part 140. These responsibilities are as set out on slide 38.

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, as discussed from slide 26 we have verified that the size of increase is reasonable given 2% increase in workforce demand, which is roughly 45% for scheduled duties when split between passenger and schedule dependent duties.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, we have reviewed workforce data for AvSec duties and it reflects the general rostering assumptions outlined from Slide 37.

Evidence examined

- AvSec frontline duty hours data
- AvSec Legislative Framework which links AvSec duties/responsibilities to the relevant statutory requirements



Overall assessment

We have been able to verify that the size of FTE increase is reasonable given the forecasted passenger demand increase over the next three years to enable AvSec to continue meeting statutory obligations



Enhanced Security: NPS insider threat to meet international standards

Summary

AvSec conducts Non-Passenger Screening (NPS) is applied to non-passenger, e.g. airport personnel, to deter and prevent such persons from carrying out unlawful acts.

As of 2023/24 AvSec has allocated 96.2 FTE to undertake the NPS function. In the 2018/19 funding review, AvSec has been approved 116 FTE to undertake NPS, which is included in its current funding.

AvSec now estimates that 119 (22.8 more FTEs than 2023/24) FTE are needed to achieve required intervention rate (20% as required by ICAO).



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, Avsec conducts NPS pursuant to a Direction issued by Director of Civil Aviation under s77B of the Civil Aviation Act and Rule Part 140.A25 (Letter of direction from Director of Civil Aviation dated 16 January 2018). Pursuant to ICAO requirements, AvSec's ensures that a minimum of 20% of personnel are screened during 100% of the time of international flight operations. The four airports with international departures must undertake NPS.

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, this aligns with the current NPS effort based on our review of NPS duties. AvSec tracks NPS effort monthly, which is based on calculations from relevant duties (schedule dependent) to meet current intervention rate requirement. The number of access points through which personnel are screened differ based on size of airports, which also affects the number of screening staff required.

The current estimate FTEs required to undertake NPS duties for the next three years is based on current NPS effort and assumes that any future increases to NPS demand due to expanded timing of flights would be included in future FTE increase estimates. This is reasonable given NPS duties are flight schedule dependent and as discussed above AvSec only receives flight schedules six months ahead of time.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, we have reviewed workforce data for NPS duties and it reflects the general rostering assumptions outlined from Slide 37.

Evidence examined

- Letter of direction from Director of Civil Aviation dated 16 January 2018
- Interview with Manager of Workforce team
- AvSec NPS duty hours data



Overall assessment

Our analysis to date has been able to verify that the assumptions driving the calculations for new NPS FTEs over the next three financial years is reasonable to ensure that AvSec continues to meet its statutory obligations.



Support Functions: Enhanced planning, training (National Office)

Summary

Due to growth in AvSec workforce, there is increased requirement for recruitment and training capacity in the national office to ensure new frontline staff are sufficiently trained to carry out AvSec's security obligations.

As of 2023/24 AvSec employs 50.2 FTE to support this function. In 2024/25 AvSec forecasts the need for two new FTEs:

1. Principal Advisor Protective Security to meet new government protective security requirements and
2. Project Coordinator - Recruitment to support manager with recruitment tasks



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Generally yes, analysis to 'right size' the back office function is out of scope, but we are comfortable that these increases can be linked to the increase in general workforce demand.

Are the workforce demand assumptions driving the size of the increase reasonable?

Generally yes, analysis to 'right size' the back office function is out of scope, but we are comfortable that these increases can be linked to the increase in general workforce demand.

Are the rostering assumptions that drive the size of the increase reasonable?

Generally yes, analysis to 'right size' the back office function is out of scope, but we are comfortable that these increases can be linked to the increase in general workforce demand.

Evidence examined

- Interview with Manager of Workforce team
- AvSec duty hours data



Overall assessment

Our analysis has been able to verify that there is sufficient need for new support functions in the national office.



Scope Increase:

Behaviour detection for USA mutual recognition

Summary

Behavioural detection analysis has increasingly become a feature of many States' aviation security systems. The ICAO recommendation in this area is for States to consider integrating behaviour detection into their aviation security practices and procedures.

Currently, only USA has specific requirements for incoming passengers to be screened in this way. AvSec is currently bearing the cost, which otherwise will fall on the airlines with direct flights to USA. This arrangement is currently being reviewed.

As of 2023/24 AvSec employs 25 FTEs to undertake these duties. In the next year, AvSec forecasts a need for 2 additional officers in Auckland and Christchurch (total of 4).



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Based on ICAO recommendation, the director of Civil Aviation has directed AvSec to undertake relevant research with the aim of integrating behaviour detection analysis into NZ's aviation security system in accordance with the ICAO recommendation. The reason for the focus on USA flights is that it is a stated expectation from the USA on New Zealand that they undertake this duty on USA-bound flights.

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes this is reasonable given that forecasted increased in passenger demand would reasonably mean an increase in the number of passengers flying directly to USA.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, these are schedule dependent duties and general rostering assumptions apply.

Evidence examined

- Letter of direction from Director of Civil Aviation dated 16 January 2018
- Interview with Manager of Workforce team



Overall assessment

Our analysis has been able to verify that there is sufficient need for new FTEs to meet USA's screening requirements. However, we understand that the decision to bear the cost of fulfilling this requirement is currently being reviewed, since it is not currently a statutory requirement.



Scope Increase: Wider operation of explosive detector dogs

Summary

In 2017 the Director of Civil Aviation directed AvSec to begin deploying Explosive Detector Dogs (EDD) into international passenger check-in area and queues to focus on travellers and their bags. This reflects the changing threat vectors for aviation.

Currently AvSec employs 37 EDD officers. Due to attrition of staff in recent years and the intention to build the function post COVID-19 to meet increased forecasted passenger demand, AvSec is forecasting the need for 12 additional EDD officers in 2024/25 to bring total to 49 officers (3 additional officers in each of the 4 international airports).



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, this was increased due to direction from Director of Civil Aviation. This aligns with the s45 of the Arms Act 1983 forbidding the carrying of any firearm, airgun, pistol, prohibited magazine, restricted weapon, or explosive.

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, this is reasonable given forecasted increased in passenger demand. Through our interview with the Manager of the Workforce team, we understand that there is also intention to use more EDDs as they are more efficient than humans in detecting explosives and therefore AvSec requires more EDD officers to manage additional EDDs.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, these are schedule dependent duties and general rostering assumptions apply.

Evidence examined

- Arms Act 1983
- Letter of direction from Director of Civil Aviation dated 16 January 2018
- Interview with Manager of the Workforce team



Overall assessment

It is reasonable that there is a need for new FTEs to manage more EDDs for explosive detection of increased passenger numbers.



Summary

AvSec is seeking 2.1 additional FTEs to move part time officers in Christchurch to full time contracts. As discussed above, this aligns with national approach to enhance retention of AvSec officers.



Is the FTE increase linked to a legislative requirement, international standard or Director Civil Aviation/Ministerial direction?

Yes, this is an extension of existing duties required under the Civil Aviation Rules Part 140

Are the workforce demand assumptions driving the size of the increase reasonable?

Yes, as this is just the delta between part-time and full-time staff all underlying demand assumptions remain constant.

Are the rostering assumptions that drive the size of the increase reasonable?

Yes, general rostering assumptions apply.

Evidence examined

- Interview with Manager of the Workforce team
- AvSec duty hours data



Overall assessment

Our analysis to date has been able to verify that there is sufficient need for 2.1 new FTEs to move Christchurch part time officers to full time contracts.





Ngā mihi

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The services provided under our Engagement Contract (Services) have not been undertaken in accordance with any auditing, review or assurance standards. The term "Audit/Review" used in this report does not relate to an Audit/Review as defined under professional assurance standards.

The information presented in this report is based on information made available to us in the course of our work and publicly available information. We have indicated within this report the sources of the information provided. Unless otherwise stated in this report, we have relied upon the truth, accuracy and completeness of any information provided or made available to us in connection with the Services without independently verifying it. Nothing in this report constitutes legal advice or legal due diligence and you should not act upon any such information without seeking independent legal advice.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by Civil Aviation Authority and Aviation Security Service consulted as part of the process. In relation to any prospective information/forecasts/projections included in the report, we do not make any statement as to whether any forecasts or projections will be achieved, or whether the assumptions and data underlying any such prospective financial information/forecasts/projections are accurate, complete or reasonable. We do not warrant or guarantee the achievement of any such forecasts or projections. There will usually be differences between forecast or projected and actual results, because events and circumstances frequently do not occur as expected or predicted, and those differences may be material. This report was based on information available at the time it was prepared. KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

Third Party Reliance

This report is solely for the purpose set out in Our Discovery Phase and Our Assurance Process sections of this report and for Client's information, and is not to be used for any other purpose or copied, distributed or quoted whether in whole or in part to any other party without KPMG's prior written consent. Other than our responsibility to Client, none of KPMG, any entities directly or indirectly controlled by KPMG, or any of their respective members or employees assume any responsibility, or liability of any kind, to any third party in connection with the provision of this report. Accordingly, any third party choosing to rely on this report does so at their own risk. Additionally, we reserve the right but not the obligation to update our report or to revise the information contained therein because of events and transactions occurring subsequent to the date of this report.