



REMEDIATION REPORT

28 March 2019

Remediation Report: Review of eGate Processes and the Use of the Decision Review Tool

EXECUTIVE SUMMARY

1. On 26 January 2019, a person of interest to an external agency departed New Zealand using a genuine passport that belonged to someone else. The person of interest used an eGate at Auckland Airport to leave the country.
2. Customs was alerted to this travel on 20 February 2019, and on 27 February 2019 Customs initiated an internal review of its eGates and the Decision Review Tool (DRT) to establish the issues that resulted in the person of interest being able to depart.
3. The review identified three key issues that require remediation by Customs:
 - a. eGate process
 - b. Learning and development training
 - c. Resourcing without the DRT.This report details those three key issues and how Customs will implement the required remediation measures.
4. There are also two issues from the review that require further clarification:
 - a. The level of false accepts and override errors suggested by the review
 - b. The circumstances around a similar incident in August 2016.

INTRODUCTION

5. On 26 January 2019, a person of interest to an external agency departed New Zealand using a genuine passport that belonged to another person.
6. The person of interest used the eGate system at Auckland Airport. The eGate correctly identified the inconsistency between the person of interest's image and the passport being used to depart the country. The eGate system referred the person to a remote Customs officer using the DRT, to either override the eGate's inconsistent identification and allow the passenger to depart or refer the passenger to another Customs officer to undertake a physical face-to-passport manual identification.

7. The Customs employee operating the DRT incorrectly determined the image of the person of interest, taken by the eGate, matched the passport image, and allowed the person of interest to depart New Zealand.
8. Customs was alerted to this travel on 20 February 2019, and on 27 February 2019 Customs initiated an internal review of its eGates and the DRT to establish the issues that resulted in the person of interest being able to depart.
9. The review identified three key issues that require remediation by Customs, and two issues that require further clarification.

ISSUES IDENTIFIED

A. eGate process

Use of DRT

10. **Issue:** The review identified a number of issues within the DRT system that contributed to an incorrect decision being made by the Customs officer to allow the person of interest to depart New Zealand. The review also identified questions around the level of distractions that officers experienced while making identify decisions using the DRT, the length of time that officers were allocated to DRT-related work, and inconsistencies in the rank of officers using the DRT.
11. **Remediation:** On 27 February 2019 Customs temporarily suspended the use of DRT for the processing of departing passengers. This temporary suspension was extended to the processing of arriving passengers on 8 March 2019. As a result of the temporary suspension, any person rejected by an eGate is referred to a Customs officer for a physical face-to-passport assessment. Customs has now decided the temporary suspension will become permanent, and the DRT system will no longer be used for processing passengers.
12. Customs will explore if the DRT process could be replaced with similar technology. This will be done once the impact of turning off the DRT tool on staffing resources and passengers has been fully quantified. The implementation of any new DRT technology in the future must address all of the recommendations from the review.
13. **Internal lead:** Manager Process Optimisation, Border Operations
14. **Remediation timeframe:** The DRT system is no longer used to process passengers. An initial assessment of technology similar to the DRT tool will be completed by the end of April 2019.

Reporting

15. **Issue:** The review established that the reporting relating to eGates and DRT management could be improved to better manage performance and usage.

16. **Remediation:** Customs will accelerate work currently underway to improve reporting on the performance of eGates. The reporting will be produced on a monthly basis and be reviewed by the Group Manager of Border Operations.
17. **Internal lead:** Manager Process Optimisation, Border Operations; Group Manager, Strategic Business Development
18. **Remediation timeframe:** Initial reporting improvement activity to be undertaken by 30 April 2019, with any additional work to be completed by 31 May 2019.

Assurance programme

19. **Issue:** The review identified that there are no identified quality assurance processes for eGates or the DRT.
20. **Remediation:** Customs will develop processes nationally to provide assurance of passenger movements using eGates, both on arrivals and departures. Weekly programme reports will be produced and reviewed by the Group Manager of Border Operations. No assurance process is required for the DRT system, which is no longer used to process passengers.
21. **Internal lead:** Manager Process Optimisation, Border Operations; Group Manager, Strategic Business Development
22. **Remediation timeframe:** By 30 June 2019

B. Learning and development training

23. **Issue:** The review identified that there did not appear to be any formal training package or recording of training for staff that have completed training in regard to the use of the DRT system. It was also unclear how often officers undertake refresher training, or how often the training was updated.
24. **Remediation:** The narrower issue of training in relation to the DRT system has been addressed by the decision to no longer use the DRT system. As the findings of the review could also call into question the adequacy of other Border Operations training, Customs will fully review its approach to Border Operations training.
25. **Internal lead:** Group Manager, People and Capability
26. **Remediation timeframe:** By 30 June 2019

C. Resourcing without DRT

27. **Issue:** The review identified that the suspension of the DRT would result in an unknown amount of additional resources being required to manually process passengers at the border.

28. **Remediation:** Customs has determined that the additional manual processing of passengers, as a result of the DRT system no longer being used to process passengers, can be managed at present. However, issues may emerge if an alternative to the DRT system is not implemented by the 2019/2020 summer peak travel season. Customs will continue to monitor the impact on resources of the decision to no longer use the DRT system.
29. **Internal lead:** Manager Process Optimisation, Border Operations
30. **Remediation timeframe:** Ongoing

ISSUES TO BE CLARIFIED

A. False Accepts and Override Errors

31. **Issue:** The report noted that in the previous 12 months in Auckland, two eGate false accepts were identified, as well as 38 low-level DRT override errors by operators. A false accept is when a passenger uses another person's passport to depart or arrive, through either an eGate process or a manual face-to-passport identification process. An override error is when the Customs officer operating the DRT incorrectly determines the image of the passenger taken by the eGate matches the passport image, and allows the passenger to depart New Zealand.
32. **Comment:** No passenger processing system is 100% fail-safe, but eGates provide a very accurate processing system.
33. In addition to its internal expertise, Customs is advised by s 9(2)(a) OIA, s 6(c) OIA a s 9(2)(a) OIA, s 6(c) OIA-based biometrics expert, who has been working with Customs since the introduction of the original eGates in 2009.
34. Extensive testing and evaluation of the biometric performance of eGates is undertaken prior to any new country being accepted for the eGate programme. Best practice thresholds are set to determine what is the theoretical acceptable volume of false accepts by the eGates – Customs' theoretical false acceptance volume is currently set at a 0.0025 per cent chance of a false accept occurring each time an eGate is used. Customs continually reviews its current eGate theoretical false accept threshold to determine if it can be lowered without compromising the performance of the eGate system.
35. False accepts are identified either at the time or using flight management and advance passenger information systems. Customs has reviewed the two false accepts that occurred in Auckland in the previous 12 months and has determined that no further action is required in relation to them. Neither of the two false accepts related to a person who was the subject of a border alert.

36. The decision to no longer use the DRT system to process passengers means the low-level override errors can no longer occur. Customs identified 38 override errors that occurred in Auckland in the previous 12 months, none of which involved a passenger attempting to travel using another person's passport. None of these override errors related to a person who was the subject of a border alert.

B. 2016 incident

37. **Issue:** The review identified that in August 2016 a Customs officer operating the DRT incorrectly determined the image of a person taken by the eGate matched the image in another person's passport, and allowed the person to depart New Zealand.

38. **Comment:** This incident was investigated at the time by Customs and other agencies. Customs determined that the placement of the DRT function (then adjacent to standard processing) should be located within the Airport Control Room – to provide greater support to the operators of the DRT and reduce distraction. Our review has not identified any other similar incidents.

Ends

NEW ZEALAND
CUSTOMS SERVICE
REVIEW OF E-GATE
AND DECISION REVIEW
TOOL (DRT)
PROCESSES IN
DEPARTURES

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FOR PUBLIC RELEASE

EXECUTIVE SUMMARY

On the 26th January 2019 a passenger departed NZ using a legitimate passport belonging to someone else using the E-Gates at Auckland International Airport. This has initiated a review of the E-Gate and Decision Review Tool (DRT) processes in departures. The review has been undertaken looking into the areas identified in the Terms of Reference and identifies a series of recommendations. The recommendations identified are across a range of issues including technical support, quality assurance processes, training and the DRT which are covered in detail in section 6 of this document.

1. INTRODUCTION

- 1.1. Customs at International Airports utilise electronic gates (E-Gates) to immigrate and emigrate passengers through the passport control process at the border daily. These gates have a series of algorithms in place that produce a score for each passenger to determine if the passenger is a match to their bio data image.
- 1.2. When a passenger meets the required threshold the E-Gates will accept the data received and allow the passenger to pass through the passport control process electronically with minimal interaction with border officials.
- 1.3. When a passenger does not meet the threshold required to be accepted by the E-Gates, the E-Gate refers the images to the Decision Review Tool or DRT. The DRT operator receives the bio data image from the passport as well as one of the images taken at the E-Gate. The operator then has approximately ten seconds to decide if the passenger is a match to the passport image.
- 1.4. Should the operator decide that the passport photo matches the photo of the passenger in the E-Gate the operator has the ability to override the E-Gate decision and allow the passenger to continue on their travel.
- 1.5. If the officer decides that the photos do not match the officer then declines the passengers' use of the E-Gate. This sends a message to the E-Gate to inform the passenger to proceed to the E-Gate assistance desk to be processed manually by a Customs staff member. If the DRT operator does not make a decision to override or refer the images the system defaults after 10-12 seconds to referral. The E-Gate then refers the passenger to an e-Gate assistance desk to be manually processed by an officer.
- 1.6. On the 26th January 2019 a person of interest has departed New Zealand using a genuine passport that belonged to someone else at Auckland International Airport. The person of interest has attempted to use the E-Gate system to depart NZ.

- 1.7. The E-Gate identified inconsistencies between the passenger image and the passport then referred the passengers' information to the DRT operator to decide if the passenger is a match or required further interaction. The DRT is based in the Customs control room at Auckland International Airport.
- 1.8. The information received by the DRT operator was the image from the passport and the image of the person of interest taken at the E-Gate, the operator then decided that the E-Gate image matched the passport image and allowed the passenger to continue.
- 1.9. The decision made by the allocated DRT officer on the day was subsequently proved incorrect and has led to a person of interest to an external agency being allowed to depart the country using a genuine passport. This has led to a review of the E-Gates and DRT in departure processing, the details outlined in the terms of reference and provisional report are outlined below.

2. REVIEW

- 2.1. As a result of the above incident the Acting Deputy Comptroller Operations requested a review of the E-Gate and DRT processes in departures. The terms of reference for the review were issued on 27th February 2019.
- 2.2. The objectives of the review, as set out in the Terms of Reference are as follows:
 - 2.2.1 Establish the facts of what occurred on 26 January 2019 with the person of interest and the DRT referral;
 - 2.2.2 Assess the adequacy of Custom's overall risk management approach to departing passengers including the roles e-gates and DRT play in this;
 - 2.2.3 Provide recommendations to enhance the e-gate and DRT processes and systems, to deliver full assurance that all passengers electing to use e-gates are legitimate travellers, authorised to travel;
 - 2.2.4 Review the allocation of staff to the DRT role and its current location, including the scope of this role;
 - 2.2.5 Review the current escalation points and process, including technical solutions that may reduce or mitigate human error (including, but not limited to, factoring in algorithm thresholds that channel low threshold scores directly to a booth, bypassing the DRT);
 - 2.2.6 Review the available material that was issued when e-gates second generation were deployed;
 - 2.2.7 Assess the training material and delivery of the e-gate processes and DRT;
 - 2.2.8 Report on any processes or system functions that are not matching the specifications originally recommended;

- 2.2.9 Review the related processes used by Customs in other NZ International airports to determine consistency of approach and relevance of any recommended changes;
- 2.2.10 Review the adequacy of quality assurance processes, to assure compliance with and effectiveness of current processes and controls;
- 2.2.11 Explore any other related issues that may arise.

3 DOCUMENTS CONSIDERED

- 3.1 As a part of the review a number of documents relating to the E-Gates, DRT and training packages were requested from a number of internal stakeholders. The following documents were read and considered as a part of the review.
 - I. E-Gate Plus Support officer guide
 - II. Quick Reference Guide for the E-Gate plus maintenance
 - III. Facial image comparison
 - IV. Detecting Imposters training presentation
 - V. LMS online learning modules – E-Gate Plus
 - VI. High Level design v1.0 – E-Gates

4 FINDINGS

Events on the 26th January 2019

- 4.1 The officer allocated to the DRT role at Auckland International Airport commenced their shift at 04:15am. The officer was based at the DRT station in the Customs Control Room at Auckland International Airport. It is suspected that the officer has spent their entire day based at this role with various allocated breaks throughout the day.
- 4.2 At 12:26pm the POI presented to an E-Gate in the departures processing area at Auckland International Airport. The E-Gate confirmed eligibility via reading the legitimate passport inserted into the reader. The E-Gate then began processing the images from the passport and the image of the POI at the E-Gate, the E-Gate successfully identified inconsistencies between the passport image and the POI.
- 4.3 The two images were then referred to the DRT, the allocated officer reviewed the two images before incorrectly accepting the images as a match. Once the DRT operator accepted the images and the POI was able to successfully pass through the E-Gates.
- 4.4 The POI was subject to two further identity clearances at Auckland International Airport, both of which were conducted by the airline carrying the POI. These were undertaken at the check in counter as well as the boarding process at the entrance to the aircraft. It is presumed that the POI was subject to further identity clearances off shore.

Custom's overall risk management approach to departing passengers

4.5 Customs approach is currently set in 4 stages, these being:

- Passengers identified as being of interest are loaded into an alerts system which declines passengers' ability to use the E-Gates. This includes passports identified as lost or stolen by the Department of Internal Affairs. These passengers are required to report to an officer for manual processing and necessary interaction if required.
- The E-Gates comparison of the persons biometric details and the passports biometric details, this includes a validation check of the passport i.e. passport is showing a genuine layout and is not recorded as invalid, as well as any known alerts.
- All E-Gate rejects are referred to a DRT Operator for an assessment
- Those requiring further interaction are referred to a second officer

4.6 If the second officer has any concerns an elevation process is under taken, see annex 1 for E-Gate process.

4.7 The current approach is deemed to be acceptable, it should be noted however that other than the E-Gates, the process is subject to human error.

Allocation of staff and location of DRT role

4.8 Distractions

During the observation stage of the review a number of distractions have been noted in Auckland surrounding the DRT operator. At times operators have been given additional work to complete whilst undertaking the role as well as other unnecessary distractions surrounding the operator. These distractions can range from passenger interactions to other administrative tasks and operational requirements placed on the operator e.g. managing the control room functions, manually processing passengers or balancing arrival cards at the same time.

4.9 Length of time allocation

It has been noted that at times operators can spend up to 8 hours in the role which is extensive, operators will be replaced for breaks during this time. There does not appear to be any standards in place regarding the length of time operators can be allocated to the role.

4.10 Inconsistencies in operator rank

Nationally there are no set standards of rank around who should be managing the DRT software. Auckland has Assistant Customs Officers available however smaller ports are required to use Variable Hours Officers and Customs Officers.

4.11 Location

The location of the DRT operator is managed individually per port.

- 4.12 In Wellington the operation of the DRT depends on the number of flights so accordingly it can be managed by either a Departures/Arrivals officer on the primary line or if it is considered to be busy the role can be redirected to the control room officer.
- 4.13 In Queenstown the officer in the E-Gate assistance desk in arrivals operates the DRT system for both arrivals and departures and again depending on the circumstances the role can be directed to the Control Room Officer to manage.
- 4.14 In Christchurch the DRT is operated from the Control Room for arrivals and by the officer in the E-Gate assistance desk in departures.
- 4.15 In Auckland the DRT is managed in the Control Room for both arriving and departing passengers.
- 4.16 Dunedin does not currently have any E-Gates.

Review of the available material issued when the second generation of E-Gates Deployed

- 4.17 Initial information has been received however due to the complex nature of the E-Gate processes further investigation is required to gather further findings on this topic.

Training Material

- 4.18 Detecting Imposters presentation – is a 63 slide training presentation that includes the main focus for recognition, steps to help officers and the six areas that should be concentrated on. 20 examples are provided for officers to consider. This is delivered once to officers during their initial cohort training.

Learning Room – E-Gate Module and documentation

- 4.19 Facial Image Comparison
A two page document provided by the Ministry of Business, Innovation & Employment, this covers the same principles as the detecting imposter's presentation.
- 4.20 Quick Reference Guide for E-Gate Plus Maintenance
Documentation pertaining to trouble shooting technical problems with the gates themselves
- 4.21 E-Gate Plus (new model) – Guide for support officers (updated 16 August 2016)
A 27 page document written in 2015 and updated in 2016, this document covers eligibility to use the gates, how they work, maintenance, referrals and how to deal with them and trouble shooting.

4.22 E-Gate Plus Learning

This includes a module to complete and checks the knowledge of an officer. The answers to the questions can be found in the guide for support officers and is not a pass/fail course. The learning room records the completion and date for each officer.

4.23 E-Gate Practical

This is a face to face session that officers must attend, this relates to the maintenance of the gates rather than the operational use of the gates. The assigning of assessors and consistency measures of this are under development.

4.24 Overview

In all, the training appears to be quite comprehensive and covers what officers need to consider when dealing with passengers to confirm their identity. The Decision Review Tool does feature briefly in the guide for support officers. What is unclear is how often officers undertake refresher training (if at all) and how often the training is updated.

4.25 This training should be sufficient to give officers the tools to assess a person and as per the training if there is any doubt the matter should be escalated to a senior officer to assess.

DRT training

4.26 There does not appear to be any formal training package or recording of training for staff that have completed any training in regards to the use of the DRT system. Staff interviewed have stated that their DRT training was on the job training. This consisted of sitting with an experienced DRT operator who showed them how it works and what to do when images present. There is an assumption that because an officer uses facial recognition techniques as a daily function in their role that they will be competent as a DRT operator.

Report on any processes or system functions that are not matching the specifications originally recommended;

4.27 Initial information has been received however due to the complex nature of the E-Gate processes further investigation is required to gather further findings on this topic.

Escalation points

4.28 The current escalation points appear to be consistent across all International terminals, the only variable being the rank at which each step is handled. In Auckland all primary processing is undertaken by Assistant Customs Officers; when risk in relation to identity is identified the ACO refers the passenger to a Departures trouble shooter. This role is undertaken by a Senior Customs Officer; should risk heighten a Supervising Customs Officer or Customs Technical Specialist will be advised and the passenger is referred to Immigration NZ. In other regions such as Christchurch the primary processing and troubleshooting roles are completed by Customs Officers so the elevation of risk is passed over to the same ranked officer operating in a different role. The Customs Officer troubleshooting will refer matters to a Senior Customs Officer

who will advise a Supervising Customs Officer and Immigration NZ if further risk is identified. See annex 1 for a simplified flow diagram of the process.

Related processes used in other Ports – Provide technical expansion on thresholds etc.

- 4.29 The handling and maintenance of the E-Gate processes appear to be consistent across all International airports that utilise them, excepting that the location of the DRT operator varies across ports (see sections 4.11. to 4.16. of this report).
- 4.30 The E-Gates run on a biometric algorithm which provides a score for each passenger attempting to use the E-Gates. This score then dictates if a passenger matches the image from the passport used in the E-Gate, if the passengers score sits above the set threshold the passenger will be allowed to continue through the gates, if the passengers score is below the threshold the passenger cannot proceed through the E-Gate and is referred to the DRT system for review.
- 4.31 The E-Gate Biometric thresholds are set by a biometrics expert, the process used to set the thresholds is;
- 4.32 A sufficient volume of travellers are required to trial the E-Gates to capture sufficient data
- 4.33 The captured bio metrics data is then sent to a Biometrics expert for analysis.
- 4.34 Using the biometrics experts recommendations, an agreement is made in regards to any additional safety margins
- 4.35 The recommended thresholds are then proposed to the business and the Ministry of Business Innovation and Employment (MBIE).
- 4.36 The agreed thresholds are then enacted by Information Services (IS) when instructed by the business and MBIE.
- 4.37 The current E-Gates thresholds sit at different levels depending on the nationality of the user, these range from a score of s 6(c) OIA
- 4.38 The score associated to the POI of s 6(c) OIA was deemed by IS to be extremely low, meaning as far as the biometric algorithm was concerned it was virtually impossible for the person at the gate to be the same as in the passport.

Quality Assurance Processes

- 4.39 In its current state there are no identified quality assurance processes for the DRT overrides or the E-Gates in place. The Air Audit team in Auckland report on the

exceptions identified using the flight management and API systems, it is during this reporting that they locate override errors and/or E-Gate false accepts. In the previous 12 months in Auckland, two E-Gate false accepts have been identified as well as 38 DRT override errors. These override errors are low level operator errors and have been addressed when identified by the Auckland Air Audit team via the current passenger exceptions auditing processes; there are no identified circumstances where a passenger has attempted to travel using another person's legitimate passport. There are no current quality assurance processes in the Central and Southern regions for E-Gates and DRT override errors (refer paragraph 4.44).

- 4.40 To date one other instance of an incorrect DRT override leading to a person departing NZ using another person's genuine passport has been identified having occurred in Auckland in August 2016. This was investigated at the time.
- 4.41 The reporting for the E-Gates and DRT management is insufficient and does not supply the data required to accurately measure the use of the E-Gates and E-Gate/DRT errors.
- 4.42 The current reporting covers the weekly E-Gate Summary which provides information around the number and % of passengers using E-Gates across all airports as well as a monthly E-Gate Active report which covers further information around numbers and nationalities using the gates.
- 4.43 The reports mentioned above have been identified as having errors within them and are not showing data required of them, specifically;
- a. Within the monthly report, the "PLRG Referred by Clearance" reason appears to double count the number of referrals.
 - b. The referral % proportions are distorted based on the fact that passengers can make multiple attempts at clearing the E-Gates.
 - c. Apart from the passengers who are rejected, the current reporting also does not actually record the number of passengers who are referred for DRT where the officer is satisfied and overrides the E-Gate decision.

It has been noted that a new reporting system addressing the above is under development and is expected to be implemented before the end of March 2019.

Other issues

- 4.44 Technical concerns - the DRT system has a "double click" error where two images from a referral will present; the officer will accept the images however the images will remain on the screen, when the officer accepts the images a second time the DRT system will clear the next passenger in the queue to be reviewed. This leads to the officer accepting a passenger referred to the DRT operator without it being visually accepted. The DRT operator then has to open a secondary application which shows the previous

E-Gate users information to confirm it was a match. This error is sporadic and irregular however presents as a risk of an accidental override error (refer paragraph 4.39).

- 4.45 The DRT referral screen only shows the operator the passport image and a photo taken at the E-Gate. This level of information is not adequate for the level of decision making required, at times these photos are from a different angle than that of the passport. Some passengers are rejected on DRT due to the photo being unable to be matched to the passport image.
- 4.46 The E-Gate refers passengers that have not met the threshold to the DRT operator for referral no matter their age, this opens up the risk to child custody alert passengers being incorrectly overridden and allowed to depart without the required clearances. Operators have expressed concern around this as the majority of passports have an expiry range of 10 years and identifying features on young persons during this age range has proven to be difficult at times. This has led to some officers choosing to refer the majority of young persons to the E-Gate assistance desk for an officer to undertake face to passport checks and manually process the passengers.
- 4.47 Interim measures have been implemented at Auckland Airport where a Customs Officer is allocated to the departures E-Gate area to interact with all passengers declined by the E-Gates. This interaction includes but is not limited to face to passport checks and appropriate questioning if required. This measure has been implemented in Auckland only due to geographical layout of airport functions (only airport where Customs processes apply prior to Aviation Security Screening)

E-Gate

- 4.48 The E-Gate process on departure has proven to be of an acceptable standard when the algorithm threshold is set at a rate slightly above the recommended rate. In regards to the POI departing, the E-Gate successfully identified the POI as requiring further interaction with an algorithm score of s 6(c) OIA being well below the acceptable standard to pass through the E-Gates.

5 CONSIDERATIONS

- 5.1 There is one major key consideration arising from this review, relating to the retention or discontinuation of the DRT system for departing passengers.
- 5.2 If retained, recommended changes are outlined in section 6 of this report to assist operators and reduce (but not eliminate) the risk of human error. If discontinued, we will need to carefully consider the impacts on staff resource allocation.
- 5.3 As at the 28th February 2019 the DRT is not being utilised on departures across all airports with an estimated 2-2.5% (between 400 and 600 passengers) of passengers departing nationwide daily being affected; this refers those passengers to the E-Gate

assistance desk for face to passport checks and manual processing. This will need to be measured over an extended period of time to accurately measure the impact.

- 5.4 Regardless of the decision made in regards to departures DRT process, the explicit recommendations should also be considered for the arrival processing of passengers.
- 5.5 If we remove the DRT on departures the impact is on a small percentage of travellers approx. 2-2.5% and one level of potential human error is removed.

6 RECOMMENDATIONS

- 6.1 There are a number of recommendations identified as a part of the review:

Information Services

- 6.2 Further analysis of the thresholds and referral process from the E-Gate to the DRT operator is to be undertaken. Due to the short timeframes of the review, a detailed investigation into what range of capabilities we have in regards to thresholds and technical advancements available should be explored.
- 6.3 Engage with IS to have the common technical issues resolved, this being the double click issue where an officer can accidentally accept a passenger they have not visually assessed.
- 6.4 Introduce a new process where passengers 18 years and under that are declined by the E-Gate are not referred to DRT and are required to be processed manually at the E-Gate assistance desk.
- 6.5 Engage with IS in relation to implementing a freeze time on DRT referrals, this would mean that operators must review the images for at least 5 seconds before deciding to override or refer the passenger.
- 6.6 Engage with IS in regards to introducing a lower level threshold on DRT referrals. A lower level threshold meaning that any passenger with a score below that threshold does not have the opportunity to be referred to the DRT and is automatically declined from the E-Gate and required to present to an officer for processing. This will see passengers that are identified by the E-Gates as being a higher risk interacted with by an Officer.
- 6.7 Consider alternative options in regards to how the DRT operator receives information. In its current state the operator only receives one image of the passenger at the E-Gate and is expected to make a decision based on this from a remote location.

Investigate the possibility of the DRT showing the operator the areas of the face that the E-Gate has identified as not being a match or another similar option.

- 6.8 Introduce a measure of performance which can also form a part of the reporting/quality assurance processing into the DRT role. An example being the DRT will randomly generate two images of passengers who are similar however do not match and allow for the operator to refer or override the passengers, these generated passengers will not be genuine travellers but images loaded into the system as a measure of performance. The results should be reported to the officer immediately as well as to their direct manager via email showing the images and the selection made by the operator. External agencies use similar technology for their X-Ray equipment.

Training

- 6.9 Learning and development sector develop a learning guide and assessment for the DRT with a pass/fail rating for operators of all ranks to complete before being able to operate the DRT. This would include quarterly assessments to keep operators up to date, a record of learning and notification system for leaders to manage their staff training will also be required.
- 6.10 Learning and development to continue to review and update their training material as other techniques or examples arise.

Airports

- 6.11 Supporting material be made readily available for staff in decision making roles including but not limited to the Facial Image Comparison document being directly visible for DRT operators etc.
- 6.12 Continuous education and promotion of information regarding the importance of identifying elevated risk referrals. For example regular briefing updates through the daily team briefings.
- 6.13 Nationwide implementation of standards of use for the DRT system, including a secure location free of distractions for operators to manage the role with minimal disruption that also offers support from a senior officer. In addition to this a rotational policy limiting the length of time an operator can be stationed at the DRT role at any given time. This will require further research to determine the length of time an operator can manage the role before becoming fatigued. An example of this being X-Ray operators in external agencies are limited to 30 minutes at an X-Ray station at a time before rotating to a different role for a determined amount of time before returning to the X-Ray.

- 6.14 In Auckland, there are resource implications to convert the interim measure of having an additional Customs Officer interacting with E-Gate passengers that are rejected in the departures processing area, to a permanent basis. This resource is removed from Customs search activity on arriving passengers, and in order for this role to continue it will require an additional resource of 9 Customs Officers.

DRT

- 6.15 Allocation of operators should be determined by the training element recommended in this report. As Auckland and Central and Southern have different ranks operating the role the standard should be set on training rather than rank. All officers signed off to be primary processing officers should qualify for DRT training as facial recognition is a part of their daily roles as a primary processing officer.

Quality assurance processes and reporting

- 6.16 Adequate quality assurance processes are to be implemented nationwide. A reporting requirement should be established with measures and actions on for errors identified. This should be given an owner at CCO level or above due to the reputational harm surrounding errors as well as maintaining overview of performance of officers. This would align with other quality assurance processes already in place across the business.
- 6.17 An in-depth reporting system should be implemented providing more detailed statistics around use of the E-Gates and DRT system including critical errors needing to be addressed in a timely manner. This is to be made available to the owner of the quality assurance reporting and a proactive approach to anomalies identified is to be taken.

Further on-going analysis

- 6.18 Further analysis into the below sections:
- I. Review of the available material issued when the second generation of E-Gates Deployed
 - II. Report on any processes or system functions that are not matching the specifications originally recommended

Due to the complex technical functions of the E-Gates the above topics have not been reviewed adequately enough to establish any further recommendations. This will involve an extended amount of time to liaise with IS and all airports around the deployment of the E-Gates and current practices that are undertaken that do not align with recommended process.

ANNEX. 1 – Simplified E-Gate process

