

4 Passenger Terminal

4.1 Terminal

The terminal was built in 1995 and has been subject to a number of incremental developments and now has an area of 5,500m² which can currently provide for the 2008 peak hour passenger flow of 858+ at the required level of service (refer Para 4.2 below); due to the peaky nature of passenger traffic, the terminal is underutilised for lengthy periods during the day which limits the available revenue generation opportunities and retail and commercial facilities.

The introduction of increased security requirements, including passenger concourse security screening, checked bag screening and general traffic growth, are pushing the terminal facility its capacity limits within the current envelope. Issues to be addressed in future terminal planning include:

- ◆ Motor vehicles have unrestricted access to the terminal kerb; this poses potential security risks.
- ◆ Expansion space for self check in kiosks is required.
- ◆ Extensive queuing occurs at the single security check point, additional facilities are required.
- ◆ The departure lounge is undersized for peak passenger numbers. There are no toilets for security cleared passengers, with passengers needing to visit the toilet needing to pass back into the general departure lounge and undergo a second security check. Furthermore, there are no retail facilities available within the secure departure lounge.
- ◆ Baggage make-up and breakdown areas are congested at peak periods, exacerbated with the use of containers on A320 aircraft. Make-up and break down conveyor belt lengths are undersized, again an issue with the advent of containerised baggage handling.
- ◆ There has been a significant increase in traffic, which is a result of regular growth of existing operations as well as the introduction of a new airline and new regional routes. For example the processing area for international (Trans-Tasman) passengers is limited to processing a single B737 load at any one time.

4.2 Planning Criteria

The International Air Transport Association (IATA) has published Space Design Standards based on a level of service concept, where Level A is Excellent and Level D is desirably the lowest level achieved in peak operations. Level F is the point of system breakdown or congestion. These standards, have been adopted for terminal planning and are shown at Table 4-1. SCA has adopted Level C for planning purposes.

Level of Service	A	B	C	D	E
Check-in Queue	1.8	1.6	1.4	1.2	1.0
Wait/Circulate	2.7	2.3	1.9	1.5	1.0
Hold Room	1.4	1.2	1.0	0.8	0.6
Bag Claim Area	2.0	1.8	1.6	1.4	1.2
Government Inspection	1.4	1.2	1.0	0.8	0.6

TABLE 4-1 IATA LEVEL OF SERVICE SPACE STANDARDS FOR AIRPORT PASSENGER TERMINALS BASED ON BUSY HOUR PASSENGER NUMBERS (M²)

Note:

Level A:	Excellent service, free flow, direct routes, no delay, excellent level of comfort.
Level B:	High level service, condition of stable flow, high level of comfort.
Level C:	Good level of service, conditions of stable flow, provides acceptable throughput, related sub-systems in balance.
Level D:	Adequate level of service, condition of unstable flow, delay for passengers, conditions acceptable for short periods of time.
Level E:	Unacceptable levels of service, conditions of unstable flow, sub-systems not in balance, represents limiting capacity of the system.
Level F:	System breakdown, unacceptable congestion and delays.

4.3 Future Terminal Development

A terminal concept was prepared to accommodate the projected peak hour traffic at the 15 year planning horizon, i.e. year 2020. The concept is shown at Figure 4-1.

The 2020 terminal layout concept provides the following features:

- ◆ Revised terminal kerb and car park interface
- ◆ Expanded check-in hall. The check-in process is expected to incorporate a high percentage of self check-in kiosks, resulting in less overall space being required than for fully conventional check-in
- ◆ Checked bag screening.
- ◆ Enlarged baggage make-up and breakdown areas and facilities
- ◆ Passenger and cabin bag security check introduced between check-in and the departures lounge. All passengers and farewellers would be subjected to this security check process
- ◆ Common departures and retail lounge for all passengers and farewellers. The full retail offering and toilets would be provided. Operable walls could be installed to segregate an area for outwards immigration and departure lounge facilities for international (trans-Tasman) passengers

Arriving passengers, being secure (unless arriving on small regional aircraft from origins that are not required to provide security screening) would enter the terminal through the departures lounge. This would provide exposure of arriving passengers to the retail offering prior to them entering the baggage reclaim area. Greeters could also wait for passengers in this area, again allowing retail exposure. Non-secure passengers would enter the baggage claim hall via a separate entry corridor that by-passes the secure retail / departures lounge

- ◆ Expanded baggage claim hall with two U and one Tee reclaim belts. An operable wall allows the Tee belt to be used for international baggage reclaim.
- ◆ International arrivals facilities (inwards duty free, immigration, quarantine and customs inspection) are accessed via a separate international passengers entry. The international baggage claim facility is separated by an operable wall between it and the general baggage claim hall to allow this to be used for domestic baggage claim when there are no international arrivals.

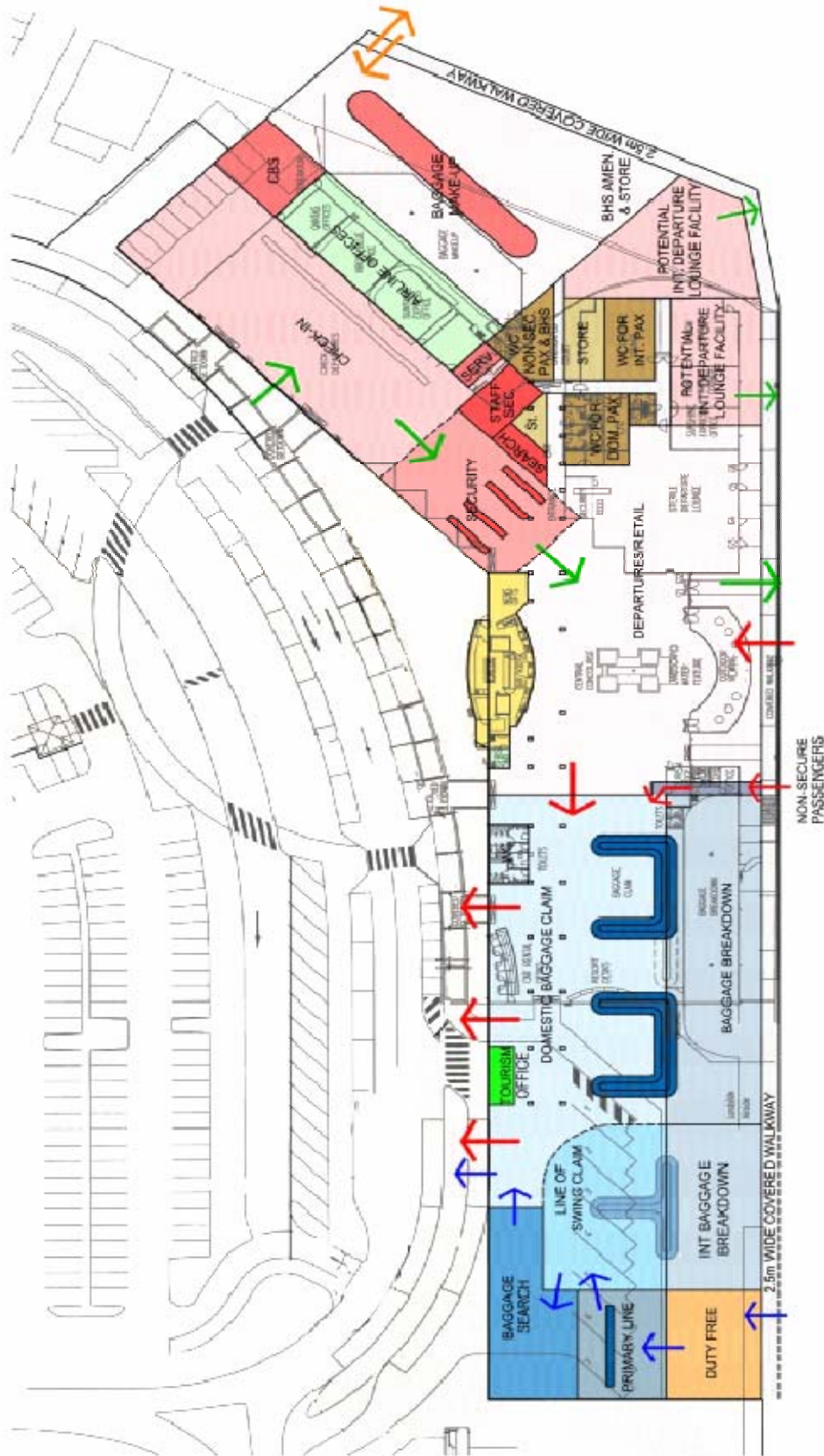


FIGURE 4-1 2020 TERMINAL LAYOUT CONCEPT