

# Business Continuity Manual

## Business Continuity Plan: A1 Aircraft Loading Bridge

		Signature	Revision	Effective Date
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## **A. System Description**

### **1.0 Introduction**

- 1.1 Airbridges are installed on all the frontal stands of Passenger Apron to facilitate passenger boarding and disembarkation.
- 1.2 Most parking stands at T1 and T1M are equipped with two airbridges, the inner one serving the front (L1) door and the outer one serving the mid (L2) door of wide-bodied aircraft.
- 1.3 Stands N5, N64, D212 and D216 are equipped with three airbridges which specially cater for A380 operation.
- 1.4 All parking stands of the T1S and stand N10 are equipped with one airbridge.
- 1.5 All airbridges units are apron drive capable of lateral movements.
- 1.6 Narrow-bodied aircraft and a few wide-bodied aircraft parking at stand equipped with two airbridges are served by the outer airbridge at the L1 door.

## **B Physical System Risk**

Risk	Description	Mitigation
Trespassers	Unauthorized operation of the equipment	<ul style="list-style-type: none"><li>• Equipment located at apron of airside, access to the equipment rely on airport security control</li><li>• Loading Bridge equipped with key switch to prevent unauthorized operation</li></ul>
Fire	Damage of equipment due to fire	<ul style="list-style-type: none"><li>• Loading Bridge design accordingly to NFPA 415 fire protection requirement</li></ul>
Water	Damage of equipment due to water ingress	<ul style="list-style-type: none"><li>• Loading Bridge design to be water proof with drain pan above control console.</li></ul>

## **C Contingency Planning for Airbridge Mal-functions**

### **1.0 Failure identified during aircraft pre-arrival check**

- 1.1 The Airbridge Operator should immediately inform IAC-ACC which will contact Fault Response Team (FRT) for follow-up.
- 1.2 IAC-ACC is to notify Airfield Duty Manager to assess impact to passenger disembarkation.
- 1.3 If the defect could not be rectified in time to facilitate passenger disembarkation for the incoming aircraft, the Airfield Duty Manager will coordinate with IAC-ACC and airline (or handling agent) to determine if relocation of the aircraft to an adjacent parking stand is feasible.
- 1.4 If relocation is not feasible, follow procedures contained in Para. 2.4 to 2.11 below.

### **2.0 Failure occurs during airbridge docking with an arrival aircraft**

- 2.1 The Airbridge Operator should immediately inform IAC-ACC which will contact FRT for follow-up
- 2.2 The Operation Officer assigned for the aircraft parking should also inform IAC-ACC and Airfield Duty Manager.
- 2.3 Airfield Duty Manager will assess the impact on passenger disembarkation.
- 2.4 IAC-ACC will liaise with RHO for deployment of passenger steps.
- 2.5 Airfield Duty Manager will coordinate with the airline (or handling agent) to decide whether arriving passengers will be transferred by buses to the APV arrival channel or directly from the parking stand to the passenger terminal by using the fire exit stairs on the fixed link bridge.
- 2.6 If it was decided to make use of APV arrival channel, the Airfield Duty Manager will coordinate with the airline or handling agent to determine the number of passenger buses required.
- 2.7 IAC-ACC will deploy passenger buses if APV arrival channel is to be used.
- 2.8 Airfield Duty Manager will coordinate with Airline (or Handling Agent) and RHO on the aircraft doors to be used for passengers disembarkation by passenger buses.
- 2.9 Airline (or handling agent) should ensure sufficient staff are deployed on the parking stand to guide the passengers.
- 2.10 Airfield Duty Manager should ensure that other aircraft ground activities on the starboard side will be suspended until passenger disembarkation (or embarkation) is completed

- 2.11 Airline (or handling agent) should arrange wheelchair-bound passenger to disembark (or embark) by using the disabled truck arranged by IAC-ACC.
  - 2.12 If the aircraft is a quick turnaround flight and the airbridge defect could not be rectified in time to facilitate departure, Airfield Duty Manager will coordinate with the airline (or handling agent) to decide whether departure passengers will make use of the fire exit stairs on the fixed link bridge to board the aircraft via passenger steps, or to reposition the aircraft to another available parking stand for departure.
  - 2.13 If embarkation of the departure passengers is to be via the fire exit stairs on the fixed link bridge and the passenger steps, follow procedures contained in Para 2.9 to 2.11.
- 3.0 Failure occurs during airbridge docking with an aircraft towed into the parking stand
- 3.1 The Airbridge Operator should immediately inform IAC-ACC which will contact FRT for follow-up.
  - 3.2 If the defect could not be rectified in time to facilitate aircraft departure, IAC-ACC will liaise with the airline or handling agent to relocate the aircraft to an adjacent parking stand with serviceable airbridges.
- 4.0 Airbridge unable to be retracted for aircraft departure
- 4.1 The Airbridge Operator or the RHO Supervisor should immediately inform IAC-ACC which will contact FRT for follow-up.
  - 4.2 IAC-ACC will then report the fault to Airfield Duty Manager.
  - 4.3 Airfield Duty Manager will ascertain in conjunction with TSI whether the fault can be rectified immediately.
  - 4.4 If the airbridge cannot be rectified in time without delaying aircraft departure, the airbridge will be retracted manually by TSI.

## **D Contingency Procedures during the passage of Tropical Cyclones**

### **1.0 General Information**

- 1. In accordance with the recommendation by the manufacturer, airbridges should be withdrawn from operational use when prevailing wind reaches 40 knots (75 km/h) and be tied-down when prevailing wind reaches 77 knots (140 km/h).
- 2. Under the influence of certain strong wind conditions, aircraft parking at the frontal stands, in particular to those carrying only light load, have a

tendency of jerky movements both vertically and laterally. This may cause displacement of the aircraft from the parked position, resulting in damage to both the aircraft and the adjoining airbridge.

3. When wind speed reaches 25 knots (or 45 km/h),

Passenger Terminal

- (a) for all frontal stands other than N5, N64, D212 and D216 and serving aircraft up to Code E, the inner airbridge will be retracted from the aircraft door. Passenger embarkation or disembarkation shall be conducted using the outer airbridge.
- (b) for frontal stands S23, N60, N62 and N66 serving an A380 aircraft, the inner airbridge will be retracted from the aircraft door. Passenger embarkation or disembarkation shall be conducted using the outer airbridge at main deck only.
- (c) for frontal stands N5, N64, D212 and D216 serving aircraft up to Code E (the inner airbridge is normally not in use), the middle airbridge will be retracted from the aircraft door. Passenger embarkation or disembarkation shall be conducted using the outer airbridge.
- (d) for frontal stands N5, N64, D212 and D216 serving an A380 aircraft, the middle airbridge will be retracted from the aircraft door. Passenger embarkation or disembarkation shall be conducted using the inner and outer airbridges at main deck only.

4. When wind reaches 35 knots (or 65 km/h),

4.1 Passenger Terminal

- (a) for all frontal stands other than N5, N64, D212 and D216 and serving aircrafts up to Code E, the outer airbridge will also be retracted from the aircraft door. However, upon request from the airline, the outer airbridge may still be used for passenger embarkation or disembarkation, cabin services, and maintenance services inside the cabin in the presence of an airline staff or representative at the aircraft door to monitor the condition of aircraft, together with an airbridge operator to monitor the operation of airbridge throughout the period when it is docked to the aircraft.



- (b) for frontal stands S23, N60, N62 and N66 serving an A380 aircraft, the outer airbridge will also be retracted from the aircraft door. However, the outer airbridge may still be used at the main deck for passenger embarkation or disembarkation, cabin services, and maintenance services inside the cabin under the conditions as stated in (a).
- (c) for frontal stands N5, N64, D212 and D216 serving aircraft up to Code E, the outer airbridge will also be retracted from the aircraft door. However, the outer airbridge may still be used for passenger embarkation or disembarkation, cabin services, and maintenance services inside the cabin under the conditions as stated in (a).
- (d) for frontal stands N5, N64, D212 and D216 serving A380 aircraft, the inner and outer airbridges will also be retracted from the aircraft door. However, the outer airbridge may still be used for passenger embarkation or disembarkation, cabin services, and maintenance services inside the cabin under the conditions as stated in (a).

#### 4.2. T1 Satellite Concourse (T1S), stand N10 and N12

Airbridge will be retracted from the aircraft. However, upon request from the airline, the airbridge may still be used for passenger embarkation or disembarkation, cabin services, and maintenance services inside the cabin in the presence of an airline staff or representative at the aircraft door to monitor the condition of aircraft, together with an airbridge operator to monitor the operation of the airbridge throughout the period when it is docked to the aircraft.

The airbridge must be retracted from the aircraft if the condition became hazardous, or as soon as passenger embarkation or disembarkation, cabin services and maintenance services inside the cabin are completed.

4.3. The table below summarizes the limitation on airbridge operation under strong wind condition:

		Passenger Terminal				T1S, N10 & N12
Stand		All frontal stands <sup>1</sup> other than N5	S23, N60, N62 & N66 <sup>2</sup>	N5, N64, D212 & D216		
Aircraft Type Served		Up to Code E	Code F	Up to Code E <sup>3</sup>	Code F	
When wind ≥ 45 km/h (25 knots)	Airbridge to be retracted	Inner	Inner	Middle		Not Applicable
	Airbridge allowed for pax embarkation or disembarkation	Outer	Outer at main deck only	Outer	Inner & Outer at Main deck only	
When wind ≥ 65 km/h (35 knots)	Airbridge to be retracted	Both Inner & Outer	Both Inner & Outer	Middle & Outer	Inner, Middle & Outer	Airbridge under monitoring by airline staff & airbridge operator
	Airbridge allowed for pax embarkation or disembarkation	Outer under monitoring by airline staff & airbridge operator	Outer at main deck under monitoring by airline staff & airbridge operator	Outer under monitoring by airline staff & airbridge operator	Outer at main deck under monitoring by airline staff & airbridge operator	
When wind ≥ 75 km/h (40 knots)		All airbridges should be retracted				
When wind ≥ 140 km/h (77 knots)		All airbridges should be tied down				

*Note<sup>1</sup>: All frontal stands include the new addition of T1 Midfield Concourse D201-D219*

*Note<sup>2</sup>: Operation of S23, N60 & N66 when serving aircrafts up to Code E shall follow the instructions under "All frontal stands other than N5"*

*Note<sup>3</sup>: The Inner airbridge is not in use when serving aircrafts up to Code E*

**E. Interface with Other Operational Organizations during Contingency**

1. Ramp Handling Franchisees;
2. Airlines;
3. Handling Agents;
4. Line Maintenance Franchisees;
5. AA TSI

**F. Drill Plan**

Drill by RHOs and TSI on manual retract and tie-down of airbridge is conducted on annual basis before typhoon season.

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