

Asia/Pacific Airport Coordinators Association (APACA)

Agenda Item 5
Airport Level Change

12th APACA meeting
21 June, 2016
Hamburg, Germany

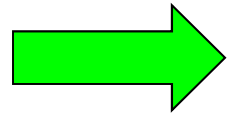
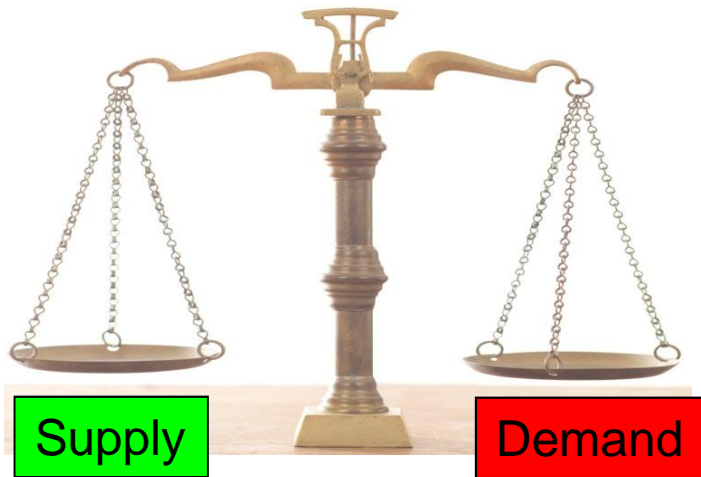
Congested Airports in Asia/Pacific Region

	Economy	Organization (No of A/P)	Airports	Airport Level
1	Australia	ACA (12)	ADL, BNE, CNS, DRW, MEL, OOL, PER, SYD	3
			HBA, NLK, PHE, TSV	2
2	Cambodia	SSCA (2)	PNH, REP	3
3	China	CAAC (11) (ATMB)	PEK, CTU, CKG, DLC, CAN, HGH, KMG, PVG, SZX, TSN, XIY	3
4	Chinese Taipei	ACT (2)	TPE	3
			KHH	2
5	Hong Kong	HKSCO (1)	HKG	3
6	India	AAI (2)	MAA, CCU	3, 2
		BLR (1)	BLR	2
		BOM (1)	BOM	3
		DEL (1)	DEL	3
		HYD (1)	HYD	2
7	Indonesia	IASM (2)	DPS, CGK	3, 2
8	Japan	JSC (5)	NRT, HND, FUK,	3
			KIX, CTS	2
		NGO (1)	NGO	2

	Economy	Organization (No of A/P)	Airports	Airport Level
9	Korea	KASO (3)	ICN, GMP, CJU	3
10	Macau	MIA (1)	MFM	2
11	Malaysia	NSCM (1)	KUL	3
12	New Zealand	NZ (4)	AKL, CHC, WLG	3
			ZQN	2
13	Pakistan	CAAP (4)	ISB, KHI, LHE, PEW	3
14	Philippines	ACA (1)	MNL	3
15	Singapore	CSC (1)	SIN	3
16	Sri Lanka	SLC (1)	CMB	3
17	Thailand	SCT (7)	BKK, CNX, DMK, HKT	3
			CEI, HDY, UTP	2
18	Vietnam	CAAV (2)	HAN, SGN	3

Why does congestion take place? (1)

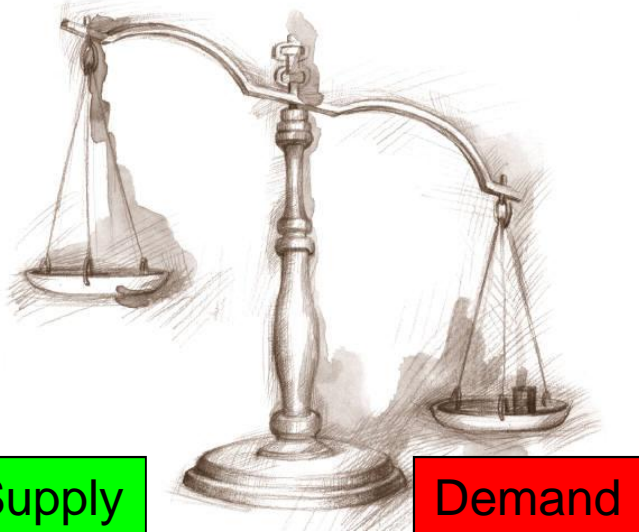
(1) Demand (Airlines Request) and Supply (Airport Capacity) are balanced



Level 1 Airport



(2) Demand (Airlines Request) and Supply (Airport Capacity) are imbalanced



Level 2 Airport

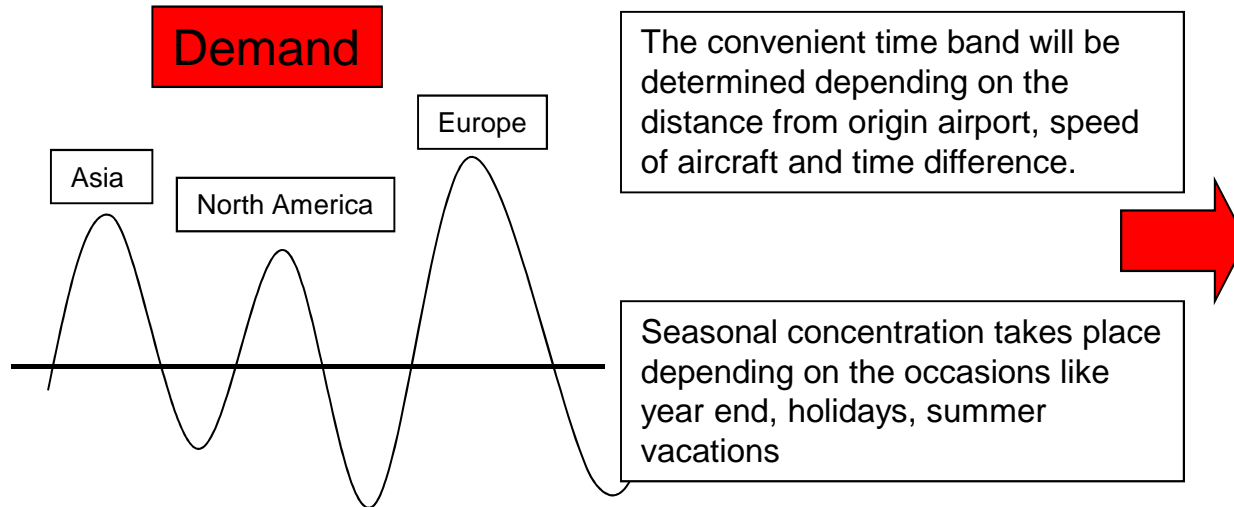


Level 3 Airport



Why does congestion take place? (2)

(1) Demand (Airlines Request) concentrates on certain time of day or season

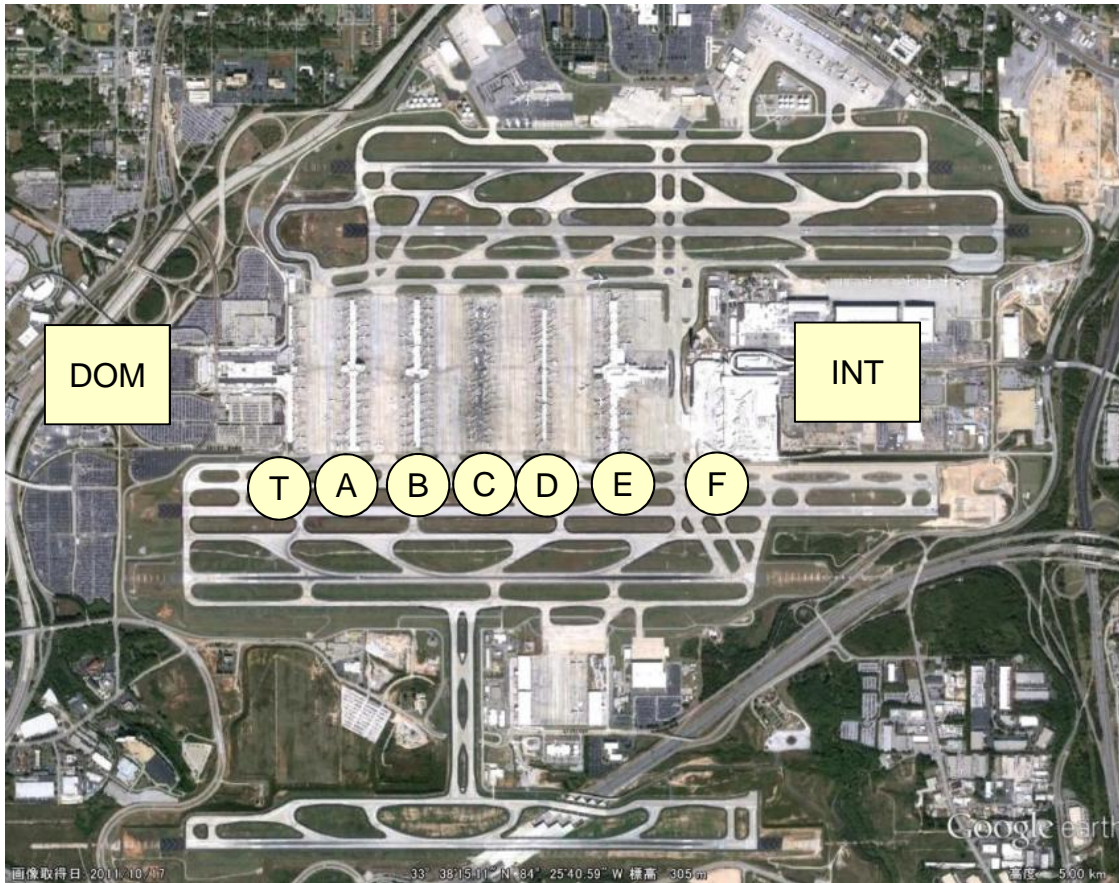


(2) Supply (Airport Capacity) is not sufficient



Does the scale of airport matter? (1)

Level 1 Airport



Hartsfield-Jackson Atlanta International Airport in USA

Airport Infrastructure

Runway	Length
8L/26R	2,743m
8R/26L	3,048m
9L/27R	3,624m
9R/27L	2,743m
10/28	2,743m

Terminal Concourse

Concourse T	14 gates (T1-T5, T7-T15)
Concourse A	34 gates (A1-A34)
Concourse B	35 gates (B1-B34, B36)
Concourse C	37 gates (C1-C22, C30-C57)
Concourse D	33 gates (D1, D1A-D8, D8A-D11, D11A-D16, D21-D46)
Concourse E	29 gates (E1-E12, E14-E18, E26-E37)
Concourse F	12 gates (F1-F12)

Traffic Achievement in 2010

Aircraft Movements	950,119
Passenger	89,331,622

Does the scale of airport matter? (2)

Level 3 Airport only for summer



Sitia Public Airport in Greece

Airport Infrastructure

Runway	Length
05/23	2,074m

Traffic Achievement in 2010

Aircraft Movements	1,805
Passenger	38,859

Demand and Capacity Analysis

6.1 DEMAND AND CAPACITY ANALYSIS

6.1.1 The airport managing body or other competent body should regularly conduct a thorough demand and capacity analysis, using commonly recognized methods. In particular, demand and capacity should be assessed whenever there are significant changes in airport infrastructure, operational practices, or patterns of demand.

6.1.2 The analysis should objectively consider the ability of the airport infrastructure to accommodate demand at desired levels of service, such as queue times, levels of congestion or delay. The analysis should assume that the airport facilities are being managed efficiently and are fully staffed.

6.1.3 The analysis should determine any infrastructure, operational, or environmental constraints that prevent demand being satisfied and identify options for overcoming such shortages through infrastructure, operational or policy changes and improvements.

6.1.4 The results of the demand and capacity analysis should be made available to interested parties in order to encourage cooperation and to alleviate and resolve any constraints on demand.

6.1.5 The objective of this analysis should be to improve the ability of the airport to accommodate demand and avoid, wherever possible, the need for the airport to change from Level 1 to Level 2 or from Level 2 to Level 3.

6.1.6 Another objective of this analysis should be to identify ways to reduce or remove the need for coordination which would result in changing the airport from Level 3 to Level 2 or Level 1 or from Level 2 to Level 1.

Airport Level Change from Level 1 to Level 2

6.2 CHANGE FROM LEVEL 1 TO LEVEL 2

6.2.1 When an airport's infrastructure is no longer able to accommodate all of the demand, a process of mutually agreed schedule adjustments may assist in smoothing demand to fit within these limitations.

6.2.2 **The responsible authority** may provide for an airport to change to Level 2 following a request from either the airport managing body or airlines operating at the airport representing at least 50% of the traffic, or on its own initiative.

6.2.3 A change in level should only occur after **the responsible authority** has ensured that:

- a) A full demand and capacity analysis has been undertaken; and
- b) All interested parties have been fully consulted on the analysis and the proposed change of level, and their views have been taken into account.

Airport Level Change from Level 2 to Level 3

6.3 CHANGE FROM LEVEL 2 TO LEVEL 3

6.3.1 A change to Level 3 may be necessary, when:

- a) Demand for airport infrastructure significantly exceeds the airport's capacity during the relevant period;
- b) Expansion of airport infrastructure to meet demand is not possible in the short term; and
- c) Attempts to resolve the problem through a process of mutually agreed schedule adjustments have failed or are ineffective.

6.3.2 **The responsible authority** may provide for an airport to change to Level 3 following a request from either the airport managing body or airlines operating at the airport representing at least 50% of the traffic, or on its own initiative.

6.3.3 A change in level should only occur after **the responsible authority** has ensured that:

- a) A full and thorough demand and capacity analysis has been undertaken, assessing the factors specified in 6.3.1; and
- b) All interested parties have been fully consulted on the analysis and the proposed change of level, and their views have been taken into account.

6.3.4 The same process should be followed in the event of an airport changing directly from Level 1 to Level 3.

Notification of Airport Level Change

6.7 NOTIFICATION

6.7.1 When a change in level is decided, **the responsible authority** must ensure that all interested parties (airlines, airport managing body, governments, IATA) are notified of the decision to change the level of the airport. In any event, notification of an airport level change should be made **no later than 1 April for the next winter season** and **1 September for the next summer season**.

6.7.2 For the purpose of maintaining an up-to-date list of the levels of all airports, any change of level must be notified to IATA using the Notification of Airport Level Change Form found at www.iata.org/wsg.

Airport Level Change Form

Top 10 Airlines by Movement

Ranking	Top 7 U Airlines by movement	Movement/31 Oct 17
1	NH (ANA)	19,730
2	QZ (JAL)	9,024
3	3U (CCA)	8,120
4	3L (INA)	7,942
5	FM (CCA)	2,519
6	MM (JAL)	2,420
7	NU (JAL)	2,205
8	CG (CCA)	1,919
9	IL (CCA)	730
10	BRC	713

Traffic

Comparing Month/Season	2019	2010	2011	2012	2013
Passenger (ATM)	125,380	127,250	122,100	125,980	117,000
Cargo (ATM)		0	0	0	0
International (ATM)**	1,92	2,41	2,45	2,33	9,12
Domestic (ATM)**	12,41	12,84	12,66	14,64	15,20
Total (ATM)**	15,33	15,25	15,11	17,42	13,20

**IATA to be discussed - the data is currently seasonal not IATA

Historic Traffic 0

Fukuoka Airport (FUK) - Level 3 - Capacity Data

Contact Information

Coordinator Facility/Contact Name	M. Hiroki Takada
Telephone	81-9-9803-2721
Email	m.takada@fukuoka-airport.co.jp

Runway/terminal and Stand Capacity

Runway	Movement/31 Oct 17
Annual	11
Uaparkuni	13
Terminal	13
Annual (ATM)	0
Uaparkuni (ATM)	0
Total	0

Stand	Type of Stand	Number of Stands
1	1	1
2	2	2
3	3	3
4	4	4

Operating Hours: 24 Hours Operation (07:00 - 22:00)

Runway/Terminal Demand vs Capacity

Bin to be cleared OK

Bin No.	Arrival	Departure
1	100%	100%
2	30%	30%
3	30%	30%
4	25%	100%
5	20%	100%
6	25%	100%
7	30%	37%
8	30%	31%
9	0%	0%
10	0%	0%
11	0%	0%
12	0%	0%
13	0%	0%
14	0%	0%
15	0%	0%
16	0%	0%
17	0%	0%
18	0%	0%
19	0%	0%
20	0%	0%
21	0%	0%
22	0%	0%
23	0%	0%
24	25%	25%
25	75%	15%
26	75%	20%
27	35%	100%
28	75%	50%

Airport Capacity Analysis

Dubai International Airport

Capacity Analysis 2009

Demand and Capacity

Dubai International is the world's fastest growing major international airport, handling over 37 million passengers and 270,000 aircraft movements in 2008 – more than double the passenger throughput of 5 years ago. Dubai has operated under an Open Skies aviation policy for many years and has sought to develop the airport infrastructure to keep pace with demand.

Figure 1a: Passengers (mpps)

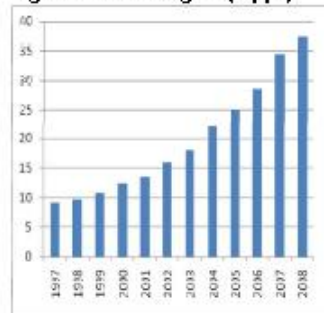
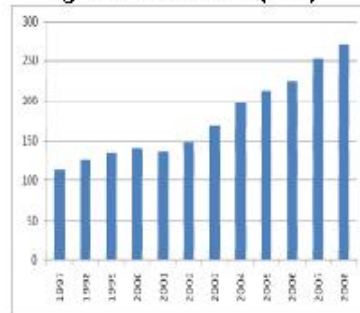


Figure 1b: Movements (000s)



Terminal 3, a new Emirates-dedicated facility, opened in October 2008 and provided a significant increase in terminal and gate capacity and purpose-built A380 capabilities. The continued growth of Emirates Airlines has resulted in them utilising stands at Terminal 1 despite the new facility being operational. A further concourse to Terminal 3 is currently under construction to support the increase in the number of A380 aircraft planned to join the Emirates fleet but this will not be open until 2012. DCAA and Serco increased air traffic control capacity to lift the runway movement rate from 40 to 52 movements per hour in Summer 2009 and work continues to increase beyond this level for 2010 to an eventual capacity of about 60 movements per hour.

Despite these developments, the Dubai International Airport site is constrained and scope to keep pace with growth in demand is limited. The availability of aircraft parking stands and then runway & airspace capacity limits are likely to constrain demand.

Runway Capacity Utilisation

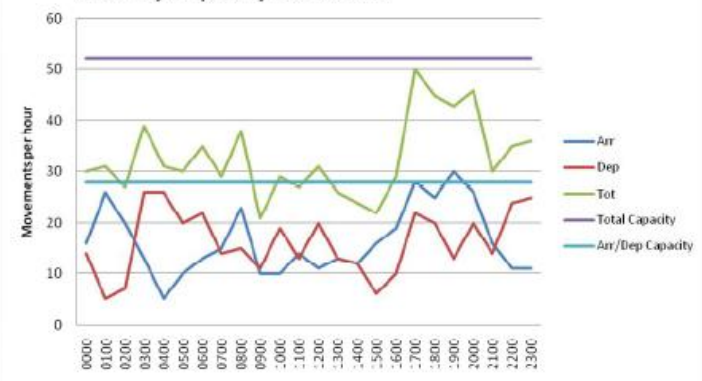


Table 1: Terminal Capacity Assessment (passengers per hour)

Hourly Passenger Capacities	TERMINAL 1		TERMINAL 2		TERMINAL 3	
	Process Capacity	Space Capacity	Process Capacity	Space Capacity	Process Capacity	Space Capacity
Departures						
Departures Concourse		1,070		1,250		
Pre-check-in screening (Removed for Terminal 3)	2,930	4,316	440	1,350	6,470	16,070
Check-in	4,300	24,682	800	2,760	11,300	37,300
Emigration	2,870	13,762	920	5,100	9,300	34,320
Security	3,030	8,672	820	7,250	11,500	49,356

Arrivals	TERMINAL 1		TERMINAL 2		TERMINAL 3	
Immigration	3,000	12,170	1,100	50,000	7,430	46,820
Customs Hand Bag Screening	3,343	9,780			20,790	
Baggage Reclaim	3,040	21,737	920	12,220	18,000	n/a
Customs Hold Baggage Screening	3,700	10,100	920	12,220	18,000	n/a

Transfers	TERMINAL 1		TERMINAL 2		TERMINAL 3	
Transfers Security	46,500	132,700	13,700		7,000	8,800