



Aviation Studies  
Institute



# RESTARTING INTERNATIONAL AIR TRAVEL WITHIN ASEAN

A White Paper from the Aviation Studies Institute (ASI) at  
the Singapore University of Technology and Design (SUTD)

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## Executive Summary

While the global aviation industry has been decimated by the COVID-19 pandemic, the ten Southeast Asian countries which comprise the Association of Southeast Asian Nations (ASEAN) have experienced passenger traffic declines that have been much sharper than the global and Asia-Pacific averages. Data from Kuala Lumpur International Airport and other sources also indicate that international travel within ASEAN has declined even more than travel connecting with non-ASEAN countries.

Globally, regional international traffic is expected to recover faster than intercontinental international traffic. This is happening in Europe, the Americas, the Middle East and Africa but it has not yet happened in ASEAN.

ASEAN's domestic aviation market started recovering in May and June, 2020, as countries lifted restrictions on internal travel. Domestic passenger levels in ASEAN are now at around 50% of normal levels overall. However, revenues for domestic travel are much lower than for cross-border travel. Due to the suspension of nearly all international passenger travel and the fact domestic revenues are very limited, many ASEAN airlines are unable to cover fixed costs and are suspending or delaying aircraft lease payments. Airline bankruptcies and collapses are expected, particularly if international air travel in ASEAN does not resume within the next few months. ASEAN airlines have a pressing need to rebuild revenue streams. Local economies dependent on tourism have also been hard-hit.

Bilateral green lanes and travel corridors, which allow for essential business travel, have been established between several countries. But such travel has been very limited due to restrictions and quotas. The best hope for restoring international air travel in ASEAN is through the creation of bilateral travel bubbles under which personal and leisure travel is permitted without quarantine but with mutually recognized COVID-19 testing or vaccination records for all travelers. Without at least a partial reopening of borders, which would be possible through air travel bubbles or other mechanisms, international passenger traffic within ASEAN will remain at its current uneconomic levels for at least several more months.

The ASEAN Secretariat, in its role to promote international collaboration, has adopted the ASEAN Comprehensive Recovery Framework (ACRF) and agreed "to take steps towards the establishment of an ASEAN travel corridor arrangement framework to facilitate essential business travels among ASEAN Member States, while prioritising public health safety". It is the recommendation of this white paper that, in addition to travel corridors, which permit only essential travel, ASEAN should consider establishing a framework for intra-ASEAN air travel bubbles.

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# Introduction

The global aviation industry has been decimated by the COVID-19 pandemic. The International Air Transport Association (IATA) projects a 66% drop in revenue passenger kilometers (RPKs) for 2019, representing the largest drop since the Second World War. The year-over-year global international RPK decline has exceeded 88% in every month since April 2020.

While no region has been spared, the Association of Southeast Asian Nations (ASEAN) has experienced international passenger traffic declines that have been much sharper than the global average and slightly sharper than the Asia Pacific average. International passenger traffic in ASEAN has declined compared with 2019 levels by over 97% every month since April as borders have remained closed. Overall domestic traffic in ASEAN has also recovered slower than the global and Asia Pacific averages, dragged down by a much slower than average recovery rate for Indonesia and Philippines, offsetting the recoveries in Thailand and Vietnam.

ASEAN accounts for around 10% of global passenger traffic and has consistently been one of the fastest growing regions over the last decade. Growth within ASEAN has particularly been strong, driven by an expanding middle class and the rapid expansion of flights from low cost carriers.

International traffic within ASEAN has not yet started to recover despite successful virus containment efforts in several countries. The guidelines, standards and protocols needed to facilitate a restart of international travel are available, thanks to the efforts of industry groups such as the International Civil Aviation Organization (ICAO) and IATA. However, they have not been widely adopted in ASEAN. While reciprocal green lane agreements have been reached between Singapore and Brunei and Malaysia, there is not yet a single example in the region of a border reopening or a travel bubble being established. So far, only essential travel has been permitted in addition to one-way repatriating traffic.

This white paper examines the potential of reopening international passenger traffic within ASEAN using the ASEAN Secretariat as a platform for facilitating a multilateral air travel bubble agreement.

The ASEAN Secretariat in November did begin pursuing an ASEAN Travel Corridor Arrangement for potential implementation in early 2021 but this proposed arrangement is currently limited to essential travel and is similar to the green lanes or travel corridors already in place between several Asian countries. Travel corridors and green lanes have not had a significant impact on passenger traffic. This is due to their limitations, which prohibit any form of leisure travel or tourism, and the quotas capping the number of travelers that are imposed. A resumption of leisure travel within ASEAN would be needed to restore ASEAN's aviation industry and overall economy.

The data and information analyzed in this paper are current as of the December 1, 2020 and focus on the ten countries in ASEAN: Brunei, Cambodia, Indonesia, Malaysia, Laos, Myanmar, Philippines, Singapore, Thailand and Vietnam.

## **Overview of air travel in ASEAN: prior to and during COVID**

Nearly 50 million passengers travelled by air between the ten ASEAN member countries in 2019, based on OAG Traffic Analyzer data.

The total ASEAN market consisted of nearly 450 million origin and destination (O&D) passengers in 2019. This includes an estimated 210 domestic passengers, 49 million passengers travelling between ASEAN countries and 187 million passengers travelling to or from ASEAN.

This study focuses on the intra-ASEAN market and the importance of restarting travel within ASEAN. Aviation has a critical role in connecting ASEAN, facilitating trade between the ten countries and enabling the overall economy.

ASEAN's domestic aviation market started recovering in May and June as countries lifted restrictions on internal travel. Domestic passenger levels in ASEAN are now at around 50% of normal levels overall but with large variation depending on the market.

However, the international market – both within ASEAN and to/from ASEAN – have still not started to recover. International traffic in all ASEAN countries has been very limited since the beginning of April due to border closures.

Total international passenger traffic has declined by around 98% since April. The three largest international airports in ASEAN – Singapore Changi, Bangkok Suvarnabhumi and Kuala Lumpur International – each had international passenger traffic declines of 98% to 99% in the first seven months of the crisis (April 2020 to October 2020) relative to the same period in 2019.

The fourth largest international airport in ASEAN, Manila Ninoy Aquino, had a decline of 95% in the first seven months of the crisis. The fifth largest international airport in ASEAN, Bangkok Don Mueang, had a decline of nearly 100%.

Table 1. International passenger traffic (in thousands) for top 5 airports in ASEAN

Airport	Apr-Oct 2019	Apr-Oct 2020	Decline
Singapore Changi	39,740	457	98.9%
Bangkok Suvarnabhumi	29,678	362	98.8%
Kuala Lumpur International	25,851	494	98.1%
Manila Ninoy Aquino	14,512	780	94.6%
Bangkok Don Mueang	10,259	17	99.8%
<b>TOTAL</b>	<b>120,040</b>	<b>2,110</b>	<b>98.2%</b>

Note: Top 5 is based on 2019 international passenger traffic.

Source: Changi Airport, Airports of Thailand, Malaysia Airports Holdings, Manila International Airport Authority

International traffic within ASEAN has declined more than international traffic to/from ASEAN. The intra-ASEAN market has accounted for around 10% of total O&D international passenger traffic in ASEAN since April compared to around 20% prior to the pandemic.

The stronger, albeit still very weak, non-ASEAN traffic is driven by one-way traffic, including repatriating passengers and workers. While there is some repatriating and worker traffic within ASEAN, most of this segment consists of passengers travelling to or from countries outside ASEAN. The Philippines has a particularly high portion of this type of traffic, which explains the smaller decline in Manila compared to the other top five ASEAN airports. Bangkok Don Mueang primarily only has regional services within Asia, which explains why its traffic has declined the most among the top five airports.

For ASEAN traffic to recover, borders need to reopen or travel bubbles need to be established. International traffic within ASEAN is not about to increase beyond the current very low levels without air travel bubbles or a full reopening of borders.

In the first eight months of 2020 approximately 10 million passengers travelled between ASEAN countries, based on O&D traffic data. Almost all these passengers travelled in the first quarter of the year – prior to the closure of all borders in late March.

Since the beginning of April, there has been less than 100,000 international passengers per month within ASEAN. Prior the pandemic an average of around 4 million passengers flew between ASEAN countries every month.

International capacity within ASEAN has declined to an average of roughly 350,000 seats per month. This represents a decline of about 95% compared to pre-pandemic levels. There has been a significantly higher decline in traffic compared to capacity due to very low load factors.

Any uptick in intra-ASEAN traffic is not about to happen until early 2021 at the earliest. International traffic within ASEAN will therefore end 2020 with less than 11 million O&D passengers in 2020, representing a 78% decline compared to 2019. When removing the first quarter and only looking at the last three quarters of 2020, the decline is more than 98%.

Seat capacity within ASEAN for the full year in 2020 will be around 22 million, including 19 million seats in the first quarter, based on OAG Schedules Analyzer data. This represents a

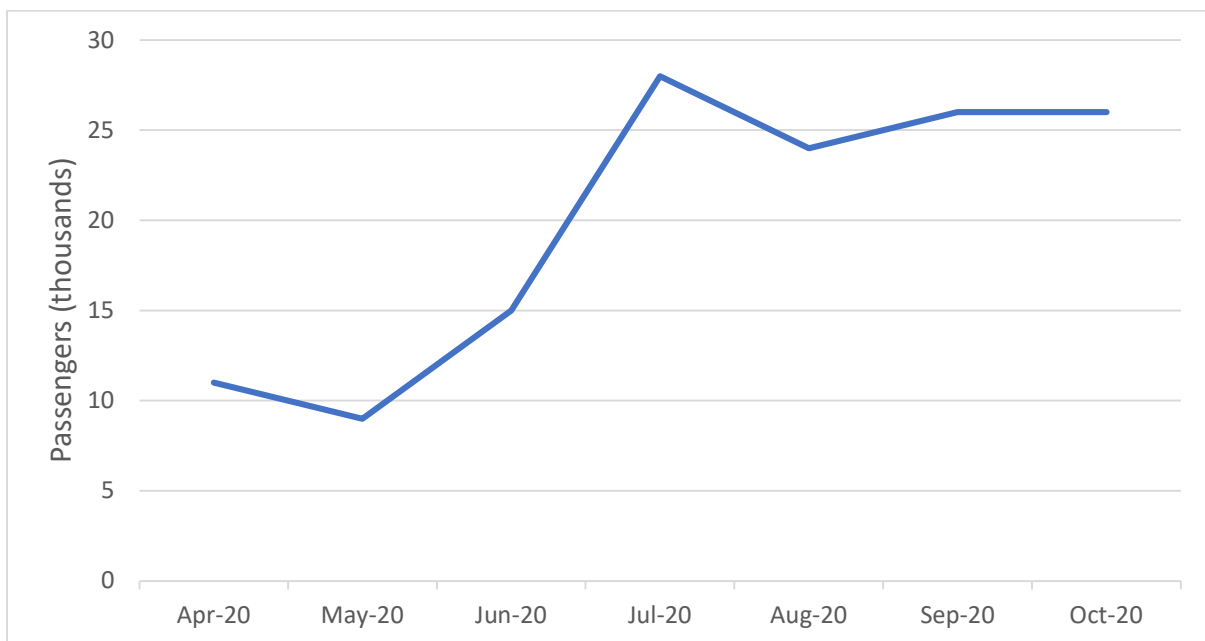
74% decline compared to 2019 and around a 95% decline for the last three quarters of the year.

## **KLIA Case Study: ASEAN traffic declines more than non-ASEAN**

Most ASEAN airports and airlines do not separate out the ASEAN segment of the market when reporting traffic. Kuala Lumpur International Airport (KLIA) is an exception because Malaysia Airports Holdings Berhad (MAHB) reports ASEAN traffic separately. As KLIA is the second largest airport for intra-ASEAN traffic it provides an ideal case study for analyzing the impact of COVID-19 on the ASEAN market.

KLIA handled 139,000 ASEAN passengers in the first seven months of the crisis (April 2020 to October 2020), according to MAHB data. This represents a 98.9% decline compared to the 12.5 million passengers handled in the same seven months in 2019.

In the seven months the highest monthly figure was 28,000 passengers (in July) and the lowest was 9,000 (in May).



*Figure 1. KLIA monthly ASEAN passenger traffic: Apr-2020 to Oct-2020*

*Source: Malaysia Airports Holdings Berhad*

All the other airports in MAHB's portfolio handled a combined 9,000 ASEAN passengers in the seven months ending September 2020, representing a 99.7% decline compared to the 2.9 million passengers from the same period of 2019. MAHB operates all airports in Malaysia except Senai Airport in Johor.

In 2019, KLIA handled 21.5 million ASEAN passengers and other MAHB airports handled 5 million ASEAN passengers. The Malaysia market overall had 27 million ASEAN passengers in 2019 when including Senai's traffic.

For Malaysia, ASEAN traffic is almost as large as the rest of the non-ASEAN international market. This is unique as most other ASEAN countries have significantly more non-ASEAN traffic compared to ASEAN traffic. Malaysia's heavy reliance on the ASEAN market further makes Malaysia an ideal case study to highlight the impact the pandemic is having on the intra-ASEAN segment.

In 2019, all airports in Malaysia handled a combined 56 million international passengers, including 27 million within ASEAN and 29 million outside ASEAN. Malaysia's airports also handled 37 million domestic passengers in 2019. However, since the latter figure counts each domestic passenger twice (once at embarkation and again at disembarkation), Malaysia's total domestic market was 18.5 million passengers, or one-third the size of its international market.

In the seven months ending October 2020, domestic traffic at MAHB declined by 81.6%, non-ASEAN international traffic by 97.7% and ASEAN traffic by 99.0%. The fact the ASEAN decline was more than the non-ASEAN decline indicates the relative underperformance of the ASEAN segment.

While other airports do not provide this breakdown, O&D data, as highlighted earlier, paint a similar picture.

## **Regional market in ASEAN should recover prior to intercontinental**

Globally, regional international traffic is expected to recover faster than intercontinental international traffic. This reflects a desire for passengers to travel closer to home and reluctance to travel outside their regions during the pandemic as well as in the initial post-pandemic period.

Some regions such as Europe, North America, the Middle East and Africa have already experienced a partial recovery in international passenger traffic driven mainly by a resumption of some short haul or regional international travel. This has not happened in ASEAN – or anywhere in Asia Pacific – yet as borders have not yet reopened and air travel bubbles have not yet been established.

For example, international RPKs for European carriers were down 80.5% in August 2020, 82.5% in September 2020 and 83.0% in October 2020 compared to prior year levels. In comparison, Asia Pacific carrier international RPKs were down 96.2% in August 2020, 95.8% in September 2020 and 95.6% in October 2020, according to IATA data.

As discussed in the prior section, almost all the passengers travelling between ASEAN countries since April 2020 has consisted of one-way repatriating or worker traffic. There has

been virtually no two-way leisure or business traffic, which typically accounts for most traffic within ASEAN. Only a very small amount of essential business and government traffic has been permitted.

Regional traffic within ASEAN could start to recover in 2021 and pick up at a faster rate than intercontinental traffic. This would align with the global consensus that short haul or regional international traffic will recover faster than medium or long-haul international traffic.

However, in order for the ASEAN recovery to begin in 2021 borders need to open and/or travel bubbles need to be established.

## **The impact on ASEAN's airlines**

ASEAN airlines have been urging the ASEAN Secretariat to facilitate a resumption of international travel. ASEAN airlines have also been indicating their disappointment with the ASEAN Secretariat's progress so far in reopening borders and resuming leisure travel, including at the last ASEAN Airline Meeting (AAM) on 21 October.

Several airlines in ASEAN are in dire condition and are close to running out of cash. Airline bankruptcies and collapses are expected, particularly if international air travel in ASEAN does not resume within the next few months.

Only two small airlines in ASEAN have shut down since the start of the pandemic – AirAsia X Indonesia and Thailand's NokScoot. Two relatively large airlines are currently rehabilitating with supervision from bankruptcy courts – Thai Airways and Nok Air.

Several other ASEAN airlines are expected to pursue bankruptcy court protection to facilitate restructuring initiatives. Most of the region's airlines should survive but require significant restructuring – either out-of-court or with court supervision – to reduce their cost base. Several of the region's airlines also need to secure new capital to ensure survival. Some of the region's airlines may not be able to secure approval from creditors and new capital, resulting in outright collapses.

Some consolidation in the ASEAN airline sector is inevitable. Consolidation could have long-term ramifications, including a reduction in capacity that impedes the ability of the airline sector to resume expansion as demand recovers. Many of the surviving airlines will have extreme debt levels to pay off over the next several years, impeding their ability to expand as well making it difficult to return to profitability.

ASEAN airlines have a pressing need to rebuild revenues streams. For the three months ending 30 September 2020, ASEAN-based publicly traded airline groups reported in their quarterly financial statements revenue declines of 75% to 94%.

Cargo and domestic passenger services accounted for most of the revenues as there was limited international passenger travel. Several airlines reported declines in revenue passenger kilometers (RPKs) of at least 90%.

Table 2. Third quarter revenues and RPKs for ASEAN airline groups

Airline Group	Currency	3Q2019 revenues (millions)	3Q2020 revenues (millions)	YoY revenue decline	3Q2019 RPKs (millions)	3Q2020 RPKs (millions)	YoY RPK decline
AirAsia Berhad^	MYR	2,945	387	87%	16,021	1,854	88%
AirAsia X Berhad^	MYR	1,105	60	94%	6,894	0	100%
Bangkok Airways	THB	6,699	903	87%	1,052	110	90%
Cebu Pacific	PHP*	18.92*	2.01*	89%	6,083	199	97%
Garuda Indonesia	USD	1,347	222	84%	10,284	1,437	86%
Philippine Airlines	PHP*	36.64*	8.47*	77%	N/A	N/A	N/A
Singapore Airlines	SGD	4,222	784	81%	38,499	641	98%
Thai AirAsia^	THB	9,657	2,403	75%	5,444	1,207	78%
Thai Airways	THB	45,983	3,747	92%	16,962	108	99%
VietJet Air	VND*	13,577*	2,809*	79%	N/A	N/A	N/A

Notes: based on calendar third calendar

\*PHP and VND are in billions; other currencies are in millions

^AirAsia is split into three subgroups – AirAsia Berhad, AirAsia X Berhad and Thai AirAsia/Asia Aviation

VietJet and Philippine Airlines did not report RPKs

AirAsia X did not operate any scheduled flights in the third quarter

Source: airline financial reports

While the revenues decline for the third quarter represented improvements compared to the second quarter, and this due to stronger domestic traffic, the declines are clearly unsustainable. All of ASEAN's airlines have incurred large losses this year.

Domestic travel in most ASEAN countries started resuming in the latter portion of the second quarter and domestic traffic continued to improve in the third quarter. But domestic passenger revenues have generally not yet been sufficient to contribute to fixed costs. Several ASEAN airlines have therefore not been able to resume paying creditors. Paying of monthly aircraft lease bills has been particularly challenging. Several airlines in ASEAN have deferred monthly lease payments since the start of the pandemic.

Thailand and Vietnam have been the best performing markets in ASEAN during the pandemic due to their relative domestic strength. Vietnam's domestic market has recovered rapidly, with domestic traffic recently reaching pre-COVID levels. Domestic traffic in Thailand has recently been at about 70% pre-COVID levels. However, even in Vietnam and Thailand, it is impossible to achieve profitability. For example, Vietnamese domestic market leader VietJet reported a revenue decline of nearly 80% in the third quarter even though overall passenger traffic declined by only around 50%.

VietJet carried over 3 million passengers in the quarter – almost all of which were in the domestic market due to the closure of international borders – but the average revenue per passenger was only around USD40. By way of contrast, in the third quarter of 2019, VietJet carried over 6 million passengers – including over 4 million domestic passengers – and generated around USD100 of revenue per passenger.

Thailand's domestic market leader, Thai AirAsia, reported a revenue decline of 75% in the third quarter while passenger traffic declined by 65%. Thai AirAsia carried 1.86 million passengers in the quarter – all in the domestic market – and the average revenue per passenger was slightly over USD40. In the third quarter of 2019, Thai AirAsia carried 5.28 million passengers – including slightly over 3 million domestic passengers – and the average revenue per passenger in the quarter was around USD60.

An average revenue per passenger of USD40 is simply not sustainable. This includes the air fare as well as ancillaries – such as checked bags, seat assignments, meals and cargo. Thai AirAsia's average air fare in the third quarter of 2020 was only THB996 or USD33. The point is that cross-border air travel is critical to airline profitability. Domestic traffic alone will not restore them to economic health.

The other main domestic markets in ASEAN – Indonesia, Malaysia and the Philippines – are still down by more than 50%. Domestic flights in the much smaller Myanmar market were suspended again in September due to a spike in COVID-19 cases and have not yet resumed as of early December. Cambodia and Laos have even smaller domestic markets (less than 1 million passengers per year) while Brunei and Singapore do not have any domestic services.

Singapore has the benefit of having a larger cargo market but even with a strong cargo contribution, revenues at Singapore Airlines Group were down by over 80% in the September quarter. Cargo accounts for a relatively small portion of airline revenues in ASEAN. The average cargo contribution is much larger in North Asia, where airlines have been significantly impacted by COVID-19 but not as battered as airlines in ASEAN.

ASEAN airlines need revenues to pick up quickly. As domestic and cargo offer relatively limited revenue generation opportunities, international passenger traffic has to increase in order for airlines to start recovering. Reopening air travel within ASEAN, particularly between those countries with low COVID-19 case numbers, is logical and would have a significant positive impact on ASEAN airlines as well as on tourism.

## **Which airline groups are most impacted**

All airlines in ASEAN would benefit from a reopening of international air travel within ASEAN.

AirAsia, which is currently grappling with a potential financial crisis, would benefit the most as it is the largest airline group in the intra-ASEAN international market. AirAsia is also the largest airline group in ASEAN overall – based on annual passenger traffic – and has positioned itself for over a decade as a leading ASEAN brand.

The AirAsia Group flew 137,000 flights between ASEAN countries in 2019, accounting for 30% of all flights, according to OAG Schedules Analyzer data. It also accounted for 25 million or 29% of the total 85 million seats flown between ASEAN countries in 2019.

Based on OAG Traffic Analyzer Data, the AirAsia Group carried an estimated 15.9 million international passengers within ASEAN in 2019, giving it a 33% share of the total market.

The second largest airline group in the intra-ASEAN international market is Singapore Airlines Group, which carried an estimated 7.7 million international passengers within ASEAN in 2019, giving it a 16% share.

The Lion Group is the third largest airline group based on intra-ASEAN O&D international passenger traffic followed by Malaysia Airlines Berhad, Jetstar Group and Thai Airways Group. The top six groups combined account for 75% of the total intra-ASEAN international market and have been disproportionately impacted by border closures.

*Table 3. Top 6 airline groups for international O&D passenger traffic within ASEAN: 2019*

Rank	Group	Airline/Airline Code	Airline traffic (millions)	Group traffic (millions)	Portion of total
1	AirAsia Group			15.9	33%
		AirAsia Malaysia/AK	7.9		
		AirAsia Indonesia/QZ	3.9		
		Thai AirAsia/FD	3.4		
		AirAsia Philippines/Z2	0.4		
		AirAsia X/D7	0.2		
2	Singapore Airlines Group			7.7	16%
		Scout/TR	3.4		
		Singapore Airlines/SQ	3.2		
		SilkAir/MI	1.0		
3	Lion Group			3.7	8%
		Malindo Air/OD	1.3		
		Lion Air/JT	1.2		
		Thai Lion/SL	0.8		
		Batik Air/ID	0.4		
		Wings Air/IW	<0.1		
4	Malaysia Airlines Berhad			3.4	7%
		Malaysia Airlines/MH	3.1		
		Firefly/FY	0.3		
5	Jetstar Group			3.1	6%
		Jetstar Asia/3K	2.8		
		Jetstar Pacific/BL*	0.2		
		Jetstar Airways/JQ	0.1		
6	Thai Airways Group			2.2	5%
		Thai Airways/TG	1.9		
		Thai Smile/WE	0.3		

Note: \*Jetstar Pacific exited the Jetstar Group and rebranded as Pacific Airlines in mid 2020

Source: OAG Traffic Analyzer

The remaining 25% is shared by a wide range of competitors. Other airlines among the top 20 include: Vietnam Airlines (VN), Philippines-based Cebu Pacific (5J), Vietnam’s VietJet (VJ), Garuda Indonesia (GA), Philippine Airlines (PR), Thailand’s Bangkok Airways (PG) and Royal Brunei Airlines (BI).

There are around 50 airlines operating international services within ASEAN (prior to COVID-19). This includes 20 airlines that are part of the top six groups. AirAsia Malaysia, AirAsia Indonesia and Thai AirAsia (all part of the AirAsia Group) are the three largest individual airlines based on international traffic within ASEAN while Scoot and Singapore Airlines (part of the Singapore Airlines Group) are the fourth and fifth largest.

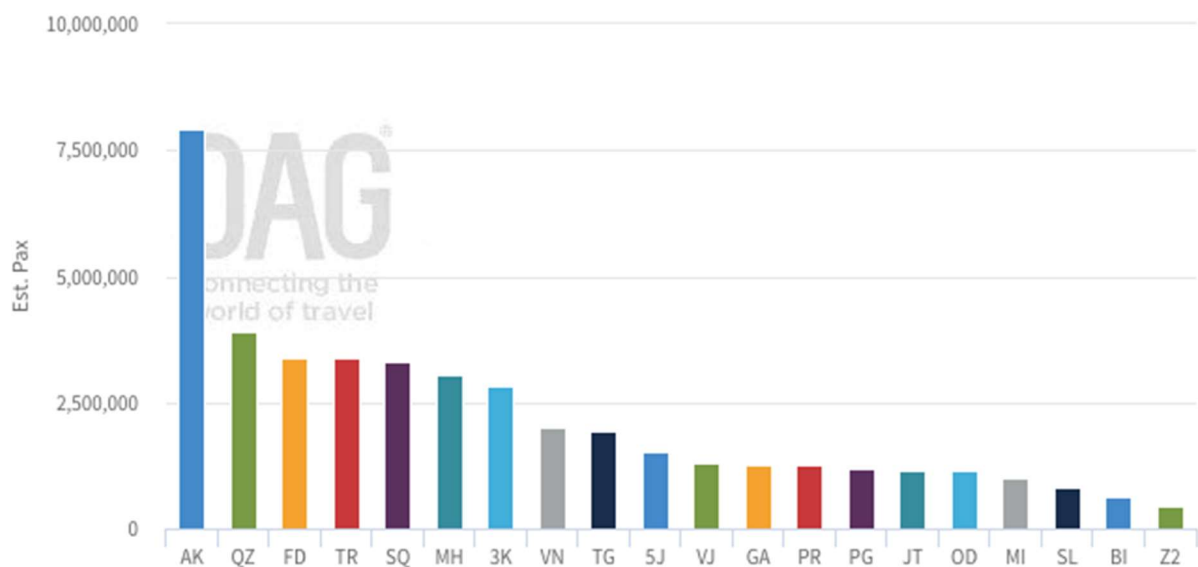


Figure 2. Top 20 airlines for international O&D passenger traffic within ASEAN: 2019

Source: OAG Traffic Analyzer

## Which countries and airports are most impacted

All ASEAN countries would benefit from a reopening of international air travel within ASEAN. Aviation and tourism are important economic contributors for all ASEAN countries.

While travel outside the region is also important, with inbound tourism from China a particularly big revenue generator, intra-ASEAN travel is a huge market. The intra-ASEAN segment is also strategically important given the close economic ties between ASEAN members.

Singapore accounts for the most air travelers within ASEAN followed by Malaysia, Thailand and Indonesia. These four countries have relatively similarly sized markets and combined account for 78% of total passenger traffic within ASEAN. Vietnam is the fifth largest market for intra-ASEAN international O&D passenger traffic followed by Philippines, Cambodia, Myanmar, Laos and Brunei.

Table 4. O&D international passenger traffic within ASEAN by country: 2019

Rank	Country	Passengers (in millions)	Portion of total
1.	Singapore	20.6	21.0%
2.	Malaysia	20.3	20.6%
3.	Thailand	17.4	17.7%
4.	Indonesia	16.8	17.1%
5.	Vietnam	9.1	9.2%
6.	Philippines	5.0	5.1%
7.	Cambodia	3.9	3.9%
8.	Myanmar	2.7	2.8%
9.	Laos	1.7	1.7%
10.	Brunei	0.9	0.9%

Source: OAG Traffic Analyzer

Malaysia-Indonesia is the largest country pair within ASEAN, accounting for 8 million O&D two-way passengers in 2019, according to OAG Traffic Analyzer data. Indonesia-Singapore is the second largest country pair, accounting for another 6 million passengers while Malaysia-Singapore is the third largest country pair accounting for 4.6 million passengers.

There are another nine country pairs, for a total of 12, that had at least 1 million passengers in 2019. Combined the top 12 country pairs account for 83% of total international passenger traffic within ASEAN.

Table 5. Top 12 country pairs for intra-ASEAN international O&D passenger traffic: 2019

Rank	Country Pair	Two-way passengers (in millions)	Portion of total
1.	Malaysia-Indonesia	8.0	16%
2.	Indonesia-Singapore	6.0	12%
3.	Malaysia-Singapore	4.6	9%
4.	Singapore-Thailand	4.4	9%
5.	Malaysia-Thailand	3.4	9%
6.	Thailand-Vietnam	3.2	7%
7.	Philippines-Singapore	2.3	5%
8.	Singapore-Vietnam	2.0	4%
9.	Malaysia-Vietnam	1.7	3%
	Cambodia-Thailand	1.7	3%
	Indonesia-Thailand	1.7	3%
12.	Myanmar-Thailand	1.4	3%

Source: OAG Traffic Analyzer

Another six country pairs have at least 500,000 two-way passengers but less than 1 million while another 12 country pairs had at least 100,000 passengers but less than 500,000.

The remaining 14 country pairs in ASEAN had less than 100,000 passengers in 2019. These country pairs have limited and – in a few cases – no nonstop services. In 2019, an estimated 89% of intra-ASEAN international passengers flew on nonstop flights while only 11% had to connect via intermediary hubs, according to OAG Traffic Analyzer data.

The table below shows O&D passenger traffic for all ASEAN country pairs in 2019. Each figure is one-way with the origin country listed in the vertical column and the destination country listed in the horizontal column. The overall total for this table is 97.4 million passengers as each passenger is counted twice – under the country the passenger departs and again under the country the passenger arrives. There are 45 country pairs in ASEAN but there are 90 data points here as it shows one-way traffic.

*Table 6. O&D passenger traffic (in millions) within ASEAN by country pair: 2019*

<b>From/to:</b>	<b>BN</b>	<b>KH</b>	<b>ID</b>	<b>LA</b>	<b>MY</b>	<b>MM</b>	<b>PH</b>	<b>SG</b>	<b>TH</b>	<b>VN</b>	<b>TOT</b>
<b>Brunei (BN)</b>		*	0.06	*	0.21	*	0.04	0.07	0.04	0.02	<i>0.44</i>
<b>Cambodia (KH)</b>	*		0.05	0.07	0.28	0.04	0.06	0.17	0.81	0.39	<i>1.87</i>
<b>Indonesia (ID)</b>	0.07	0.04		0.01	4.00	0.02	0.22	3.03	0.8	0.16	<i>8.35</i>
<b>Laos (LA)</b>	*	0.08	0.01		0.28	0.01	0.01	0.02	0.30	0.13	<i>0.84</i>
<b>Malaysia (MY)</b>	0.21	0.30	4.00	0.26		0.15	0.38	2.31	1.66	0.85	<i>10.12</i>
<b>Myanmar (MM)</b>	*	0.04	0.02	0.03	0.16		0.01	0.3	0.72	0.10	<i>1.38</i>
<b>Philippines (PH)</b>	0.04	0.05	0.22	0.01	0.37	0.01		1.13	0.47	0.20	<i>2.50</i>
<b>Singapore (SG)</b>	0.09	0.18	3.09	0.03	2.30	0.29	1.13		2.18	1.01	<i>10.30</i>
<b>Thailand (TH)</b>	0.03	0.85	0.84	0.30	1.71	0.7	0.49	2.20		1.62	<i>8.74</i>
<b>Vietnam (VN)</b>	0.02	0.44	0.16	0.14	0.83	0.11	0.20	1.05	1.63		<i>4.58</i>
<b>TOTAL (TOT)</b>	<i>0.46</i>	<i>1.98</i>	<i>8.45</i>	<i>0.85</i>	<i>10.14</i>	<i>1.33</i>	<i>2.54</i>	<i>10.28</i>	<i>8.61</i>	<i>4.48</i>	

*\*Brunei-Cambodia, Brunei-Myanmar and Brunei-Laos have only a few thousand passengers*

*Source: OAG Traffic Analyzer*

Singapore Changi (SIN) is the largest airport based on O&D passengers within ASEAN followed by Kuala Lumpur International, Bangkok Suvarnabhumi (BKK), Jakarta Soekarno-Hatta (CKG) and Bangkok Don Mueang (DMK). Ho Chi Minh (SGN), Manila (MNL), Bali (DPS), Penang (PEN) and Hanoi (HAN) round out the top 10 while Yangon (RGN), and Phnom Penh (PNH), Medan (KNO), Phuket (HKT), Siem Reap (REP), Surabaya (SUB), Da Nang (DAD), Bandar Seri Begawan (BWN), Chiang Mai (CNX) and Vientiane (VTE) make the top 20.

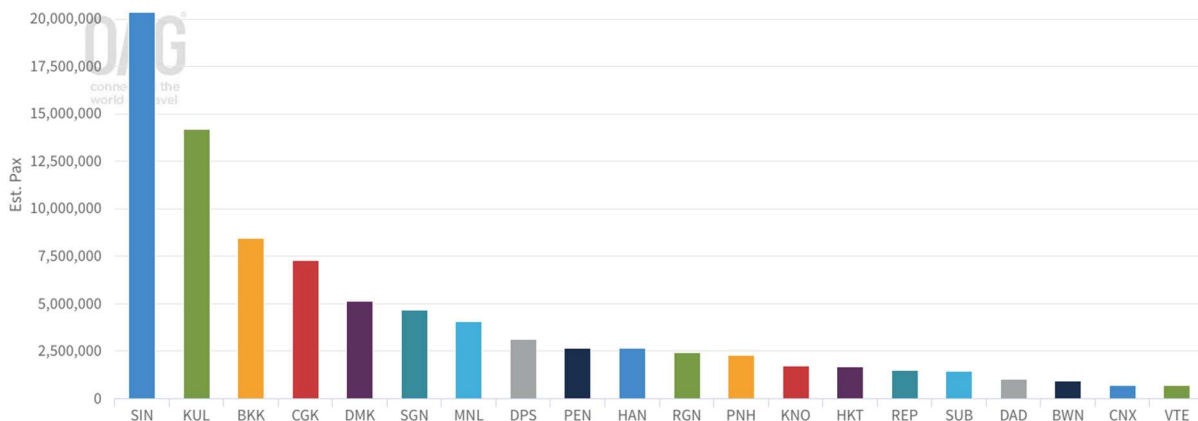


Figure 3. Top 20 airports for intra-ASEAN O&D passenger traffic: 2019

Source: OAG Traffic Analyzer

As highlighted earlier in this paper, Singapore, Bangkok Suvarnabhumi and Kuala Lumpur are also the largest three airports in ASEAN based on total international passenger traffic (including traffic to non-ASEAN countries). Manila and Bangkok Don Mueang round out the top five for total international passenger traffic while Jakarta, Ho Chi Minh, Hanoi, Bali Denpasar and Phuket are in the top 10 for total international passenger traffic. All these airports handled at least 10 million total international passengers in 2019. Phnom Penh, Yangon, Mactan-Cebu, Penang and Chiang Mai are in the top 15 for total international passenger traffic but are significantly smaller, handling in 2019 between 3 million and 6 million international passengers.

As highlighted earlier in this paper, the within ASEAN segment accounts for around 20% of total international O&D passenger traffic in ASEAN (prior to COVID-19). However, from a total ASEAN airport traffic perspective this segment accounts for around 35% as each of these passengers in this segment starts and ends their journey at an ASEAN airport.

While the portion varies, all international airports in ASEAN rely relatively heavily on traffic within ASEAN. A partial recovery of international travel within ASEAN in 2021 would have a significant impact on airports along with the overall air transport sector and the broader ASEAN economy.

## Green Lanes and Travel Corridors have not had a significant impact

A “green lane” or “travel corridor” is a bilateral agreement between countries to permit essential business and official travel. A “travel bubble” is a bilateral agreement which also permits personal travel and tourism. So far there has not been any agreements between two ASEAN countries to reopen borders or to establish travel bubbles. Only green lanes or travel corridors have so far been established in ASEAN. These have not generated significant air traffic due to tight restrictions and quotas.

As of the beginning of December 2020, three green lanes or travel corridors have been formed in ASEAN: Brunei-Singapore, Indonesia-Singapore and Malaysia-Singapore. Several

more bilateral green lanes or travel corridors involving two ASEAN countries have been discussed over the last couple of months but have not yet been formally established.

A multi-lateral travel corridor for the entire ASEAN region was also discussed at the 37th ASEAN Summit, which was held virtually on 12-13 November and attended by the leaders of all ten ASEAN countries. The ASEAN Coordinating Council is now overseeing the process of developing a framework for the ASEAN Travel Corridor Arrangement.

If implemented, the ASEAN Travel Corridor Travel Arrangement would permit essential business travel between ASEAN countries. As is the case with the existing bilateral green lanes and travel corridors, the ASEAN-wide corridor could replace quarantine requirements with COVID-19 testing and with health protocols designed to facilitate safe and managed travel.

While an ASEAN Travel Corridor would be an important first step in reuniting ASEAN countries, the impact on air travel will likely not be significant given it will be limited to essential business travel. Most travel within ASEAN does not meet essential business travel requirements and the processes involved with securing approval under existing travel corridors are cumbersome, resulting in limited demand. For many of the existing travel corridors or green lanes there are also strict quotas limiting the number of passengers.

For example, the Malaysia-Singapore Reciprocal Green Lane (RGL), which has been in place since August, has a quota of 400 people per week for Malaysia and Singapore residents combined. Therefore, this green lane can generate at most a few thousand air passengers per month. The actual number of air passengers using this RGL is likely to be even smaller than this as travelers also have the option of using one of the bridges connecting Singapore with Johor in Malaysia.

In 2019, there was an average of 400,000 passengers per month flying between Malaysia and Singapore, according to OAG Traffic Analyzer data. Therefore, the RGL has generated less than 1% of typical Malaysia-Singapore traffic.

The Indonesia-Singapore RGL, which has been in place since November, has a quota of only 300 people per week. Therefore, the maximum traffic this green lane can generate is only a few thousand passengers per month. The actual number of air passengers is even less because travelers using this RGL also have the option of using the ferry connecting Singapore with Batam in Indonesia. In 2019, there was an average of 500,000 passengers per month flying between Indonesia and Singapore, meaning the Indonesia-Singapore RGL is also generating less than 1% of typical Indonesia-Singapore traffic.

The Brunei-Singapore RGL is not significant because Brunei-Singapore is a very small market even in normal times – around 13,000 passengers per month. The number of passengers using the RGL is significantly less as there are currently only three weekly flights between the two countries.

RGLs lift quarantine requirements and instead rely on COVID-19 testing at both ends of the journey. They also require a controlled itinerary with travelers stating in their applications

where they are staying and what companies they are visiting. The process of applying for permission to travel under RGLs can be time-consuming and confusing to applicants as the requirements can differ at each end of the journey.

Higher quotas and more streamlined requirements could generate more RGL traffic. However, total RGL traffic would still be relatively small as it is intended only for essential business travel.

If the ASEAN Travel Corridor is approved, quotas similar to the RGLs would likely be in place, limiting demand. Requirements may also prove to be time-consuming and inconsistent. Ideally all ten ASEAN countries would agree on common requirements, but this will be very difficult to achieve.

In addition to the three existing RGLs in ASEAN, there are also more than a dozen green lanes, travel corridors or equivalent arrangements permitting specific types of essential traffic between ASEAN and non-ASEAN countries. These include: Brunei-Japan, Indonesia-China, Indonesia-South Korea, Indonesia-Japan, Indonesia-UAE, Laos-China, Laos-Japan, Singapore-China, Singapore-Germany, Singapore-Japan, Singapore-South Korea, Vietnam-Japan, Vietnam-South Korea and Vietnam-Taiwan.

However, all of these arrangements have similar issues and have not generated significant volumes of air traffic. A regional travel bubble or other similar scheme which enables resumption of leisure travel in ASEAN is essential for the intra-ASEAN market to start recovering in earnest. If the reopening is limited to essential business traffic, passenger traffic between ASEAN countries will likely remain at less than 5% of normal levels for most and perhaps all of 2021.

## **Air Travel Bubbles are the way forward for ASEAN**

Leisure travel is currently not permitted between any pair of ASEAN countries on a two-way basis. Singapore has lifted quarantine restrictions for Brunei and Vietnam, opening up the possibility of visitors from these two countries. However, this is a unilateral opening and Brunei and Vietnam have not yet reciprocated by opening up to Singapore. Therefore, Brunei and Vietnam residents are subject to quarantine requirements when they return from Singapore (except for essential business travelers from Brunei who are able to secure approval under the Brunei-Singapore RGL).

Quarantine requirements typically eliminate demand, leading to virtually no two-way traffic. While some ASEAN countries, such as Cambodia and Thailand, are now open to receiving some types of visitors, they still have quarantine requirements, which severely limit demand.

Generally, the visitors which ASEAN countries are now receiving are the few visitors that are willing to be quarantined. Visitors who have family or a property in the country they are visiting are sometimes willing to travel despite quarantine requirements as they are long-stay visitors. But most visitors typically travelling between ASEAN countries are short-stay visitors who would normally visit for a period that is significantly less than the quarantine

period. The quarantine period for most ASEAN countries is two weeks and for some ASEAN countries there is even a three-week requirement.

Air travel bubbles would enable short stays by replacing quarantine requirements with COVID-19 testing for all types of travelers. While there are not yet any travel bubbles between ASEAN countries, several ASEAN countries have mentioned they are under consideration for possible implementation in early 2021.

The first air travel bubble (ATB) within ASEAN could follow the framework that was agreed to in October by Singapore and Hong Kong. Hong Kong and Singapore has delayed the start of their ATB, which was initially slated to be implemented on 22 November, due to a new wave of COVID-19 cases in Hong Kong. However, Hong Kong and Singapore still plan to implement the ATB once conditions improve. Despite this setback, the Hong Kong-Singapore ATB could become a model for other ATBs in Asia Pacific, including within ASEAN.

The Hong Kong-Singapore ATB represents one of only two arrangements involving an ASEAN country for two-way leisure travel without quarantine on either end. The other arrangement is between Indonesia and Saudi Arabia, which began on 1 November and allows a limited number of religious pilgrim travelers for Umrah. While reopening Umrah is significant, particularly if Saudi Arabia expands the reopening to other ASEAN countries, the Hong Kong-Singapore ATB has much wider potential ramifications as it is open to all types of travelers.

The Hong Kong-Singapore ATB agreement included no restrictions on travel purpose, no requirement for a controlled itinerary, no quarantine or stay-home notices at either end of the journey, mutually recognized COVID-19 polymerase chain reaction (PCR) tests; and dedicated flights, which make it impossible for transit passengers originating in other countries to fly on the same aircraft as the passengers travelling under the ATB. The Hong Kong agreement specifies a suspension of the ATB for 14 days if the number of untraceable COVID-19 infections exceed five on a seven-day moving average. This requirement triggered the decision by Hong Kong and Singapore to delay starting their ATB and is an indication that the agreement has succeeded rather than failed.

The ideal scenario would be for all ASEAN countries to agree to a similar ATB framework. That does not mean every ASEAN country would implement an ATB with all other ASEAN countries at once. Any ATB would only be implementable and maintainable if the number of infections remains low. An ASEAN-wide ATB would enable a partial resumption of travel within ASEAN, limited to countries that do not have many untraceable infections, on a safe and managed basis until the end of the pandemic.

It is not realistic to wait for a vaccination before resuming international air travel as it will take at least several months – and possibly years – for a vaccination to be distributed throughout the region. ATBs represent a platform to support a partial recovery of the intra-ASEAN air transport market in 2021 and could remain in place after vaccines begin to be distributed. Mutual recognition of vaccinations would be required, replacing COVID-19 tests for those passengers already vaccinated.

## **Actions by the ASEAN Secretariat**

The ASEAN Secretariat's mission is to promote intergovernmental cooperation and facilitate integration.

In its first response to the pandemic, the ASEAN Air Transport Working Group (ATWG) stated in early July that its members supported the guidelines and recommendations published by ICAO to restart aviation. The ASEAN ATWG also stated that "we agreed on the need to join hands as we work together to better facilitate and strengthen the regional and global recovery from the COVID-19 pandemic, and help ASEAN to become stronger and more resilient".

The ASEAN ATWG met in July and October. This was followed in November by the ASEAN Senior Transport Officials Meeting (STOM) and the ASEAN Transport Ministers (ATM) Meeting.

Following the 24 November ATM Meeting, a joint ministerial statement was issued recognizing the unprecedented challenges posed by COVID-19 and welcoming the adoption of the ASEAN Comprehensive Recovery Framework (ACRF) at the ASEAN Summit earlier in November. According to the statement following the ATM Meeting: "The Ministers encouraged STOM and the relevant working groups to implement the initiatives and programmes of the ACRF Implementation Plan under the transport sector's purview to build a better post-pandemic future for the region."

As part of the ASEAN Summit, a declaration was issued on 12 November, deciding "to take steps towards the establishment of an ASEAN travel corridor arrangement framework to facilitate essential business travels among ASEAN Member States, while prioritising public health safety". The declaration also stressed "the need to develop a common set of pre-departure and post arrival health, and safety measures to protect the well-being and safety of our citizens.

At the ATM Meeting, ASEAN-wide COVID-19 operational guidelines were endorsed, covering safety of passengers and crew, in line with the latest guidelines published by the ICAO Council Aviation Recovery Task Force (CART). "This will benefit the general travelling population as the guidance was developed to mitigate the risk of COVID-19 transmission, restore passenger confidence, and support the safe resumption of aviation activities in ASEAN," the Ministers stated.

## **Recommendation: ASEAN Secretariat should pursue travel bubbles**

A pan-ASEAN ATB agreement is the principal recommendation of this white paper. The ASEAN Secretariat would be the logical platform for forging such an agreement.

Adopting the ICAO CART recommendations, which were initially published in early June and were updated in November, is important given the lack of uniform regulations and

standards for air travel in the pandemic environment. However, achieving consensus on air travel standards is not sufficient alone to achieve a recovery of international passenger services within ASEAN. Without at least a partial reopening of borders, which would be possible through air travel bubbles or other mechanisms, international passenger traffic within ASEAN will remain at its current uneconomic levels for at least several more months.

ASEAN's aviation and travel sectors are already reeling, and the economic impact could become devastating without a partial recovery of leisure travel. Up to 70% of travel industry jobs could be lost if borders are not reopened within six months.

This crisis could provide an opportunity for the ASEAN Secretariat to step up and facilitate a recovery for the region's battered aviation industry. The ASEAN Secretariat could promote travel bubbles and work on a framework for restarting international air travel. The ASEAN Travel Corridor Arrangement is a positive recent development but may not do enough. Without some resumption of leisure travel in 2021, ASEAN's aviation sector will struggle to recover.

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