146th Transport Policy Colloquium
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Aviation Now Seen from ASEAN! — The Future of Aviation through the COVID-19 —

# Trends in the ASEAN Single Aviation Market

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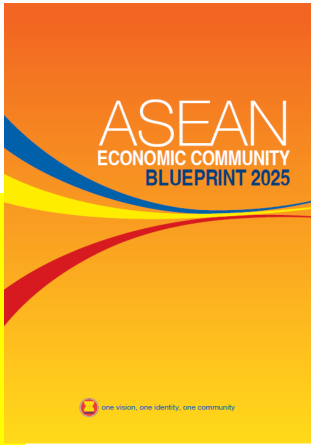
# ASEAN Member Countries

(Association of Southeast Asian Nations)


**ASEAN Economic Community [AEC]**
**ASEAN Economic Community Launched at the End of 2015**


<u>ASEAN Economic Community Blueprint 2025</u>

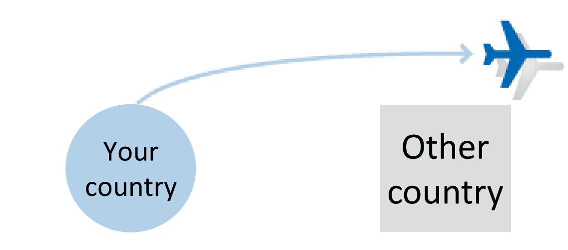
C. Enhanced Connectivity and Sectoral Cooperation

C.1. Transport- ASEAN Transport Strategic Plan

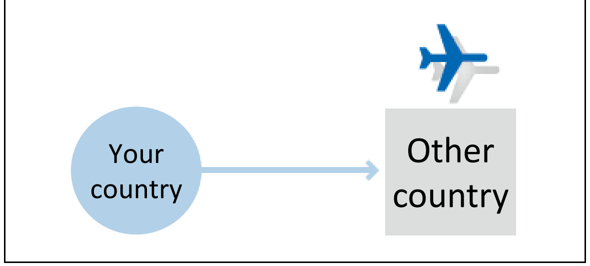
- 48 ii) Strengthen the ASEAN Single Aviation Market (ASAM)

# Nine Freedoms in International Air Transport

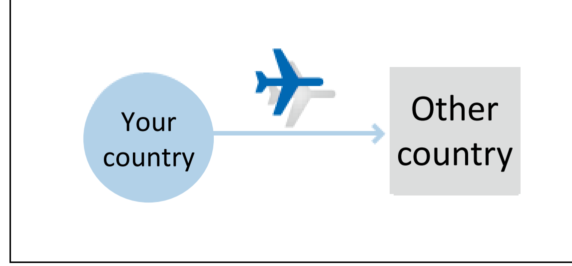
## 1. Fly over other country



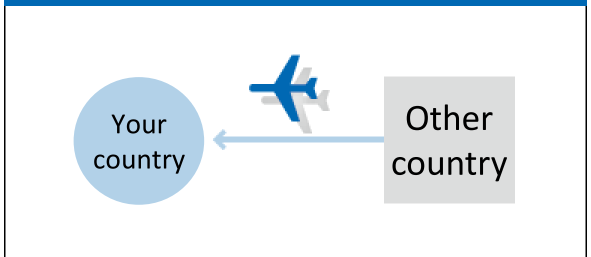

## 2. Technical landing



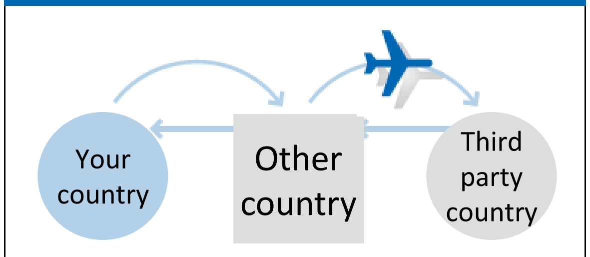

## 3. Transportation rights from your country to other country



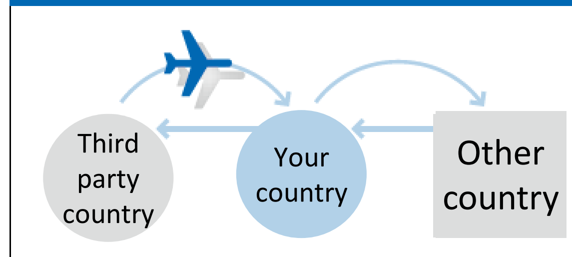

## 4. Transportation rights from other country to your country



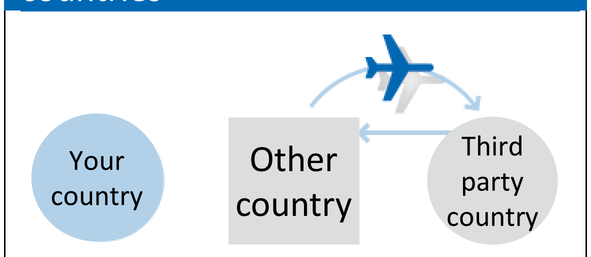

## 5. Beyond rights



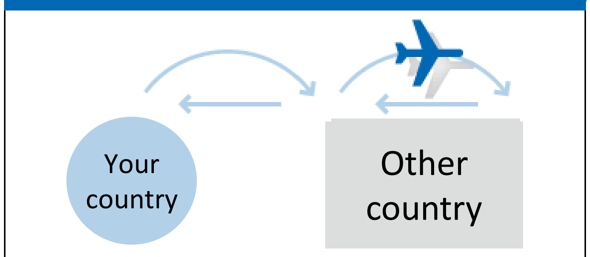

## 6. Transport between three countries using your own country as a hub



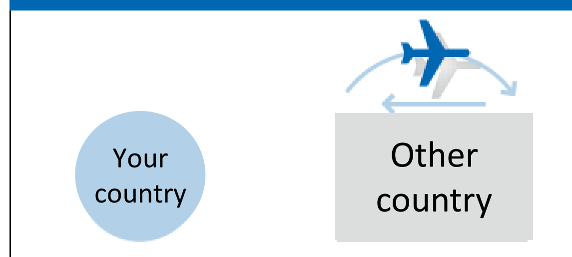

## 7. Transport between three countries



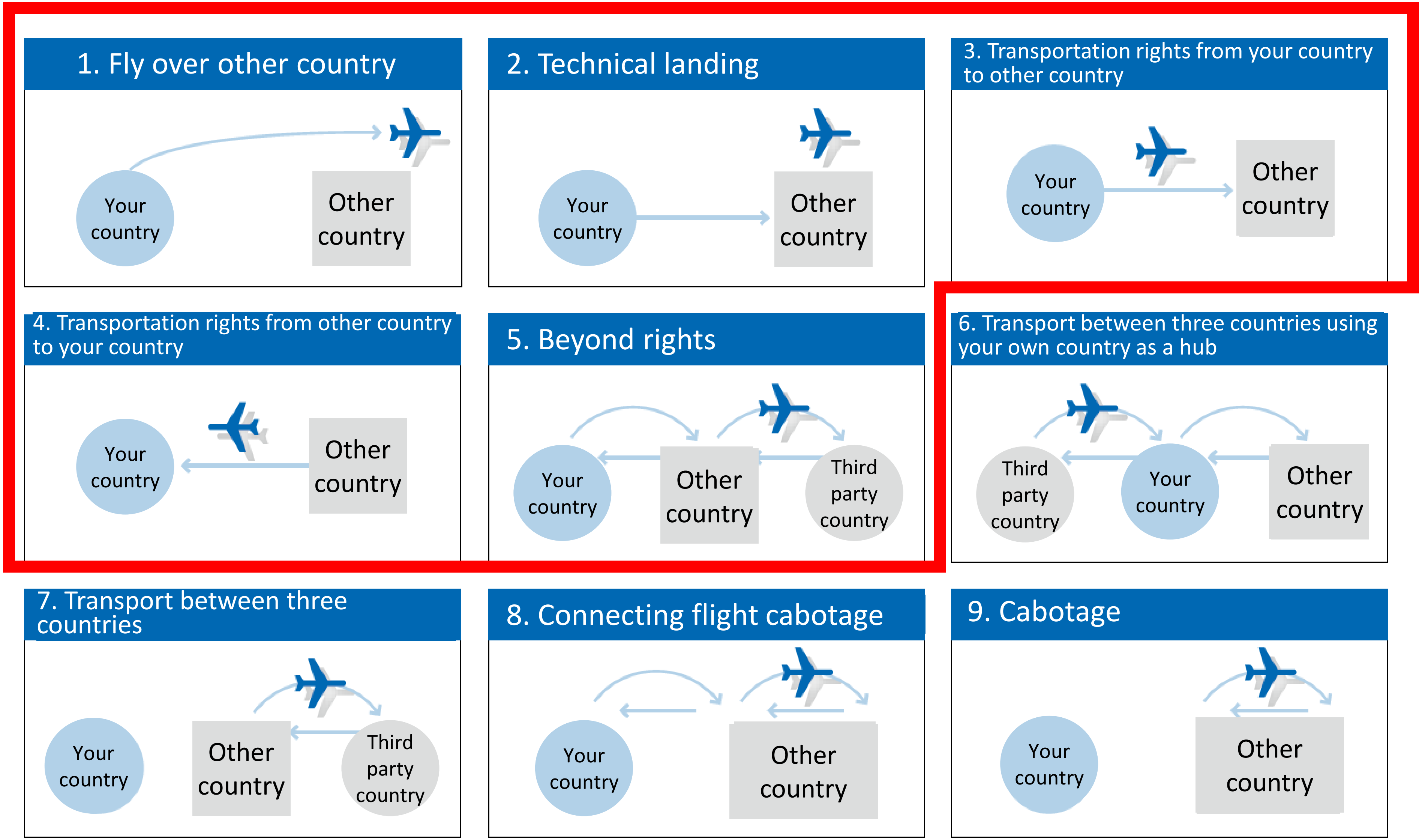

## 8. Connecting flight cabotage




## 9. Cabotage



# ASEAN Single Aviation Market (ASAM)
# ASEAN Single Aviation Market



# ASEAN Open Sky Policy Agreement Process

**1995**
Plan of Action for Transport and Communications (1994 – 1996)

**1997**
Successor Plan of Action in Transport (1999 – 2004)

**2004**
Action Plan for ASEAN Air Transport Integration and Liberalization（2005 – 2015)

**2004**
Roadmap for Integration of Air Travel Sector (RIATS)

**2009**
Multilateral Agreement on Air Services (MAAS)

**2010**
Multilateral Agreement for Full Liberalization of Passenger Air Services (MAFLPAS)

Main provisions of **MAAS** and **MAFLPAS** agreements

1. **relaxation of market access (transportation rights)**
2. relaxation of ownership and control (effective ownership and control)
3. adoption of common policy regarding charges, tariff, and others

# ASEAN Single Aviation Market (ASAM)

| | Implementing Protocols (Appendix) |
|---|---|
| **MAAS 2009.5 Signature** | Protocol 1. Unlimited **third, fourth** freedom traffic rights within the ASEAN Sub-region |
| | Protocol 2. Unlimited **fifth** freedom traffic rights within the ASEAN Sub-region |
| | Protocol 3. Unlimited **third, fourth** freedom traffic rights between the ASEAN Sub-region |
| | Protocol 4. Unlimited **fifth** freedom traffic rights between the ASEAN Sub-region |
| | Protocol 5. Unlimited **third, fourth** freedom traffic rights between ASEAN **capital** cities |
| | Protocol 6. Unlimited **fifth** freedom traffic rights between ASEAN **capital** cities |
| **MAFLPAS 2010.11 Signature** | Protocol 1. Unlimited **third, fourth** freedom traffic rights between **any** ASEAN cities* |
| | Protocol 2. Unlimited **fifth** freedom traffic rights between **any** ASEAN cities* |

Enforced upon ratification by three countries (ASEAN-X approach). MAAS was enforced the same year; MAFLPAS was enforced the following year. MAAS: The Philippines ratified it in March 2016; ratification by all member states has been completed. MAFLPAS: Indonesia and Laos ratified in April 2016; ratification by all member states has been completed.

# New Movements in ASAM

## Domestic Code Sharing and Co-terminal Rights Approved

The two additional protocols approved by the ASEAN Member States are under the ASEAN Multilateral Agreement on the Full Liberalisation of Passenger Air Services.

PROTOCOL 3: Domestic Code Share Rights Between Points Within the Territory of Any Other ASEAN Member States


There shall be no exercise of cabotage rights at all times

PROTOCOL 4: Co-Terminal Rights Between Points Within the Territory of Any Other ASEAN Member State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Source: Dy, M. (2019) Liberalizing Air Transport in ASEAN, Fourth ICAO Air Transport Symposium (IATS/4), Incheon.

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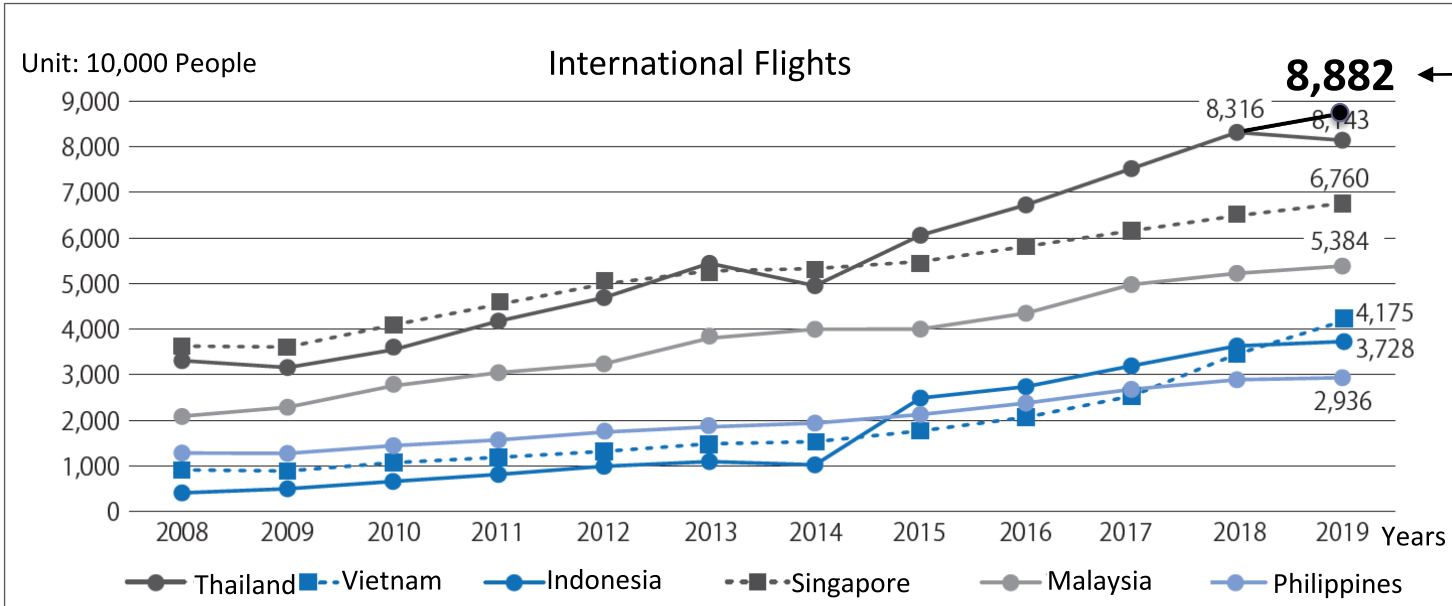
“Airlines of (other) member countries can operate between two points in (other) member countries (but cannot load and unload between two points in (other) member countries. They may pick up or drop off international passengers at either of the two points.) "

Indonesia only; limited to 5 major airports

0

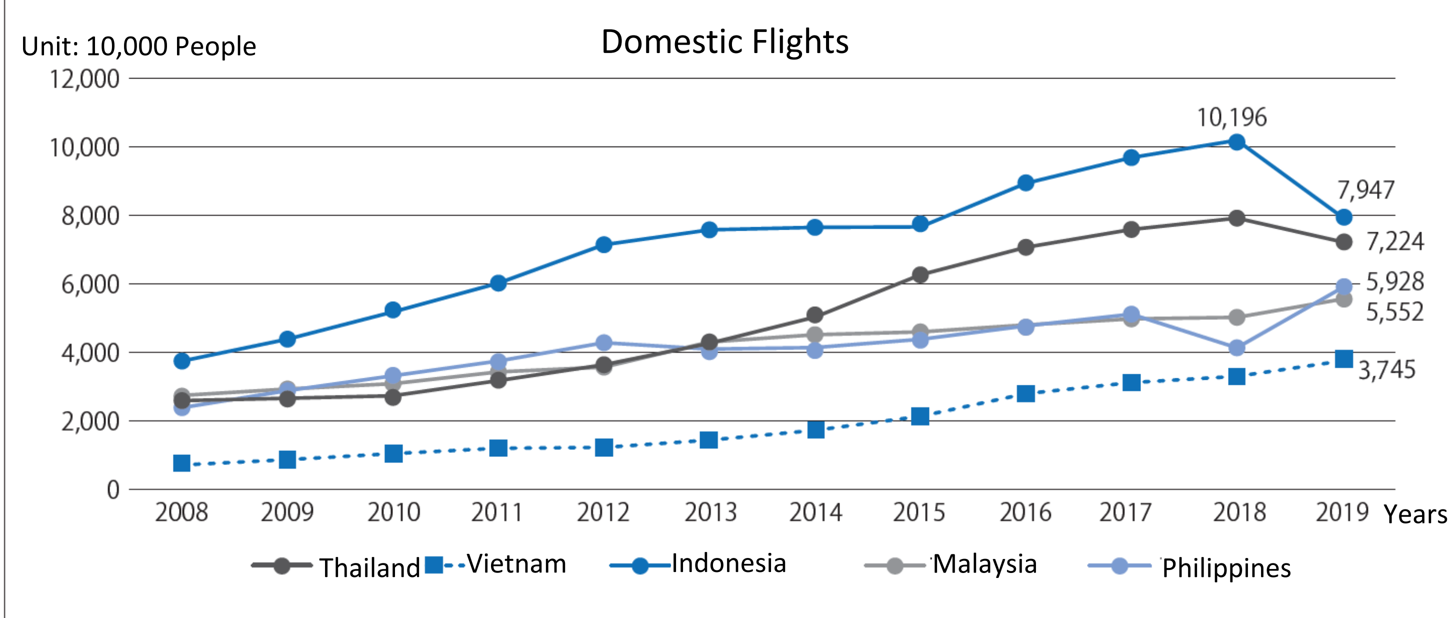
Source: Dy, M. (2019) Liberalizing Air Transport in ASEAN, Fourth ICAO Air Transport Symposium (IATS/4), Incheon.

# Transitions in the Number of International and Domestic Passengers in Major ASEAN Countries




State of Thai Aviation Industry 2019

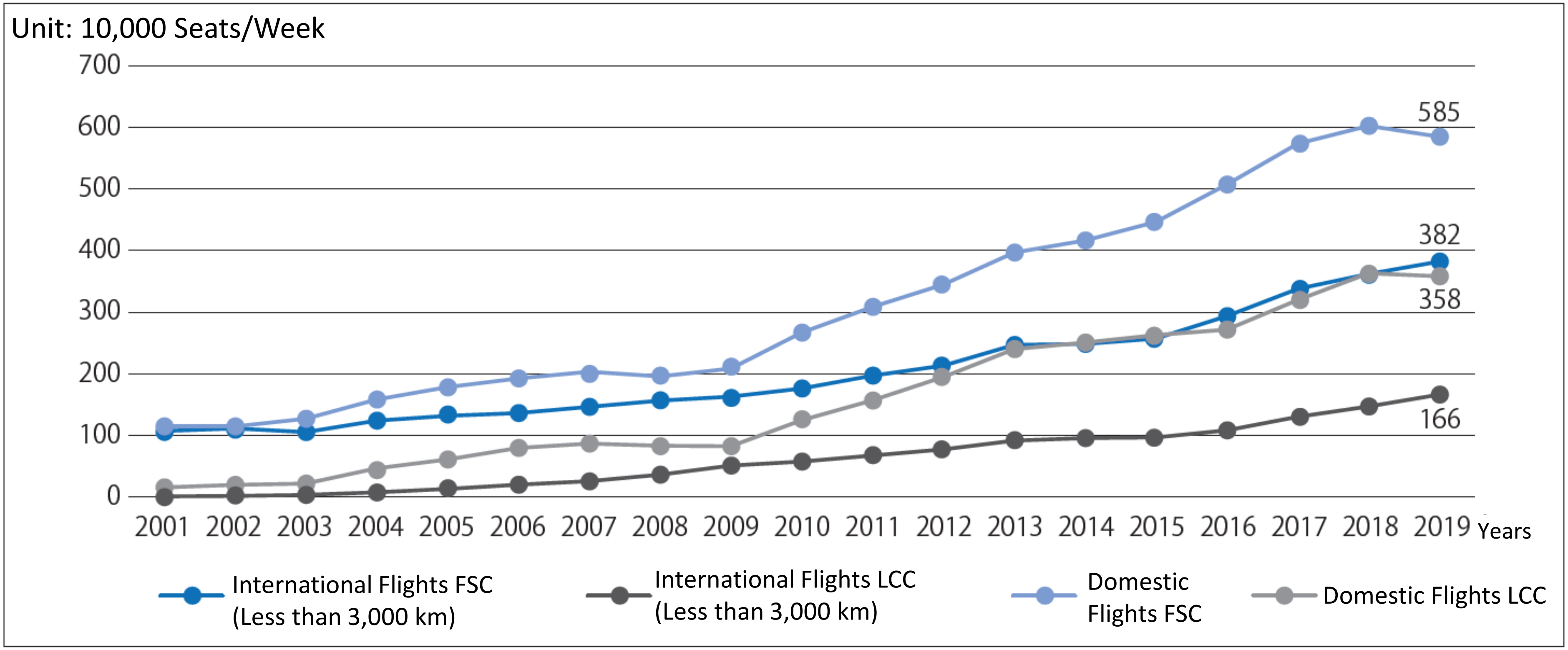
**Share of ASEAN international flights from and to Thailand**
Thai-AirAsia 16.9
Thai Airways 15.3
AirAsia 10.0




**Indonesia**
Significant increase in air fares because of rising fuel prices

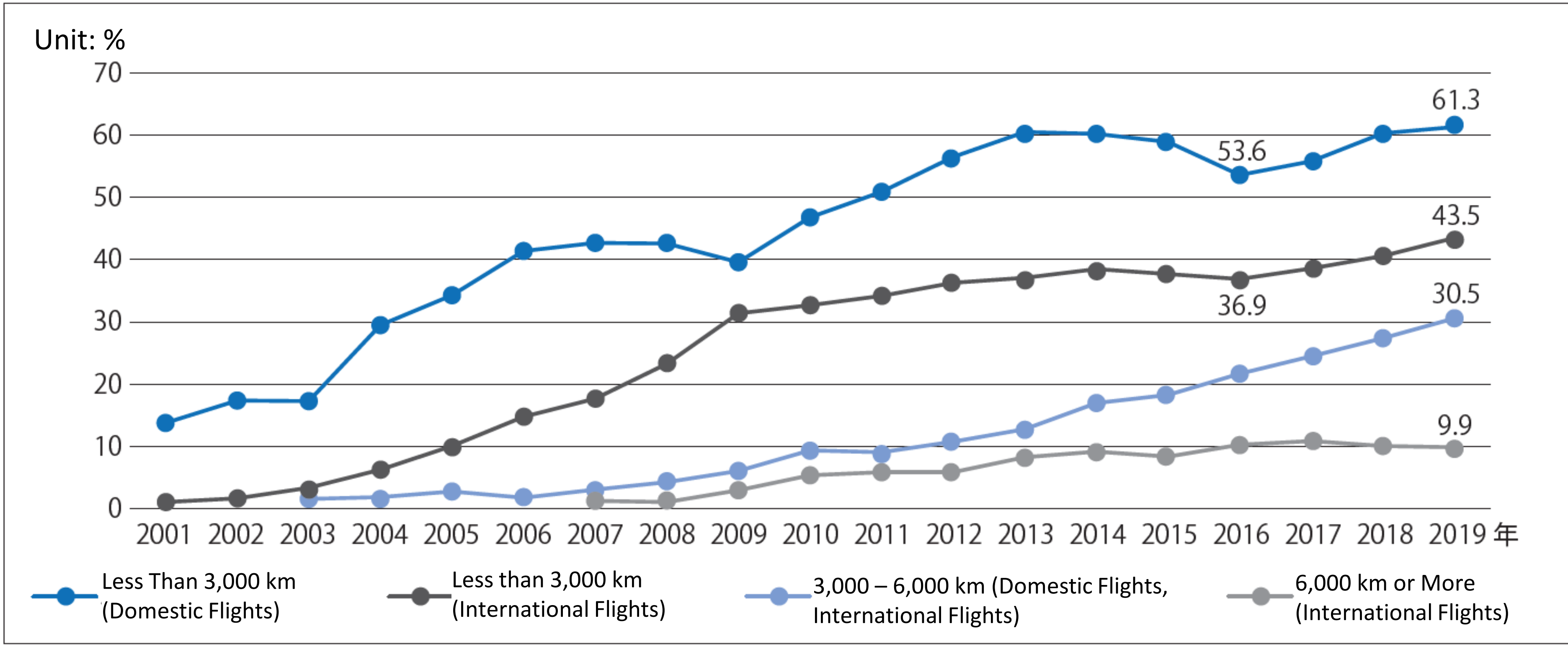
**Thailand**
Air fares increased because of a reduction in the number of seats provided on domestic flights and the transfer of equipment to international flights.

## Changes in the Number of Seats Offered on Flights Operating to and from the Member Countries




International flights of less than 3,000 kilometers are located in the heart of the ASEAN region

# Share of Number of Seats Provided by LCC Operating to and from Member Countries by Distance Between Regions




Domestic flights with a regional distance of less than 3,000 km: The number of seats provided by FSC increased in 2016-17, and the LCC share decreased. This was mainly caused by increased FSC Batik Air flights in Indonesia. Later, LCC WINGS AIR and Citylink in Indonesia, AirAsia in Malaysia, and VietJet Air in Vietnam increased, and the share of LCC increased again after 2018 because of a significant reduction in flights by Garuda Indonesia.

# Regular Airlines in Indonesia

Setting Categories and Fare Ceilings in Civil Aviation Act in 2009

**No-frill**

Upper fare limit 85%

- **Citilink**
- **Lion Air**
- **Wings Air**
- **Indonesia AirAsia**

**Medium**

Upper fare limit 90%

- **Sriwijaya Air**
- **Nam Air**

**Full Service**

Upper fare limit 100%

- Garuda Indonesia
- **Batik Air**

1. **Garuda Indonesia Group** (Garuda Indonesia, Citilink)
2. **Lion Air Group** (Batik Air, Lion Air, Wings Air)
3. Sriwijaya Group (Sriwijaya Air, Nam Air)

# Impact of ASAM

The Impact of ASAM Was Measured by Bilotkach et al. (2021). Panel Data for 2010, 2015, and 2017.
OD Pairs of 30 Major Airports in Northeast Asia and ASEAN (77,479 samples)

## Tallying Results

**(OD pair per day)**

| | 2,010 | 2,015 | 2,017 |
|---|---|---|---|
| Total Number of Passengers | **2,314.99** | **3,761.85** | **4,390.12** |
| No. of LCC Passengers | **145.00** | **391.07** | **949.44** |
| No. of FSC Passengers | **2,169.99** | **3,370.77** | **3,440.69** |
| Total No. of Airlines | **1.973** | **4.50** | **4.77** |
| No. of LCC | **0.065** | **0.12** | **0.23** |
| No. of FSC | **1.908** | **4.39** | **4.54** |

## Measurement Results

Control Group Outside of ASEAN Region OD pairs (approximately 65% of the total sample)
Treatment Group 1 OD Pairs in ASEAN Regions (about 2.5%); Treatment Group 2 OD in either ASEAN Regions (about 32%)

| | Fixed Effect 1 | Difference Method 1 of Difference | Fixed Effect 2 | Difference Method 2 of Difference |
|---|---|---|---|---|
| **Total Number of Passengers** | 0.075 * | 0.341*** | 0.098*** | -0.001 |
| **No. of LCC Passengers** | 1.126*** | 0.716*** | 0.416*** | 0.387*** |
| **No. of FSC Passengers** | -0.289*** | -0.091 | 0.064*** | -0.063* |
| **Total No. of Airlines** | -0.909*** | -0.221* | 0.369*** | 0.625*** |
| **No. of LCC** | 0.596*** | 0.492*** | 0.167*** | 0.160*** |
| **No. of FSC** | -1.505*** | -0.713*** | 0.202*** | 0.465*** |

p value: * Less than 5%; ** Less than 1%; *** Less than 0.1%

Treatment Group 1
LCC entry and passenger numbers increased, FSC withdrawal and passenger numbers decreased.

Treatment group 2 issues
The ASEAN-China interregional aviation agreement is not considered.

# ASEAN-China Interregional Aviation Agreement

ASEAN-China interregional aviation agreement is an unfavorable agreement for ASEAN airlines. Although the agreement allows unrestricted air transport between ASEAN countries and any city in China by the third, fourth, and fifth freedoms, the ASEAN single aviation market does not allow the seventh freedom. For that reason, ASEAN airlines can only connect to Chinese airports from airports in their own countries. Conversely, Chinese airlines can operate freely from any airport in China to any airport in ASEAN countries (Tan, 2014).

Source: Tan, A.K.J (2014) The future of multilateral liberalisation of air transport in Asia (Chapter 15), In Duval, D.T. (eds) Air Transport in the Asia Pacific, 259-275, Routledge.

# Changes in the Share of Seats Between ASEAN and China

Share of scheduled seats in China-ASEAN market over 2014-2018 period (excluding routes to/from top 10 Chinese airports).
Source: OAG

| year | Chinese LCC | Chinese FSC | ASEAN LCC | ASEAN FSC | Other airlines |
|---|---|---|---|---|---|
| 2014 | 0.2% | 45.9% | 36.5% | 17.3% | 0.1% |
| 2015 | 2.5% | 51.7% | 29.0% | 15.8% | 0.9% |
| 2016 | 6.3% | 38.0% | 40.2% | 15.1% | 0.3% |
| 2017 | 4.4% | 31.8% | 40.1% | 22.9% | 0.9% |
| 2018 | 4.6% | 31.7% | 44.9% | 18.1% | 0.7% |

Note: the top 10 Chinese airports are Beijing Capital, Shanghai Pudong, Shanghai Hongqiao, Guangzhou, Chengdu, Shenzhen, Kunming, Xi'an, Chongqing, Hangzhou. The top 10 refers to total passenger throughput.

2016: Indonesia ratified Protocol 1 2016.4.
At this point, ratifications were made in eight countries, excluding the Philippines and Laos.

# Changes in the Share of Flights Between ASEAN and China

Share of scheduled flight frequency in China-ASEAN market over 2014-2018 period (excluding routes to/from top 10 Chinese airports).
Source: OAG

| year | Chinese LCC | Chinese FSC | ASEAN LCC | ASEAN FSC | Other airlines |
|---|---|---|---|---|---|
| 2014 | 0.2% | 50.8% | 30.3% | 18.6% | 0.1% |
| 2015 | 2.5% | 56.2% | 23.6% | 16.6% | 1.0% |
| 2016 | 6.5% | 42.9% | 33.3% | 16.4% | 0.9% |
| 2017 | 4.8% | 36.6% | 33.4% | 24.4% | 0.8% |
| 2018 | 5.2% | 36.9% | 38.1% | 19.2% | 0.6% |

Note: the top 10 Chinese airports are Beijing Capital, Shanghai Pudong, Shanghai Hongqiao, Guangzhou, Chengdu, Shenzhen, Kunming, Xi'an, Chongqing, Hangzhou. The top 10 refers to total passenger throughput.

Note: Airports of top 10 number of passengers in China are excluded. As China's FSC focuses on these top 10 airports, the share may be declining. Furthermore, because the top 10 airports are crowded, there is a possibility that the ASEAN LCC does not have adequate departure and arrival slots.

# Considerations

- The LCC for international flights in China is essentially Spring Airlines only.
- From ASEAN, LCCs from the AirAsia Group, Lion Air Group, and Jetstar Group have joined. Joint Venture LCC entered the markets of other countries, and developed routes from the country's hub airport to China.
- Top LCC with the number of seats flying between ASEAN-China (2018)

1. Thai Lion Air
2. Scoot (Singapore)
3. Thai AirAsia
4. NokScoot

Thai Lion Air, Thai AirAsia, NokScoot use Don Mueang International Airport in Bangkok as a hub.

Total scheduled seats by LCCs serving China-ASEAN market in year 2018 (excluding routes to/from top 10 Chinese airports).
Source: OAG

| LCC carriers | Code | Scheduled Seats | Scheduled Frequency |
|---|---|---|---|
| Thai Lion Air | SL | 1600005 | 6568 |
| Scoot | TR | 1251274 | 4828 |
| Thai AirAsia | FD | 875940 | 4892 |
| NokScoot Airlines | XW | 732060 | 1764 |
| **Spring Airlines** | 9C | 621900 | 3455 |
| AirAsia | AK | 557100 | 3095 |
| Citilink Indonesia | QG | 431280 | 2396 |
| Lion Air | JT | 411130 | 1978 |
| Nok Air | DD | 329427 | 1743 |
| Thai Smile Airways | WE | 250842 | 1493 |
| Jetstar Pacific | BL | 202320 | 1124 |
| Jetstar Asia | 3K | 169200 | 940 |
| Airasia X | D7 | 161504 | 434 |
| Lucky Air | 8L | 135570 | 782 |
| Asia Atlantic Airlines | HB | 130170 | 504 |
| Okay Airways | BK | 44268 | 238 |
| **China Express Airlines** | G5 | 41064 | 472 |
| Cebu Pacific Air | 5J | 37800 | 210 |
| **Beijing Capital Airlines** | JD | 14212 | 80 |
| **ASEAN LCC sub-total:** | | 12,548,525 (88%) | 59,782(85.9%) 9838 |
| **Chinese LCC sub-total:** | | 1,707,947 (12%) | (14.1%) |

Note: Chinese LCCs are in bold.

Source: Ibid.

# ASEAN Joint Venture LCCs

- AirAsia Group

  AirAsia (Malaysia)

  Thai AirAsia, Indonesia AirAsia, Philippines AirAsia, AirAsia India,

  AirAsia X, Thai AirAsia X　Discontinued Business AirAsia Japan, Indonesia AirAsia X

- Lion Air Group

  Lion Air, Batic Air [FSC], Wings Air (Indonesia)

  Malindo Air (Malaysia [FSC]), Thai Lion Air (Thailand)

- Jetstar Group

  Jetstar (Australia), Jetstar Asia (Singapore), Jetstar Japan

EasyJet Europe (founded in 2017)

Ryanair UK (founded in 2019)

# Summary: The Future of the ASEAN Aviation Market

• Work can be substituted for others (depending on the work content), and the necessity of moving work is reduced by the popularization of online activities. Conversely, leisure time is consumed by oneself, and tourism cannot be switched to others.

• If there is an increase in the middle class who have enough time and income, it will spur an increase in movement for tourism purposes. Even in ASEAN countries, the increase in leisure time and the accompanying international travel for tourism and private purposes will most likely increase.

• The LCC share of domestic flights of ASEAN countries is remaining at a high level. Conversely, within the ASEAN region, which is a short-haul international flight, there is room for growth, mainly in the LCC.

• The 3,000-6,000 km medium-range market includes East Asia, including Japan and China, South Asia, mainly India, and Australia. LCC increases steadily over this distance. Many LCCs have entered, including Jetstar Asia, AirAsia X, Scoot, and Thai Lion Air. Including FSC, competition is already tough, but since both parties have tourist resources, there is potential for a large increase in air passenger demand mainly for tourism purposes.