Malaysian Aviation Commission
Suruhanjaya Penerbangan Malaysia
MAVCOM

# WAYPOINT

MALAYSIAN AVIATION INDUSTRY OUTLOOK | JULY 2022

## KEY HIGHLIGHTS

### Passenger traffic improved in 1Q22

**In 1Q22, total passenger traffic was 8.7mn, the highest since the start of the pandemic.** Due to the low base effect, passenger traffic grew 415.6% YoY (1Q21: -91.2% YoY). This marks a 33.0% recovery from the same quarter in 2019. Domestic passenger traffic accounts for 88.8% of total traffic in 1Q22, continuing its momentum since the resumption of domestic inter-state travel in 4Q21.

### Total cargo volume expands 5.9% YoY in 1Q22

**Malaysia's cargo volume in terms of total freight tonne kilometres (FTK) recorded a growth of 5.9% YoY (1Q21: -15.2% YoY) to 5.1bn in 1Q22 (1Q21: 4.8bn).** This is supported by the return of belly cargo capacity as international flights gradually resume, as well as by the continued growth of e-commerce and the electrical and electronics (E&E) sector.

### 2022 air passenger traffic and cargo forecast remains unchanged

Given that the passenger traffic and cargo volume performance in 1Q22 were within expectations, **MAVCOM maintains its 2022 air passenger and cargo traffic forecast made in December 2021.** Passenger traffic is forecasted at 32.6mn – 49.0mn passengers, with a base case scenario of 39.3mn – 41.6mn passengers. Air cargo traffic is expected to increase between 3.9% YoY and 6.7% YoY, translating to 21.5bn – 22.2bn FTK.

### 21 ATR applications approved, down by 12.5% YoY for 1Q22

**MAVCOM approved 21 Air Traffic Right (ATR) applications in 1Q22, a decrease of 12.5% YoY (1Q21: 24 ATR applications).** The ATR applications in 1Q22 recorded a 95.5% approval. Of these approved applications, 13 were for international routes, while the remaining 8 were for domestic routes. SKS Airways, which is among the newest airlines in Malaysia, was awarded the highest number of ATR approvals with a total of 4 ATRs across the domestic routes.

### The domestic and international airfare trends diverged since the COVID-19 pandemic

The COVID-19 pandemic caused airfare trends for most countries to vary significantly. **For domestic economy class flights, MAVCOM observed that the average airfares in ASEAN, Australia, and China have mostly been below the pre-pandemic level. In contrast, for international economy class flights, the average airfares for these countries have increased drastically and have remained above 2019 levels.** Airfares in the endemic phase may be affected by several emerging developments such as higher operating costs and varied policies across international borders. With capacity still lacking, fares during peak periods may be higher compared to the same period pre-pandemic, driven by strong demand, which has been muted for the last two years.

***The data and facts in this publication are accurate as of 7 July 2022.**

# TABLE OF ABBREVIATIONS

| Abbreviations | |
|---|---|
| ADB | Asian Development Bank |
| AirAsia | AirAsia Bhd. |
| AirAsia X | AirAsia X Bhd. |
| AOL | Aerodrome Operating Licence |
| APAC | Asia-Pacific |
| ASEAN | Association of Southeast Asian Nations |
| ASL | Air Service Licence |
| ASP | Air Service Permit |
| ATR | Air Traffic Rights |
| Batik Air | Batik Air Malaysia (previously known as Malindo Air) |
| bbl | barrel |
| bn | billion |
| BNM | Bank Negara Malaysia |
| CAPA | Centre for Aviation |
| Capital A | Capital A Bhd. |
| CASK | Cost per Available Seat Kilometre |
| COVID-19 | Coronavirus Disease 2019 |
| DOS | Department of Statistics, Malaysia |
| E&E | Electrical and Electronic |
| EU | European Union |
| Firefly | FlyFirefly Sdn. Bhd. |
| FSC | Full Service Carrier |
| FTK | Freight Tonne Kilometre |
| GDP | Gross Domestic Product |
| GHL | Ground Handling Licence |
| GOM | Government of Malaysia |
| HHI | Herfindahl-Hirschman Index |
| IATA | International Air Transport Association |
| IMF | International Monetary Fund |
| LCC | Low-cost Carrier |
| MAB | Malaysia Airlines Bhd. |
| MAG | Malaysia Aviation Group |
| MAHB | Malaysia Airports Holdings Bhd. |
| MAVCOM | Malaysian Aviation Commission |
| mn | million |
| MOTAC | Ministry of Tourism, Arts and Culture |
| P2C | Passenger to Cargo |
| PN17 | Practice Note 17 |
| QoQ | Quarter-on-Quarter |
| RASK | Revenue per Available Seat Kilometre |
| RM | Ringgit Malaysia |
| SAF | Sustainable aviation fuels |
| SDMC | State Disaster Management Committee |

| Abbreviations | |
|---|---|
| SKS Airways | SKS Airways Sdn. Bhd. |
| TMDSB | Tanjung Manis Development Sdn. Bhd. |
| UNWTO | World Tourism Organization |
| US | United States of America |
| USD | United States Dollar |
| VTL | Vaccinated Travel Lane |
| WCA | World Cargo Airline Sdn. Bhd. |
| WEO | World Economic Outlook |
| YoY | Year-on-Year |

## AIRPORT CODES

| Airport Codes | Airport Names |
|---|---|
| AOR | Sultan Abdul Halim Airport, Alor Setar, Malaysia |
| BKI | Kota Kinabalu International Airport, Malaysia |
| JHB | Senai International Airport, Johor Bahru, Malaysia |
| KBR | Sultan Ismail Petra Airport, Kota Bharu, Malaysia |
| KCH | Kuching International Airport, Malaysia |
| KUL | Kuala Lumpur International Airport, Malaysia |
| LGK | Langkawi International Airport, Malaysia |
| MYY | Miri International Airport, Malaysia |
| PEN | Penang International Airport, Malaysia |
| SIN | Changi Airport, Singapore |
| SBW | Sibu Airport, Malaysia |
| SZB | Sultan Abdul Aziz Shah Airport, Subang, Malaysia |
| TGG | Sultan Mahmud Airport, Kuala Terengganu, Malaysia |
| TWU | Tawau Airport, Malaysia |

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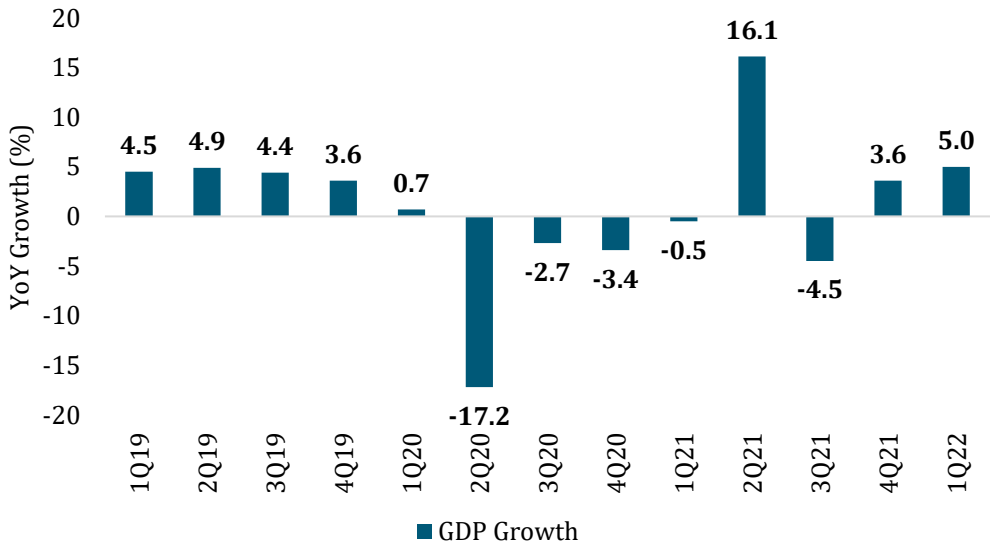
# SECTION 1: MACROECONOMIC OVERVIEW AND OUTLOOK

## Macroeconomic Overview

### Malaysia's GDP Grew by 5.0% YoY in 1Q22

Malaysia's economy expanded by 5.0% YoY in 1Q22 (4Q21: 3.6% YoY) (see Figure 1). The growth was mainly supported by the improving domestic demand, as economic activities continued to normalise with the easing of containment measures. The economic expansion also reflects the recovery in the labour market, continued growth in external demand, and continued policy support.[1]

**Figure 1: Malaysia's GDP Growth, 2019 – 2022**




*Source: DOS*

Key economic sectors continued to expand in 1Q22. The services sector grew by 6.5% YoY (4Q21: 3.2% YoY) while the manufacturing sector grew by 6.6% YoY (4Q21: 9.1% YoY) (see Table 1).

**Table 1: Malaysia's GDP Growth by Sector, 2021 – 2022**

| Sectors | YoY Growth (%) | |
|---|---|---|
| | 4Q21 | 1Q22 |
| Headline GDP | 3.6 | 5.0 |
| *-Services* | *3.2* | *6.5* |
| *-Manufacturing* | *9.1* | *6.6* |
| *-Agriculture* | *2.8* | *0.2* |
| *-Mining & Quarrying* | *-0.6* | *-1.1* |
| *-Construction* | *-12.2* | *-6.2* |

*Source: DOS*

[1] BNM, Quarterly Bulletin 1Q22 (May 2022).

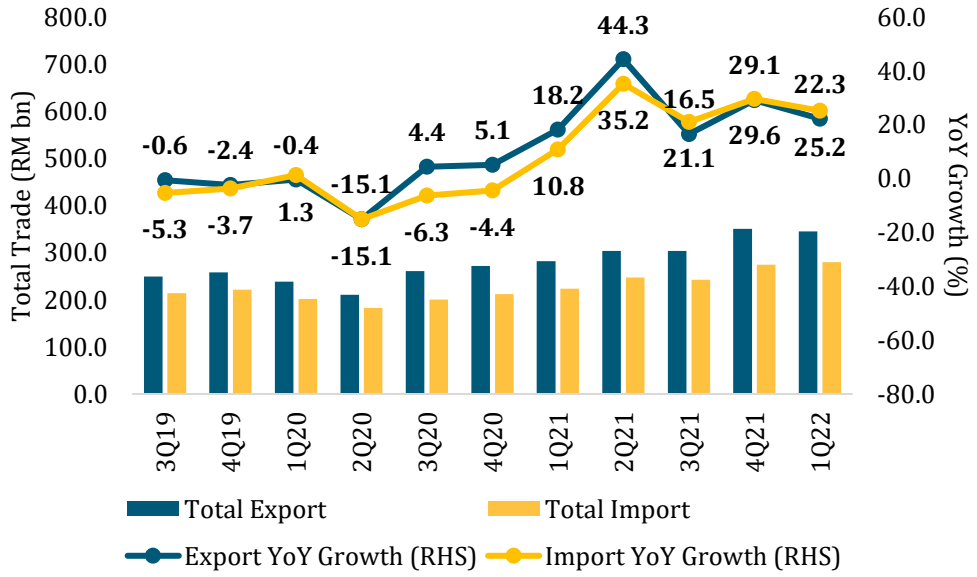
Growth in the services sector was due to the higher leisure-related spending and business-related activities amidst the reopening of the economy. In 2Q21, major sub-sectors, such as transportation & storage, wholesale & retail trade, and food & beverage recorded strong growth of 25.8% YoY (4Q21: 11.8% YoY), 4.0% YoY (4Q21: 1.3% YoY), and 24.2% YoY (4Q21: 5.6% YoY), respectively.

Expansion in the manufacturing sector was contributed by the continued demand for semiconductors and consumer-related products. Specifically, major sub-sectors that drove the expansion include electrical, electronic & optical products at 15.4% YoY (4Q21: 16.4% YoY), non-metallic mineral products, basic metals & fabricated metal products at 5.3% YoY (4Q21: 5.8% YoY) and wood products, furniture, paper products and printing at 6.6% YoY (4Q21: 5.6% YoY). However, the petroleum, chemicals, rubber & plastics products recorded a decline of 0.5% YoY in this quarter (4Q21: 6.5% YoY).

### Total Exports and Imports Continued to Record Double-Digit Growth in 1Q22

The gradual reopening of economies continued to facilitate trade activities. In 1Q22, exports increased by 22.2% YoY to RM345.0bn whilst imports rose by 25.2% YoY to RM279.9bn (see Figure 2). The trade surplus expanded by 10.9% YoY to RM65.1bn.

**Figure 2: Malaysia's External Trade, 2019 – 2022**




*Source: DOS*

Growth in exports in 1Q22 was mainly supported by electrical & electronic products (E&E) (RM137.3bn, 27.2% YoY), palm oil & palm oil-based agriculture products (RM31.7bn, 64.4% YoY), and petroleum products (RM20.6bn, 45.5% YoY). Increased inflationary pressures with the still-present global supply chain disruptions may pose a challenge to future trade performance.

Tables 2 and 3 show the breakdown of Malaysia's top 5 export and import markets in 1Q22, which constitute 69.1% of both Malaysia's total exports and imports during that period. Exports to and imports from these major markets recorded double-digit growth, with ASEAN and China being the top markets.

**Table 2: Malaysia's Top 5 Export Markets, 1Q22**

| Economy | Exports (RM bn) | Share (%) | YoY Growth (%) |
|---|---|---|---|
| ASEAN | 99.5 | 28.8 | 26.3 |
| China | 50.1 | 14.5 | 19.2 |
| US | 36.1 | 10.5 | 10.7 |
| EU | 30.0 | 8.7 | 17.2 |
| Japan | 22.7 | 6.6 | 19.6 |

*Source: DOS*

**Table 3: Malaysia's Top 5 Import Markets, 1Q22**

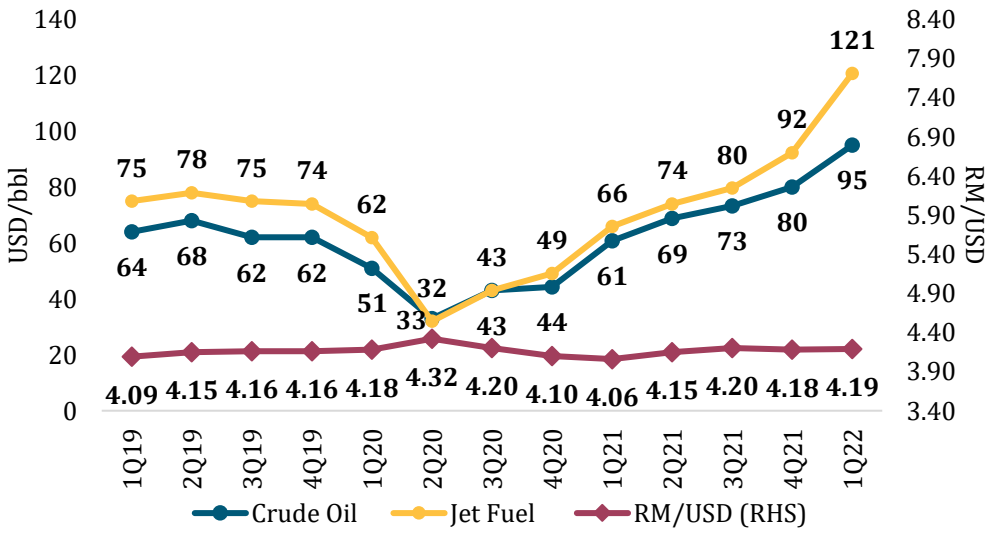
| Economy | Imports (RM bn) | Share (%) | YoY Growth (%) |
|---|---|---|---|
| ASEAN | 69.7 | 24.9 | 31.4 |
| China | 61.3 | 21.9 | 21.3 |
| Taiwan | 21.8 | 7.8 | 34.2 |
| US | 20.6 | 7.4 | 23.8 |
| EU | 19.8 | 7.1 | 19.8 |

*Source: DOS*

## Increased Energy Costs and Stronger USD

In 1Q22, Brent crude and jet fuel averaged at USD95/bbl and USD121/bbl, respectively (see Figure 3), with an average crack spread[2] of USD26/bbl. The prices for the Brent crude oil and the jet fuel have been on an uptrend since 2Q20 and the Russia-Ukraine conflict further increased oil prices in 1Q22.

**Figure 3: Oil, Jet Fuel, and Exchange Rate Trends, 2019 – 2022**




*Source: Bloomberg*

[2] The crack spread is the price difference between a barrel of crude oil and jet fuel. It is also known as the refining margin.

The hike in fuel prices has prompted several airlines to impose fuel surcharges on passengers and cargo. Table 4 shows examples of fuel surcharges imposed by airlines on their domestic and international passengers.

**Table 4: Examples of Fuel Surcharges by Airlines**

| Airline | Fuel Surcharge (RM) | |
|---|---|---|
| | Domestic* | International** |
| Malaysia Airlines | 12 | 50 |
| AirAsia | 10 | 60 |
| Batik Air | 30 | - |
| Singapore Airlines | - | 66 |
| Philippine Airlines | - | 14 |

*Source: Various airlines' websites*
*Notes: *Domestic fuel surcharge for KUL-BKI*
***International fuel surcharge for KUL-ICN*

As at 3 June, jet fuel is trading at USD171/bbl. Currently, there is no price-competitive alternative to jet fuel. Sustainable aviation fuels (SAF) are still expensive as substitutes, which cost two to five times the price of conventional jet fuel.[3]

Meanwhile, the RM/USD exchange rate appreciated to RM4.19/USD in 1Q22. According to the BNM, the USD is appreciating against most major currencies as the US Federal Reserve is anticipated to increase interest rates to manage the US' high inflation as a result of strong growth and improved labour market conditions. The uncertainty surrounding the Russia-Ukraine conflict has also contributed to the higher demand for US dollar-denominated assets. The depreciation of the RM can also be explained by concerns over the zero-COVID policy in China, which is Malaysia's largest trading partner, accounting for 16.5% of Malaysia's total trade in 2021.[4]

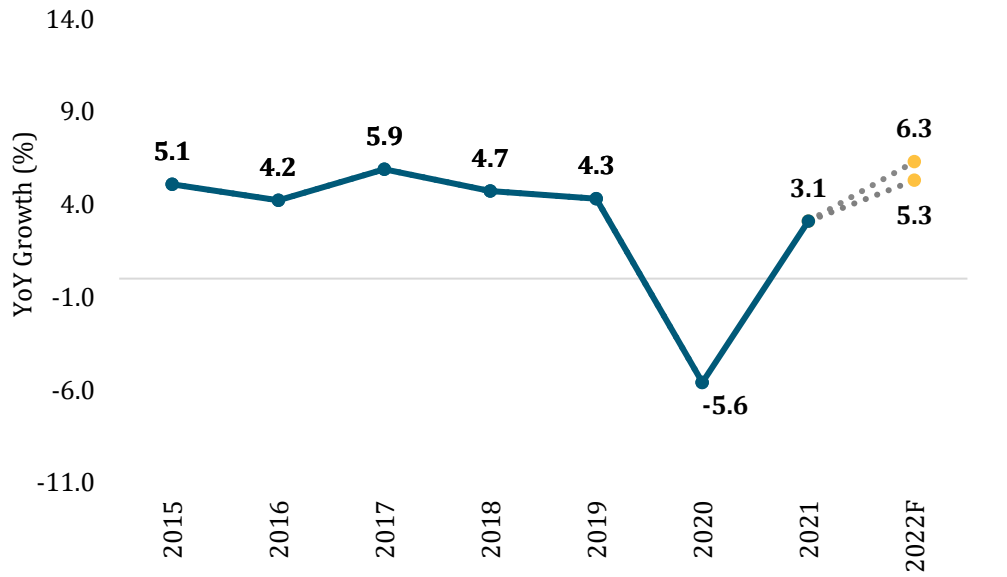
[3] WEF, https://www3.weforum.org/docs/WEF_Clean_Skies_for_Tomorrow_Sustainable_Aviation_Fuel_Policy_Toolkit_2021.pdf (1 November 2021).
[4] MITI, https://www.miti.gov.my/miti/resources/MITI%20Weekly%20Bulletin/MITI_Weekly_Bulletin_Volume_675_01_February_2022.pdf (1 February 2022).

## Macroeconomic Outlook

### Malaysia's GDP to Grow Between 5.3% and 6.3% YoY in 2022

BNM has forecasted for Malaysia's GDP growth to be between 5.3% and 6.3% YoY in 2022 (see Figure 4 and Table 5).

**Figure 4: Malaysia's 2022 GDP Growth Forecast**




*Source: BNM e*

**Table 5: Malaysia's GDP Forecasts by BNM, ADB, IMF and World Bank, 2022**

| Sources | Month of Forecast | 2022 YoY Malaysia's GDP Growth Forecast (%) |
|---|---|---|
| BNM | March 2022 | 5.3 – 6.3 |
| ADB | April 2022 | 6.0 |
| IMF | April 2022 | 5.6 |
| World Bank | April 2022 | 5.5 |

GDP forecasts by the ADB, the IMF, and the World Bank also fall within the range of BNM's forecast. Economic recovery in 2022 is projected to gain momentum with the reopening of the economy and international borders. Private consumption, strong external demand, and increased investments are expected to be the main drivers of growth. However, this growth outlook is subject to key risks affecting the global economy, including escalating geopolitical conflicts, such as the Russia-Ukraine conflict, supply chain disruptions, and the potential outbreak of new and virulent COVID-19 strains.

### The Global Economy is Expected to Grow by 3.6% YoY in 2022

In its April 2022 World Economic Outlook (WEO), the IMF forecasted that the global economy would grow by 3.6% YoY in 2022 (see Table 6). This is 0.8 percentage points lower than the forecast made in the January 2022 WEO. Economic damage caused by the Russia-Ukraine conflict will contribute to a significant slowdown in global growth in 2022.

**Table 6: Global GDP Forecast by IMF, 2021 – 2022**

| Economy | 2021 GDP YoY Growth (%) | 2022 GDP YoY Growth Forecast (%) |
|---|---|---|
| Global | 6.1 | 3.6 |
| *- Advanced Economies* | *5.2* | *3.3* |
| *- Emerging Market Economies* | *6.8* | *3.8* |

*Source: IMF*

The IMF forecasts inflation to rise 5.7% YoY in advanced economies and 8.7% YoY in emerging market and developing economies, 1.8 and 2.8 percentage points lower than projected in January 2022. Although high prices may ease supply bottlenecks, recurrent lockdowns in China, the Russia-Ukraine conflict, and sanctions on Russia could prolong disruptions in some economic sectors into 2023. Since Malaysia has limited direct trade links to Russia and Ukraine, the spillover effects from the Russia-Ukraine conflict will only be through higher commodity prices and indirect effects via weaker demand from key trading partners, such as the Euro area.

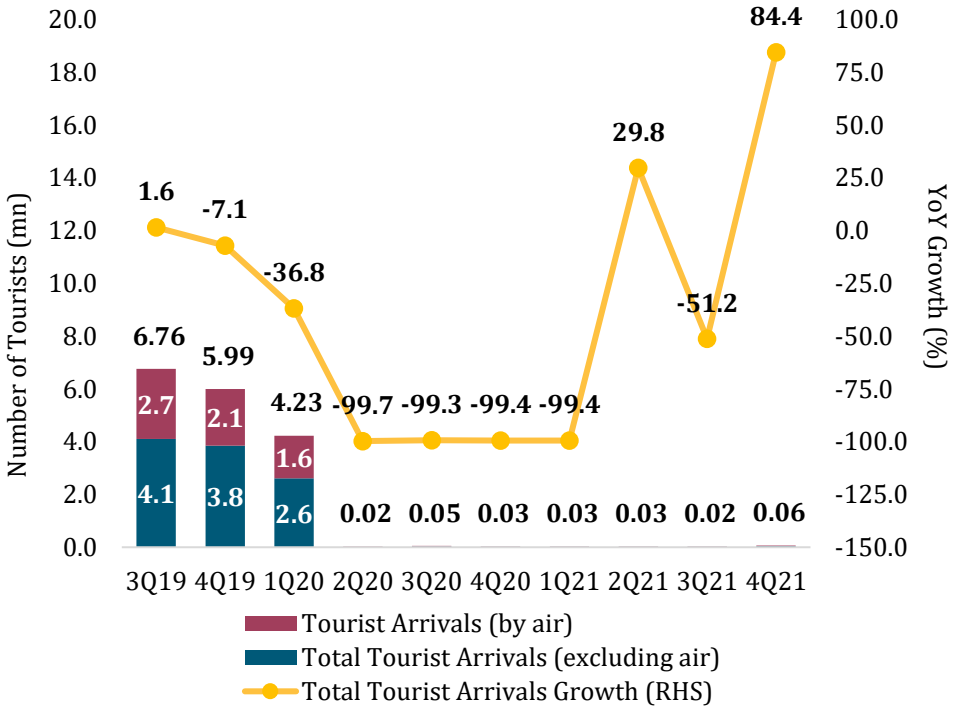
# SECTION 2: INDUSTRY OVERVIEW AND OUTLOOK

## Industry Overview

### Tourist Arrivals Show Recovery in 4Q21

As travel restrictions were lifted by the GOM on 11 October 2021, Malaysia's tourist arrivals picked up in 4Q21. Based on the latest data from the Ministry of Tourism, Arts and Culture (MOTAC), **Malaysia's tourist arrivals recorded an increase of 84.4% YoY in 4Q21 at 0.06mn (4Q20: 0.03mn)** (see Figure 5). On a QoQ basis, tourist arrivals in 4Q21 recorded an increase of 171.1% (3Q21: 0.02mn).

**Figure 5: Malaysia's Tourist Arrivals, 2019 – 2021**




*Source: MAVCOM, Tourism Malaysia*
*Notes: 1) This figure may contain rounding errors*
*2) Data only available up to 4Q21*

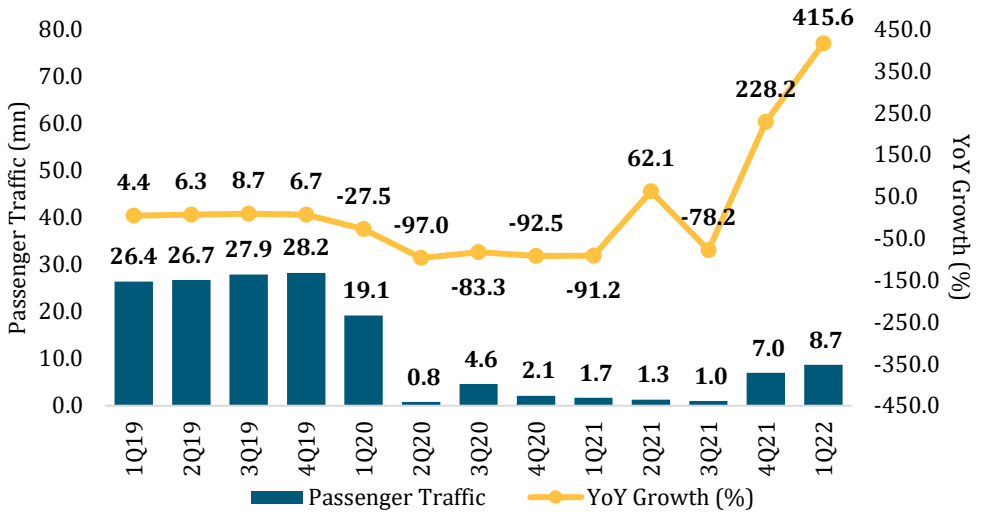
The recovery of tourist arrivals in 1Q22 was driven by the development of travel bubbles, Vaccinated Travel Lanes (VTL), and the gradual reopening of borders around the world aimed at reviving air travel safely. MOTAC is also targeting the entry of about 2.0mn international tourists in 2022, following the reopening of Malaysia's borders beginning 1 April 2022.[5]

[5] The Malaysian Reserve, https://themalaysianreserve.com/2022/04/11/motac-targets-2m-international-tourists-this-year/ (11 April 2022).

## Highest Passenger Traffic Recorded in 1Q22 since the Pandemic

**In 1Q22, total passenger traffic was 8.7mn**, the highest since the start of the COVID-19 pandemic (see Figure 6). **Passenger traffic grew by 415.6% YoY** (1Q21: -91.2% YoY) due to the low base effect. On a QoQ basis, passenger traffic recorded an improvement of 24.1% QoQ in 1Q22 (1Q21: -21.0% QoQ).

**Figure 6: Malaysia's Quarterly Passenger Traffic, 2019 – 2022**




*Source: MAVCOM, AOL Holders*

The increase in the passenger traffic number has indicated early signs of recovery for the aviation industry at the start of 4Q21, attributable to the easing of domestic inter-state travel restrictions during the quarter. For the first five months in 2022, Malaysia's air passenger traffic stands at 16.3mn, a 574.6% growth compared to the same period in 2021. In May 2022, international passenger traffic reached 1.0mn for the first time since March 2020.

## International Travel is Expected to Improve

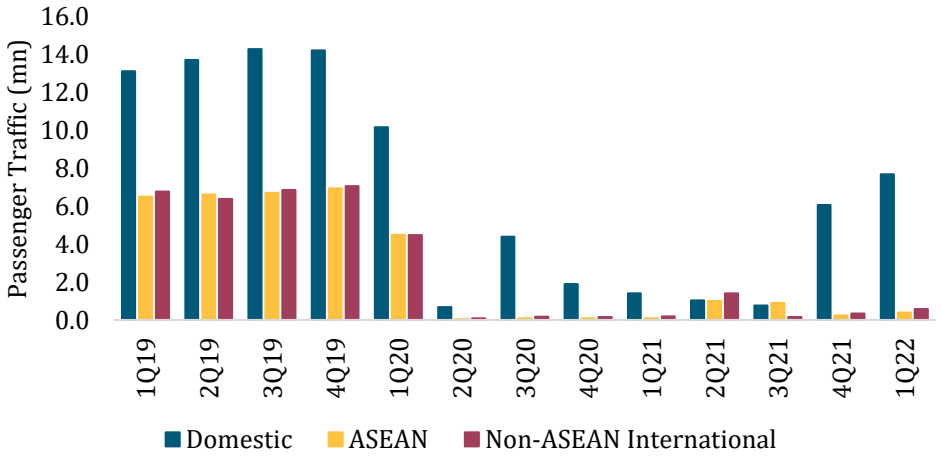
The recovery of international travel is expected to improve further at the start of 2Q22, following the GOM's announcement of the reopening of Malaysia's international borders on 1 April 2022. This will be driven by the implementation of the various VTL programmes between Kuala Lumpur and Singapore, Bangkok, Phuket, and Phnom Penh, and between Penang and Singapore, just to name a few.[6]

**The World Tourism Organization (UNWTO) announced that international tourism is expected to continue its gradual recovery in 2022**, after the unprecedented decline in 2020 and 2021. According to the UNWTO, an increasing number of destinations have eased or lifted the COVID-19 related travel restrictions, unleashing pent-up demand. However, global conflicts and existing economic uncertainties might hinder the overall confidence in tourism recovery.[7]

[6] The Edge, https://www.theedgemarkets.com/article/mahb-saw-52-monthly-increase-march-international-traffic-thanks-border-reopening (21 April 2022).
[7] UNWTO, https://www.unwto.org/news/tourism-enjoys-strong-start-to-2022-while-facing-new-uncertainties (25 March 2022).

## Passenger Traffic was Significantly Driven by Domestic Passengers

**Figure 7: Malaysia's Passenger Traffic by Region, 2019 – 2022**



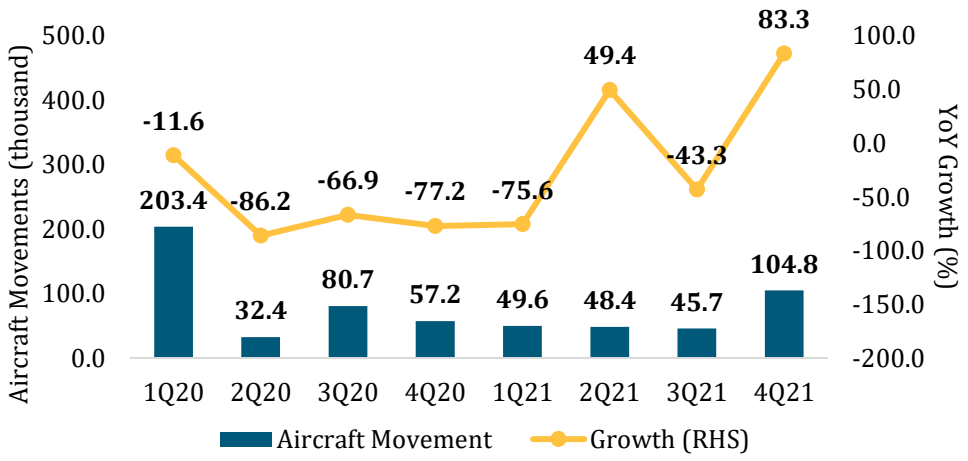

*Source: MAVCOM, AOL Holders*

Figure 7 shows the quarterly trend of Malaysia's passenger traffic by region. The domestic market experienced the greatest recovery in 1Q22 as domestic travel restrictions were further eased towards the end of 3Q21. Meanwhile, the recovery of the international passenger traffic from both ASEAN and non-ASEAN countries remained marginal due to the international border closures during the quarter.

## Malaysia's Quarterly Aircraft Movements Increased by 83.3% YoY in 4Q21

**Malaysia's aircraft movements increased by 83.3% YoY in 4Q21** (4Q20: -77.2% YoY) and 129.1% QoQ (4Q20: -29.1% QoQ) (see Figure 8). The number of aircraft movements went up to 104,809, the highest since 2Q20. Seven airports—KUL, BKI, SZB, KCH, MYY, PEN, and LGK—make up 72.5% of total aircraft movements in 4Q21.

**Figure 8: Malaysia's Aircraft Movements, 2020 – 2021**

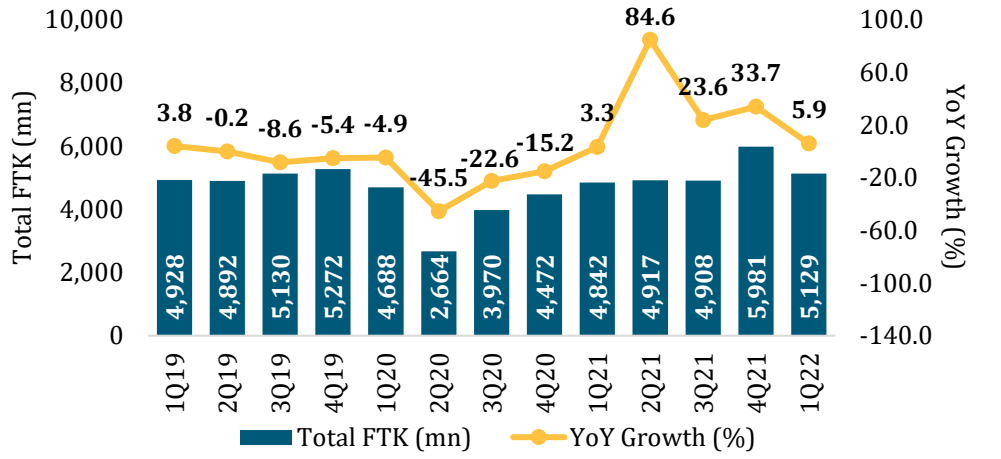



*Source: MAVCOM, AOL Holders*
*Note: Data only available up to 4Q21*

## Malaysia's Cargo Volume Expands by 5.9% YoY to 5.1bn in 1Q22

Malaysia's cargo volume in terms of total FTK recorded a growth of 5.9% YoY (1Q21: -15.2% YoY) to 5,129mn in 1Q22 (1Q21: 4,842mn) (see Figure 9). This is supported by the return of belly cargo capacity as international flights gradually resume, as well as the continued growth of e-commerce[8] and the E&E sector. On a QoQ basis, total FTK recorded a decline of 14.2% QoQ in 1Q22 (1Q21: 8.3% QoQ), due to seasonality factors.

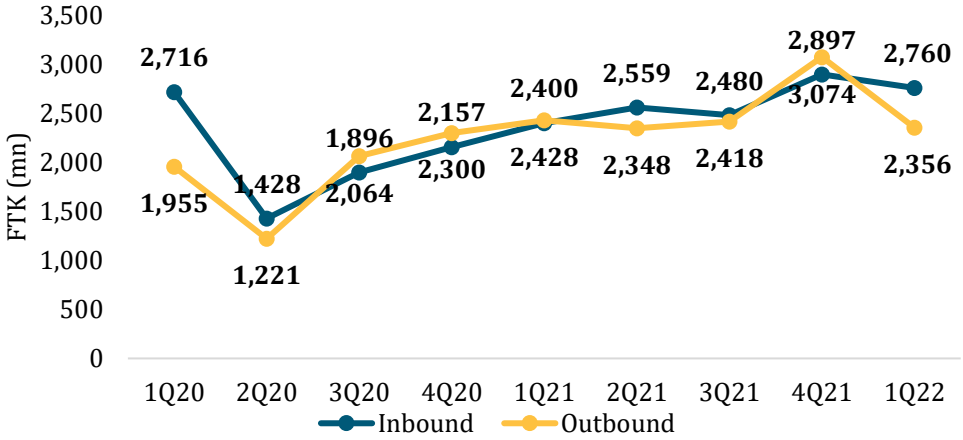
**Figure 9: Total FTK in Malaysia, 2019 – 2022**




*Source: MAVCOM, CargoIS*

Malaysia's inbound cargo increased by 15.0% YoY in 1Q22 (1Q21: -11.6% YoY) but declined by 4.7% QoQ in 1Q22 (1Q21: 11.3% QoQ). Inbound cargo FTK was 2,760mn in 1Q22, lower than the pre-pandemic level at 2,993mn in 1Q19. As for the outbound cargo, FTK decreased by 3.0% YoY (1Q21: 24.2% YoY) and declined by 23.4% QoQ (1Q21: 5.6% QoQ). The outbound cargo FTK in 1Q22 was 2,356mn, higher than the pre-pandemic level (3Q19: 1,917mn) (see Figure 10).

**Figure 10: Inbound and Outbound FTK in Malaysia, 2020 – 2022**




*Source: MAVCOM, CargoIS*
*Note: This figure excludes domestic cargo volume due to small numbers*

[8] According to the Quarterly Services Statistics published by DOS, e-commerce income in 1Q22 increased 9.3% YoY (1Q21: 30.0 YoY) to RM278.2bn (1Q21: RM254.6bn).

While the outbreaks of the Omicron variant and the Russia-Ukraine conflict have caused disruptions to the air cargo capacity—due to flight cancellations and overflight bans—Malaysia's FTK remains resilient. Malaysia's top inbound and outbound countries recorded a YoY growth in 1Q22, except for the US and the Netherlands in outbound FTK (see Tables 7 and 8). In terms of total FTK, the Netherlands recorded a decline of 7.2% YoY while the US recorded a 6.4% YoY growth.

**Table 7: Malaysia's Top 5 Origin Countries of Malaysia's FTK, 1Q22**

| Economy | Inbound FTK (mn) | Share (%) | YoY Growth (%) |
|---|---|---|---|
| US | 964.0 | 34.9 | 27.3 |
| Germany | 477.6 | 17.3 | 9.9 |
| Japan | 235.9 | 8.5 | 22.9 |
| China | 120.4 | 4.4 | 17.2 |
| UK | 120.1 | 4.4 | 19.8 |

*Source: MAVCOM, CargoIS*

**Table 8: Malaysia's Top 5 Destination Countries of Malaysia's FTK, 1Q22**

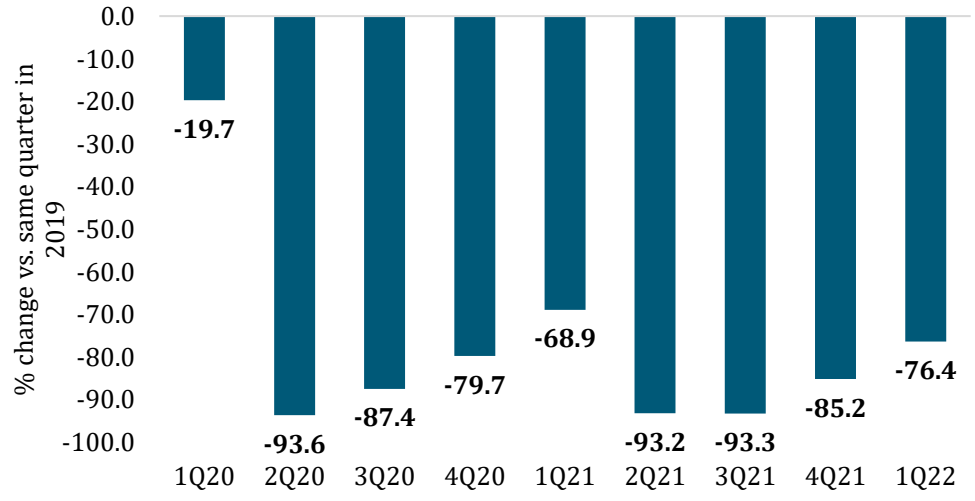
| Economy | Outbound FTK (mn) | Share (%) | YoY Growth (%) |
|---|---|---|---|
| US | 1,126.4 | 47.8 | -6.7 |
| Germany | 350.6 | 14.9 | 6.3 |
| Japan | 240.8 | 10.2 | 36.9 |
| Netherlands | 162.4 | 6.9 | -5.7 |
| China | 72.1 | 3.1 | 0.6 |

*Source: MAVCOM, CargoIS*

### Cargo Capacity by Malaysian Carriers Improved but Remains Below 2019 Level

Cargo capacity remains below 2019 level, but the progressive relaxation of COVID-19 travel restrictions has improved the capacity to 76.4% below the pre-pandemic levels in 1Q22 (see Figure 11). Capacity is expected to improve further from April 2022 onwards as international flights return following the government's decision to open its international borders.

**Figure 11: Air Cargo Capacity of Malaysian Carriers as a Percentage of 2019 Levels, 2020 – 2022**




*Source: MAVCOM, CAPA*

## Industry Outlook

### Global Passenger Traffic is expected to reach 83.0% of pre-pandemic levels in 2022

**In March 2022, the International Air Transport Association (IATA) expects the overall passenger traffic to reach 4.0bn in 2024**, exceeding the pre-COVID-19 levels (103.0% of the 2019 level). To put things into perspective, in 2021, the overall passenger traffic was 47.0% of the 2019 level. In 2022, this is expected to improve to 83.0% of the 2019 level (see Table 9). This is a slightly more optimistic near-term international recovery scenario based on the progressive lifting of travel restrictions in many markets.[9]

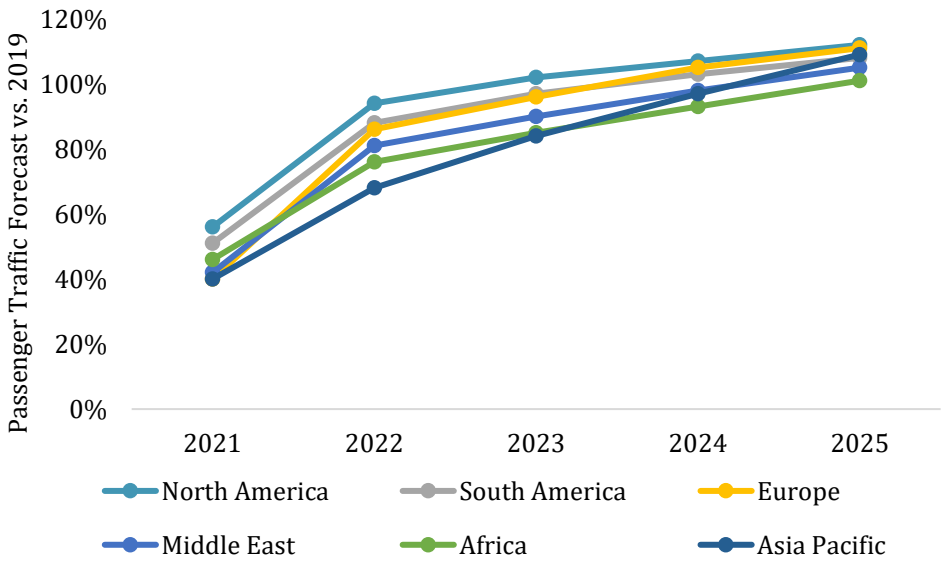
**Table 9: IATA's Global Passenger Traffic Forecasts, 2022 – 2025 vs. 2019**

| Key Figure | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|
| Total Passenger Traffic Forecasts vs. 2019 (%) | 83.0 | 94.0 | 103.0 | 111.0 |

*Source: IATA*

There have been massive improvements in the North Atlantic and intra-European markets, strengthening the baseline for recovery. The European market is expected to gain further traction with its upcoming summer holidays. However, not all regions are recovering at the same pace. For instance, Asia Pacific is expected to continue to lag in its recovery with the region's largest market, China, not showing any signs of lifting its severe border restrictions in the near future. The Middle East market, which mainly relies on the long-haul connectivity through its hubs, is also expected to experience a slower recovery due to the lack of large domestic markets in the region (see Figure 12).

**Figure 12: IATA's Total Passenger Traffic Forecasts by Region vs. 2019 (%)**



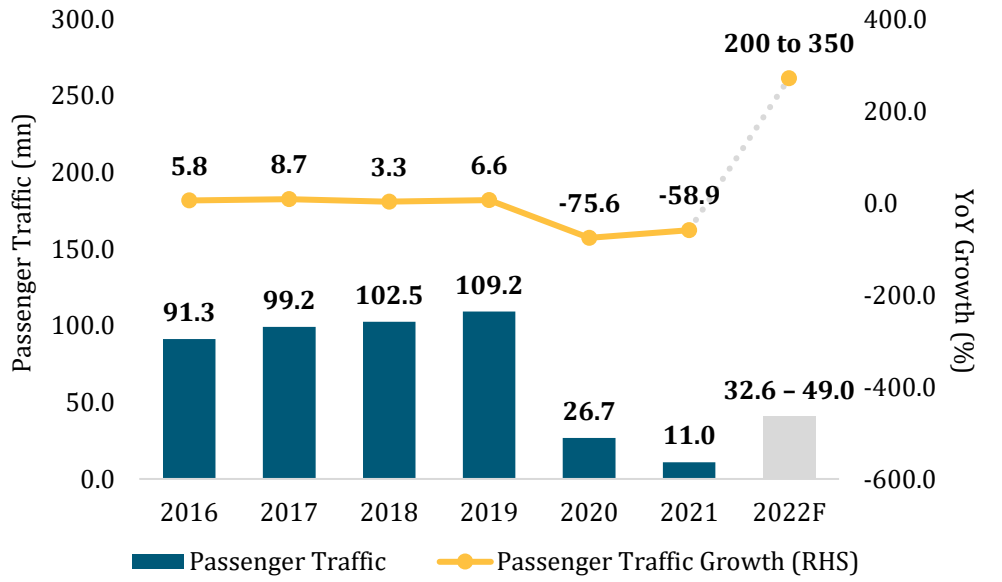

*Source: IATA*

[9] IATA, https://www.iata.org/en/pressroom/2022-releases/2022-03-01-01/ (1 March 2022).

## MAVCOM's 2022 Air Passenger Traffic Forecast Remains the Same

In December 2021, MAVCOM estimated Malaysia's air passenger traffic in 2022 to increase by between 200% YoY and 350% YoY, translating to 32.6mn – 49.0mn passengers, with a base case scenario of 39.3mn – 41.6mn passengers (see Figure 13).[10] For the first five months in 2022, Malaysia's air passenger traffic stands at 16.3mn, which is within the range of MAVCOM's forecast. Hence, **MAVCOM maintains its air passenger traffic forecast made in December 2021**.

**Figure 13: Malaysia's Passenger Traffic, 2016 – 2022F**



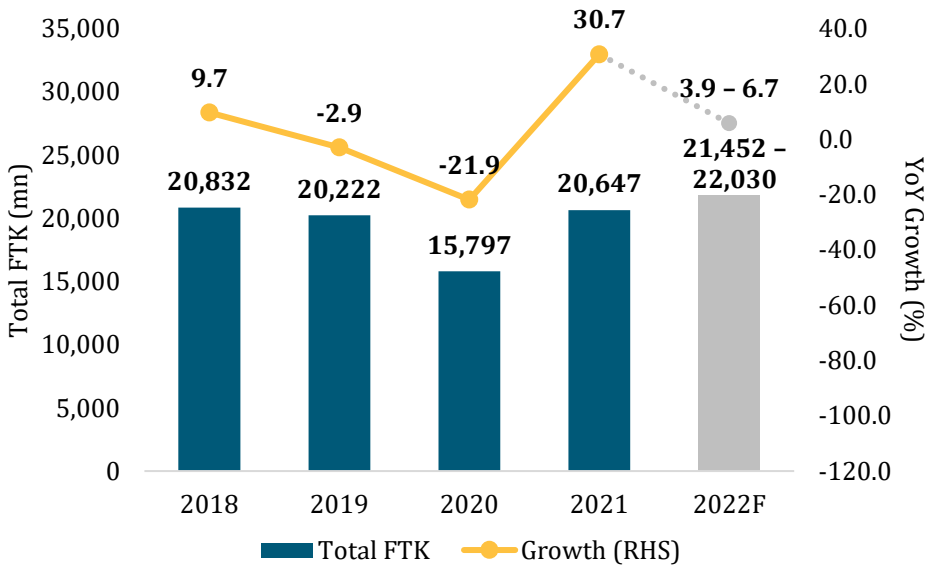

*Source: MAVCOM, AOL Holders*

[10] For a detailed explanation on the underlying assumptions of the passenger traffic forecast, please refer to MAVCOM's December 2021 Waypoint report, accessible on https://www.mavcom.my/wp-content/uploads/2021/12/211209-MAVCOM-Waypoint-Report-December-2021-FINAL.pdf

## MAVCOM Maintains 2022 Air Cargo Traffic Growth at 3.9% YoY and 6.7% YoY

Given the strong air cargo performance in 2021 and 1Q22, MAVCOM maintains its forecast made in December 2021. Malaysia's air cargo traffic is expected to increase in 2022 by between 3.9% YoY and 6.7% YoY, translating to 21.5bn – 22.0bn FTK (see Figure 14). Growth will be supported by the high demand for the E&E components and the growth of the e-commerce sector. According to the World Semiconductor Trade Statistics, the Asia Pacific semiconductor market increased 26.5% YoY in 2021 and is expected to show a further growth of 8.3% YoY in 2022.

**Figure 14: Malaysia's Air Cargo Traffic, 2018 – 2022F**




*Source: MAVCOM, CargoIS*

# SECTION 3: INDUSTRY STRUCTURE AND PERFORMANCE

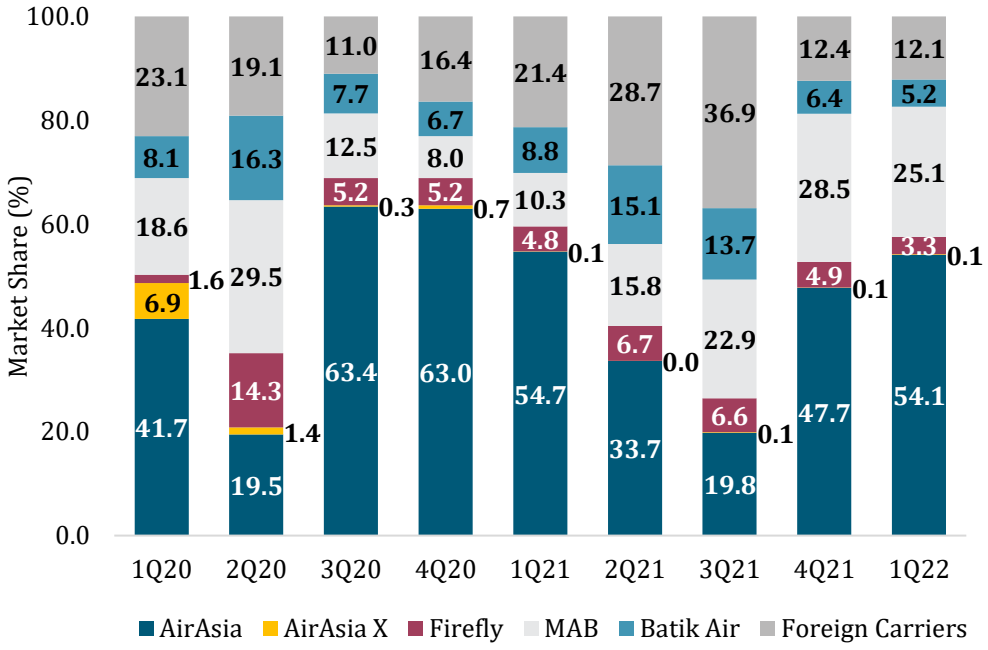
## Industry Structure

### Scheduled Passenger Services Market

#### Malaysian Carriers' Passenger Market Share Increased to 87.9% in 1Q22

**In 1Q22, Malaysian carriers' combined market share increased to 87.9%** (1Q21: 78.6%) (see Figure 15). This was supported by the return of domestic travel, as domestic routes are only served by Malaysian carriers. AirAsia experienced a significant increase in its passenger market share as it resumed a significant number of domestic flights and relaunched several of its domestic routes. AirAsia's market share increased to 54.1%, with a passenger growth of 249.8% YoY and 81.0% QoQ (1Q21: -87.9% YoY; -27.2% QoQ). MAB had a market share of 25.1% at the back of a 762.0% YoY and 40.7% QoQ growth in passenger traffic (1Q21: -94.9% YoY; 7.5% QoQ). Firefly and Batik Air[11] had smaller market shares of 3.3% and 5.2%, respectively.

**Figure 15: Malaysia's Passenger Market Share by Airlines, 2020 – 2022**

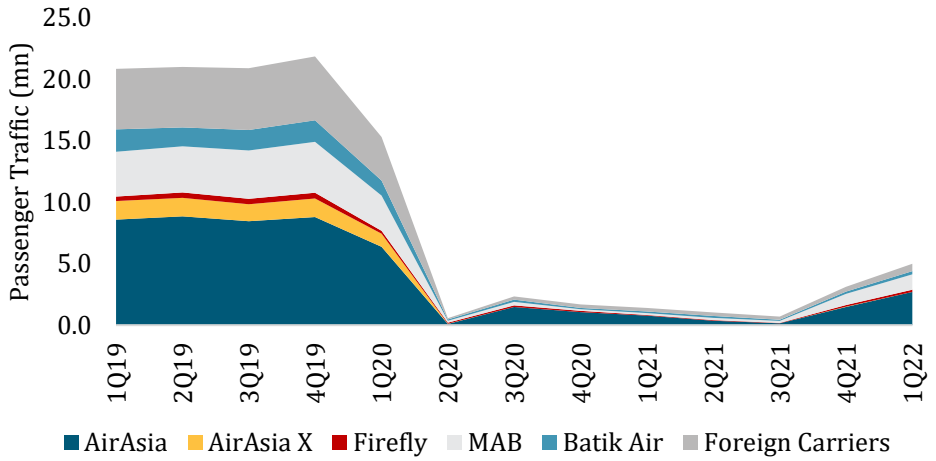



*Source: MAVCOM, AirportIS*

[11] Batik Air was previously known as Malindo Air.

Although Malaysia's market size in 1Q22 was minuscule compared to the pre-pandemic level in 2019, there was an increase in the passenger traffic during the quarter (see Figure 16). Total air passenger traffic increased by 253.7% YoY and 59.8% QoQ (1Q21: -90.8% YoY; -16.2% QoQ). The passenger traffic in 1Q22 was 24.0% of the passenger traffic level obtained in 1Q19.

**Figure 16: Malaysia's Quarterly Passenger Traffic by Airlines, 2019 – 2022**

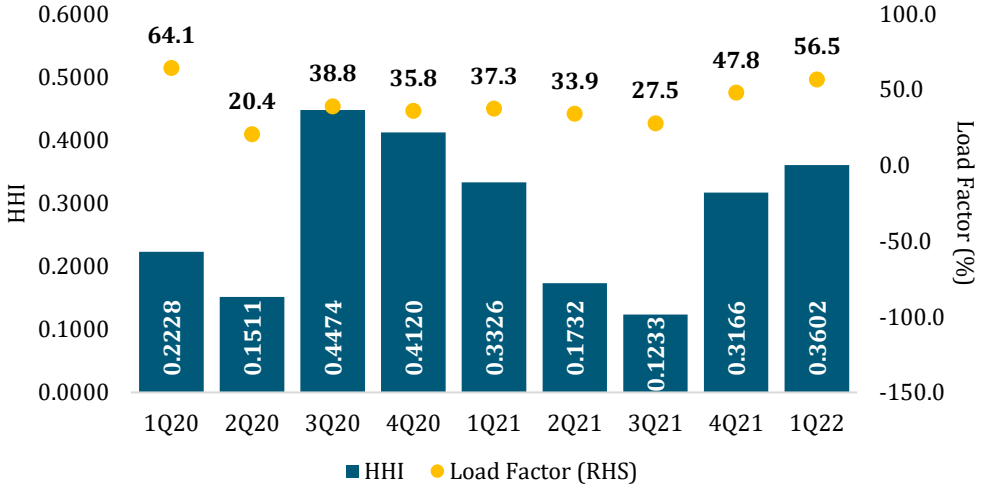



*Source: MAVCOM, AirportIS*

## Both Market Concentration and Average Load Factor Increased in 1Q22

**The market concentration [12] in Malaysia's airline industry increased to 0.3602 in 1Q22** (1Q21: 0.3326) due to the significant increase in MAB's market share from 10.3% in 1Q21 to 25.1% in 1Q22. **The average load factor for all carriers—including foreign carriers—increased to 56.5% in 1Q22** (1Q21: 37.3%) (see Figure 17).

**Figure 17: Market Concentration Level and Load Factor, 2020 – 2022**




*Source: MAVCOM, AirportIS*

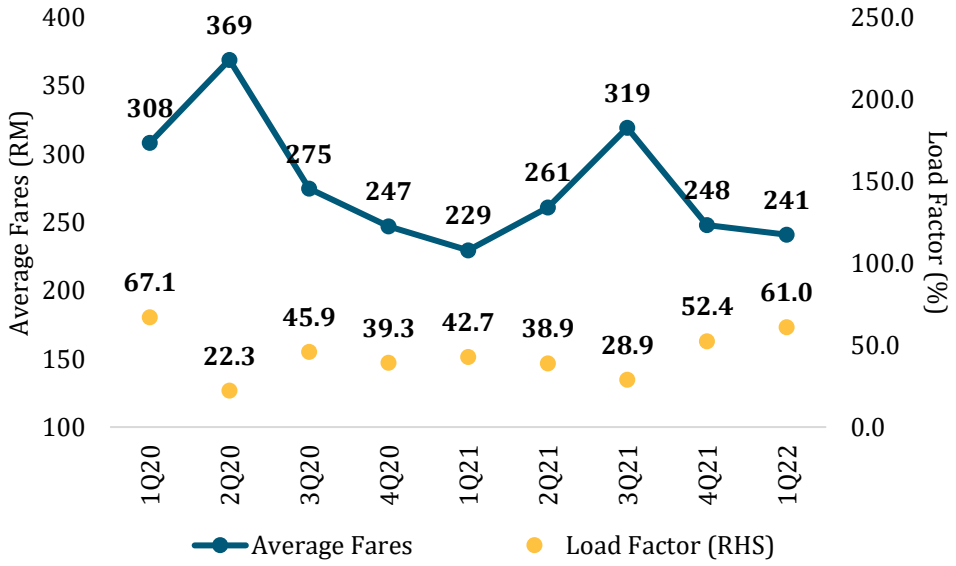
[12] Market concentration is measured by using the Herfindahl-Hirschman Index (HHI). The index ranges from '0' which denotes perfect competition to '1' which denotes a monopoly.

## Malaysian Carriers' Fares Reduced by 2.9% QoQ whilst Average Load Factor Increased in 1Q22

**Malaysian carriers' average load factor increased to 61.0% in 1Q22** (1Q21: 42.7%) (see Figure 18). This was due to the increase in passenger traffic. In 1Q22, Malaysian carriers' passenger traffic increased by 295.1% YoY and 60.3% QoQ (1Q21: -90.6% YoY and -21.2% QoQ). In comparison, the seat capacity had a slightly smaller increase of 175.4% YoY and 37.7% QoQ (1Q21: -84.5% YoY and -27.4% QoQ).

**Additionally, Malaysian carriers' average fares decreased by 2.9% QoQ** (1Q21: -7.1% QoQ)**.** However, compared to 1Q21, fares had increased by 4.9% YoY (1Q21: -25.5% YoY). This came to RM241 in 1Q22 (1Q21: RM229).

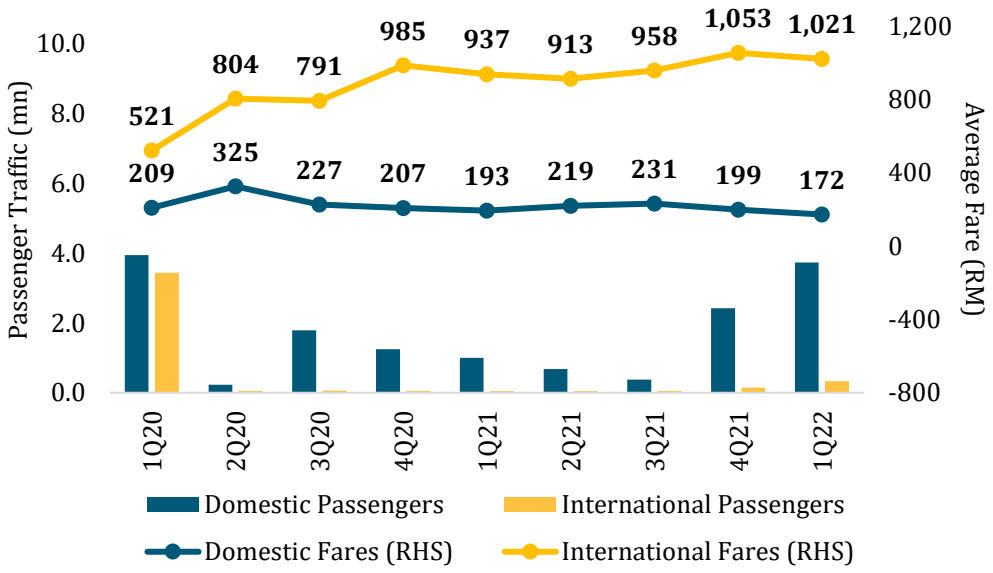
**Figure 18: Malaysian Carriers' Average Fares and Load Factor, 2020 – 2022**




*Source: MAVCOM, AirportIS*

**The average domestic fares decreased by 10.8% YoY and 13.7% QoQ in 1Q22 (1Q21: -7.5% YoY; -6.9% QoQ) while the average international fares increased by 8.9% YoY but decreased by 3.1% QoQ in 1Q22 (1Q21: 79.9% YoY; -4.9% QoQ)** (see Figure 19). The domestic fares decreased to RM172 in 1Q22 from RM199 in 4Q21. Meanwhile, international fares also decreased to RM1,021 in 1Q22 from RM1,053 in 4Q21.

**Figure 19: Malaysian Carriers' Passenger Traffic and Average Fares, 2019 – 2022**




*Source: MAVCOM, Airport*IS

## Non-Scheduled Services Segment

### On-demand Charter Sub-segment Remains Competitive

The most competitive market in the non-scheduled services segment is the on-demand charter with 8 players in the market, recording a HHI of 0.3088 (see Table 10). For the on-demand cargo sub-segment, Pos ACE – previously the sole licence holder – converted its ASP to an ASL effective 1 April 2021, and is now known as World Cargo Airline Sdn Bhd. As the ASP of Afjets Sdn. Bhd. expired on 31 January 2022, Sabah Air Aviation Sdn. Bhd. is currently the sole licence holder in the aerial work sub-segment. The pleasure flying, as well as oil and gas sub-segments, had highly concentrated markets in 2021, with their HHIs being above 0.6000. The aerial work and on-demand charter sub-segments were mildly concentrated, with their HHI at 0.5074 and 0.3088 respectively.

**Table 10: Summary of Non-Scheduled Services' Market Structure, 2021**

| Type of Business | No. of Licence Holders | HHI | 2021 Revenue (RM million) | 2021 Operating Profit Margin (%) |
|---|---|---|---|---|
| Surveying, Observation & Patrol | - | - | - | - |
| On-demand Cargo* | - | - | 71.5 | 8.5 |
| Pleasure Flying | 2 | 0.9586 | 5.7 | 6.5 |
| Aerial Work – cloud seeding, mapping** | 2 | 0.5074 | 100.8 | 10.9 |
| Oil & Gas | 3 | 0.8587 | 1,039.2 | 13.7 |
| On-demand Charter | 8 | 0.3088 | 379.2 | 16.3 |
| **TOTAL** | **14** | | **1,596.4** | 13.9 |

*Source: MAVCOM, ASP Holders*

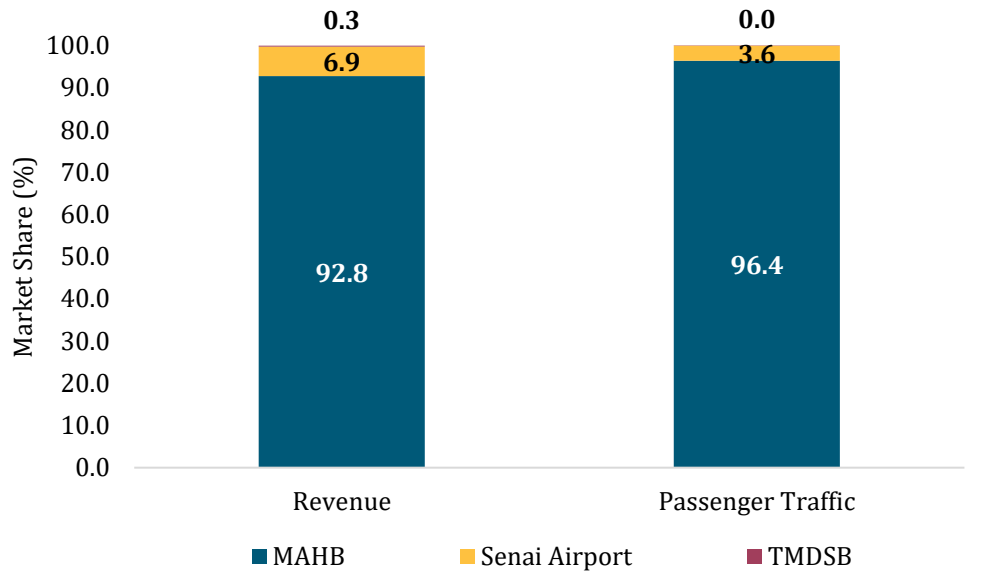
*Note: *Pos ACE converted their ASP to an ASL effective 1 April 2021, now known as World Cargo Airline Sdn Bhd*
***The ASP for Afjets Sdn. Bhd. expired on 31 January 2022*

## Aerodrome Operations Segment

92.8% of AOL Holders' RM1.8bn Revenue was Generated by MAHB in 2021

**In 2021, the aerodrome operations segment reported a total revenue of RM1.8bn, of which 92.8% was generated by MAHB** (2020: 95.3%) (see Figure 20). As the biggest airport operator in the country, which operates 39 of the 42 airports in Malaysia, MAHB handled 96.4% of the total passenger traffic in Malaysia in 2021 (2020: 95.7%). Meanwhile, Senai Airport's passenger market share marginally decreased from 4.3% in 2020 to 3.6% in 2021, while its revenue market share rose to 6.9% in 2021 (2020: 4.5%). Additionally, the aerodrome operator segment was the most concentrated segment within the aviation services market with an HHI of 0.9093 in 2020 (2020: 0.9093).

**Figure 20: Market Shares of the Aerodrome Operations Segment by Revenue and Passenger Traffic, 2021**

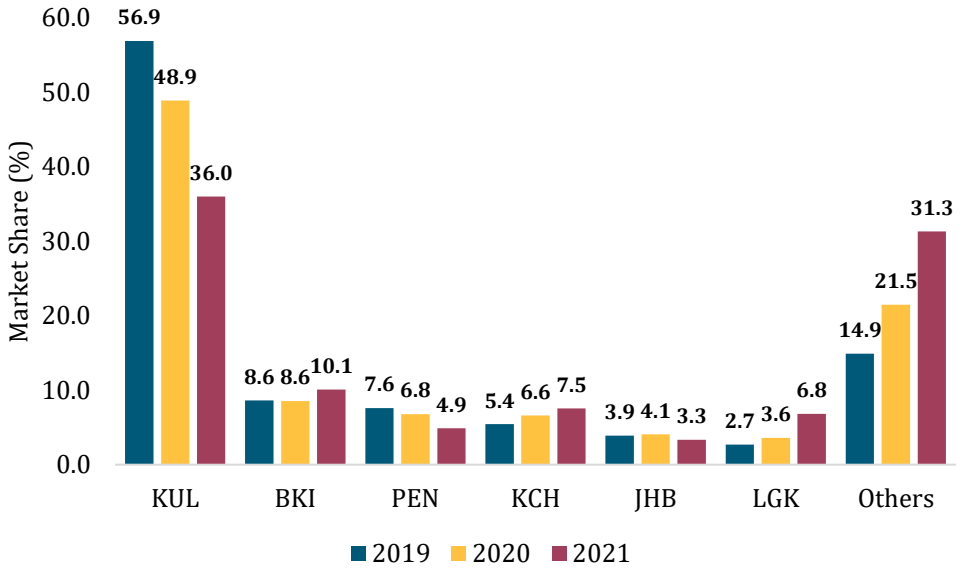



*Source: MAVCOM, AOL Holders*
*Note: TMDSB's passenger market share was approximately 0.02% in 2021*

## Passenger Market Share of Malaysia's International Airports Decrease Due to Border Closures and Travel Restrictions

In 2021, KUL experienced a decline in market share to 36.0% compared to 48.9% in 2020 (see Figure 21). Before the pandemic, passenger traffic at Malaysian airports in 2019 was highly concentrated at KUL, which handled 56.9% of the total passenger traffic for Malaysia. The passenger market share of the six international airports in Malaysia decreased from 78.5% in 2020 to 68.7% in 2021 (2019: 85.1%). In terms of the passenger traffic by segments, 67.0% of the total passenger traffic in KUL were domestic passengers in 2021 compared to 27.9% in 2019 (see Table 11). This larger percentage of domestic passengers was due to the international border closures and travel restrictions.

**Figure 21: Market Shares of Airports in Malaysia in Terms of Passenger Traffic, 2019 – 2021**




*Source: MAVCOM, AOL Holders*

**Table 11: Percentage of KUL's Passenger Traffic by Segment, 2019 – 2021**

| Segment | 2019 (%) | 2020 (%) | 2021 (%) |
|---|---|---|---|
| Domestic | 27.9 | 37.4 | 67.0 |
| International | 72.1 | 62.6 | 33.0 |

*Source: AOL Holders*

## Ground Handling Services Segment

### Ground Handling is the Least Concentrated Aviation Services Segment

As at 4Q21, there are 23 Ground Handling Licence (GHL) holders that operate in three ground handling services sub-segments. **In 4Q21, the GHL holders' revenue grew by 67.0% YoY to RM1.1bn** (4Q20: RM0.7bn). This was mainly contributed by a 72.4% YoY increase in general ground handling revenue. On a QoQ basis, the GHL holders' revenue increased by 38.0% QoQ in 1Q21 (4Q20: 20.0% QoQ).

**Based on the 2021 financial data, the GHL holders reported RM3.5bn in revenue**[13] (2019: RM1.3bn) (see Table 12). In terms of profitability, the segment reported an operating profit margin of 6.6% in 2021 (2019: -0.3%).

**Ground handling is the least concentrated segment** compared to the scheduled passenger services, the non-scheduled services, and the aerodrome operation segments. However, the different sub-segments within the ground handling segment may have different degrees of market concentration. For example, general ground handling is the most concentrated sub-segment with an HHI of 0.7763 in 2021.

**Table 12: Market Structure of the GHL Segment, 2021**

| Type of Business | No. of Licence Holders | HHI | Revenue (RM mn) | Operating Profit Margin (%) |
|---|---|---|---|---|
| Catering | 3 | 0.5213 | 26.2 | -433.6 |
| General Ground Handling[14] | 17 | 0.7763 | 3,502.3 | 10.0 |
| Refuelling[15] | 3 | 0.7387 | 9.65 | -23.0 |
| **TOTAL** | **23** | | **3,538.1** | **6.6** |

*Source: MAVCOM, GHL Holders*

The general ground handling sub-segment includes 10 types of services. A general ground handler may provide multiple services within the list shown in Table 13.

**Table 13: Types of General Ground Handling Services**

| No. | Ground Handling Services |
|---|---|
| 1 | Ground administration and supervision |
| 2 | Passenger handling |
| 3 | Freight and mail handling (documentations handling) |
| 4 | Aircraft services |
| 5 | Aircraft maintenance |
| 6 | Flight operations and crew administration |
| 7 | Surface transport |
| 8 | Baggage handling |
| 9 | Freight and mail handling (physical handling) |
| 10 | Ramp handling |

*Source: MAVCOM*

[13] The calculation excludes GHL Holders that are multi-licence holders, i.e., those that are also ASL, ASP, or AOL Holders, and petroleum products retailers.
[14] As at 4Q21, there are only 17 GHL Holders in the general ground handling sub-segment.
[15] The calculation of the refuelling sub-segment excludes Petronas, Petron, Shell, and Shell Timur.

## ATRs Awarded by MAVCOM as of 31 March 2022

**In 2021, the ASL holders were awarded 82 additional ATRs** (see Table 14), with My Jet Xpress receiving the highest number of ATRs at 25, followed by MAB Kargo and WCA at 12 each. WCA converted its ASP to an ASL effective from 1 April 2021 and is the latest ASL holder for the cargo segment. The ATR applications in 2021 recorded a 98.8% approval for the 82 ATR applications received from airlines.

**The ATR applications in 1Q22 recorded a 95.5% approval for the 21 out of 22 ATR applications received from airlines.** The ATR application rate decreased slightly by 8.0% YoY in contrast with the 24 ATR applications in 1Q21. Of these approved applications, 13 were for international routes, while the remaining 8 were for domestic routes. SKS Airways, which is among the newest airlines in Malaysia, was awarded the highest number of ATR approvals with a total of 4 ATRs across the domestic routes. Meanwhile, AirAsia, MAB, M Jets International, and MyJet Xpress each received 3 ATR approvals followed by MAB Kargo and MASwings, which both received 2 ATRs, while AirAsia X was accorded 1 ATR.

**Table 14: Breakdown of ATRs Awarded, 2021 – 2022**

| ASL Holder | Total Domestic & International ATRs Awarded | | Surrendered[16] | |
|---|---|---|---|---|
| | 2021 | 1Q22 | 2021 | 1Q22 |
| AirAsia | 9 | 3 | - | - |
| AirAsia X | 9 | 1 | - | - |
| Batik Air | 3 | | - | - |
| Firefly | 2 | | - | - |
| MAB | 5 | 3 | 1 | - |
| MAB Kargo | 12 | 2 | - | - |
| MASwings | | 2 | - | - |
| Raya Airways | 2 | | - | - |
| My Jet Xpress | 25 | 3 | 5 | - |
| M Jets International | 3 | 3 | - | - |
| SKS Airways | | 4 | - | - |
| World Cargo Airlines | 12 | | - | - |
| **TOTAL** | **82** | **21** | **6** | **-** |

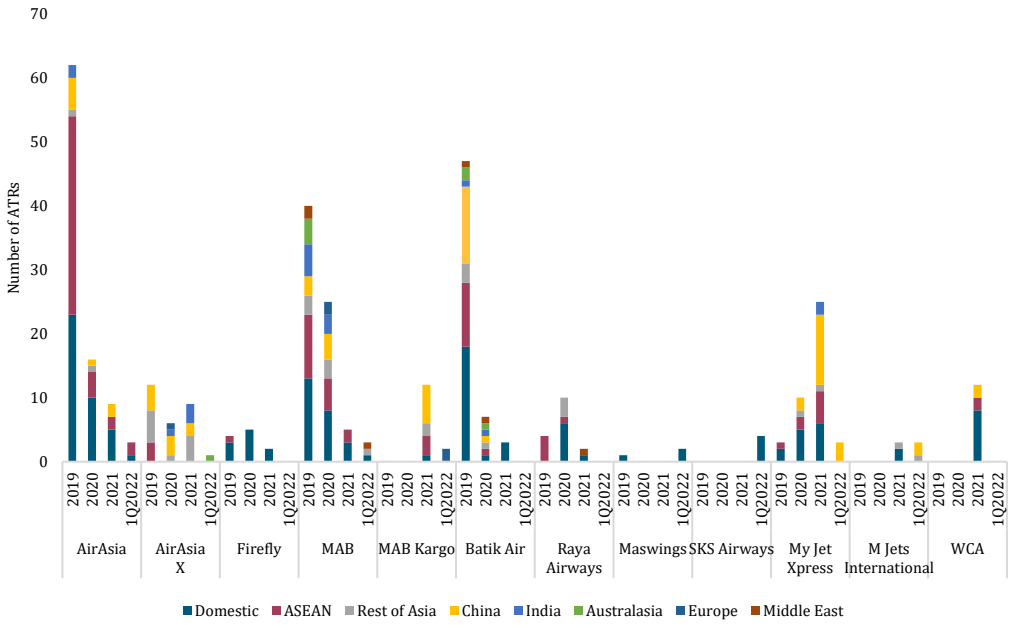
*Source: MAVCOM*

**There has been a significant jump in ATR applications** following the GOM's announcement of the reopening of Malaysia's international borders on 1 April 2022. A total of 15 ATR applications were submitted between 1 April 2022 and 15 April 2022, comprising 7 ATRs for the cargo sector including Passenger to Cargo (P2C) flights, 3 ATRs for passenger flights on domestic routes, and 5 ATRs for passenger flights on international routes. This encouraging development shows that the industry is gradually transitioning towards recovery.

[16] ATRs surrendered by the ASL Holders.

**1Q22 saw the largest share of ATR allocations for domestic routes at 38.1%** (1Q21: 23.5%)**, followed by allocations to China and the ASEAN at 23.8% and 9.5% respectively** (1Q21: 38.2% and 23.5%, respectively) (see Figure 22). The share of the ATR allocations to domestic destinations increased in part due to the inclusion of SKS Airways receiving the highest number of ATRs at 50.0%, encouraged by the increasing healthy competition shown and stimulating higher demand for domestic air travel. MAVCOM has reinstated a new Condition 6 to better monitor and manage unutilized ATRs, as well as to ensure efficient allocation of ATRs as the industry is beginning to show signs of recovery.[17]

**Figure 22: Breakdown of ATRs Awarded by Region, 2019 – 2022**




*Source: MAVCOM*
*Note: Raya Airways, My Jet Xpress, and WCA are ASL Holders providing scheduled cargo services*

[17] Condition 6 is applicable to all existing and new ATRs issued on or after 27 March 2022 (start of NS 2022):-
6. (a) The airline shall commence its operations and utilise all of the air traffic right issued to it as detailed in this letter within six (6) months from the date of the grant of the approval.
(b) The air traffic right shall not remain unutilised for a continuous period of six (6) months from the date of its last use.
(c) In the event the airline breaches conditions 6(a) or 6(b), the said air traffic right and/or the capacity of the said air traffic right shall be deemed revoked with immediate effect.

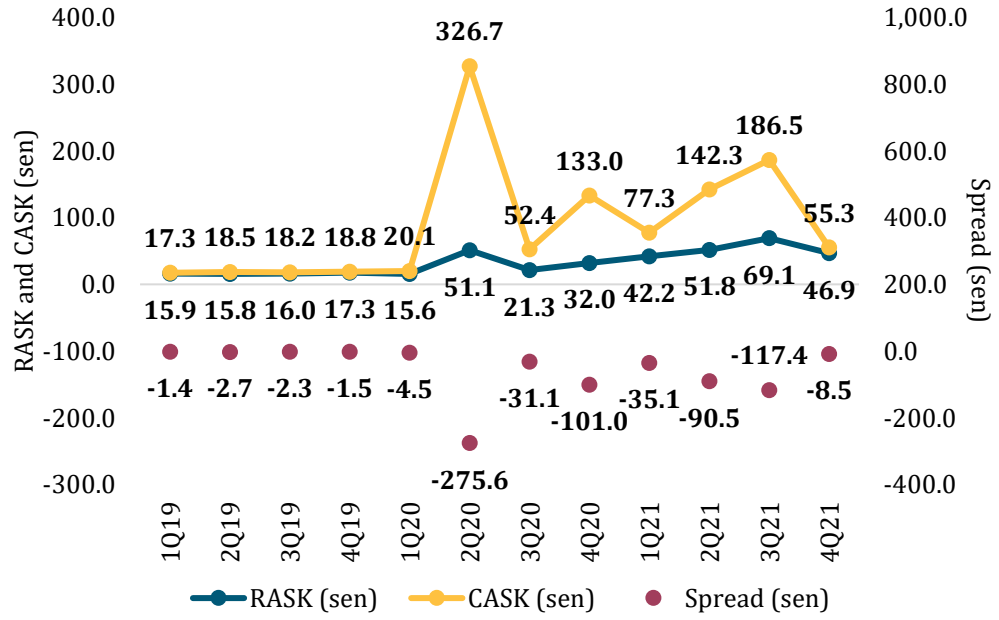
## Industry Performance

### Scheduled Passenger Services Market

#### The Spread between RASK and CASK Narrowed in 4Q21

CASK decreased sharply to 55.3 sen in 4Q21 (4Q20: 133.0 sen). However, RASK increased to 46.9 sen compared to 32.0 sen in 4Q20. The large decrease in the CASK resulted in a narrow gap between RASK and CASK. This led to a RASK-CASK spread of 8.5 sen in 4Q21 (see Figure 23). While the reopening of international borders may help ease the pressure on the airlines' profitability in the next quarters, rising fuel prices would pose a challenge to airlines when managing their operating costs.

**Figure 23: Malaysian Carriers' RASK and CASK Trends, 2019 – 2021**



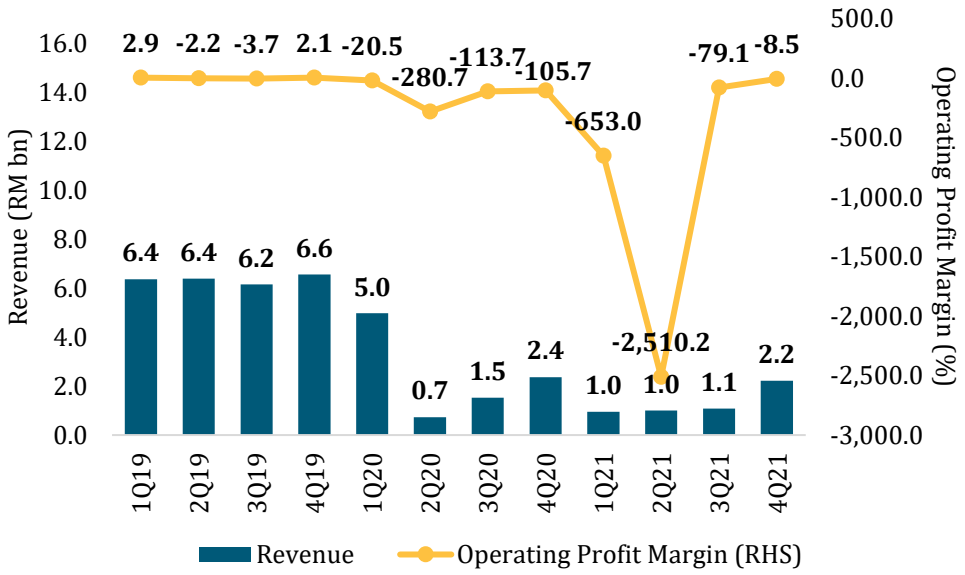

*Source: MAVCOM, ASL Holders*
*Note: Data only available up to 4Q21*

## Lowest Operating Loss for Malaysian Carriers Since the COVID-19 Pandemic

Due to an increase in revenue and decrease in operating losses, the spread between CASK and RASK for Malaysian carriers narrowed in 4Q21. Malaysian carriers reported a RM2.2bn revenue in 4Q21 (4Q20: RM2.4bn) and an operating loss margin of 8.5% in 4Q21 (4Q20: -105.7%) (see Figure 24). Given the strong travel demand as a result of easing travel restrictions and quarantine-free travel bubbles, the industry recorded the lowest operating loss margin in 4Q21 since the beginning of the COVID-19 pandemic.

In 2021, airlines recorded a higher yield in passenger revenue compared to 2020. Some airlines managed to reduce their liabilities and eliminate debt after undertaking restructuring exercises, as well as digital transformations. Airlines were also able to reduce their operating expenses through headcount rationalisation, pay cuts, and natural attrition. Airlines recorded better domestic load factors in 2021, enabled by travel bubbles, the removal of quarantine requirements, and strategic capacity management.

**Figure 24: Malaysian Carriers' Revenue and Operating Profit Margin, 2019 – 2021**



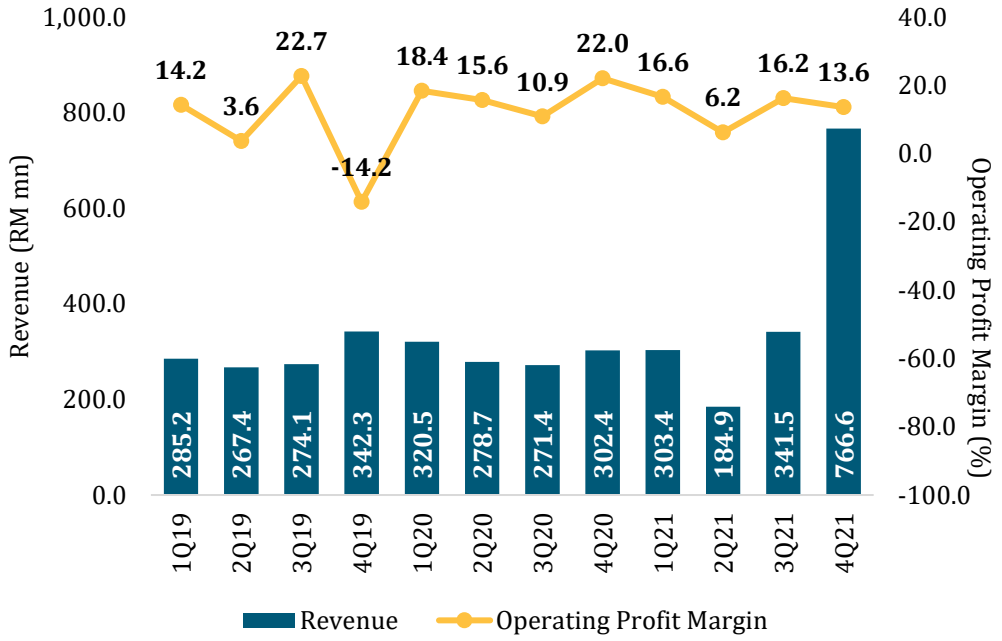

*Source: MAVCOM, ASL Holders*
*Note: Data only available up to 4Q21*

## Non-Scheduled Services Segments

### Higher Revenue but Lower Operating Profit Margin in 2021

**Collectively, revenue for the non-scheduled services segment increased by 153.5% YoY in 4Q21 to RM766.6mn (4Q20: RM302.4mn), the strongest quarterly performance to date** (see Figure 25). This increase, however, did not translate into a higher overall operating profit margin, which dropped from 22.0% in 4Q20 to 13.6% in 4Q21.

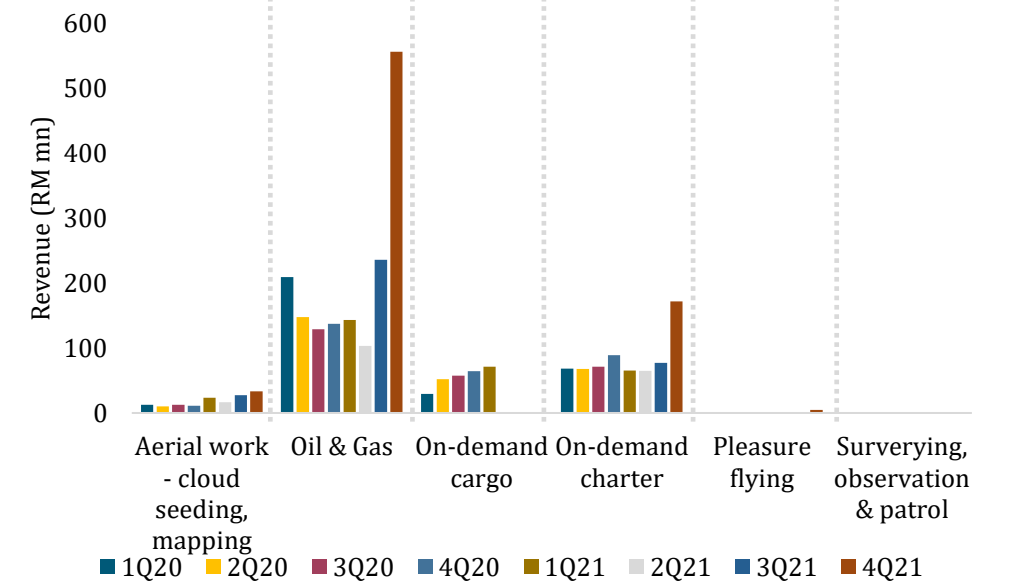
**Figure 25: Revenue and Operating Profit Margin of ASP Holders, 2019 – 2021**




*Source: MAVCOM Analysis, ASP Holders*

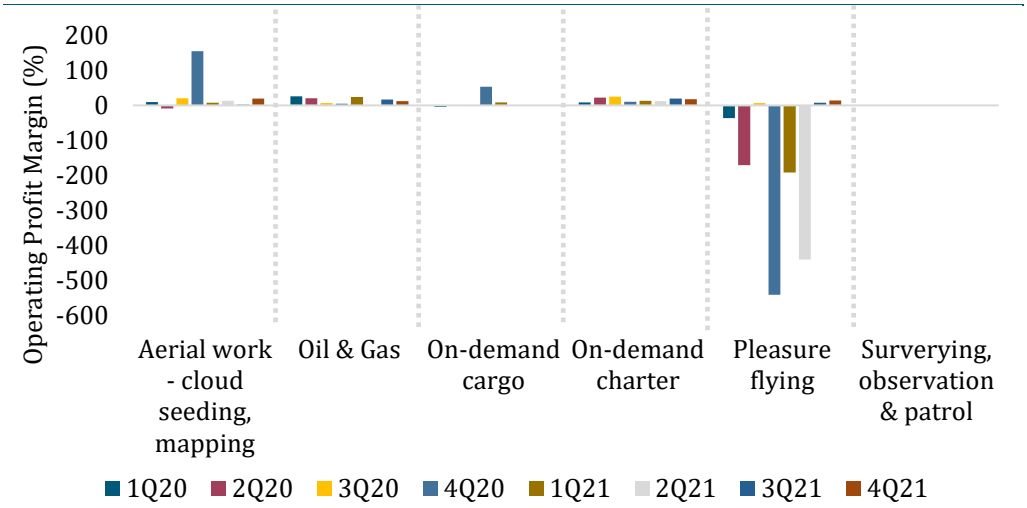
The financial performance of each sub-segment of the non-scheduled services segment between 1Q20 and 4Q21 is illustrated in Figures 26 and 27. Except for the on-demand cargo sub-segment, all other active sub-segments reported higher revenues in 2021. **The oil and gas sub-segment was the strongest performing sub-segment**, consistently reporting revenues above RM100mn and operating profits between 1Q20 and 4Q21. The revenues for other sub-segments were below RM100mn per quarter, except for the on-demand charter sub-segment in 4Q21. All sub-segments recorded positive operating profit margins in 2021.

**Figure 26: Revenue of ASP Holders by Sub-Segment, 2020 – 2021**




*Source: MAVCOM Analysis, ASP Holders*

**Figure 27: Operating Profit Margin of ASP Holders by Sub-Segment, 2020 – 2021**




*Source: MAVCOM Analysis, ASP Holders*

## Aerodrome Operations Segment

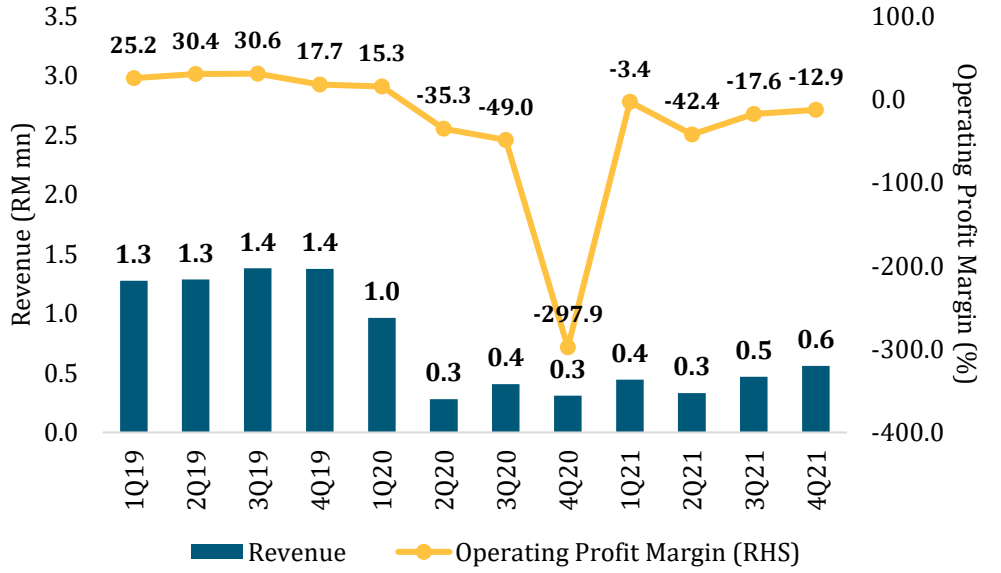
### 8.0% YoY Decrease in Revenue for Aerodrome Operators in 2021

Aerodrome operators' airport operations typically include airport services, duty-free and non-duty-free outlets while non-airport operations typically include project and repair maintenance, hotel operations, agriculture and horticulture, and other activities.

**For 2021, the aerodrome operators' revenue decreased by 8.0% YoY to RM1.8bn** (2020: RM2.0bn) (see Figure 28), in line with the decline exhibited by the passenger traffic and aircraft movements. The AOL holders' revenue decreased due to a 10.4% YoY decrease in revenue by MAHB (2020: -64.2% YoY). In contrast, Senai Airport and TMDSB's revenue increased by 40.6% YoY and 25.3% YoY, respectively (2020: -4.6% YoY and -26.9% YoY). The aggregate financial performance of Malaysian aerodrome operators was heavily skewed by MAHB's numbers as the company recorded 92.8% of the total revenue and operating profit of all aerodrome operators in the country.

Meanwhile, **the average operating profit margin for the aerodrome operations segment decreased by 68.6% YoY to -17.2% in 2021** (2020: -311.0% YoY). The operating profit margin for the AOL holders has remained negative since the start of the pandemic.

**Figure 28: AOL Holders' Revenue and Operating Profit Margin, 2019 – 2021**




*Source: MAVCOM, AOL Holders*
*Note: Data only available up to 4Q21*

## Ground Handling Services Segment

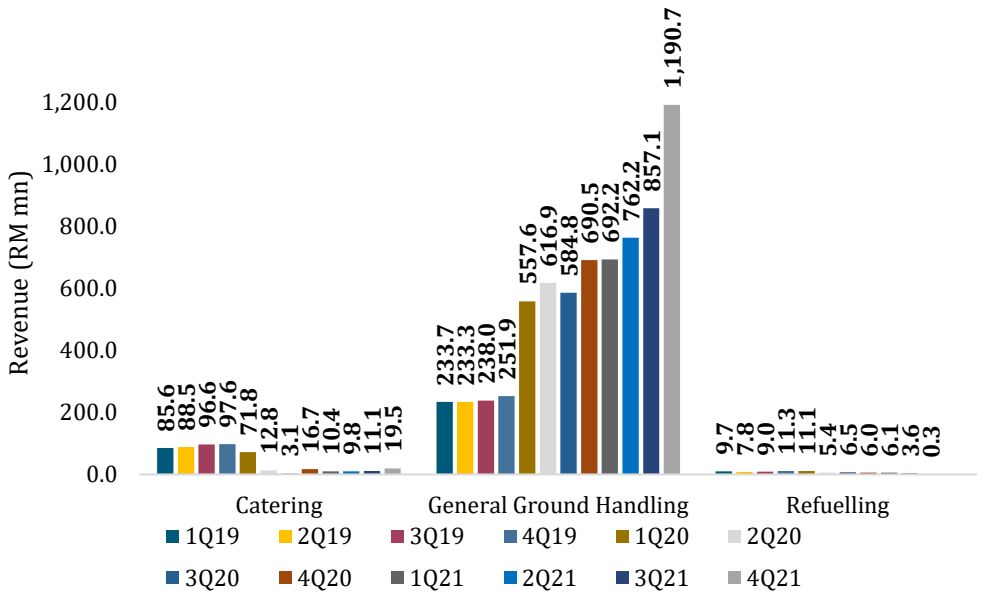
### Revenue for General Ground Handling Increased in 4Q21

**In 4Q21, the catering sub-segment revenue increased by 16.8% YoY and 76.1% QoQ to RM19.5mn** (4Q20: -82.9% YoY, 432.6% QoQ, and RM16.7mn). This is due to the increase of flights being operated as the passenger traffic number has started to recover in 4Q21.

Meanwhile, **the revenue generated by the general ground handling sub-segment in 4Q21 increased by 72.4% YoY and 38.9% QoQ to RM1.2bn** (4Q20: 174.2% YoY, 18.1% QoQ, and RM690.5mn). This was due to the substantial revenues recorded by MAB Kargo relative to other, smaller players. MAB Kargo made up 86.5% of the total revenue for the sub-segment in 4Q21 and has continued its dominance throughout 2021 with an average of 87.8% of the total revenue for the general ground handling sub-segment. Furthermore, the boom in the air cargo market has seen MAB Kargo's contribution increased to more than 50.0% (2019: 15.0%) of the MAG's total revenue during the pandemic.

Figure 29 provides details of the revenue for all the ground handling sub-segments between 2019 and 2021.

**Figure 29: Revenue for Ground Handling Sub-Segments, 2019 – 2021**



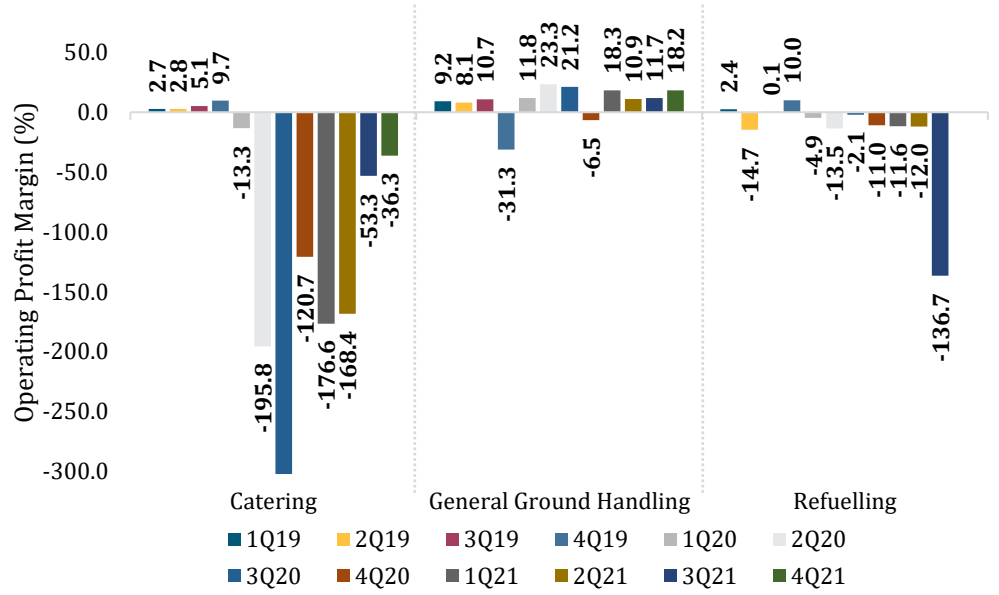

*Source: MAVCOM, GHL Holders*
*Note: Data only available up to 4Q21*

## General Ground Handling Recorded An Operating Profit Margin for 4Q21

**The general ground handling sub-segment reported positive margins of 18.2% in 4Q21**. This encouraging trend in the general ground handling sub-segment shows the continuous growth of the cargo segment given the robust trade activities during the pandemic, mainly contributed by the surge in demand from year-end festivities.

In contrast, **the catering sub-segment reported an operating loss margin of 36.3% in 4Q21** (4Q20: -120.7% YoY) (see Figure 30). In a Bursa filing in February 2022, Brahim announced that its cumulative net loss narrowed to RM12.5mn in 2021 (2020: RM103.1mn) due to higher revenue contribution from in-flight catering and related services. Brahim was classified as a Practice Note 17 (PN17) status listed company in 2019 after its shareholders' equity fell below the 25.0% threshold of the company's issued capital. The company was officially delisted from Bursa on 3 June 2022. However, Brahim will continue to exist as an unlisted entity and proceed with its corporate restructuring. Brahim will also maintain its core business of providing in-flight meals to its 35 airline customers, which includes MAB.[18]

**Figure 30: Operating Profit Margin for Ground Handling Sub-Segments, 2019 – 2021**




*Source: MAVCOM, GHL Holders*
*Note: Data only available up to 4Q21*

[18] The Edge Markets, https://www.theedgemarkets.com/article/airline-caterer-brahims-slumps-43-record-low-15-sen (11 April 2022).

# SECTION 4: AIRFARE TRENDS SINCE THE COVID-19 PANDEMIC

## Background

The COVID-19 pandemic significantly affected the global aviation industry due to the travel restrictions imposed by national governments. With soft and uncertain demand for air travel, the airlines drastically reduced their seat capacity, which caused airfares to vary significantly over the past two years.

Box 1 highlights the key common factors that traditionally influence airfares. These factors also played key roles in determining airfares during the pandemic period.

### Box 1: Key Common Factors Determining Airfares

#### Dynamic Pricing

Airlines utilise a pricing strategy known as dynamic pricing, where the price of a good or service changes in response to the market conditions and demand.[19] Over time, increased data collection has allowed **airline pricing to become more granular, adapting to the supply and demand in real-time**.[20] Many airlines have their own dynamic pricing strategies to compete with their peers. Key pricing variables include **competition, passengers' willingness to pay, distance covered, and other external factors**. These allow **airlines to provide interesting offers and discounts to capture their target markets at a specific timeframe.**

#### Deregulation and Liberalisation

The deregulation of airfares generally has positive effects of reducing airfares and increasing competition. **Indeed, this has been the case for Malaysia, where the average domestic airfares are on a declining trend since 2011.** However, there are countries, such as Indonesia and Thailand, which implement price regulation by imposing price ceilings for their domestic air travel markets. Studies have shown that Indonesia's strict airfare regulation has the unintended negative consequence of higher airfares in general. The imposition of floor and ceiling prices may also discourage competition between airlines.[21]

#### Route Distance

The distance between origin and destination plays a role in determining airfares. It is usually directly related to the pricing system of airfares. However, distance **is not always the main deciding factor, with airlines utilising common marketing incentives to attract customers.** For instance, airlines

[19] For a detailed explanation on dynamic pricing, please refer to MAVCOM's Technical Paper on Airfares for Domestic Flights During Peak Seasons (August 2018).
[20] IATA, https://www.iata.org/contentassets/0688c780d9ad4a4fadb461b479d64e0d/dynamic-offers-fact-sheet.pdf (May 2021).
[21] MAVCOM's Technical Paper on Airfares for Domestic Flights During Peak Seasons (August 2018).

may offer airfares at discounted prices to attract customers and create greater awareness for newly introduced routes to gain market share. However, there are instances where airfares for flights from the Peninsular to East Malaysia during festive periods have increased to between RM1,900 and RM3,800 for an economy class. In comparison, a one-way economy airfare for the KUL-LHR route costs an average of RM2,300 even though the flight distance for the KUL-LHR route is 10 times farther than flights between the Peninsular and East Malaysia.

### Availability of Travel Alternatives

Airfares for a certain route also depend on the availability of travel alternatives, i.e. by car, train, and bus. **Airfares on routes that have travel alternatives are generally more competitive than routes only accessible via air travel.** In Malaysia, flights between the Peninsular and East Malaysia are constantly in high demand, especially during peak travel periods, such as public holidays and festive seasons. Due to the lack of travel alternatives, airfares for routes between these two regions increase drastically during peak travel periods. For airfares to remain close to normal prices, airlines need to deploy a higher number of flights to match the high demand.

### Type of Service

**Low cost carriers (LCC) have enabled significant airfare discounts for travellers by adopting a different business model.** The no-frills concept introduced by the LCCs is catered to the price-sensitive travellers, making air travel more accessible to wider consumer market. Following suit, the full service carriers (FSC) have also launched similar fare options such as non-cancellation fares, check-in luggage charges etc. to lower their airfares.

### Seasonal Effect

Historical air travel period data is often utilised as a base to determine future airfares. **For instance, seasonal holiday periods are priced higher than off-peak periods due to higher demand**. Higher airfares for peak seasons are mainly caused by high passenger demand.

### External Factors

Supply chains in the aviation industry are closely integrated into the global value chain. As a result, the operating costs of airlines are highly sensitive to geopolitical and economic developments around the world. In 2008, the surging demand from developing economies, stagnant production, financial speculation, and tension in the Middle East had increased the oil and gas prices. Airlines were challenged by a 62.0% YoY jump in jet fuel prices. This had caused airlines to increase fares through the imposition of fuel surcharges. Similarly, concerns about the oil supply disruptions emerged in mid-February 2022 due to the Russia-Ukraine conflict. This had caused a surge in the Brent crude oil prices resulting in several airlines incorporating fuel surcharges into their airfares.

## Observations of Airfare Trends During the Pandemic

### Introduction

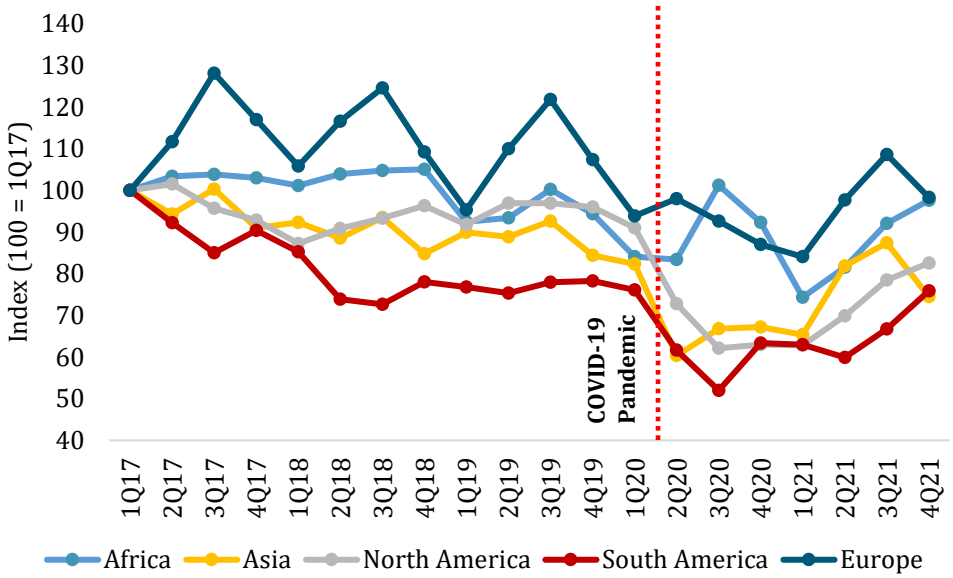
This section discusses the observations of airfare trends at the global, regional, and country levels throughout the pandemic. The average economy and business class airfares by regions are indexed to the pre-pandemic levels to provide an overview of the recent global airfare trends. International and domestic airfare trends in ASEAN countries are then analysed in-depth, with Australia and China—two major aviation markets in the APAC region—included as regional benchmarks. International and domestic airfare trends in Malaysia are discussed with reference to recent developments, namely the KUL-SIN VTL flights, inter-state travel restrictions at the height of the pandemic and seat capacity limitations on flights to Sarawak. The outlook on airfares in the endemic phase will be discussed in the final sub-section.

### Airfares For All Classes Fell During the Pandemic for All Regions

According to the IATA, global airfares declined by 21.9% YoY from 2019 to 2020.[22] The economy class average airfares fell for most regions around the world in 2Q20 when many countries imposed travel restrictions. Asia experienced the largest drop in airfares of 55.1% QoQ (see Figure 31). Average fares continued to fall in 3Q20 for most regions before returning close to 2019 levels in 4Q21. The economy class average airfare for a one-way trip within Asia was RM386 in 2021, 13.1% lower than the average fare in 2019 (2019: RM445).

[22] IATA Economic Performance Report, https://www.iata.org/en/iata-repository/publications/economic-reports/airline-industry-economic-performance---october-2021---report/ (October 2021).

**Figure 31: Index of Regional Economy Class Average Fare, 2017 – 2021**

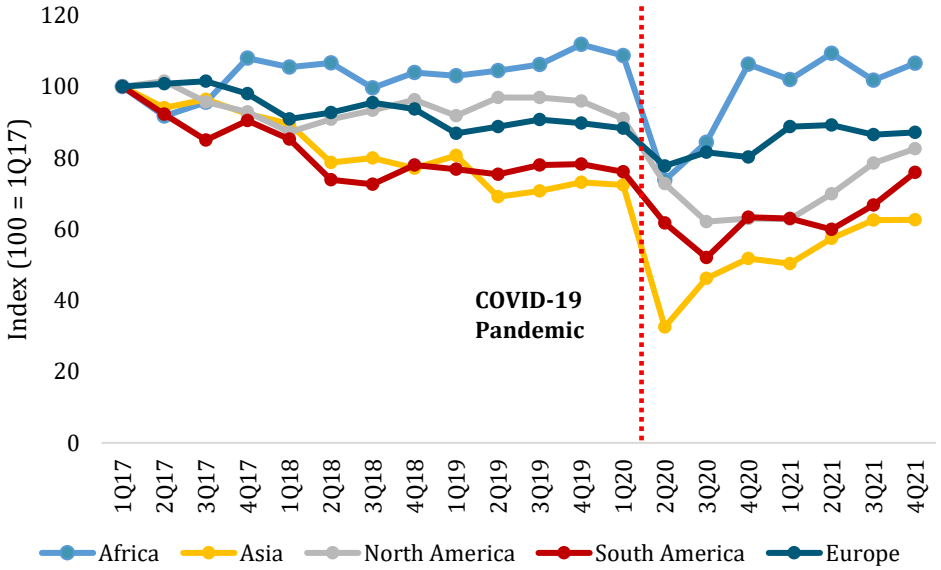



*Source: MAVCOM Analysis, AirportIS*

North America experienced the largest reduction in average airfares across all regions. For example, the economy class average airfares for a one-way trip within North America was RM537 in 2021, 23.0% lower than the average fares in 2019 (2019: RM698). North American carriers have been reducing their airfares in an attempt to increase their load factors and stimulate demand from their large domestic market, particularly in the US. While North American carriers were allowed to operate with stricter SOPs, the fear of contracting COVID-19 deterred travellers from flying during the pandemic.

Similarly, the business class average airfares decreased in 2Q20 (See Figure 32). For example, the business class average airfares for a one-way trip within Asia was RM924 in 2021, 20.7% lower than the average fares in 2019 (2019: RM1,166). The decline in business travelling during the pandemic—aggravated further by the high seat cancellations by airlines—forced airlines to reduce their business class airfares to increase their load factors.

**Figure 32: Index of Regional Business Class Average Fare, 2017 –2021**




*Source: AirportIS*

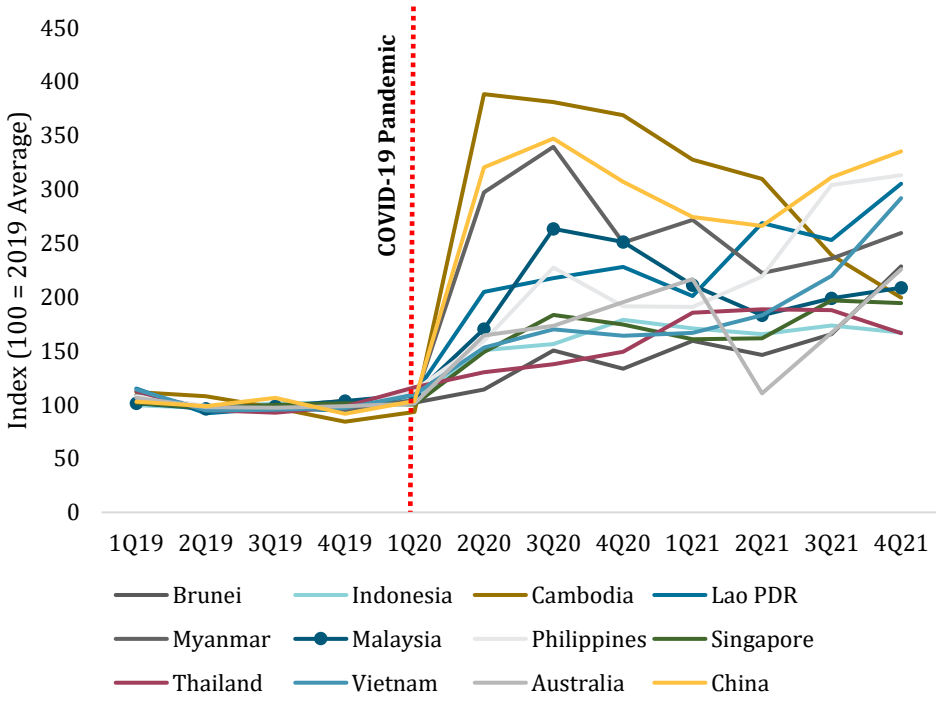
## Observations of International Airfares

### Economy Class Average International Airfares are Above 1.5 Times of 2019 Levels

The economy class average international airfares have increased drastically since the start of the COVID-19 pandemic. Since the onset of the pandemic in March 2020, the average international airfares have remained above the 2019-level for all ASEAN countries, Australia, and China (see Figure 33).

In 2Q20, the economy class average international airfares increased by as high as 3.9 times the 2019 average for Cambodia, with the smallest increase recorded by Brunei at 1.1 times the 2019 average. In 4Q21, all observed countries recorded average airfares above 1.5 times the 2019 average, with airfares in China, Lao PDR, and the Philippines more than three times higher than the 2019 average. Australia, Brunei, Cambodia, Malaysia, Myanmar, and Vietnam recorded airfares above two times the 2019 average.

**Figure 33: Index of Average International Airfares, 2019 –2021**

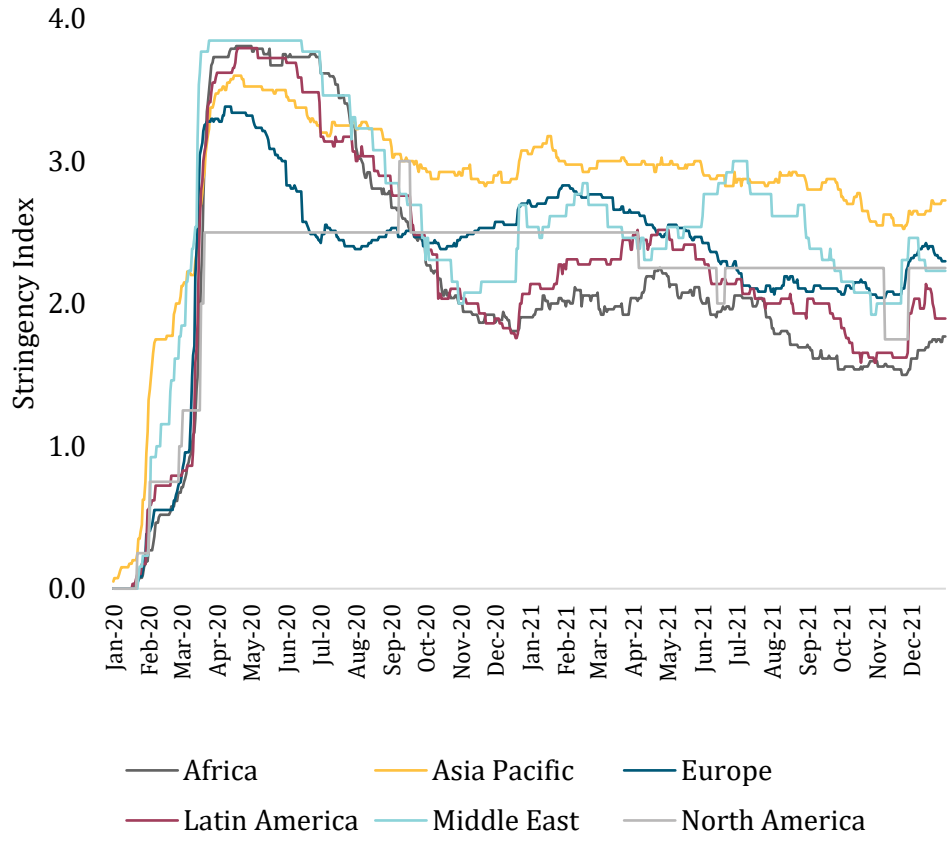



*Source: AirportIS*

## APAC Countries Maintained Strict Border Controls in 2021, Slowing Down Resumption of International Travel

Several regions around the world, such as Europe and North America, relaxed their travel restrictions in 2021 to restart the tourism industry. However, the APAC countries on average have taken more conservative approach than any other region by maintaining strict border controls, such as quarantine requirements or travel bans from high-risk countries (see Figure 34). Despite the rollout of the vaccination programmes by national governments, the outbreak of the Delta and Omicron variants delayed the reopening of borders.

**Figure 34: COVID-19 Stringency Index - International Travel Controls by Region, 2020 – 2021**




*Source: Oxford University's Our World in Data*
*Note:*
*0 = No international travel control measures;*
*1 = Passenger screening;*
*2 = Quarantine arrivals from high-risk regions;*
*3 = Ban on high-risk regions;*
*4 = Total border closure*

As a result, the regional airlines in APAC experienced slow recovery. With weak international traffic, the airlines from APAC reported the largest decline in market shares in the industry from 35% in 2019 to 28% in 2021.[23] This put pressure on airlines' operational costs, causing the average international airfares in 2021 to be higher in most observed countries. In ASEAN, only Cambodia, Indonesia, and Malaysia have seen lower average international airfares in 4Q21 as compared to 4Q20. Vietnam, Brunei, and the Philippines saw the highest increase in average international airfares from 4Q20 to 4Q21, increasing by 77.9%, 71.2%, and 63.6% respectively (see Table 15).

**Table 15: Change in Average International Airfares, 2021**

| Country | QoQ Change (%) | | | | YoY Change (%) |
|---|---|---|---|---|---|
| | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 4Q21 |
| Vietnam | 1.6 | 9.8 | 19.9 | 33.0 | 77.9 |
| Brunei | 19.4 | **-8.2** | 13.1 | 38.0 | 71.2 |
| Philippines | **-0.3** | 14.8 | 38.8 | 3.0 | 63.6 |
| Lao PDR | **-11.8** | 33.7 | **-5.8** | 20.6 | 33.9 |
| Australia | 10.9 | **-48.9** | 50.8 | 35.3 | 15.5 |
| Thailand | 24.2 | 1.8 | **-0.4** | **-11.4** | 11.6 |
| Singapore | **-7.9** | 0.4 | 21.9 | **-1.3** | 11.3 |
| China | **-10.6** | **-3.0** | 16.9 | 7.7 | 9.2 |
| Myanmar | 8.4 | **-18.2** | 6.0 | 10.1 | 3.5 |
| Indonesia | **-4.4** | **-3.2** | 4.9 | **-3.8** | **-6.6** |
| Malaysia | **-16.0** | **-13.2** | 8.6 | 4.9 | **-16.9** |
| Cambodia | **-11.2** | **-5.4** | **-22.9** | **-16.5** | **-45.9** |

*Source: AirportIS*
*Note: Figures in bold indicate a negative change*

[23] IATA Economics, https://www.iata.org/en/iata-repository/publications/economic-reports/the-distribution-of-air-travel-across-regions-changed-in-2021/ (January 2022).

### Gradual Increase in Economy Class Seats have Minimal Impact on Average International Airfares as Seat Capacity is Still Below 25% of its 2019 Levels

Except for Brunei and China, all other observed countries saw increase in their international seat capacities in 4Q21. However, current additional seat capacities affected airfares minimally as they were still well below 2019 levels. International seat capacities for countries such as Brunei, Cambodia, Lao PDR, Myanmar and China are all below 10% of their seat capacities in 2019, with Lao PDR the lowest at 2.9%. International air travel recovered the fastest for the Philippines and Singapore but were still only at 24.0% and 22.3% of their 2019 seat capacity, respectively (see Table 16).

**Table 16: Index of Seat Capacity on International Flights during 4Q21, 100 = 2019 Average**

| Country | 4Q21 |
|---|---|
| Philippines | 24.0 |
| Singapore | 22.3 |
| Australia | 15.8 |
| Vietnam | 13.6 |
| Thailand | 10.5 |
| Malaysia | 10.1 |
| Indonesia | 9.8 |
| Brunei | 9.3 |
| China | 5.8 |
| Cambodia | 5.6 |
| Myanmar | 5.6 |
| Lao PDR | 2.9 |

*Source: MAVCOM, AirportIS*

Seat capacity on international flights is expected to recover at a faster rate in 2022, with the short- and medium-haul passengers among the first expected to return. Malaysia reopened its international borders to tourists on 1 April 2022, at a similar time as other ASEAN countries such as Singapore, Indonesia, Thailand, Vietnam, and Myanmar. Airlines are making plans to increase their flight frequencies on international routes to meet the pent-up demand from the pandemic. This development is expected to put downward pressure on airfares, as airlines aim to recapture market shares for international travellers again.

### Airfares for VTL Flights were Significantly Higher than Normal Flights for KUL-SIN

Malaysia and Singapore established a VTL between KUL and SIN on 29 November 2021 to enable quarantine-free travel.[24] This has caused the average airfares on the KUL-SIN route to increase from December 2021 onwards to above RM300 (see Table 17).

[24] The Star, https://www.thestar.com.my/news/nation/2021/11/19/air-and-land-vtl-to-open-on-nov-29 (November 2021).

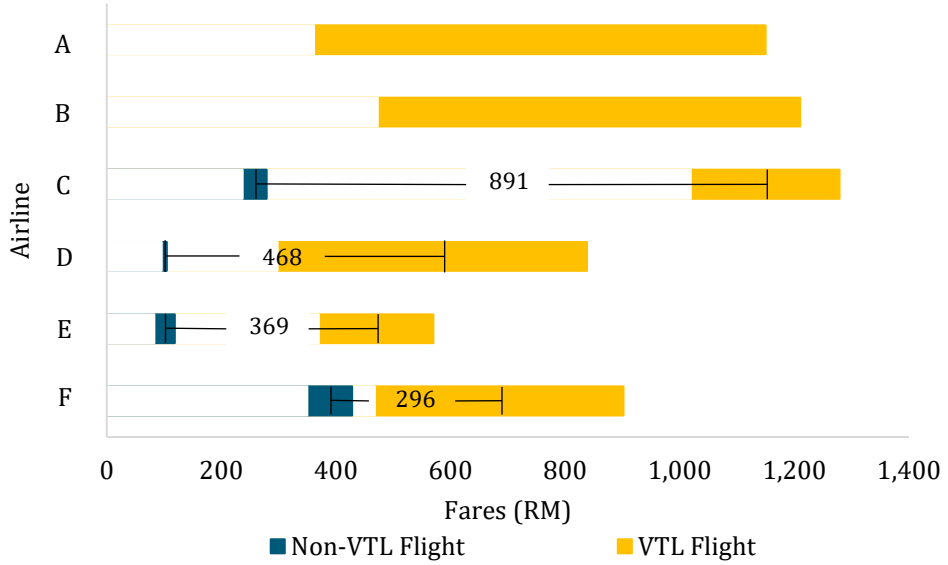
**Table 17: Average Fares for the KUL-SIN route, 2019 – 2022**

| Month/ Year | Average Fares (RM) |
|---|---|
| 2019 | 266 |
| 2020 | 250 |
| 2021 | 280 |
| Dec 2021 | 339 |
| Jan 2022 | 374 |

*Source: AirportIS*

In March 2022, airfares for the VTL flights were significantly higher than normal flights, which required passengers to quarantine upon arrival. The average difference between the airfares for normal and VTL flights offered by the same airlines ranged from RM296 to RM891 (See Figure 35). Airlines are able to demand higher airfares on VTL flights as only a limited number of seats are available daily. The range in airfares for VTL flights is also significantly wider than normal flights. Consumers may be willing to pay the price difference for the convenience of quarantine-free travel, which will also offset the cost incurred from the additional travel days needed for quarantine when travelling via normal flights.

**Figure 35: Average Difference in Airfares between Normal Flights and VTL Flights by Airline, March 2022**



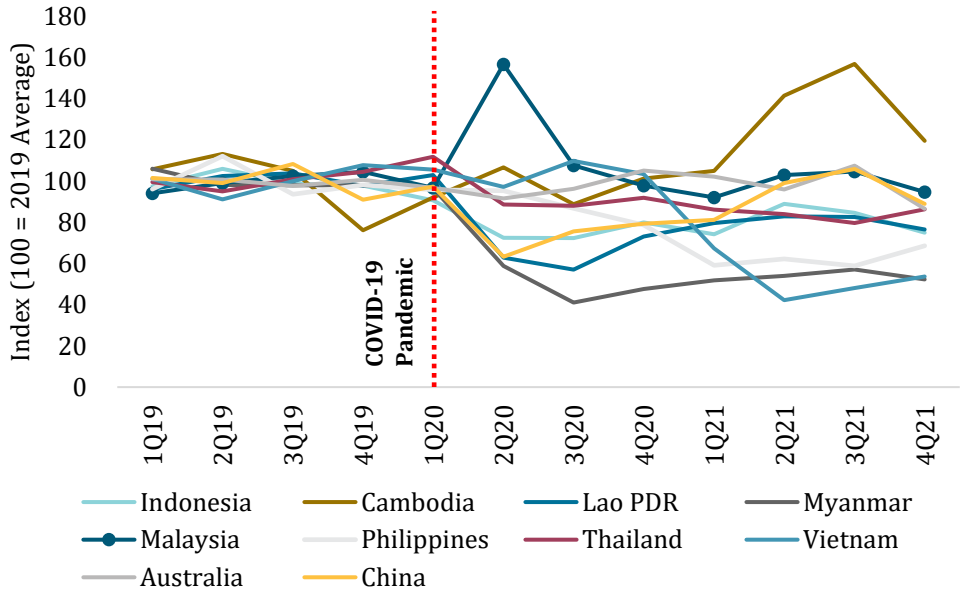

*Source: MAVCOM*

## Observations of Domestic Airfares

### Domestic Airfares Across Most Observed Countries were Below Pre-Pandemic Level

Since the onset of the COVID-19 pandemic, the average domestic airfares for the economy class in ASEAN, Australia, and China have mostly been below the pre-pandemic level (see Figure 36). **In 4Q21, the domestic airfares in most observed countries, with the exception of Cambodia, were below or close to the pre-pandemic levels in 2019**.

**Figure 36: Index of Domestic Economy Class Average Fare, 2019 – 2021**




*Source: MAVCOM, AirportIS*

Certain ASEAN countries, such as Vietnam and Myanmar, experienced significant reductions in their domestic airfares. In 4Q21, the domestic airfares in these countries were only 53.7% and 52.3% of their respective pre-pandemic levels. Vietnam had a 48.1% YoY decrease in average domestic fares in 4Q21 —the largest drop in domestic airfares across all observed countries (see table 18).

**Table 18: Change in Average Domestic Airfares, 2021**

| Country | QoQ Change (%) | | | | YoY Change (%) |
|---|---|---|---|---|---|
| | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 4Q21 |
| Cambodia | 3.6 | 34.8 | 10.9 | **-23.8** | 18.0 |
| China | 2.3 | 21.9 | 6.9 | **-16.0** | 12.0 |
| Myanmar | 8.8 | 4.3 | 5.7 | **-8.5** | 9.8 |
| Lao PDR | 8.9 | 4.0 | **-0.3** | **-7.3** | 4.6 |
| Malaysia | **-5.8** | 11.7 | 1.7 | **-9.4** | **-3.1** |
| Indonesia | **-7.2** | 20.0 | **-5.0** | **-11.3** | **-6.1** |
| Thailand | **-6.2** | **-2.6** | **-5.1** | 8.3 | **-6.1** |
| Philippines | **-24.8** | 5.2 | **-5.4** | 16.6 | **-12.7** |
| Australia | **-2.7** | **-6.2** | 12.1 | **-19.5** | **-17.6** |
| Vietnam | **-34.9** | **-37.3** | 14.1 | 11.6 | **-48.1** |

*Source: AirportIS*
*Note: Figures in bold indicate a negative change*

**The decrease in domestic airfares may be a strategy by airlines to stimulate demand for air travel in these countries.**[25] It is noted, however, that Vietnam imposes a cap on its domestic airfares based on the length of the routes.

The low passenger demand in a high seat capacity environment was key to the lower domestic fares. In contrast, the domestic airfares in Cambodia increased up to 1.6 times the 2019 average domestic airfare in 3Q21 due to the low flight frequencies, as well as a reduction in demand for air travel.

Compared to the other observed countries, the 2021 average domestic airfares in China, Malaysia, and Australia were quite close to their respective pre-pandemic levels. In the case of Australia, the government supported 800,000 domestic flights between April and July 2021 by subsidising 50% of the cost of flying.[26]

### Domestic Seat Capacity Across Most Countries Still Far Below Average 2019 Levels

In 4Q21, the domestic flights in all observed countries, with the exception of China, were still operating well below their pre-pandemic levels (see Table 19). Cambodia's seat capacity was the most affected, with the capacity in 4Q21 only at 1.4% of the 2019 average. In 4Q21, the seat capacity of domestic flights in other ASEAN countries ranged from 29.9% to 58.4% of their respective pre-pandemic seat capacities. In contrast, China's seat capacity throughout 2021 was very close to or above its pre-pandemic level.

**Table 19: Index of Seat Capacity on Domestic Flights during 4Q21, 100 = 2019 Average**

| Country | 4Q21 |
|---|---|
| China | 98.7 |
| Indonesia | 58.4 |
| Malaysia | 50.6 |
| Vietnam | 49.6 |
| Australia | 49.5 |
| Thailand | 49.2 |
| Philippines | 40.8 |
| Myanmar | 31.2 |
| Lao PDR | 29.9 |
| Cambodia | 1.4 |

*Source: MAVCOM, AirportIS*

[25] Vietnam News, https://vietnamnews.vn/economy/984104/competition-in-domestic-air-fares-causes-concerns.html (2 July 2021).
[26] Reuters, https://www.reuters.com/world/asia-pacific/ticket-recovery-australia-offer-subsidised-flights-support-tourism-2021-03-10/ (10 March 2021).

### Airfares During the Pandemic Period

The domestic and international airfares showed divergence in trend since the start of the pandemic. The average domestic airfares for the economy class in ASEAN, Australia, and China were mostly below the pre-pandemic level. In contrast, the economy class average international airfares for these countries have increased drastically and have remained above 2019 levels.

Although international travel is gradually recovering, the increase in seat capacity has minimal impact to reduce average international airfares. The total international seat capacities for many countries are still below 25% of its 2019 levels. International airfares remain high for most countries all over the globe. On the other hand, the seat capacities of domestic flights in most observed countries ranged from 29.9% up to 58.4% of their respective pre-pandemic seat capacities. The increase in the domestic capacity and airlines' marketing strategy to stimulate demand for air travel had reduced the domestic airfares.

Malaysia's average domestic airfares—apart from peak periods and festive seasons—decreased from 3Q20 onwards, and stabilised below or close to pre-pandemic levels. Airfares were generally lower in 4Q21 than the pre-pandemic levels as domestic travel resumed, with most airlines setting low airfares to stimulate demand for air travel.

## Airfares in the Endemic Phase may be Affected by Several Emerging Developments

As the world deals with post-pandemic realities, 2022 is looking brighter for the global airline industry. This is mainly due to the increasing momentum towards the reopening of borders, an increase in VTL arrangements, and the relaxation of travel restrictions, as the COVID-19 pandemic transitions into the endemic phase.

According to the IATA's 2022 survey on travel restrictions for the world's top 50 air travel markets, 38 markets are open to vaccinated travellers with no quarantine requirements.[27] As vaccination rates improve, more governments are managing COVID-19 via surveillance, a norm for coping with endemic viruses in the past. Attractive airfares are important as the post-pandemic air travel market will most likely be dominated by leisure travellers. However, several challenges could push up airfares, which would reduce travel demand, and thereby delay the recovery of the industry.

### Constantly-evolving travel restriction policies

While other regions are reopening their borders, international travel in Asia is still impeded by travel restrictions such as the zero-COVID policy in China[28], an important connecting hub that contributes significantly to the region's passenger traffic. Despite many countries appearing to have passed the pandemic's acute phase, a new variant could lead countries to reimpose travel restrictions. The constantly-evolving travel restriction policies deter passengers' confidence to travel. They also limit the ability of airlines to offer attractive fares as airlines require reasonable lead time and certain degree of predictability to manage capacity strategically.

### The return of the aviation workforce may not be immediate

The aviation industry is currently facing a manpower crunch. During the height of the pandemic, industry players had reduced their headcounts to manage their operational costs. As travel resumes, demand may outstrip supply in the short-term as the aviation industry experiences labour shortages. While the aviation players are actively recruiting, they are unable to increase manpower immediately to meet a short-term spike in demand. The hiring and retraining of flight crew, more specifically pilots, takes approximately between 3 and 6 months before they are able to resume flying. Meanwhile, the lack of manpower for ground handling and security clearance causes long waiting times and congestion at airports. In certain cases, authorities have to intervene by limiting flight frequency.[29]

As industry players seek to recover post-pandemic, they may offer revised employment packages. This can make the industry less attractive to job seekers, slowing the return of capacity. Furthermore, those retrenched during the

[27] IATA, https://www.iata.org/en/pressroom/2022-releases/2022-03-17-01/ (17 March 2022).
[28] IATA, https://www.iata.org/en/iata-repository/publications/economic-reports/asia-pacific-lags-behind-international-connectivity-recovery/ (27 May 2022).
[29] CAPA, https://centreforaviation.com/news/tunis-carthage-airport-to-limit-flights-to-relieve-congestion-1140365 (3 June 2022).

pandemic may have moved on to work in other sectors while some may have opted for early retirement.

### Lack of aircraft in service

The pandemic has forced airlines to ground significant part of their existing fleet. This has caused airlines to restructure their fleet orderbooks with aircraft manufacturers. According to CAPA, the number of aircraft in service globally is still below the pre-pandemic level. For instance, only 46.1% of AirAsia's existing fleet is in service (pre-pandemic: 88.0%).[30] Aircraft maintenance facilities are experiencing long queues as airlines reactivate their grounded fleet that were not in operation for a period of time. This process requires about two weeks to one month, and is key to ensure the reactivated aircraft are fit and safe to resume flying.

### The Russia-Ukraine conflict led to rising jet fuel prices and extended flight journeys

The recent rise in jet fuel prices caused by the conflict has prompted airlines from around the world including Malaysia, Thailand, the Philippines, South Korea, and Japan to impose fuel surcharges. During the pandemic, many airlines reviewed their hedging policies in response to decreasing oil prices, leaving them currently vulnerable.[31] Some airlines cut their capacity on less profitable routes to mitigate the impact of high jet fuel prices. Most flights on the Europe-Asia and Asia-North America routes had to be rerouted or cancelled. This resulted in extended flight journeys, putting upward pressure on operational costs and thus airfares. However, airlines from the ASEAN countries including Malaysia are less affected as they have a wider scope of routes. Moreover, MAB has already avoided the warzone airspace following the MH17 incident in 2014.

### Outlook of airfares in the endemic phase

In the endemic phase, demand may continue to outstrip supply, driving airfares higher in the short-term. Consumers seem to be less price-sensitive after long lockdowns as they seek to 'revenge travel'. Pandemic-induced pent-up demand has also caused high airfares in many countries such as Singapore[32], India[33], and the US.[34]

Airlines that have been operating in a relaxed travel restriction environment in the early stages, such as the US, are still operating below their pre-pandemic levels. As Malaysia began to fully relax travel restrictions in April 2022, capacity is not expected to fully return in the short term. With the lack of capacity, fares in the peak travel periods may be higher compared to the same period pre-

[30] Planespotters, https://www.planespotters.net/airline/AirAsia (As at 10 June 2022).
[31] Bloomberg, https://www.bloomberg.com/news/articles/2021-05-07/big-airlines-pull-back-from-oil-hedging-after-losing-billions (7 May 2021).
[32] Straits Times, https://www.straitstimes.com/singapore/prices-of-flights-go-up-as-spore-fully-opens-border-pent-up-travel-demand-spurs-bookings (14 May 2022).
[33] The Economic Times, https://economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/airfares-rise-30-100-against-pre-pandemic-levels-amid-festive-season-thomas-cook/articleshow/87723078.cms?from=mdr (15 November 2021).
[34] New York Times, https://www.nytimes.com/2022/03/26/travel/rising-airfares-budget-travel.html (26 March 2022).

pandemic, driven by strong demand which has been muted for two years. The trend of high airfares during festivities is a common phenomenon globally, such as during the summer holiday season[35] and the upcoming 2022 FIFA World Cup in Qatar[36]. The Qatar Civil Aviation Authority is expecting up to 200,000 passengers daily during the tournament.[37]

### MAVCOM's role in safeguarding consumer welfare

In line with MAVCOM's Long-term Recommendations for the Civil Aviation Industry in Malaysia 2021 – 2030, MAVCOM adopts a 'soft-touch' regulatory approach to maintain the commercial and competitive nature of the domestic scheduled services market. MAVCOM implements the following measures to safeguard consumer welfare:

- Compulsory filing of airfares for selected routes during the peak seasons for monitoring purposes
- Encouraging more airlines to operate on monopoly routes or routes with high demand or no alternative modes of transport
- Continuous monitoring of domestic airfares for peak seasons

MAVCOM's continuous airfare monitoring exercise highlights key findings to the MOT which enables the high airfares during festive seasons to be addressed. For instance, during the recent Hari Raya Aidilfitri travel period between 27 April and 8 May 2022, most economy one-way airfares for flights from Peninsular Malaysia to Sabah and Sarawak reduced from between RM700 and RM1,200 to between RM200 and RM500 during the same travel period. This was a result of a joint consultative effort between MAVCOM[38], MOT, and the airlines to increase flight frequencies and make more seats available to meet the high demand.

Moving forward, MAVCOM will continue to monitor airfares, particularly during the peak periods to ensure they remain affordable. MAVCOM, MOT, and airlines have also encouraged consumers to plan ahead and book their flights early to avoid being burdened by exorbitant prices as airfares are pre-determined dynamically by airlines to balance the demand and supply forces.

[35] New York Times, https://www.nytimes.com/2022/03/26/travel/rising-airfares-budget-travel.html (28 March 2022).
[36] Khaleej Times, https://www.khaleejtimes.com/aviation/uae-qatar-flights-airfares-rocket-to-over-dh10000-for-one-way-ticket-ahead-of-fifa-world-cup (3 February 2022).
[37] ICAO, https://www.icao.int/MID/Documents/2019/FWC2022%20TF2/FWC2022%20TF2%20PPT2.pdf (2019).
[38] MAVCOM approved 1,141 flight frequencies for the routes between Peninsular Malaysia to Kota Kinabalu, Tawau, Sandakan, Sibu, Kuching, Bintulu, Miri, and Labuan during the 2022 Hari Raya Aidilfitri travel period.

# APPENDIX A: DATA TABLES

**Table A1: Malaysia's GDP Growth, 2019 – 2022**

| Year | YoY Growth (%) |
|---|---|
| 1Q19 | 4.7 |
| 2Q19 | 5.0 |
| 3Q19 | 4.5 |
| 4Q19 | 3.7 |
| 1Q20 | 0.7 |
| 2Q20 | -17.1 |
| 3Q20 | -2.7 |
| 4Q20 | -3.4 |
| 1Q21 | -0.5 |
| 2Q21 | 16.1 |
| 3Q21 | -4.5 |
| 4Q21 | 3.6 |
| 1Q22 | 5.0 |

*Source: DOS*

**Table A2: Malaysia's External Trade, 2019 – 2022**

| Quarter | Total Export (RM bn) | Total Import (RM bn) | Export YoY Growth (%) | Import YoY Growth (%) |
|---|---|---|---|---|
| 1Q19 | 239.7 | 199.2 | 0.9 | -2.5 |
| 2Q19 | 247.7 | 215.1 | 1.1 | -1.2 |
| 3Q19 | 249.5 | 213.7 | -0.6 | -5.3 |
| 4Q19 | 258.2 | 221.4 | -2.4 | -3.7 |
| 1Q20 | 238.7 | 201.7 | -0.4 | 1.3 |
| 2Q20 | 210.3 | 182.7 | -15.1 | -15.1 |
| 3Q20 | 260.6 | 200.3 | 4.4 | -6.3 |
| 4Q20 | 271.4 | 211.6 | 5.1 | -4.4 |
| 1Q21 | 282.2 | 223.5 | 18.2 | 10.8 |
| 2Q21 | 303.4 | 247.0 | 44.3 | 35.2 |
| 3Q21 | 303.7 | 242.5 | 16.5 | 21.1 |
| 4Q21 | 350.5 | 274.3 | 29.1 | 29.6 |
| 1Q22 | 345.0 | 279.9 | 22.3 | 25.2 |

*Source: DOS*

**Table A3: Oil, Jet Fuel, and Exchange Rate Trends, 2019 – 2022**

| Quarter | Crude Oil (USD/bbl) | Jet Fuel (USD/bbl) | RM/USD |
|---|---|---|---|
| 1Q19 | 64 | 75 | 4.09 |
| 2Q19 | 68 | 78 | 4.15 |
| 3Q19 | 62 | 75 | 4.16 |
| 4Q19 | 62 | 74 | 4.16 |
| 1Q20 | 51 | 62 | 4.18 |
| 2Q20 | 33 | 32 | 4.32 |
| 3Q20 | 43 | 43 | 4.20 |
| 4Q20 | 44 | 49 | 4.10 |
| 1Q21 | 61 | 66 | 4.06 |
| 2Q21 | 69 | 74 | 4.15 |
| 3Q21 | 73 | 80 | 4.20 |
| 4Q21 | 80 | 92 | 4.18 |
| 1Q22 | 95 | 121 | 4.19 |

*Source: Bloomberg*

**Table A4: Global and Malaysia's GDP Growth, 2015 – 2022F**

| Year | Global YoY Growth (%) | Malaysia YoY Growth (%) |
|---|---|---|
| 2015 | 3.5 | 5.1 |
| 2016 | 3.3 | 4.2 |
| 2017 | 3.8 | 5.9 |
| 2018 | 3.5 | 4.7 |
| 2019 | 2.8 | 4.3 |
| 2020 | -3.2 | -5.6 |
| 2021 | 6.0 | 3.1 |
| 2022F | 6.1 | 5.3-6.3 |

*Source: Bloomberg, BNM, IMF, MOF*

**Table A5: Malaysia's Tourist Arrivals, 2019 – 2021**

| Quarter | Tourist Arrivals (by air) (mn) | Total Tourist Arrivals (excluding air) (mn) | Total Tourist Arrivals (mn) | Total Tourist Arrivals YoY Growth (%) |
|---|---|---|---|---|
| 1Q19 | 2.5 | 4.2 | 6.7 | 2.7 |
| 2Q19 | 2.3 | 4.3 | 6.7 | 7.2 |
| 3Q19 | 2.7 | 4.1 | 6.8 | 1.6 |
| 4Q19 | 2.1 | 3.8 | 6.0 | -7.1 |
| 1Q20 | 1.6 | 2.6 | 4.2 | -36.8 |
| 2Q20 | 0.0 | 0.0 | 0.02 | -99.7 |
| 3Q20 | 0.0 | 0.0 | 0.05 | -99.3 |
| 4Q20 | 0.0 | 0.0 | 0.03 | -99.4 |
| 1Q21 | 0.0 | 0.0 | 0.03 | -99.4 |
| 2Q21 | 0.0 | 0.0 | 0.03 | 29.8 |
| 3Q21 | 0.0 | 0.0 | 0.02 | -51.2 |
| 4Q21 | 0.0 | 0.0 | 0.06 | 84.4 |

*Source: Bloomberg, Tourism Malaysia*

**Table A6: Malaysia's Monthly Passenger Traffic, 2020 – 2022**

| Month | Passenger Traffic (mn) | |
|---|---|---|
| | Domestic | International |
| Jan-20 | 4.6 | 4.7 |
| Feb-20 | 3.5 | 3.0 |
| Mac-20 | 2.1 | 1.3 |
| Apr-20 | 0.1 | 0.0 |
| May-20 | 0.2 | 0.0 |
| Jun-20 | 0.4 | 0.1 |
| Jul-20 | 1.3 | 0.1 |
| Aug-20 | 1.5 | 0.1 |
| Sep-20 | 1.7 | 0.1 |
| Oct-20 | 0.6 | 0.1 |
| Nov-20 | 0.2 | 0.1 |
| Dec-20 | 1.0 | 0.1 |
| Jan-21 | 0.7 | 0.1 |
| Feb-21 | 0.2 | 0.1 |
| Mar-21 | 0.5 | 0.1 |
| Apr-21 | 0.5 | 0.1 |
| May-21 | 0.4 | 0.1 |
| Jun-21 | 2.5 | 0.5 |
| Jul-21 | 2.7 | 0.6 |
| Aug-21 | 2.9 | 0.7 |
| Sep-21 | 0.4 | 0.1 |
| Oct-21 | 4.4 | 0.9 |
| Nov-21 | 6.7 | 1.0 |
| Dec-21 | 9.6 | 1.4 |
| Jan-22 | 2.6 | 0.3 |
| Feb-22 | 2.4 | 0.3 |
| Mar-22 | 2.7 | 0.4 |

*Source: MAVCOM, AOL Holders*

**Table A7: Malaysia's Quarterly Passenger Traffic, 2019 – 2022**

| Quarter | Passenger Traffic (mn) | YoY Growth (%) |
|---|---|---|
| 1Q19 | 26.4 | 4.4 |
| 2Q19 | 26.7 | 6.3 |
| 3Q19 | 27.9 | 8.7 |
| 4Q19 | 28.2 | 6.7 |
| 1Q20 | 19.1 | -27.5 |
| 2Q20 | 0.8 | -97.0 |
| 3Q20 | 4.7 | -83.3 |
| 4Q20 | 2.1 | -92.5 |
| 1Q21 | 1.7 | -91.2 |
| 2Q21 | 1.3 | 62.0 |
| 3Q21 | 1.0 | -78.2 |
| 4Q21 | 7.0 | 228.2 |
| 1Q22 | 8.7 | 415.6 |

*Source: MAVCOM, AOL Holders*

**Table A8: Malaysia's Passenger Traffic by Region, 2019 – 2022**

| Quarter | Passenger Traffic (mn) | | |
|---|---|---|---|
| | Domestic | ASEAN | Non-ASEAN International |
| 1Q19 | 13.1 | 6.5 | 6.8 |
| 2Q19 | 13.7 | 6.6 | 6.4 |
| 3Q19 | 14.3 | 6.7 | 6.9 |
| 4Q19 | 14.2 | 6.9 | 7.1 |
| 1Q20 | 10.2 | 4.5 | 4.5 |
| 2Q20 | 0.7 | 0.0 | 0.1 |
| 3Q20 | 4.4 | 0.1 | 0.2 |
| 4Q20 | 1.9 | 0.1 | 0.2 |
| 1Q21 | 1.4 | 0.1 | 0.2 |
| 2Q21 | 1.1 | 0.1 | 0.1 |
| 3Q21 | 0.8 | 0.9 | 0.2 |
| 4Q21 | 6.1 | 0.2 | 0.3 |
| 1Q22 | 7.7 | 0.4 | 0.6 |

*Source: MAVCOM, AOL Holders*

**Table A9: Malaysia's Aircraft Movements, 2019 – 2021**

| Quarter | Aircraft Movement (thousand) | YoY Growth (%) |
|---|---|---|
| 1Q19 | 230.0 | 1.2 |
| 2Q19 | 233.9 | 3.3 |
| 3Q19 | 243.4 | 4.5 |
| 4Q19 | 251.2 | 5.0 |
| 1Q20 | 203.4 | -11.6 |
| 2Q20 | 32.4 | -86.2 |
| 3Q20 | 80.7 | -66.9 |
| 4Q20 | 57.2 | -77.2 |
| 1Q21 | 49.6 | -75.6 |
| 2Q21 | 48.4 | 49.4 |
| 3Q21 | 45.7 | -43.3 |
| 4Q21 | 104.8 | 83.3 |

*Source: MAVCOM, AOL Holders*

**Table A10: Inbound and Outbound FTK in Malaysia, 2019 – 2022**

| Quarter | Inbound (mn) | Outbound (mn) | Within (mn) |
|---|---|---|---|
| 1Q19 | 2,993.2 | 1,916.8 | 18.5 |
| 2Q19 | 3,066.7 | 1,806.1 | 18.9 |
| 3Q19 | 3,247.4 | 1,862.6 | 19.6 |
| 4Q19 | 3,050.5 | 2,203.1 | 18.8 |
| 1Q20 | 2,715.8 | 1,954.9 | 16.8 |
| 2Q20 | 1,427.6 | 1,221.0 | 15.3 |
| 3Q20 | 1,896.0 | 2,063.6 | 10.8 |
| 4Q20 | 2,156.6 | 2,300.3 | 15.3 |
| 1Q21 | 2,400.4 | 2,428.1 | 13.1 |
| 2Q21 | 2,558.7 | 2,347.5 | 10.4 |
| 3Q21 | 2,480.2 | 2,417.6 | 10.1 |
| 4Q21 | 2,897.2 | 3,074.4 | 9.1 |
| 1Q22 | 2,760.3 | 2,355.9 | 13.3 |

*Source: MAVCOM, CargoIS*

**Table A11: Total Passenger Traffic Forecast vs. 2019 by Region (%), 2021 – 2025**

| Total Passenger Traffic Forecast vs. 2019 | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) | 2025 (%) |
|---|---|---|---|---|---|
| North America | 56.0 | 94.0 | 102.0 | 107.0 | 112.0 |
| South America | 51.0 | 88.0 | 97.0 | 103.0 | 108.0 |
| Europe | 40.0 | 86.0 | 96.0 | 105.0 | 111.0 |
| Middle East | 42.0 | 81.0 | 90.0 | 98.0 | 105.0 |
| Africa | 46.0 | 76.0 | 85.0 | 93.0 | 101.0 |
| Asia Pacific | 40.0 | 68.0 | 84.0 | 97.0 | 109.0 |
| Malaysia | 10.0 | 39.4 | 65.5 | 84.1 | 96.5 |

*Source: IATA, MAVCOM*

**Table A12: Malaysia's Passenger Traffic, 2015 – 2022F**

| Year | Passenger Traffic (mn) | YoY Growth (%) |
|---|---|---|
| 2015 | 86.3 | 0.8 |
| 2016 | 91.7 | 6.2 |
| 2017 | 99.8 | 8.8 |
| 2018 | 102.5 | 2.7 |
| 2019 | 109.2 | 6.6 |
| 2020 | 26.7 | -75.6 |
| 2021 | 11.0 | -58.9 |
| 2022F | 32.6 – 42.9 | 200 to 350 |

*Source: MAVCOM, AOL Holders*

**Table A13: Malaysia's Air Cargo Traffic, 2018 – 2022F**

| Year | Total FTK (mn) | YoY Growth (%) |
|---|---|---|
| 2018 | 20,832 | 9.7 |
| 2019 | 20,222 | -2.9 |
| 2020 | 15,797 | -21.9 |
| 2021 | 20,647 | 30.7 |
| 2022F | 21,452 – 22,030 | 3.9 to 6.7 |

*Source: MAVCOM, CargoIS*

**Table A14: Malaysia's Passenger Market Share by Airlines, 2019 – 2022**

| Quarter | AirAsia | AirAsia X | Firefly | MAB | Batik Air | Others |
|---|---|---|---|---|---|---|
| 1Q19 | 41.2 | 7.1 | 1.8 | 17.4 | 8.8 | 23.6 |
| 2Q19 | 42.2 | 7.2 | 2.1 | 17.8 | 7.3 | 23.4 |
| 3Q19 | 40.5 | 6.5 | 2.2 | 18.8 | 7.9 | 24.1 |
| 4Q19 | 40.3 | 6.9 | 2.1 | 19.0 | 8.0 | 23.7 |
| 1Q20 | 41.7 | 6.9 | 1.6 | 18.6 | 8.1 | 23.1 |
| 2Q20 | 19.5 | 1.4 | 14.3 | 29.5 | 16.3 | 19.1 |
| 3Q20 | 63.5 | 0.3 | 5.2 | 12.5 | 7.7 | 11.0 |
| 4Q20 | 63.7 | 0.7 | 5.2 | 8.1 | 6.7 | 15.6 |
| 1Q21 | 54.8 | 0.1 | 4.8 | 10.4 | 8.8 | 21.2 |
| 2Q21 | 33.7 | 0.0 | 6.7 | 15.8 | 15.1 | 28.7 |
| 3Q21 | 19.8 | 0.1 | 6.6 | 22.9 | 13.7 | 36.9 |
| 4Q21 | 47.7 | 0.1 | 4.9 | 28.5 | 6.4 | 12.4 |
| 1Q22 | 57.9 | 0.0 | 3.5 | 26.0 | 4.7 | 7.8 |

*Source: MAVCOM, AirportIS*

**Table A15: Market Concentration Level and Load Factors, 2019 – 2022**

| Quarter | HHI | Load Factor (%) |
|---|---|---|
| 1Q19 | 0.2163 | 81.0 |
| 2Q19 | 0.2255 | 80.1 |
| 3Q19 | 0.2129 | 76.3 |
| 4Q19 | 0.2121 | 78.1 |
| 1Q20 | 0.2228 | 64.1 |
| 2Q20 | 0.1511 | 20.4 |
| 3Q20 | 0.4474 | 38.8 |
| 4Q20 | 0.4120 | 35.8 |
| 1Q21 | 0.3326 | 37.3 |
| 2Q21 | 0.1732 | 33.9 |
| 3Q21 | 0.1233 | 27.5 |
| 4Q21 | 0.3166 | 47.8 |
| 1Q22 | 0.4069 | 48.5 |

*Source: MAVCOM, AirportIS*

**Table A16: Malaysian Carriers' Average Fares and Load Factor, 2019 – 2022**

| Quarter | Load Factor (%) | Average Fare (RM) | |
|---|---|---|---|
| | | Domestic | International |
| 1Q19 | 81.2 | 192 | 470 |
| 2Q19 | 80.3 | 194 | 469 |
| 3Q19 | 76.4 | 215 | 509 |
| 4Q19 | 78.3 | 223 | 484 |
| 1Q20 | 67.1 | 209 | 521 |
| 2Q20 | 22.3 | 325 | 804 |
| 3Q20 | 45.9 | 227 | 791 |
| 4Q20 | 39.3 | 207 | 985 |
| 1Q21 | 42.7 | 193 | 937 |
| 2Q21 | 38.9 | 219 | 913 |
| 3Q21 | 28.9 | 231 | 958 |
| 4Q21 | 52.4 | 199 | 1,053 |
| 1Q22 | 61.0 | 172 | 1,021 |

*Source: MAVCOM, AirportIS*

**Table A17: Market Shares of the Aerodrome Operations Segment by Revenue and Passenger Traffic, 2021**

| Company | Market Share (%) | |
|---|---|---|
| | Revenue | Passenger Traffic |
| MAHB | 92.8 | 96.4 |
| Senai Airport | 6.9 | 3.6 |
| TMDSB | 0.3 | 0.0 |

*Source: MAVCOM, AOL Holders*
*Note: TMDSB's passenger market share was approximately 0.005% in 2020*

**Table A18: Market Shares of Airports in Malaysia in Terms of Passenger Traffic, 2019 – 2021**

| Airport | Market Share (%) | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| KUL | 62.3 | 48.9 | 36.0 |
| Others | 37.7 | 51.1 | 64.0 |

*Source: MAVCOM, AOL Holders*

**Table A19: Breakdown of ATRs Awarded by Region, 2019 – 2022**

| Region | AirAsia | AirAsia X | Firefly | MAB* | Batik Air** | Raya Airways | MASwings | My Jet Xpress | SKS Airways | WCA | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2019** | | | | | | | | | | | |
| Domestic | 23 | - | 3 | 13 | 18 | - | 1 | 2 | - | - | 60 |
| ASEAN | 31 | 3 | 1 | 10 | 10 | 4 | - | 1 | - | - | 60 |
| Rest of ASIA | 1 | 5 | - | 3 | 3 | - | - | - | - | - | 12 |
| China | 5 | 4 | - | 3 | 12 | - | - | - | - | - | 24 |
| India | 2 | - | - | 5 | 1 | - | - | - | - | - | 8 |
| Australasia | - | - | - | 4 | 2 | - | - | - | - | - | 6 |
| Europe | - | - | | - | | - | - | - | - | - | 0 |
| Middle East | - | - | - | 2 | 1 | - | - | - | - | - | 3 |
| **TOTAL** | **62** | **12** | **4** | **40** | **47** | **4** | **1** | **3** | **0** | **0** | **173** |
| **2020** | | | | | | | | | | | |
| Domestic | 10 | - | 5 | 8 | 1 | 6 | - | 5 | - | - | 35 |
| ASEAN | 4 | - | - | 5 | 1 | 1 | - | 2 | - | - | 13 |
| Rest of ASIA | 1 | 1 | - | 3 | 1 | 3 | - | 1 | - | - | 10 |
| China | 1 | 3 | - | 4 | 1 | - | - | 2 | - | - | 11 |
| India | - | 1 | - | 3 | 1 | - | - | - | - | - | 5 |
| Australasia | - | - | - | - | 1 | - | - | - | - | - | 1 |
| Europe | - | 1 | - | 2 | - | - | - | - | - | - | 3 |
| Middle East | - | - | - | - | 1 | - | - | - | - | - | 1 |
| **TOTAL** | **16** | **6** | **5** | **25** | **7** | **10** | **0** | **10** | **0** | **0** | **79** |
| **2021** | | | | | | | | | | | |
| Domestic | 5 | - | 2 | 4 | 3 | 1 | - | 8 | - | 8 | 31 |
| ASEAN | 2 | - | - | 5 | - | - | - | 5 | - | 2 | 14 |
| Rest of ASIA | - | 4 | - | 2 | - | - | - | 2 | - | - | 8 |
| China | 2 | 2 | - | 6 | - | - | - | 11 | - | 2 | 23 |
| India | - | 3 | - | - | - | - | - | 2 | - | - | 5 |
| Australasia | - | - | - | - | - | - | - | 0 | - | - | 0 |
| Europe | - | - | - | - | - | - | - | 0 | - | - | 0 |
| Middle East | - | - | - | - | - | 1 | - | 0 | - | - | 1 |
| **TOTAL** | **9** | **9** | **2** | **17** | **3** | **2** | **0** | **28** | **0** | **12** | **82** |

| Region | AirAsia | AirAsia X | Firefly | MAB* | Batik Air** | Raya Airways | MASwings | My Jet Xpress | SKS Airways | WCA | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1Q22** | | | | | | | | | | | |
| Domestic | 1 | - | - | 1 | - | - | **2** | - | 4 | - | 8 |
| ASEAN | 2 | - | - | - | - | - | - | - | - | - | 2 |
| Rest of ASIA | - | - | - | 1 | - | - | - | 1 | - | - | 2 |
| China | - | - | - | - | - | - | - | 5 | - | - | 5 |
| India | - | - | - | - | - | - | - | - | - | - | 0 |
| Australasia | - | 1 | - | 2 | - | - | - | - | - | - | 1 |
| Europe | - | - | - | - | - | - | - | - | - | - | 2 |
| Middle East | - | - | - | 1 | - | - | - | - | - | - | 1 |
| **TOTAL** | **3** | **1** | **0** | **5** | **0** | **0** | **2** | **6** | **4** | **0** | **21** |

*Source: MAVCOM*
*Note: *Including MAB Kargo*
***Batik Air was previously known as Malindo Air*

**Table A20: Malaysian Carriers' RASK and CASK Trends, 2019 – 2021**

| Quarter | RASK (sen) | CASK (sen) | RASK-CASK Spread (sen) |
|---|---|---|---|
| 1Q19 | 15.9 | 17.3 | -1.4 |
| 2Q19 | 15.8 | 18.5 | -2.7 |
| 3Q19 | 16.0 | 18.2 | -2.3 |
| 4Q19 | 17.3 | 18.8 | -1.5 |
| 1Q20 | 15.6 | 20.1 | -4.5 |
| 2Q20 | 51.1 | 326.7 | -275.6 |
| 3Q20 | 21.3 | 52.4 | -31.1 |
| 4Q20 | 32.0 | 133.0 | -101.0 |
| 1Q21 | 42.2 | 77.3 | -35.1 |
| 2Q21 | 51.8 | 142.3 | -90.5 |
| 3Q21 | 69.1 | 186.5 | 117.4 |
| 4Q21 | 46.9 | 55.3 | -8.5 |

*Source: MAVCOM, ASL Holders*

**Table A21: Malaysian Carriers' Revenue and Operating Profit Margin, 2019 – 2021**

| Quarter | Revenue (RM bn) | Operating Profit Margin (%) |
|---|---|---|
| 1Q19 | 6.4 | 2.9 |
| 2Q19 | 6.4 | -2.2 |
| 3Q19 | 6.2 | -3.7 |
| 4Q19 | 6.6 | 2.1 |
| 1Q20 | 5.0 | -20.5 |
| 2Q20 | 0.7 | -280.7 |
| 3Q20 | 1.5 | -113.7 |
| 4Q20 | 2.4 | -105.7 |
| 1Q21 | 1.0 | -653.0 |
| 2Q21 | 1.0 | -2510.2 |
| 3Q21 | 1.1 | -79.1 |
| 4Q21 | 2.2 | -8.5 |

*Source: MAVCOM, ASL Holders*

**Table A22: ASP Holders' Revenue and Operating Profit Margin, 2019 – 2021**

| Quarter | Revenue (RM mn) | Operating Profit Margin (%) |
|---|---|---|
| 1Q19 | 285.2 | 14.2 |
| 2Q19 | 267.4 | 3.6 |
| 3Q19 | 274.1 | 22.7 |
| 4Q19 | 342.3 | -14.2 |
| 1Q20 | 320.5 | 18.4 |
| 2Q20 | 278.7 | 15.6 |
| 3Q20 | 271.4 | 10.9 |
| 4Q20 | 302.4 | 22.0 |
| 1Q21 | 303.4 | 16.6 |
| 2Q21 | 184.9 | 6.2 |
| 3Q21 | 341.5 | 16.2 |
| 4Q21 | 766.6 | 13.6 |

*Source: MAVCOM, ASP Holders*

**Table A23: AOL Holders' Revenue and Operating Profit Margin, 2019 – 2021**

| Quarter | Revenue (RM bn) | Operating Profit Margin (%) |
|---|---|---|
| 1Q19 | 1.3 | 25.2 |
| 2Q19 | 1.3 | 30.4 |
| 3Q19 | 1.4 | 30.6 |
| 4Q19 | 1.4 | 17.7 |
| 1Q20 | 1.0 | 15.3 |
| 2Q20 | 0.3 | -35.3 |
| 3Q20 | 0.4 | -49.0 |
| 4Q20 | 0.3 | -297.9 |
| 1Q21 | 0.4 | -3.4 |
| 2Q21 | 0.3 | -42.4 |
| 3Q21 | 0.5 | -17.6 |
| 4Q21 | 0.6 | -12.9 |

*Source: MAVCOM, AOL Holders*

**Table A24: Revenue for Ground Handling Sub-Segments, 2019 – 2021**

| Year | Revenue (RM mn) | | |
|---|---|---|---|
| | Catering | General Ground Handling | Refuelling |
| 1Q19 | 85.6 | 233.7 | 9.7 |
| 2Q19 | 88.5 | 233.3 | 7.8 |
| 3Q19 | 96.6 | 238.0 | 9.0 |
| 4Q19 | 97.6 | 251.9 | 11.3 |
| 1Q20 | 71.8 | 557.6 | 11.1 |
| 2Q20 | 12.8 | 616.9 | 5.4 |
| 3Q20 | 3.1 | 584.8 | 6.5 |
| 4Q20 | 16.7 | 689.9 | 6.0 |
| 1Q21 | 10.4 | 691.6 | 6.1 |
| 2Q21 | 9.8 | 762.2 | 3.6 |
| 3Q21 | 11.1 | 857.1 | 0.3 |
| 4Q21 | 19.5 | 1,190.7 | - |

*Source: MAVCOM, GHL Holders*

**Table A25: Operating Profit Margin for Ground Handling Sub-Segments, 2019 – 2021**

| Year | Operating Profit Margin (%) | | |
|---|---|---|---|
| | Catering | General Ground Handling | Refuelling |
| 1Q19 | 2.7 | 9.2 | 2.4 |
| 2Q19 | 2.8 | 8.1 | -14.7 |
| 3Q19 | 5.1 | 10.7 | 0.1 |
| 4Q19 | 9.7 | -31.3 | 10.0 |
| 1Q20 | -13.3 | 11.8 | -4.9 |
| 2Q20 | -195.8 | 23.3 | -13.5 |
| 3Q20 | -1594.9 | 21.2 | -2.1 |
| 4Q20 | -120.7 | -6.5 | -11.0 |
| 1Q21 | -176.6 | 18.4 | -11.6 |
| 2Q21 | -168.4 | 10.9 | -12.0 |
| 3Q21 | -53.3 | 11.7 | -136.7 |
| 4Q21 | -36.3 | 18.2 | - |

*Source: MAVCOM, GHL Holders*

**Table A26: Selected Airlines' Fleet Details**

| Airline | In Service (%) | Parked (%) |
|---|---|---|
| Malaysia Airlines | 85.0 | 15.0 |
| Thai Airways | 83.7 | 16.3 |
| Batik Air | 81.3 | 18.7 |
| Singapore Airlines | 80.4 | 19.6 |
| AirAsia | 46.1 | 53.9 |
| Garuda Indonesia | 43.9 | 56.1 |

*Source: Planespotters*
*Note: As at 10 June 2022*

# APPENDIX B: LIST OF LICENCE AND PERMIT HOLDERS

**Table B1: AOL Holders**

| No. | Company Name |
|---|---|
| 1 | Malaysia Airports (Sepang) Sdn. Bhd. |
| 2 | Malaysia Airports Sdn. Bhd. |
| 3 | Senai Airport Terminal Services Sdn. Bhd. |
| 4 | Tanjung Manis Development Sdn. Bhd. |

*Source: MAVCOM*

**Table B2: ASL Holders**

| No. | Company Name |
|---|---|
| 1 | AirAsia Bhd. |
| 2 | AirAsia X Bhd. |
| 3 | FlyFirefly Sdn. Bhd. |
| 4 | Malaysia Airlines Bhd. |
| 5 | Malindo Airways Sdn. Bhd. |
| 6 | MASwings Sdn. Bhd. |
| 7 | My Jet Xpress Airlines Sdn. Bhd. |
| 8 | M Jets International Sdn. Bhd. |
| 9 | Raya Airways Sdn. Bhd. |
| 10 | SKS Airways Sdn. Bhd. |
| 11 | World Cargo Airline Sdn. Bhd. |

*Source: MAVCOM*

**Table B3: ASP Holders**

| No. | Company Name |
|---|---|
| 1 | Asia Jet Partners Malaysia Sdn. Bhd. |
| 2 | Berjaya Air Sdn. Bhd. |
| 3 | Cempaka Helicopter Corporation Sdn. Bhd. |
| 4 | Helistar Resources Sdn. Bhd. |
| 5 | Hevilift (M) Sdn. Bhd. |
| 6 | Hornbill Skyways Sdn. Bhd. |
| 7 | Jet Premier One (M) Sdn. Bhd. |
| 8 | Layang Layang Aerospace Sdn. Bhd. |
| 9 | Myballoon Adventure Sdn. Bhd. |
| 10 | Prima Air Sdn. Bhd. |
| 11 | Sabah Air Aviation Sdn. Bhd. |
| 12 | Sazma Aviation Sdn. Bhd. |
| 13 | Systematic Aviation Services Sdn. Bhd. |
| 14 | Weststar Aviation Services Sdn. Bhd. |

*Source: MAVCOM*

**Table B4: GHL Holders**

| No. | Company Name |
|---|---|
| 1 | AeroDarat Services Sdn. Bhd. |
| 2 | Aerohandlers Sdn. Bhd. |
| 3 | Asia Digital Engineering Sdn. Bhd. |
| 4 | BCS Contract & Supply Services Sdn. Bhd. |
| 5 | Brahim's SATS Food Services Sdn. Bhd.* |
| 6 | Cloudera Aviation Services Sdn. Bhd. |
| 7 | Conor Engineering & Services Sdn. Bhd. |
| 8 | Dviation Solutions Sdn. Bhd. |
| 9 | Execujet Handling Services Sdn. Bhd. |
| 10 | Ground Team Red Sdn. Bhd. |
| 11 | Hasrat Asia (M) Sdn. Bhd. |
| 12 | Helitech Aviation Services Sdn. Bhd.* |
| 13 | Hornbill Skyways Sdn. Bhd. |
| 14 | Jets Fuels Sdn. Bhd. |
| 15 | KLM Line Maintenance Sdn. Bhd. |
| 16 | Layang Layang Aerospace Sdn. Bhd. |
| 17 | MAB Kargo Sdn. Bhd. |
| 18 | Malindo Airways Sdn. Bhd. |
| 19 | Mas Awana Services Sdn. Bhd. |
| 20 | MNM Aviation Services Sdn. Bhd. |
| 21 | Nusantara Aviation Services Sdn. Bhd. |
| 22 | Petron Malaysia Refining & Marketing Bhd. |
| 23 | Petronas Dagangan Bhd. |
| 24 | POS Aviation Engineering Services Sdn. Bhd. |
| 25 | POS Aviation Sdn. Bhd. |
| 26 | Prosky Services Sdn. Bhd. |
| 27 | Raya Airways Sdn. Bhd. |
| 28 | Sabah Air Aviation Sdn. Bhd. |
| 29 | Safeair Technical Sdn. Bhd.* |
| 30 | Select Inflight Services Sdn. Bhd. |
| 31 | Senai Airport Terminal Services Sdn. Bhd. |
| 32 | Shell Malaysia Trading Sdn. Bhd. |
| 33 | Shell Timur Sdn. Bhd. |
| 34 | Skypark FBO Malaysia Sdn. Bhd. |
| 35 | Smooth Route Sdn. Bhd. |

*Source: MAVCOM*
*Note: *These are no longer licence holders in 2021 and 2022*

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