



KEY HIGHLIGHTS

Robust passenger traffic in 1Q23

Malaysia's air passenger traffic grew by 123.6% YoY in 1Q23, translating to 19.4mn passengers. This is equivalent to 73.0% of the pre-pandemic passenger traffic in 1Q19. Since the reopening of international borders, Malaysia's international passenger traffic had grown at an average of 80.9% QoQ. The number of international ATRs approved by MAVCOM had also increased by 246.1% YoY in 1Q23, demonstrating a steady revival of the international market.

Decline in cargo performance in 1Q23

Malaysia's cargo volume in terms of total FTK recorded a decline of 11.0% YoY (1Q22: -8.3% YoY) to 4,666mn in 1Q23 (1Q22: 5,242mn). This marks the second declining quarter in a row. This performance is in line with Malaysia's trading performance during the quarter, which declined due to a combination of several factors, including a slowing global economy, a continued shift in consumer spending from products to services, and a downcycle in the E&E industry.

MAVCOM's forecasts remain unchanged

With a robust passenger traffic performance in the first few months of 2023, MAVCOM maintains its December 2022 air passenger traffic forecast. Passenger traffic in 2023 is expected to increase by between 40.0% YoY and 52.0% YoY, translating to 74.6mn – 80.8mn passengers. Meanwhile, Malaysia's air cargo traffic is forecasted to increase by between 3.0% YoY and 4.8% YoY in 2023. MAVCOM estimates that the cargo traffic in 2023 will hover near the lower boundary of its forecast, indicating much slower growth.

Malaysia's Air Connectivity Ranking Improved to 5th in ASEAN

Malaysia's ranking improved to fifth in ASEAN, overtaking the Philippines, with a connectivity score of 61.0 in 2022. This was due to the higher deployment of international seats to "higher weightage" destinations where border restrictions were lifted in 3Q22. At the airport level, KUL remains the fourth-most connected airport in ASEAN behind SIN, BKK, and MNL. On average, ASEAN countries recorded a 262.1% YoY growth for international seat capacity in 2022 (Malaysia: 350.8% YoY).

RASK-CASK spread has stabilized

Due to the reopening of borders and resumption of operations, the industry RASK-CASK spread stabilized and reduced to 1.6 sen in 4Q22. Malaysian carriers reported RM5.4bn in revenue for 4Q22 (4Q21: RM2.2bn) and an operating profit margin of 24.9% in 4Q22 (4Q21: -8.5%). The industry recorded its first positive operating margin after 11 quarters of losses.

***The data and facts in this publication are accurate as of 15 June 2023.**

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
EIA	US Energy Information Administration
EU	European Union
Firefly	FlyFirefly Sdn. Bhd.
FSC	Full Service Carrier
FTK	Freight Tonne Kilometre
GDP	Gross Domestic Product
GHL	Ground Handling Licence
HHI	Herfindahl-Hirschman Index
IATA	International Air Transport Association
IEA	International Energy Agency
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
QoQ	Quarter-on-Quarter
RASK	Revenue per Available Seat Kilometre
RM	Ringgit Malaysia
SAF	Sustainable aviation fuels
SDMC	State Disaster Management Committee
SKS Airways	SKS Airways Sdn. Bhd.

Abbreviations

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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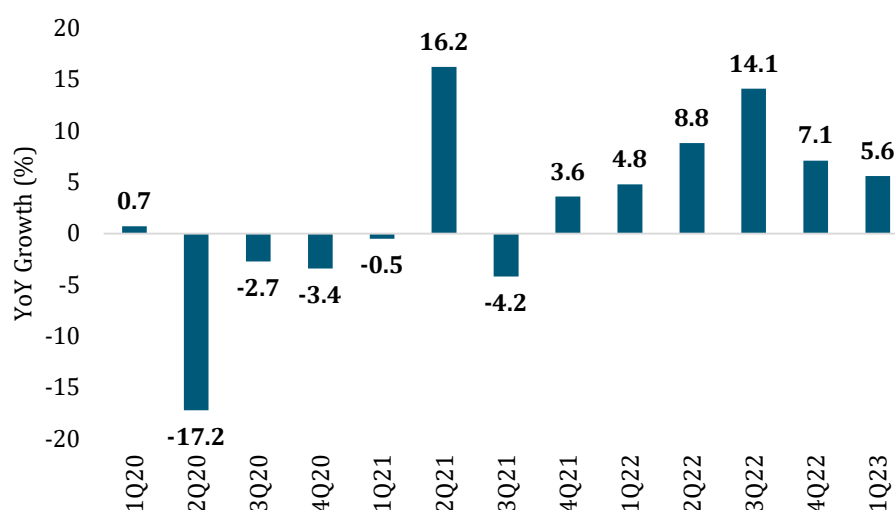
SECTION 1: MACROECONOMIC OVERVIEW AND OUTLOOK

Macroeconomic Overview

Continued GDP Growth in 1Q23

The Malaysian economy grew 5.6% YoY in 1Q23 (4Q22: 7.1% YoY) (see Figure 1). On a QoQ basis, the economy grew by 0.9%. The expansion was mainly due to increased household spending, continued investment activity, and higher inbound tourism.

Figure 1: Malaysia's GDP Growth, 2020 – 2023



Source: DOS

From the supply side, all economic sectors grew in 1Q23, most notably in the construction and services sectors, which increased by 7.4% YoY and 7.3% YoY respectively (see Table 1).

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

Sectors	YoY Growth (%)	
	1Q23	1Q22
Headline GDP	5.6	5.0
-Services	7.3	6.5
-Manufacturing	3.2	6.6
-Agriculture	0.9	0.2
-Mining & Quarrying	2.4	-1.1
-Construction	7.4	-6.2

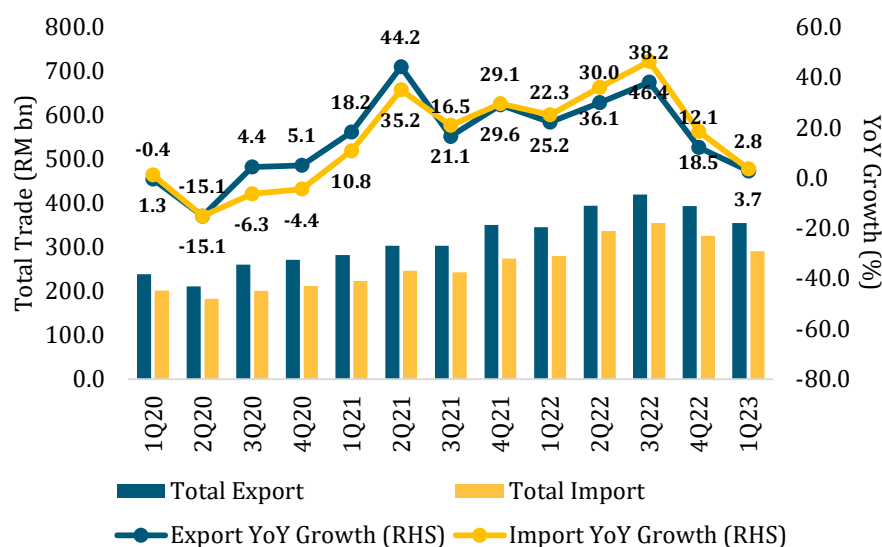
Source: DOS

The services sector was backed by the favourable performance in the wholesale & retail trade sub-sector, which grew 9.4% YoY. This was followed by the transportation and storage sub-sector, which grew 17.0% YoY (4Q22: 23.1% YoY), mainly contributed by the improved performance in the air transport and land transport segments.

Positive Trade, Exports, and Imports Performance

Despite growing at a slower rate, Malaysia's trade, exports, and imports performance remained positive in 1Q23 (see Figure 2). Exports grew 2.8% YoY to RM354.6bn, whilst imports grew 3.7% YoY to RM290.2bn. Overall trade grew by 3.2% YoY to RM644.9bn. However, the trade surplus edged down by 1.0% YoY to RM64.4bn.

Figure 2: Malaysia's External Trade, 2020 – 2023



Source: DOS

Growth in exports in 1Q23 was mainly contributed by the electrical & electronic products (E&E) (RM142.9bn, 3.3% YoY), petroleum products (RM36.5bn, 58.7% YoY), and liquified natural gas (LNG) (RM17.8bn, 33.8% YoY). Meanwhile for imports, growth was contributed by petroleum products (RM33.0bn, 36.6% YoY) and metal products (RM15.9bn, 11.3% YoY).

In terms of top markets, ASEAN continued to be Malaysia's largest trading partner for both exports and imports in 1Q23. Trade with China declined by 2.4% YoY due to declining exports to China (-8.1% YoY) for iron and steel products, as well as E&E products. Tables 2 and 3 show the breakdown of Malaysia's top 5 export and import markets in 1Q23, which constitute 68.7% of Malaysia's total exports and 68.3% of total imports during the period.

Table 2: Malaysia's Top 5 Export Markets, 1Q23

Economy	Exports (RM bn)	Share (%)	YoY Growth (%)
ASEAN	105.8	29.8	6.3
China	46.0	13.0	-8.1
US	39.0	11.0	8.0
EU	29.3	8.3	-2.3
Japan	23.7	6.7	4.3

Source: DOS

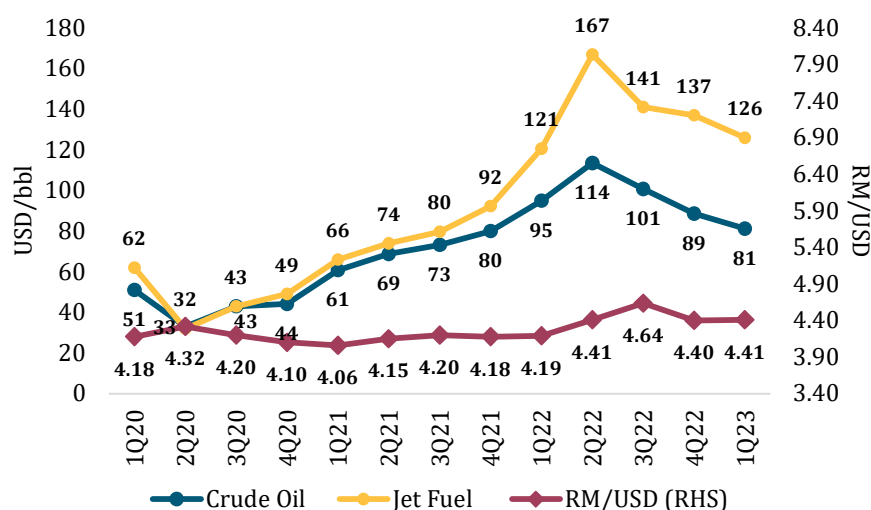
Table 3: Malaysia's Top 5 Import Markets, 1Q23

Economy	Imports (RM bn)	Share (%)	YoY Growth (%)
ASEAN	70.5	24.3	1.1
China	62.7	21.6	2.2
EU	22.7	7.8	14.7
Taiwan	21.6	7.4	-1.1
US	20.7	7.1	0.5

Source: DOS

Prices for Brent Oil and Jet Fuel Eased Further Whilst Ringgit-Dollar Appreciates Slightly in 1Q23

In 1Q23, prices for Brent crude and jet fuel eased, averaging at USD81/bbl and USD126/bbl, respectively (see Figure 3), with an average crack spread¹ of USD45/bbl.

Figure 3: Oil, Jet Fuel, and Exchange Rate Trends, 2020-2023

Source: EIA, BNM

According to the US Energy Information Administration (EIA), the global oil demand increased in 1Q23. This demand recovery was led by the rebounding air traffic and release of pent-up Chinese demand. In terms of supply, the world oil output increased as a result of the US' and Canada's robust recovery from winter storms and outages. To meet demand in 1H23, the EIA anticipates the non-OPEC members to drive global output in 2023. However, supply may be lacking in 2H23, when seasonal trends and China's recovery are set to boost demand to higher levels.

The significant price difference between the jet fuel and Brent crude continues to pose a challenge for the airline industry. This disparity is caused by a lack of refining capacity, resulting in a scarcity of jet fuel, leading to higher prices. According to the International Energy Agency's (IEA) June 2022 Oil Market

¹ The crack spread is the price difference between a barrel of crude oil and jet fuel. It is also known as the refining margin.

Report, the net worldwide refining capacity fell in 2021 for the first time in 30 years. However, the IEA anticipates a rise in the net worldwide refining capacity in 2022 and 2023, suggesting that the crack spread may have peaked, although it may remain high throughout 2023.

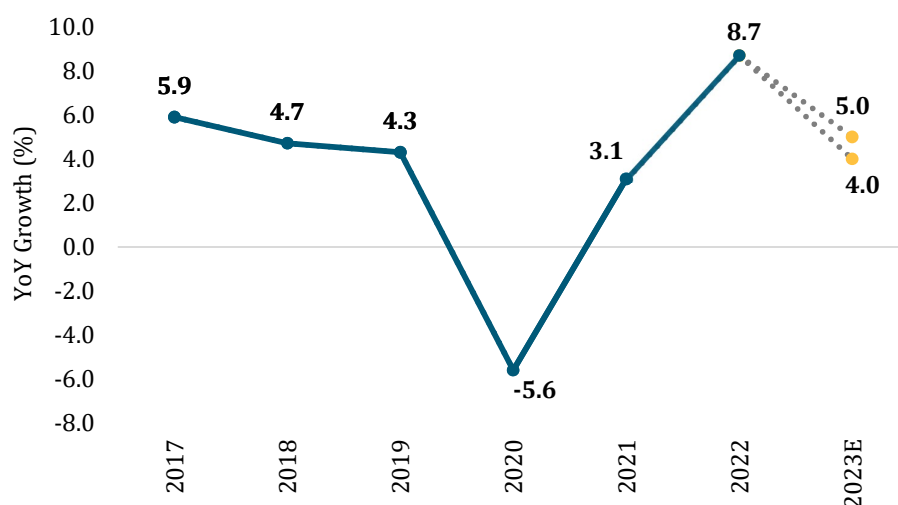
Meanwhile, the RM/USD exchange rate slightly appreciated to RM4.41/USD in 1Q23. The BNM reports that the Ringgit's appreciation was influenced by mixed sentiments on the future of the world economy and the stress in the banking sector of some advanced economies. However, a stronger dollar is expected in 2023, which may lead to the Ringgit depreciating in the near future.

Macroeconomic Outlook

Malaysia's GDP Growth in 2023

The Malaysian economy is anticipated to keep growing in 2023 despite the weaker external demand. Domestic demand will be the main driver of growth, at the back of a strengthening labour market, increased tourism, and the continued advancement of long-term investment projects. The BNM forecasted Malaysia's GDP growth to be between 4.0% and 5.0% YoY in 2023 (see Figure 4).

Figure 4: Malaysia's 2023 GDP Growth Forecast



Source: BNM

The forecasts made by the ADB, IMF, and World Bank for Malaysia's GDP in 2023 also fall within BNM's forecast range (see Table 4).

Table 4: Malaysia's GDP Forecasts by BNM, ADB, IMF and World Bank, 2023

Sources	Month of Forecast	2022 YoY Malaysia's GDP Growth Forecast (%)
BNM	March 2023	4.0 – 5.0
ADB	April 2023	4.7
IMF	April 2023	4.5
World Bank	February 2023	4.0

The primary domestic drivers that pose an upside risk are the implementation of infrastructure projects, mainly those from the re-tabled Budget 2023, and stronger-than-expected tourism activity. The downside risks include weaker-than-anticipated global GDP growth and the more volatile global financial market circumstances.

Slower Global Economy Growth Expectations in 2023

In its April 2023 World Economic Outlook (WEO), the IMF forecasted that the global economy would grow by 2.8% YoY in 2023 (see Table 5). This projection is 1.0% lower compared to the forecast made in January 2023. Global growth in 2023 is expected to be supported by several factors, including China's reopening, a robust labour market, improved supply chain conditions, and a revival in the services sector, particularly in tourism. However, obstacles such as high inflation and tighter monetary policies are also anticipated. Additionally, recent banking collapses in several advanced countries are expected to have an impact on growth.

Table 5: Global GDP Forecast by IMF, 2022 – 2023F

Economy	2022 GDP YoY Growth (%)	2023 GDP YoY Growth Forecast (%)
Global	3.4	2.8
- <i>Advanced Economies</i>	2.7	1.3
- <i>Emerging Market Economies</i>	4.0	3.9

Source: IMF

In 2023, a projected 90% of advanced economies will have slower growth as higher unemployment is anticipated. On the other hand, the economic prospects for emerging market economies are, on average, stronger than those for advanced economies, although these prospects vary widely across regions. According to the World Bank, the global GDP is expected to grow by 1.7% YoY in 2023, a decline from the 3.0% anticipated in June 2022. This revision is attributed to increasing inflation, higher interest rates, decreased investment, and disruptions caused by the geopolitical tensions between Russia and Ukraine.

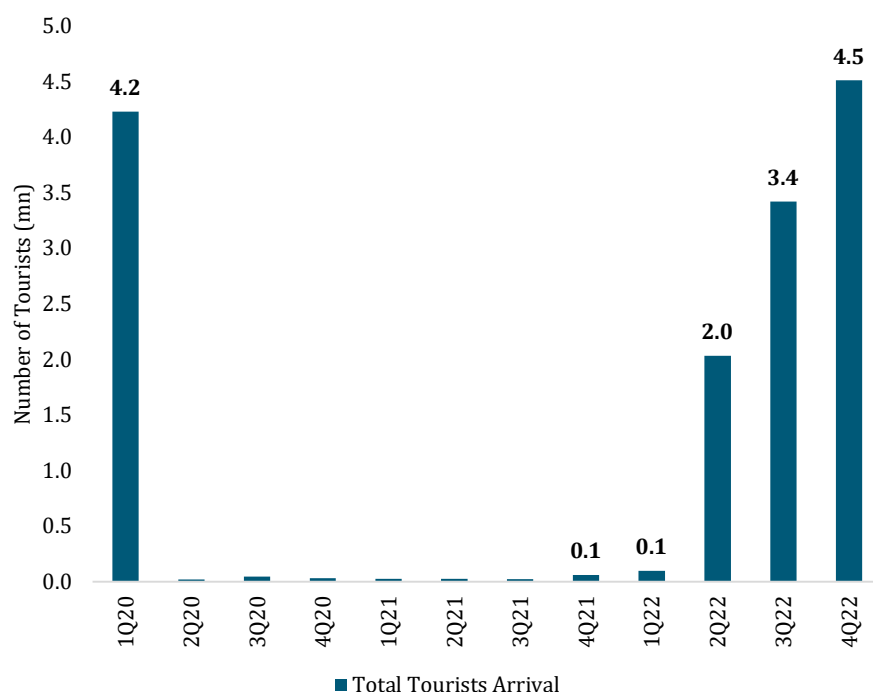
SECTION 2: INDUSTRY OVERVIEW AND OUTLOOK

Industry Overview

Tourist Arrivals Recovered in 2022

According to the latest data from the Ministry of Tourism, Arts and Culture (MOTAC), **Malaysia's tourist arrivals experienced a significant growth of 7,250% YoY in 4Q22 or 4.5mn visitors (4Q21: 0.06mn)** (see Figure 5). On a QoQ basis, tourist arrivals in 4Q22 recorded an increase of 31.8% (3Q22: 3.4mn).

Figure 5: Malaysia's Tourist Arrivals, 2020 – 2022



Source: MAVCOM, Tourism Malaysia

Notes: 1) This figure may contain rounding errors

2) Data only available up to 4Q22

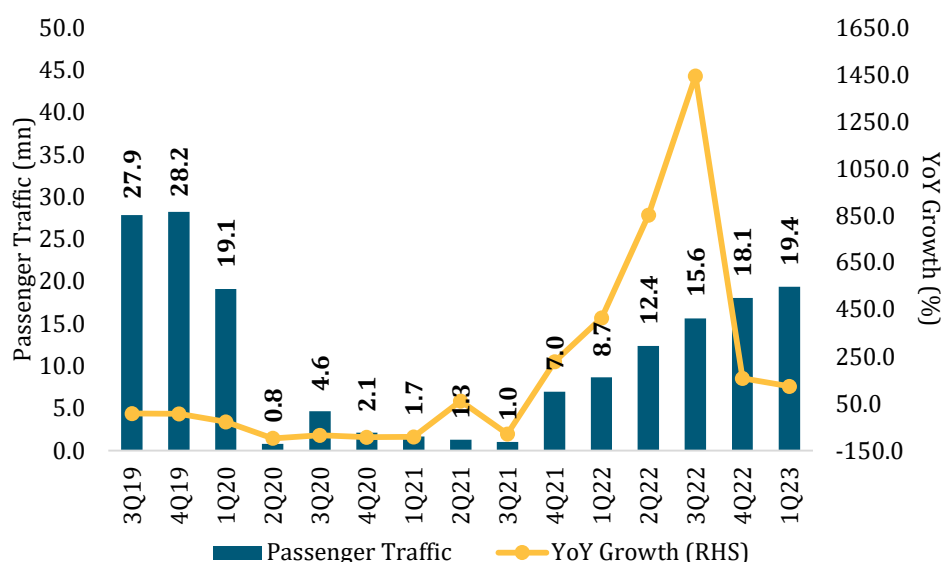
In 2022, Malaysia recorded a total of 10.1mn tourist arrivals, which represents a remarkable increase of 7,375% compared to 2021 (2021: 0.1mn). Approximately half originated from Singapore (5.2mn), followed by Indonesia (1.5mn), Thailand (0.7mn), India (0.3mn), and Brunei (0.3mn). However, this increase in visitor numbers still significantly lags the 26.1mn tourists recorded in 2019.

International tourism is predicted to continue growing in 2023, as tourist arrivals from key markets such as ASEAN, the Middle East, and Europe continue to recover, while the Chinese tourist arrivals are expected to gradually improve. Tourism Malaysia anticipates 16.1mn tourist arrivals in 2023, reflecting a 60% YoY increase compared to 2022.

Malaysia's Passenger Traffic Increased by 123.6% YoY in 1Q23

Malaysia's scheduled passenger traffic increased by 123.6% YoY (7.2% QoQ) in 1Q23, reaching a total of 19.4mn passengers (see Figure 6). Since the reopening of travel borders in 4Q22, Malaysia's passenger traffic has grown at an average of 23.2% QoQ.

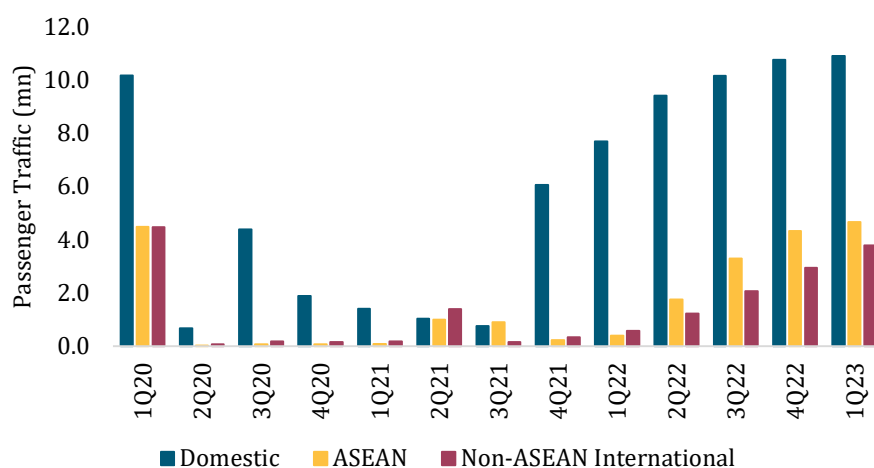
Figure 6: Malaysia's Quarterly Passenger Traffic, 2019 – 2023



Source: MAVCOM, AOL Holders

The main driver of passenger traffic continues to be domestic travel (see Figure 7), accounting for 56.4% of the total passengers in 1Q23, followed by ASEAN (24.1%) and non-ASEAN (19.6%). On a QoQ basis, the non-ASEAN international region experienced the highest growth of 28.6% in 1Q23, while the ASEAN and domestic regions grew by 7.8% and 1.4%, respectively.

Figure 7: Malaysia's Passenger Traffic by Region, 2020 – 2023

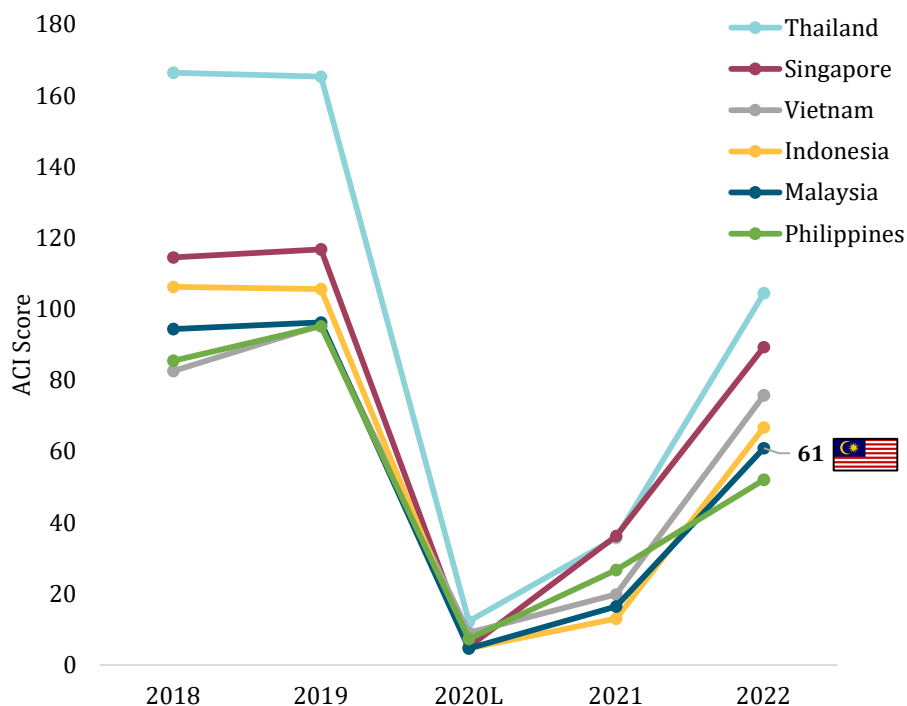


Source: MAVCOM, AOL Holders

Malaysia's Air Connectivity Ranking Improved to 5th in 2022

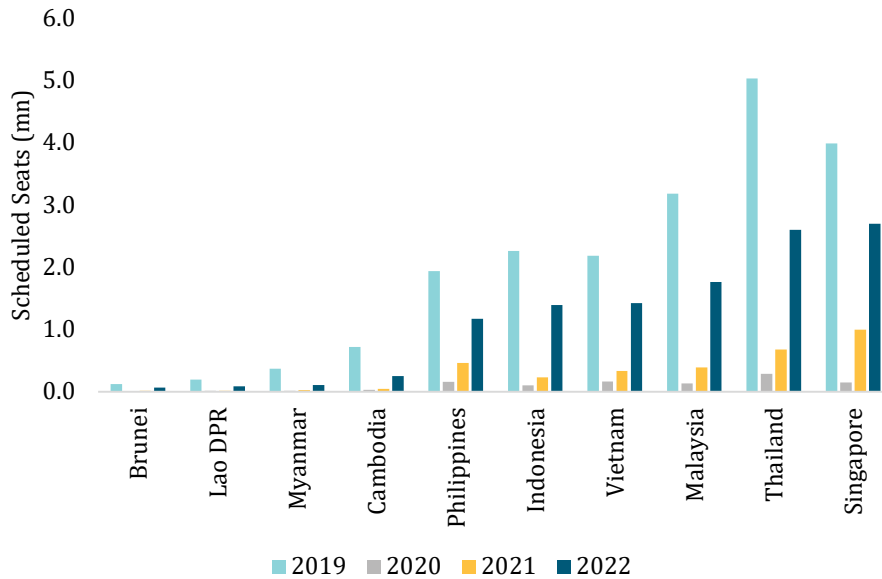
Based on MAVCOM's Air Connectivity Index, Malaysia's ranking has improved to 5th, overtaking the Philippines, with a connectivity score of 61.0 in 2022 (see Figure 8). This improvement was attributed to the higher deployment of international seats to more important destinations after the lifting of international border restrictions. Thailand continues to lead the way, followed by Singapore, Vietnam, and Indonesia.

Figure 8: Air Connectivity Scores of Selected ASEAN Countries, 2018 – 2022



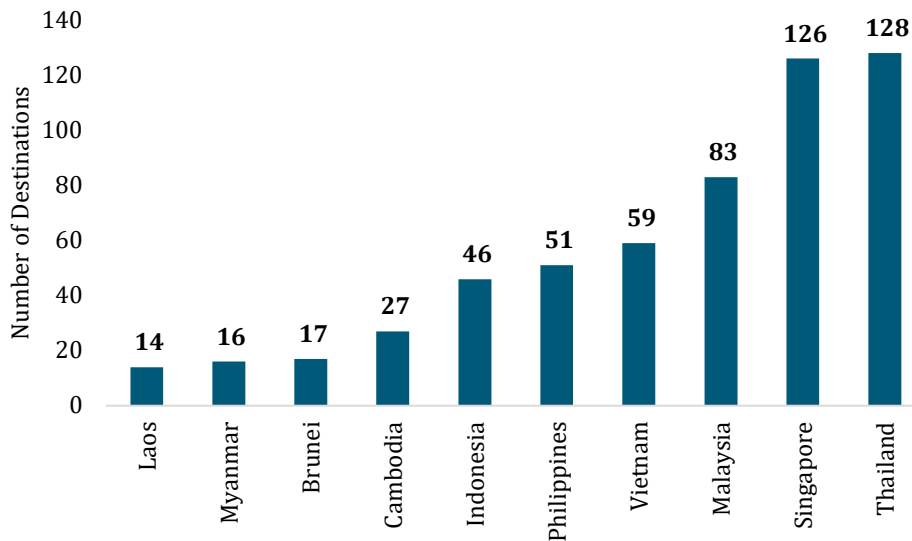
Source: MAVCOM

The lifting of international border restrictions allowed airlines to add more international capacity, especially in the 2H22. On average, the ASEAN countries recorded a 262.1% YoY growth in international seat capacity in 2022 (Malaysia: 350.8% YoY). In terms of the international seat capacity offered, Malaysia ranked third, behind Singapore and Thailand (see Figure 9). International seats in 2022 for ASEAN countries is at 58.0% of the 2019 level (Malaysia: 55.4%).

Figure 9: Total Scheduled Seats from ASEAN Countries, 2019 – 2022

Source: AirportIS

In 2022, Malaysia was connected to 83 international destinations, which is the third-highest number of connections among ASEAN countries (see Figure 10). Thailand offered the highest number of international destinations, with 128, while Singapore came in second with 126 international destinations.

Figure 3: Number of International Destinations for ASEAN Countries, 2022

Source: AirportIS

KUL Maintains Its Position as the Fourth-Most Connected Airport in ASEAN

In 2022, KUL was the fourth-most connected airport in ASEAN, behind SIN, BKK, and MNL, recording a connectivity score of 47.5. This is an improvement compared to 2021 when KUL only recorded a score of 14.7 due to the pandemic. KUL was connected to 80 international destinations while serving 1.5mn international seats (see Table 6).

Table 6: Airport-level Air Connectivity Index, 2022

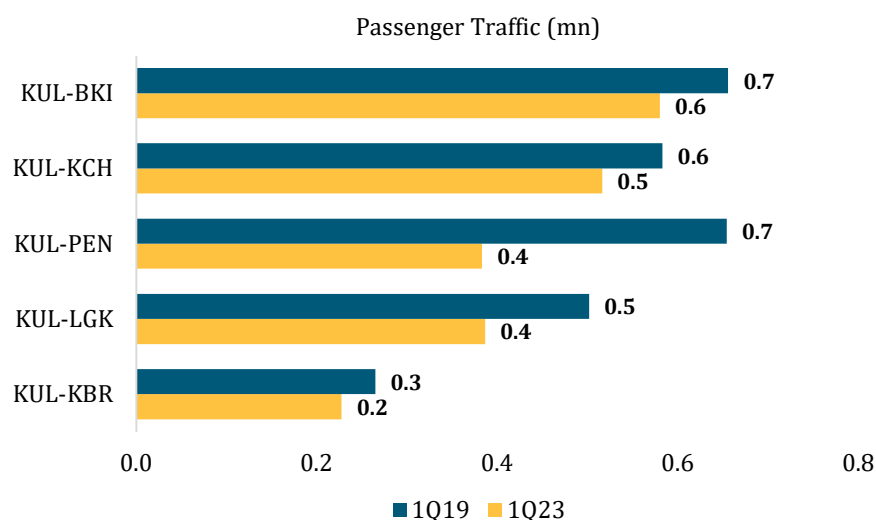
Rank	Airport	Connectivity Score (2022)	Total Seats (mn)	International Destinations
1	SIN	89.4	2.69	125
2	BKK	76.7	1.85	98
3	MNL	52.4	0.99	50
4	KUL	47.5	1.50	80
5	SGN	35.4	0.69	52
6	CGK	31.1	0.61	36
7	PNH	10.2	0.19	24
8	RGN	5.6	0.10	16
9	BWN	3.1	0.06	17
10	VTE	2.8	0.06	12

Source: MAVCOM, AirportIS

Malaysia's Domestic and International Busiest Routes by Passenger Traffic

Within Malaysia, the KUL-BKI was the busiest domestic route in terms of passenger volume, recording 0.6mn passengers in 1Q23, followed by KUL-KCH and KUL-PEN (see Figure 11). Overall, the total domestic passenger traffic reached 83.1% of the 2019 level in 1Q23.

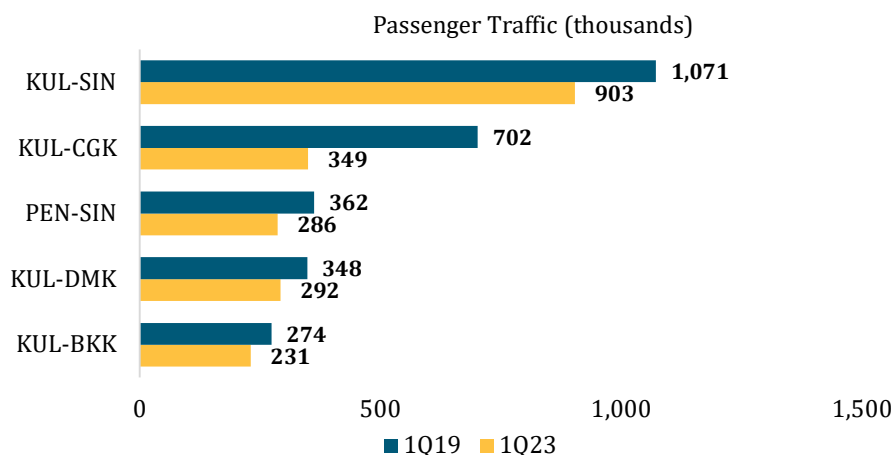
Figure 11: Malaysia's Top Domestic Routes in Terms of Passengers, 1Q19 and 1Q23



Source: AirportIS, MAVCOM

KUL-SIN remains the busiest ASEAN route, recording 0.9mn passengers in 1Q23. This represents 84.3% of pre-pandemic levels (see Figure 12). **Overall, ASEAN region passenger traffic had reached 71.8% of the 2019 level.**

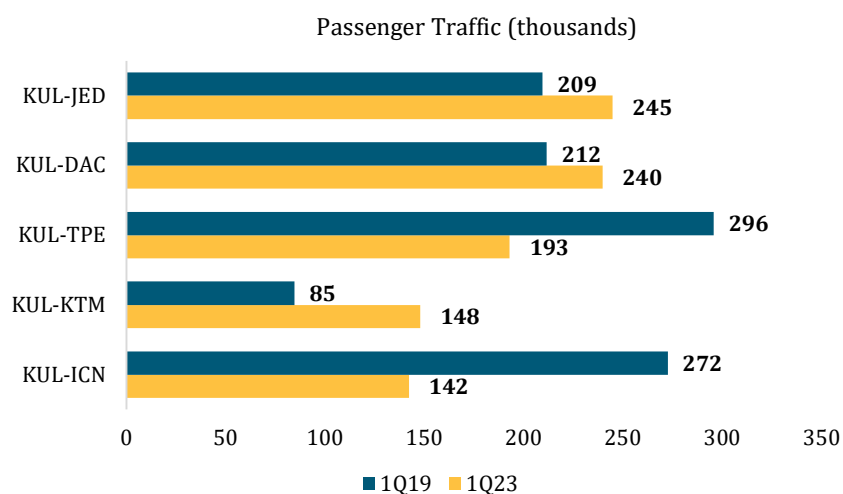
Figure 12: Malaysia's Top ASEAN International Routes in Terms of Passengers, 1Q19 and 1Q23



Source: AirportIS, MAVCOM

For the non-ASEAN international region, KUL-JED recorded the highest passenger traffic in 1Q23, surpassing the pre-pandemic level (see Figure 13). This was due to the increase in capacity by Saudia and MAB. Several other routes also surpassed the 2019 level, including KUL-DAC and KUL-KTM, as more capacity was added into the market by AirAsia for the KUL-DAC and Himalayan Air, Malaysia Airlines, and Batik Air for the KUL-KTM route. **However, the overall non-ASEAN international passenger traffic was still at 55.9% of the 2019 level.**

Figure 13: Malaysia's Top Non-ASEAN International Routes in Terms of Passengers, 1Q19 and 1Q23

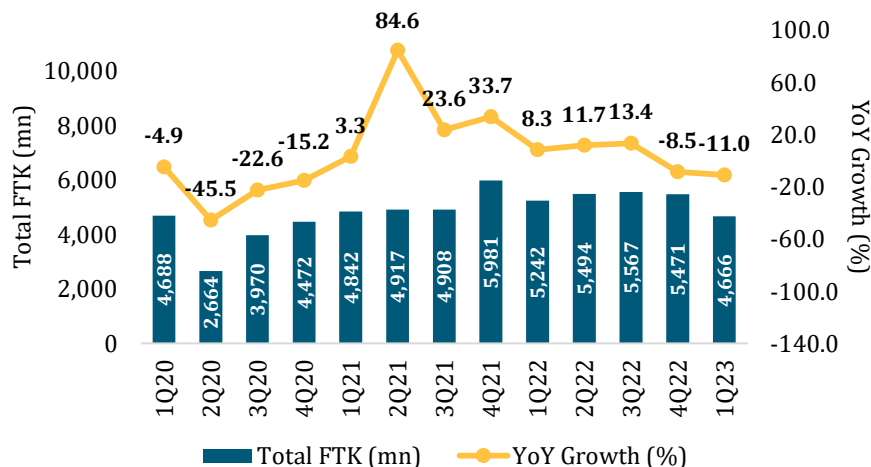


Source: MAVCOM

Malaysia's Cargo Volume Performance Worsened in 1Q23

Malaysia's cargo volume in terms of total FTK recorded a decline of 11.0% YoY (1Q22: -8.3% YoY) to 4,666mn in 1Q23 (1Q22: 5,242mn) (see Figure 14). This marks the second consecutive declining quarter. On a QoQ basis, the total FTK recorded a contraction of 14.7% in 1Q23 (4Q22: -1.7% QoQ). The contraction is mostly attributed to weaker global goods trades, indicating lower air cargo demand as economic headwinds persist.

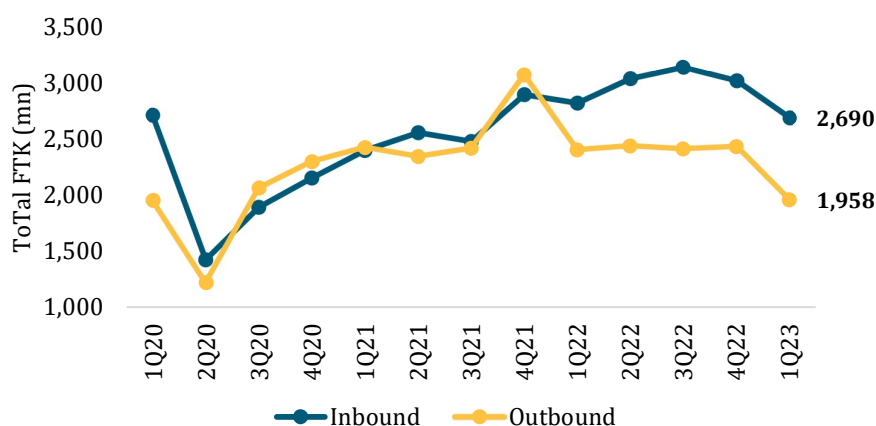
Figure 14: Total FTK in Malaysia, 2020 – 2023



Source: MAVCOM, CargoIS

In 1Q23, Malaysia's inbound cargo fell by 4.7% YoY (1Q22: 17.5% YoY) and declined by 10.9% QoQ (4Q22: -3.9% QoQ). Inbound cargo FTK was 2,690mn, lower than the pre-pandemic level of 2,993mn in 1Q19. As for the outbound cargo, FTK decreased by 18.6% YoY (1Q22: -0.9% YoY) and by 19.6% QoQ (4Q22: 1.0% QoQ). The outbound cargo FTK in 1Q23 was 1,958mn, slightly higher than the pre-pandemic level (1Q19: 1,917mn) (see Figure 15).

Figure 15: Inbound and Outbound FTK in Malaysia, 2020 -2023



Source: MAVCOM, CargoIS

Note: This figure excludes domestic cargo volume due to small numbers

In 1Q23, Malaysia's top inbound and outbound countries mostly recorded contractions in FTK (see Tables 7 and 8). In terms of the total outbound FTK, Japan recorded the largest decline of 43.7% YoY, followed by China (-24.4% YoY).

Table 7: Malaysia's Top 5 Inbound FTK by Country, 1Q23

Economy	Inbound FTK (mn)	Share (%)	YoY Growth (%)
United States	873.3	32.5	-10.6
Germany	495.6	18.4	1.3
Japan	176.1	6.5	-27.3
Netherlands	140.9	5.2	42.9
UK	130.4	4.8	7.0

Source: MAVCOM, CargoIS

Table 8: Malaysia's Top 5 Outbound FTK by Country, 1Q23

Economy	Outbound FTK (mn)	Share (%)	YoY Growth (%)
United States	956.9	48.9	-16.3
Germany	296.9	15.2	-17.4
Netherlands	150.4	7.7	-10.1
Japan	138.1	7.1	-43.7
China	55.7	2.8	-24.4

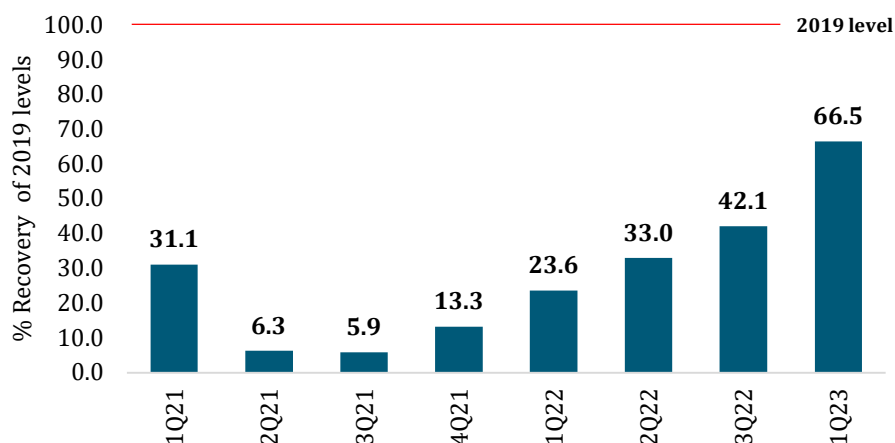
Source: MAVCOM, CargoIS

The outbound FTK YoY growth was worse than that of the inbound FTK. This is consistent with Malaysia's declining export demand during the quarter. Malaysia's exports contracted in 1Q23 due to a combination of factors, including slowing global economy, continued shift in consumer spending from products to services, and a downcycle for the E&E industry, notably for consumer electronics.

Cargo Capacity by Malaysian Carriers Improved but Remains Below 2019 Level

Cargo capacity remains below 2019 level but has now improved to 66.5% of pre-pandemic level in 1Q23 (see Figure 16).

Figure 16: Recovery of Air Cargo Capacity of Malaysian Carriers as a Percentage of 2019 Levels, 2021 – 2023

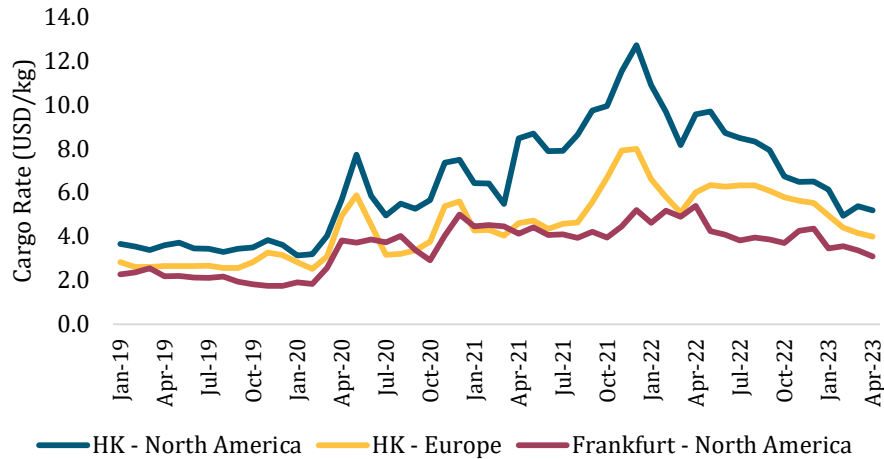


Source: MAVCOM, CAPA

Air Cargo Rates on Major Trade Routes Continue to Fall

As air cargo capacity steadily increased, the air freight rates on important trade routes decreased and began to approach the 2019 level (see Figure 17). In April 2023, the air cargo rates between Hong Kong and North America, Hong Kong and Europe, and Frankfurt and North America were USD5.2/kg, USD3.9/kg, and USD3.1/kg, respectively. However, these prices still remain higher than the pre-pandemic levels of USD3.5/kg, USD2.8/kg, and USD1.8/kg respectively.

Figure 17: Air Cargo Rates on Major Trade Lanes, 2019 – 2023



Source: Baltic Exchange

ATRs Awarded by MAVCOM as of 31 March 2023

In 1Q23, the ASL holders were awarded 67 additional ATRs, for which 45 were for international routes (see Table 9). Due to the resumption of international travel, the number of international ATRs approved by MAVCOM had increased by 246.1% YoY in 1Q23. Batik Air was awarded the highest number of international ATR approvals with a total of 14 ATRs.

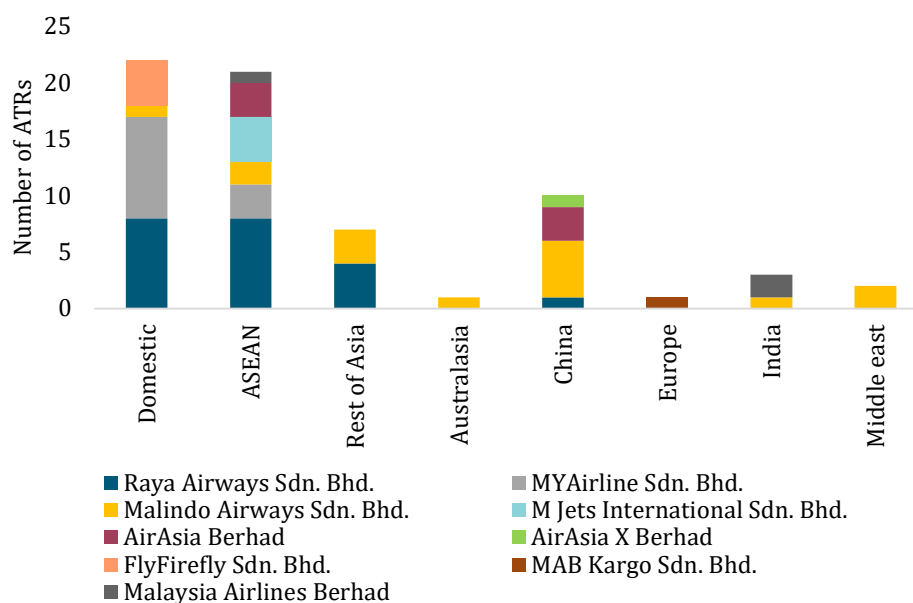
Table 9: Breakdown of ATRs Awarded, 1Q23

ASL Holder	ATRs Awarded	
	Domestic	International
AirAsia		6
AirAsia X		1
Batik Air	1	14
Firefly	4	
MAB		3
MAB Kargo		1
Raya Airways	8	13
M Jets International		4
MYAirline	9	3
TOTAL	22	45

Source: MAVCOM

In terms of breakdown by region, the domestic region received the highest allocation of ATRs with 22 approvals, followed by ASEAN with 21 approvals, and China with 10 approvals (see Figure 18). The highest domestic ATR allocation in 1Q23 was MyAirline with 9 approvals. For cargo, Raya Airways was awarded 8 domestic ATRs and 13 international ATRs.

Figure 18: Breakdown of ATRs Awarded by Region, 1Q23



Source: MAVCOM

Industry Outlook

Global Passenger Traffic is Expected to Reach 92.0% of Pre-pandemic Level in 2023

In December 2022, the International Air Transport Association (IATA) expects the global passenger traffic to reach 4.2bn in 2023, representing a 22.4% YoY growth. IATA anticipates that the global passenger traffic will rebound to 2019 levels in 2024 (see Table 10) and then expands 3% YoY in the long run.

Table 10: IATA's Global Passenger Traffic Forecasts, 2022 – 2025 vs. 2019

Key Figure	2022	2023F	2024F	2025F
Total Passenger Traffic Forecasts vs. 2019 (%)	68.5	92.0	103.0	111.0

Source: IATA

North America is expected to lead the recovery, whilst the Asia Pacific region is expected to take the longest to recover. Table 11 below shows the estimated year of recovery to 2019 passenger traffic levels for various regions. The global pent-up demand for travel at the back of government border rules relaxation is arguably the primary driver of growth in international air passenger traffic. Europe, Latin America, and the Middle East experienced quicker initial relaxations of travel restrictions, and most of these regions have recovered extensively. Asia Pacific experienced slower reactions, with rigorous government rules, particularly in China, leading to only a minor improvement in international air traffic passengers.

Table 11: IATA's Global Passenger Traffic Forecasts

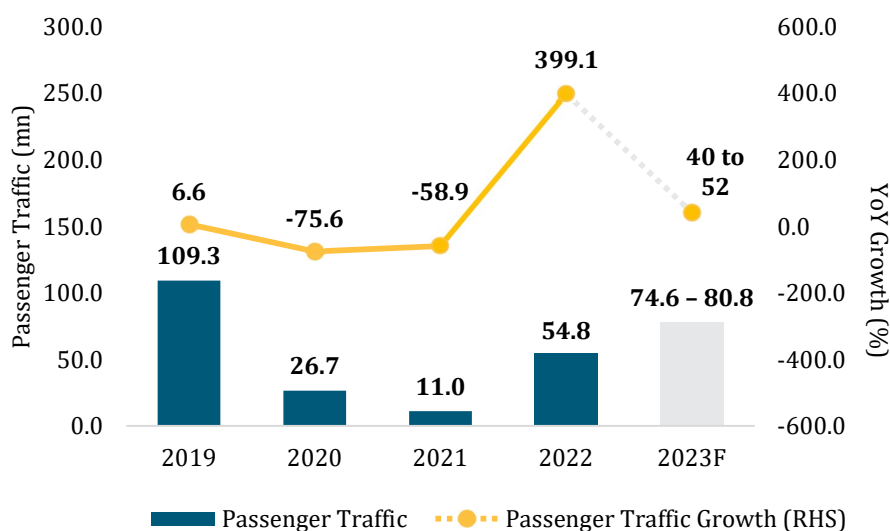
Region	Estimated Year of Recovery to 2019 levels
North America	2023
Middle East	2024
Europe	2024
World	2024
Latin America & Caribbean	2024
Africa	2025
Asia Pacific	2025

Source: IATA

MAVCOM's 2023 Air Passenger Traffic Forecast

With a robust passenger traffic performance in the first few months of 2023, **MAVCOM maintains its December 2022² air passenger traffic forecast for 2023**. Passenger traffic is expected to increase by between 40% YoY and 52% YoY, translating to 74.6mn – 80.8mn passengers (see Figure 19). This forecast assumes a steady industry recovery, with routes to key international and ASEAN markets gradually being restored.

Figure 19: Malaysia's Passenger Traffic, 2019 – 2023F



Source: MAVCOM, AOL Holders

International passenger traffic is expected to experience significant recovery in 2023. Based on the schedule data as of May 2023, the planned capacity for domestic routes makes up 36.2% of the total planned capacity for 2023, followed by 35.2% for ASEAN routes, and 28.7% for non-ASEAN international routes.

Domestic and ASEAN passenger traffic will remain resilient and steadily increase in 2023. Table 12 shows the key routes expected to drive passenger traffic in 2023, based on the seat capacity schedule as of May 2023.

Table 12: Key Routes based on Seat Capacity Schedule in 2023

Domestic	ASEAN	International
KUL-BKI	KUL-SIN	KUL-TPE
KUL-KCH	KUL-CGK	KUL-DAC
KUL-PEN	KUL-DPS	KUL-JED
KUL-LGK	PEN-SIN	KUL-HKG
KUL-JHB	KUL-DMK	KUL-DXB

Source: MAVCOM, AirportIS

Note: Data as at 25 May 2023

² The Waypoint December 2022 report covers Malaysia's 2023 passenger traffic forecast's assumptions and scenarios.

MAVCOM's 2023 passenger traffic forecast ranges within 68% to 74% of the 2019 passenger traffic level, slightly below the IATA's forecast of 80% for the Asia Pacific region in 2023 (see Table 13).

Table 13: IATA's Global Passenger Traffic Forecasts

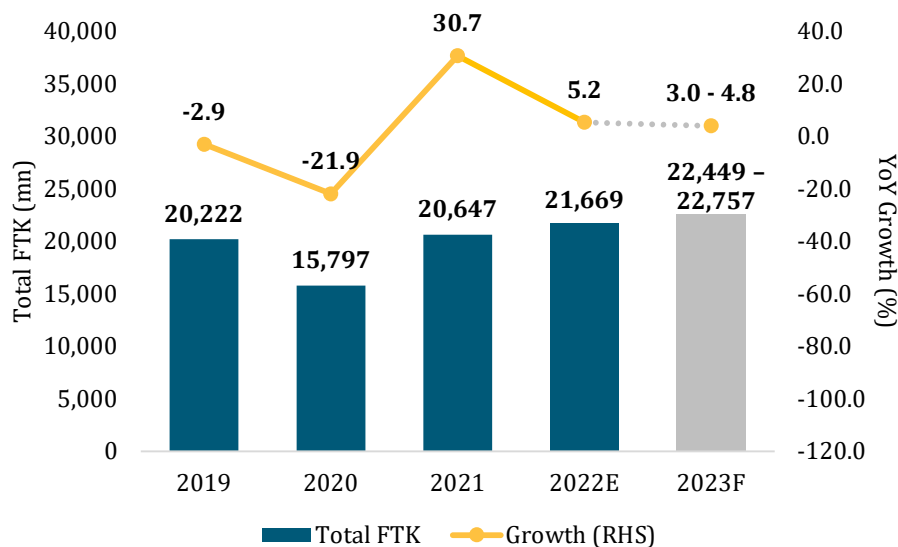
Region	2023 Recovery level vs 2019
North America	105%
Middle East	90%
Europe	90%
World	90%
Latin America & Carriibbean	95%
Africa	80%
Asia Pacific	80%

Source: IATA

MAVCOM 2023 Air Cargo Traffic Forecast

MAVCOM maintains its 2023 air cargo traffic forecast, made in December 2022. Malaysia's air cargo traffic is forecasted to increase by between 3.0% YoY and 4.8% YoY in 2023, translating to 22.4bn – 22.8bn FTK (see Figure 20). However, with the worsening performance of cargo in 1Q23, **MAVCOM estimates that the cargo traffic in 2023 will hover nearer to the lower boundary of the forecast, indicating much slower growth.**

Figure 20: Malaysia's Air Cargo Traffic, 2019 – 2023F



Source: MAVCOM, CargoIS

Due to the lower demand for air cargo in 1Q23, business conditions are expected to be challenging for the cargo industry. This challenge would be further exacerbated by ongoing uncertainties, such as the geopolitical tensions between Russia and Ukraine, high inflation, labour shortages, and a potential downcycle for the E&E industry, notably for consumer electronics.

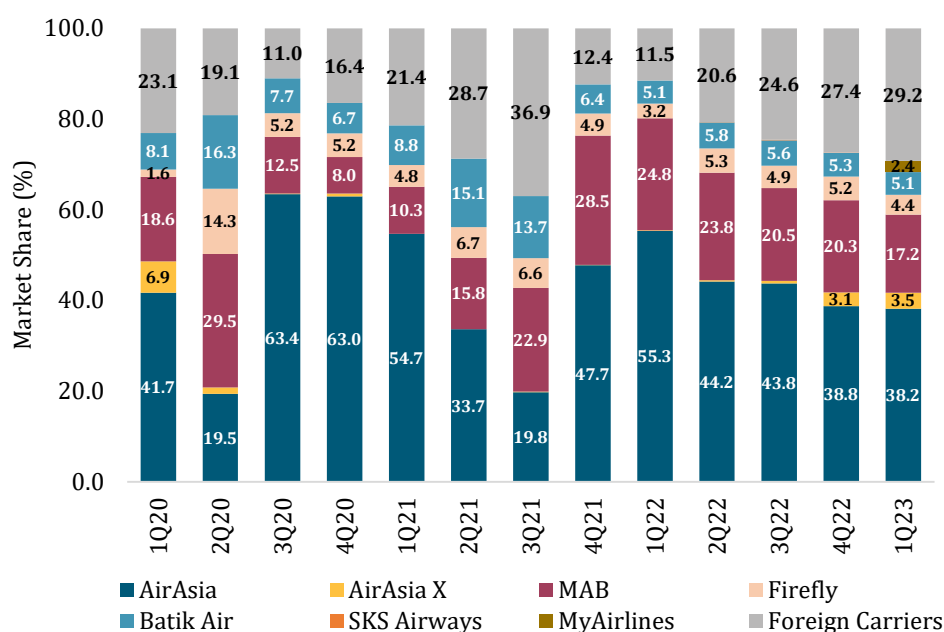
SECTION 3: INDUSTRY STRUCTURE AND PERFORMANCE

Scheduled Passenger Services

Malaysian Carriers' Passenger Market Share

In 1Q23, Malaysian carriers' combined market share shrank to 70.8% (1Q22: 88.5%) (see Figure 21). This was due to the steady recovery of the international market since the reopening of borders in 4Q22. AirAsia continued to be the largest local airline market share of 38.2%, whilst MAB was second with a market share of 17.2%. Firefly and Batik Air³ had smaller market shares of 4.4% and 5.1%, respectively. Additionally, 1ssq23 marks the introduction of a new local carrier, MyAirline, which recorded a 2.4% market share.

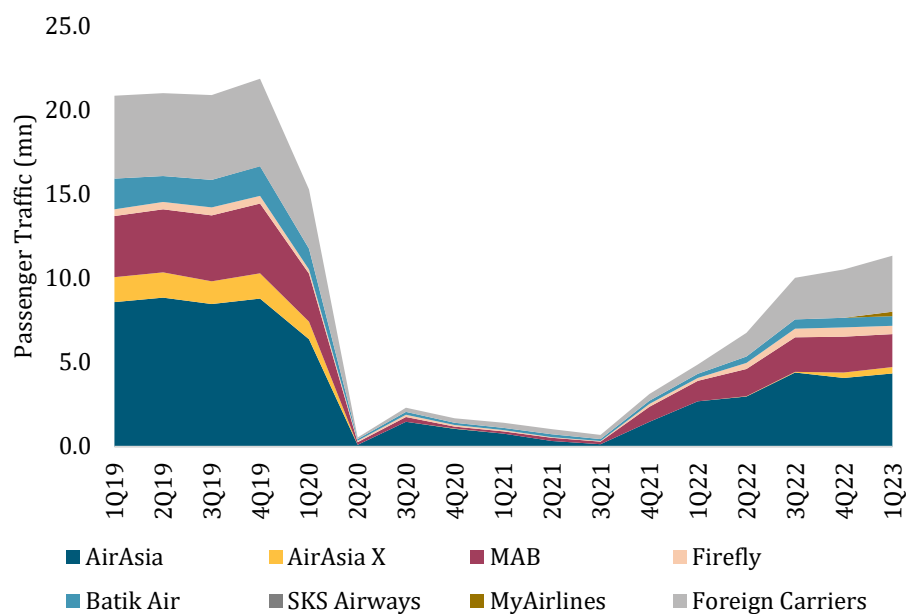
Figure 21: Malaysia's Passenger Market Share by Airlines, 2020 – 2023



Source: MAVCOM, Airports

In 1Q23, the number of passengers carried by local airlines increased by 85.8% YoY, while passengers carried by foreign airlines increased by 491.2% YoY. Passenger traffic carried by airlines in 1Q23 reached 54.0% of the passenger traffic level obtained in 1Q19 (see Figure 22).

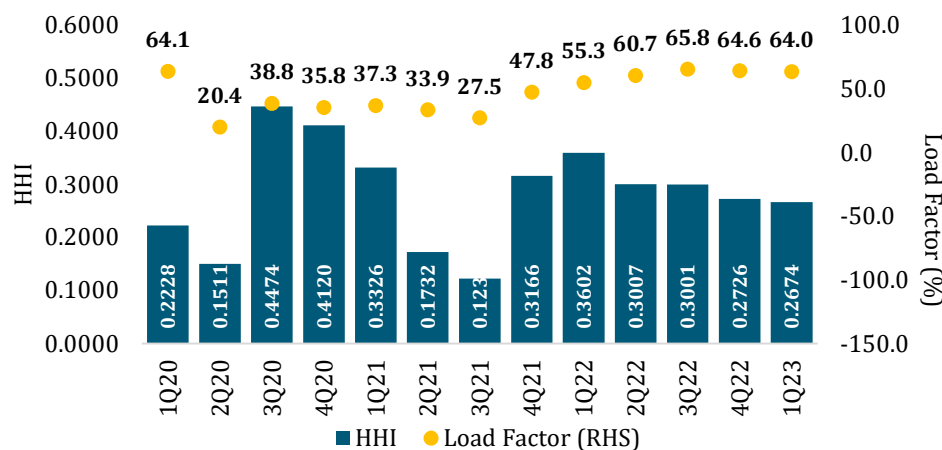
³ Batik Air was previously known as Malindo Air.

Figure 22: Malaysia's Quarterly Passenger Traffic by Airlines, 2019 – 2023

Source: MAVCOM, AirportIS

Lower Market Concentration and Improved Average Load Factor in 1Q23

The Malaysian airline industry was less concentrated⁴ in 1Q23 with an HHI of 0.2674 in 1Q23, indicating a more competitive market (1Q22: 0.3602). The number of local players increased as SKS Airways and MyAirline entered the market. The 1Q23 average load factor for all carriers—including foreign carriers—was at 64% (1Q22: 55.3%) (see Figure 23).

Figure 23: Market Concentration Level and Load Factor, 2020 – 2023

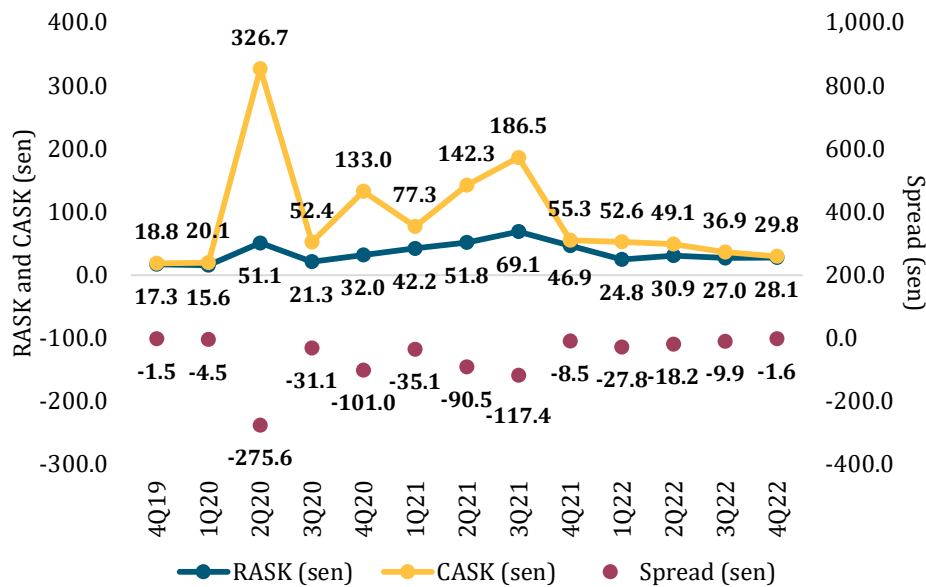
Source: MAVCOM, AirportIS

⁴ 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.

CASK and RASK Spread Stabilized

Due to the reopening of borders and resumption of operations, the industry's RASK-CASK spread stabilized and reduced to 1.6 sen in 4Q22 (see Figure 24). RASK slightly increased to 28.1 sen compared to 26.9 sen in the previous quarter. Meanwhile, CASK decreased to 29.8 sen in 4Q22 (3Q22: 36.9 sen).

Figure 24: Malaysian Carriers' RASK and CASK Trends, 2019 – 2022



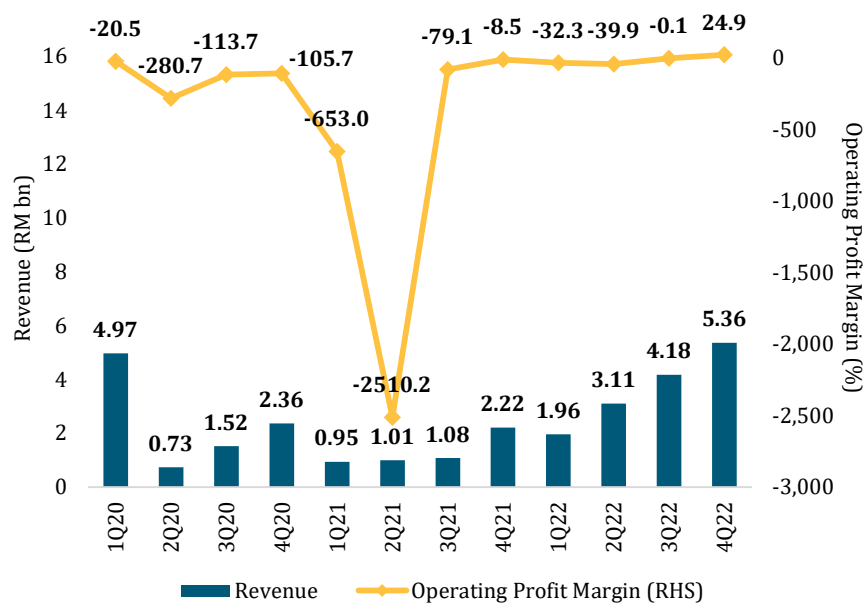
Source: MAVCOM, ASL Holders

Note: Data only available up to 4Q22

Positive Operating Profit Margin

Malaysian carriers reported RM5.4bn in revenue (4Q21: RM2.2bn) and an operating profit margin of 24.9% in 4Q22 (4Q21: -8.5%) (see Figure 25). The industry recorded the first positive operating margin after 11 quarters. This increase in profit was mainly attributed to the robust pent-up demand, higher yield, as well as effective cost control and cashflow management by airlines.

Figure 25: Malaysian Carriers' Revenue and Operating Profit Margin, 2020 – 2022



Source: MAVCOM, ASL Holders

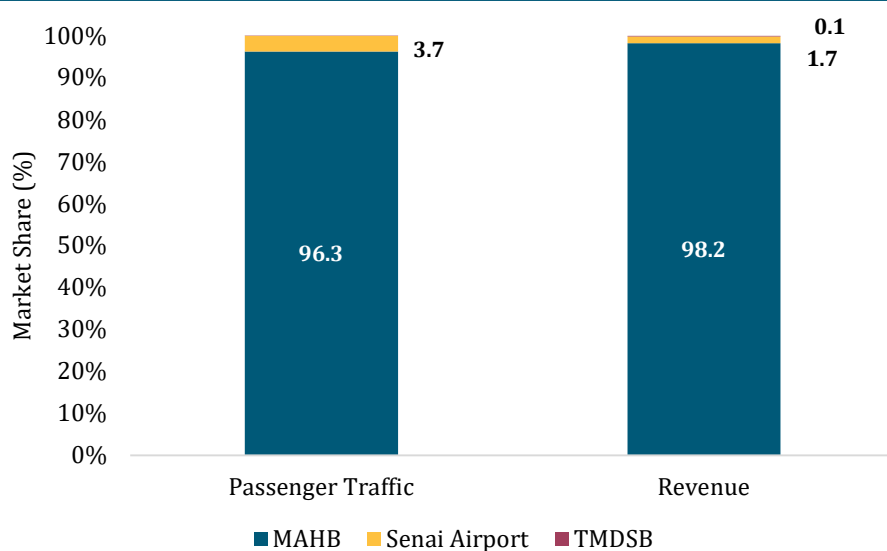
Note: Data provided by ASL players and only available up to 4Q22

Aerodrome Operations Segment

Aerodrome Operations Continues to be the Most Concentrated Segment Within the Aviation Services Market

The aerodrome operator segment was the most concentrated segment within the aviation services market with an HHI of 0.9280 in 2022 (2021: 0.9303). As the biggest airport operator in the country, which operates 39 of the 42 airports in Malaysia, MAHB handled 96.3% of the total passenger traffic in Malaysia in 2022 (2021: 96.4%) (see Figure 26). Meanwhile, Senai Airport's passenger market share marginally increased from 3.6% in 2021 to 3.7% in 2022, while its revenue market share dropped to 1.7% in 2022 (2021: 6.9%).

Figure 26: Market Shares of the Aerodrome Operations Segment by Revenue and Passenger Traffic, 2022



Source: MAVCOM, AOL Holders

Note: TMDSB's passenger market share was approximately 0.02% in 2021

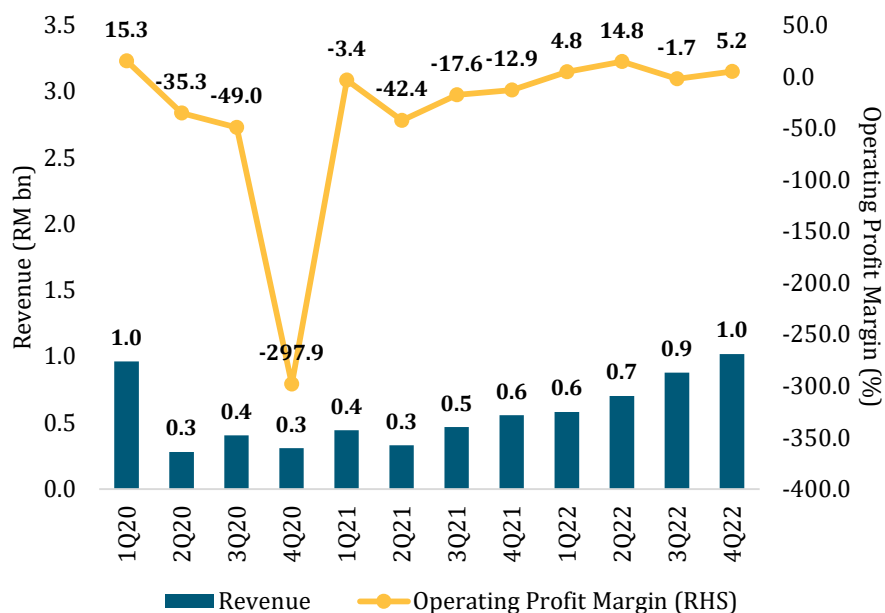
Positive Operating Profit Margins for Aerodrome Operators in 2022

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

For 2022, the revenue of the aerodrome operators increased by 86.9% YoY to RM3.1bn (2021: RM1.8bn) (see Figure 27), in line with the recovery of passenger traffic and aircraft movements. The aggregate financial performance of Malaysian aerodrome operators was heavily skewed by MAHB's numbers, as the company recorded 98.2% of the total revenue and operating profit of all aerodrome operators in the country.

The average operating profit margin for the aerodrome operations segment was also positive. In 4Q22, the operating profit margin for the segment was 5.2%, an improvement compared to 2021 when the segment recorded an operating loss margin of 12.9% (2020: -311.0% YoY).

Figure 27: AOL Holders' Revenue and Operating Profit Margin, 2020 – 2022



Source: MAVCOM, AOL Holders

Note: Data provided by AOL holders and only available up to 4Q22

Non-Scheduled Services Segment

On-demand Charter Sub-segment Remains Competitive

The on-demand charter market continues to be the most competitive in the non-scheduled services area, with 8 operators and an HHI of 0.2999 (see Table 14). The pleasure flying, as well as oil and gas sub-segments, had highly concentrated markets in 2022, with their HHIs being above 0.6000.

Table 14: Summary of Non-Scheduled Services' Market Structure, 2022

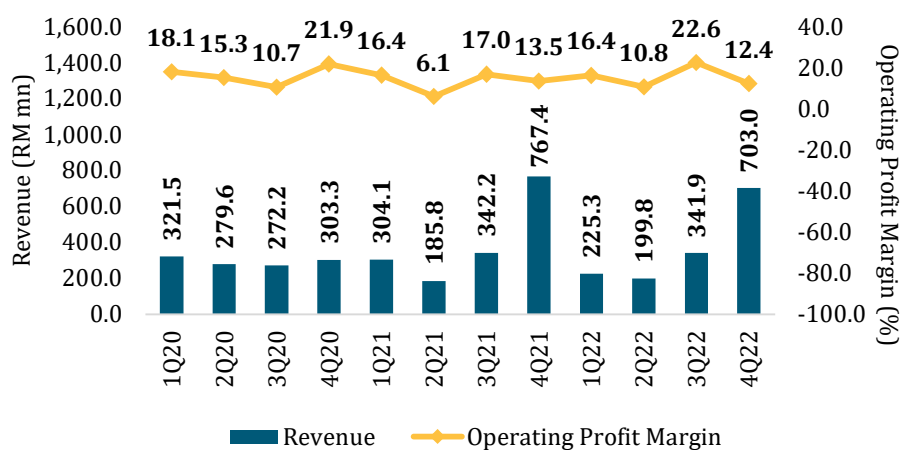
Type of Business	No. of Licence Holders	HHI	2022 Revenue (RM million)	2022 Operating Profit Margin (%)
Surveying, observation & patrol	-	-	-	-
On-demand cargo	-	-	-	-
Pleasure flying	2	0.7015	1.2	-113.0
Aerial work – cloud seeding, mapping	1	1.0000	54.4	14.1
Oil & gas	3	0.8363	1048.8	14.9
On-demand charter	8	0.2999	382.4	14.4
TOTAL	15		1,470.0	14.6

Source: MAVCOM, ASP Holders

Revenue and Operating Profit Margin for ASP Holders in 2022

Revenue for the non-scheduled services segment decreased by 8.4% YoY in 4Q22 to RM703.0mn (4Q21: RM767.4mn) (see Figure 28). However, revenue for the segment increased by 105.6% QoQ. ASP holders continued to record a positive operating profit margin of 12.4% in 4Q22, a drop from 22.6% in 3Q22.

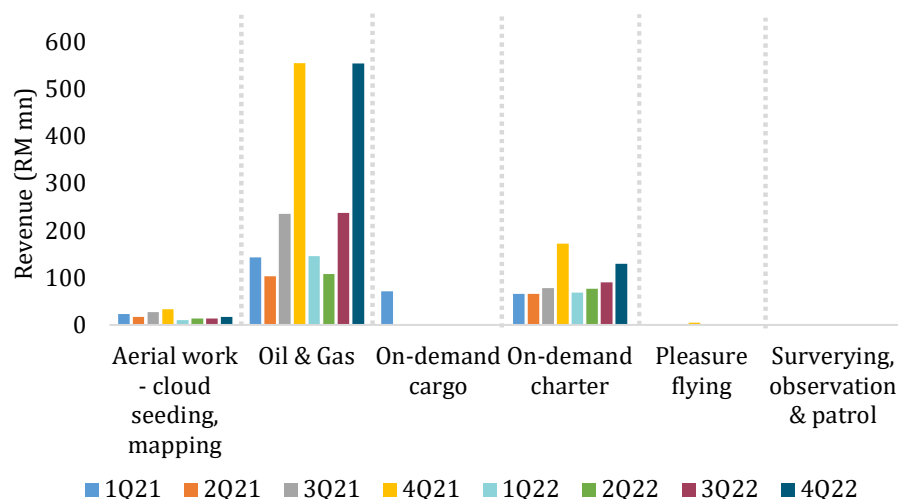
Figure 28: Revenue and Operating Profit Margin of ASP Holders, 2020 – 2022



Source: Data provided by ASP players

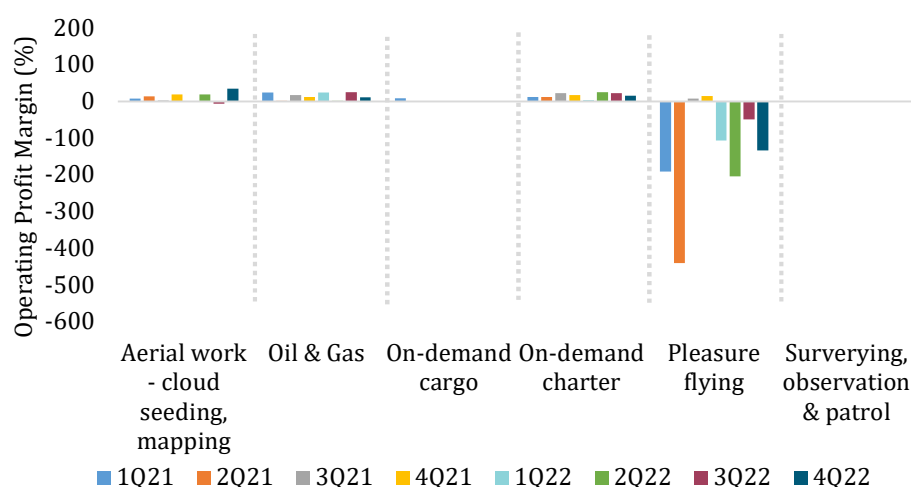
The financial performance of each sub-segment of the non-scheduled services segment is illustrated in Figures 29 and 30. **The oil and gas sub-segment was the strongest performing sub-segment**, consistently reporting revenues above RM100mn and operating profits between 1Q20 and 4Q22. All sub-segments recorded operating profit margins in 2022, except for the pleasure flying sub-segment, which recorded a 113.0% operating loss margin. Currently, there are no ASP holders operating in the on-demand cargo and surveying, observation & patrol sub-segments.

Figure 29: Revenue of ASP Holders by Sub-Segment, 2021 – 2022



Source: MAVCOM Analysis, ASP Holders

Figure 30: Operating Profit Margin of ASP Holders by Sub-Segment, 2021 – 2022



Source: MAVCOM Analysis, ASP Holders

Note: Data provided by ASP holders and only available up to 4Q22

Ground Handling Services Segment

Ground Handling Segment Market Concentration

As at 4Q22, there were 23 Ground Handling Licence (GHL) holders that operate in three ground handling services sub-segments. Among these sub-segments, catering was the most concentrated, with an HHI of 0.9781 in 2022. Meanwhile, the general ground handling sub-segment recorded the highest revenue of RM3.9bn in 2022 (see Table 15).

Table 15: Market Structure of the GHL Segment, 2022

Type of Business	No. of Licence Holders	HHI	Revenue (RM mn)	Operating Profit Margin (%)
Catering	2	0.9781	57.0	2.2
General Ground Handling ⁵	17	0.6702	3,868.0	12.3
Refuelling ⁶	3	0.5146	20.7	-4.5
TOTAL	23		3,945.7	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 listed in Table 16.

Table 16: Types of General Ground Handling Services

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

Source: MAVCOM

⁵ As at 4Q22, there are only 17 GHL holders in the general ground handling sub-segment.

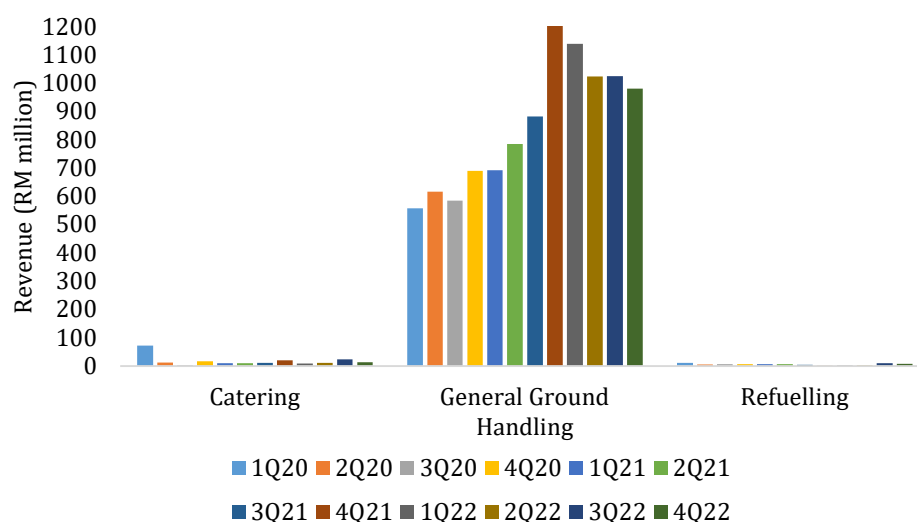
⁶ The calculation of the refuelling sub-segment excludes Petronas, Petron, Shell, and Shell Timur.

Revenue for General Ground Handling in 4Q21

In 4Q22, the revenue for the GHL holders dropped by 19.3% YoY to RM1.0bn (4Q21: RM1.3bn). On a QoQ basis, the revenue of GHL holders decreased by 5.3% in 4Q22 (3Q22: 20.0% QoQ). This reduction was mainly due to a decline in revenue within the catering and general ground handling sub-segment.

The revenue for the catering and general ground handling sub-segment declined by 30.3% YoY and 19.7% YoY, respectively. The drop in revenue was mainly an adjustment due to a high base effect when revenue substantially increased in 4Q21. **Only the refuelling sub-segment recorded a revenue growth** of 741.8% YoY, due to the resumption of operations by several GHL holders. Figure 31 provides the quarterly revenue for all ground handling sub-segments between 2020 and 2022.

Figure 31: Revenue for Ground Handling Sub-Segments, 2020 – 2022



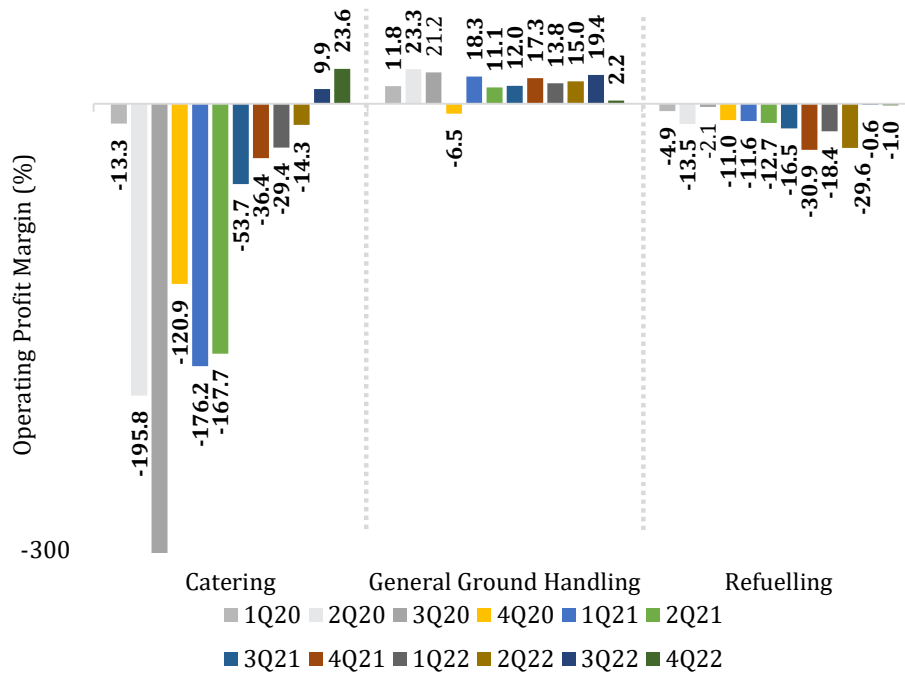
Source: MAVCOM, GHL Holders

Note: Data only available up to 4Q22

General Ground Handling Operating Profit Performance in 4Q22

Despite having lower revenue than 4Q21, the catering and general ground handling sub-segments reported positive margins of 23.6% and 2.2%, respectively, in 4Q22. On the other hand, refuelling recorded a loss margin of -0.6% (see Figure 32).

Figure 32: Operating Profit Margin for Ground Handling Sub-Segments, 2020 – 2022



Source: MAVCOM, GHL Holders

Note: Data provided by GHL holders and only available up to 4Q22

APPENDIX A: DATA TABLES

Table A1: Malaysia's GDP Growth, 2020 – 2023

Year	YoY Growth (%)
1Q20	0.7
2Q20	-17.2
3Q20	-2.7
4Q20	-3.4
1Q21	-0.5
2Q21	16.2
3Q21	-4.2
4Q21	3.6
1Q22	4.8
2Q22	8.8
3Q22	14.1
4Q22	7.1
1Q23	5.6

Source: DOS

Table A2: Malaysia's External Trade, 2020 – 2023

Quarter	Total Export (RM bn)	Total Import (RM bn)	Export YoY Growth (%)	Import YoY Growth (%)
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	303.3	247.0	44.2	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
2Q22	394.2	336.1	30.0	36.1
3Q22	419.6	355.1	38.2	46.4
4Q22	393.0	325.1	12.1	18.5
1Q23	354.6	290.2	2.8	3.7

Source: DOS

Table A3: Oil, Jet Fuel, and Exchange Rate Trends, 2020 – 2023

Quarter	Crude Oil (USD/bbl)	Jet Fuel (USD/bbl)	RM/USD
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
2Q22	114	167	4.41
3Q22	101	141	4.64
4Q22	89	137	4.40
1Q23	81	126	4.41

Source: EIA, BNM

Table A4: Global and Malaysia's GDP Growth, 2016 – 2023E

Year	Global YoY Growth (%)	Malaysia YoY Growth (%)
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
2022	3.4	8.7
2023E	2.8	4.0 – 5.0

Source: BNM, IMF

Table A5: Malaysia's Tourist Arrivals, 2020 – 2022

Quarter	Tourist Arrivals (by air) (mn)	Total Tourist Arrivals (excluding air) (mn)	Total Tourist Arrivals (mn)	Total Tourist Arrivals YoY Growth (%)
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
1Q22	0.1	0.0	0.10	288.2
2Q22	0.5	1.5	2.03	7,921.9
3Q22	0.0	3.4	3.42	15,016.2
4Q22	0.0	4.5	4.51	7,250.6

Source: MAVCOM, Tourism Malaysia

Table A6: Malaysia's Quarterly Passenger Traffic, 2020 – 2023

Quarter	Passenger Traffic (mn)	YoY Growth (%)
1Q20	19.1	-27.5
2Q20	0.8	-97.0
3Q20	4.6	-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
2Q22	12.4	853.8
3Q22	15.6	1,445.1
4Q22	18.1	158.7
1Q23	9.4	123.6

Source: MAVCOM, AOL Holders

Table A7: Malaysia's Passenger Traffic by Region, 2020 – 2023

Quarter	Passenger Traffic (mn)		
	Domestic	ASEAN	Non-ASEAN International
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	1.0	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
2Q22	9.4	1.8	1.2
3Q22	10.2	3.3	2.1
4Q22	10.8	4.3	2.9
1Q23	10.9	4.7	3.8

Source: MAVCOM, AOL Holders

Table A8: Inbound and Outbound FTK in Malaysia, 2019 – 2023

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	2,821.6	2,406.0	14.3
2Q22	3,039.9	2,439.2	15.0
3Q22	3,141.4	2,412.9	12.4
4Q22	3,019.7	2,436.0	15.6
1Q23	2,690.1	1,958.3	17.3

Source: MAVCOM, CargoIS

Table A9: 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

Table A10: Malaysia's Passenger Traffic, 2019 – 2022F

Year	Passenger Traffic (mn)	YoY Growth (%)
2019	109.3	6.6
2020	26.7	-75.6
2021	11.0	-58.9
2022	54.8	399.1
2022F	74.6 – 80.8	40 to 52

Source: MAVCOM, AOL Holders

Table A11: Malaysia's Air Cargo Traffic, 2019 – 2023F

Year	Total FTK (mn)	YoY Growth (%)
2019	20,222	-2.9
2020	15,797	-21.9
2021	20,647	30.7
2022	21,669	5.2
2023F	22,449 – 22,757	3.0 to 4.8

Source: MAVCOM, CargoIS

Table A12: Malaysia's Passenger Market Share by Airlines, 2020 – 2023

Quarter	AirAsia	AirAsia X	Firefly	MAB	Batik Air	Others
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	63.4	0.3	5.2	12.5	7.7	11.0
4Q20	63.0	0.7	5.2	8.0	6.7	16.4
1Q21	54.7	0.1	4.8	10.3	8.8	21.4
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	55.3	0.1	3.2	24.8	5.1	11.5
2Q22	44.2	0.2	5.3	23.8	5.8	20.6
3Q22	43.8	0.5	4.9	20.5	5.6	24.6
4Q22	38.8	3.1	5.2	20.3	5.3	27.4
1Q23	38.2	3.5	4.4	17.2	5.1	29.2

Source: MAVCOM, AirportIS

Table A13: Market Concentration Level and Load Factors, 2020 – 2023

Quarter	HHI	Load Factor (%)
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	0.3602	55.3
2Q22	0.3007	60.7
3Q22	0.3001	65.8
4Q22	0.2726	64.6
1Q23	0.2674	64.0

Source: MAVCOM, AirportIS

Table A14: Market Shares of the Aerodrome Operations Segment by Revenue and Passenger Traffic, 2022

Company	Market Share (%)	
	Revenue	Passenger Traffic
MAHB	98.2	96.3
Senai Airport	1.7	3.7
TMDSB	0.1	0.0

Source: MAVCOM, AOL Holders

Note: TMDSB's passenger market share was approximately 0.005% in 2020

Table A15: 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 A16: Malaysian Carriers' RASK and CASK Trends, 2019 – 2022

Quarter	RASK (sen)	CASK (sen)	RASK-CASK Spread (sen)
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
1Q22	24.8	52.6	-27.8
2Q22	30.9	49.1	-18.2
3Q22	27.0	36.9	-9.9
4Q22	28.1	29.8	-1.6

Source: MAVCOM, ASL Holders

Table A17: Malaysian Carriers' Revenue and Operating Profit Margin, 2020 – 2022

Quarter	Revenue (RM bn)	Operating Profit Margin (%)
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
1Q22	2.0	-32.3
2Q22	3.1	-39.9
3Q22	4.2	-0.1
4Q22	5.3	24.9

Source: MAVCOM, ASL Holders

Table A18: ASP Holders' Revenue and Operating Profit Margin, 2020 – 2022

Quarter	Revenue (RM mn)	Operating Profit Margin (%)
1Q20	321.5	18.1
2Q20	279.6	15.3
3Q20	272.2	10.7
4Q20	303.3	21.9
1Q21	304.1	16.4
2Q21	185.8	6.1
3Q21	342.2	17.0
4Q21	767.4	13.5
1Q22	225.3	16.4
2Q22	199.8	10.8
3Q22	341.9	22.6
4Q22	703.0	12.4

Source: MAVCOM, ASP Holders

Table A19: AOL Holders' Revenue and Operating Profit Margin, 2020 – 2022

Quarter	Revenue (RM bn)	Operating Profit Margin (%)
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
1Q22	0.6	4.8
2Q22	0.7	14.8
3Q22	0.9	-1.7
4Q22	1.0	5.2

Source: MAVCOM, AOL Holders

Table A20: Revenue for Ground Handling Sub-Segments, 2020 – 2022

Year	Revenue (RM mn)		
	Catering	General Ground Handling	Refuelling
1Q20	71.8	557.6	11.1
2Q20	12.8	616.9	5.4
3Q20	3.1	584.8	6.5
4Q20	16.8	690.5	6.0
1Q21	10.5	692.2	6.1
2Q21	9.8	784.9	6.4
3Q21	11.1	882.2	4.4
4Q21	19.5	1,220.5	0.9
1Q22	9.1	1,138.7	1.4
2Q22	11.2	1,024.3	1.9
3Q22	23.1	1,024.9	9.8
4Q22	13.6	980.2	7.7

Source: MAVCOM, GHL Holders

Table A21: Operating Profit Margin for Ground Handling Sub-Segments, 2020 – 2022

Year	Operating Profit Margin (%)		
	Catering	General Ground Handling	Refuelling
1Q20	-13.3	11.8	-4.9
2Q20	-195.8	23.3	-13.5
3Q20	-1,594.9	21.2	-2.1
4Q20	-120.9	-6.5	-11.0
1Q21	-176.2	18.3	-11.6
2Q21	-167.7	11.1	-12.7
3Q21	-53.7	12.0	-16.5
4Q21	-36.4	17.3	-30.9
1Q22	-29.4	13.8	-18.4
2Q22	-14.3	15.0	-29.6
3Q22	9.9	19.4	-0.6
4Q22	23.6	2.2	-1.0

Source: MAVCOM, GHL Holders

APPENDIX B: LISTS OF LICENCE AND PERMIT HOLDERS AS OF 2022

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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