SUMMARY OF





MAVCOM'S FUNCTIONS



Establish a competitive framework which promotes a healthy, stable and sustainable commercial environment



Drive awareness of consumer rights and provide a platform for complaints resolution



To promote domestic and international connectivity to drive economic growth and nation building

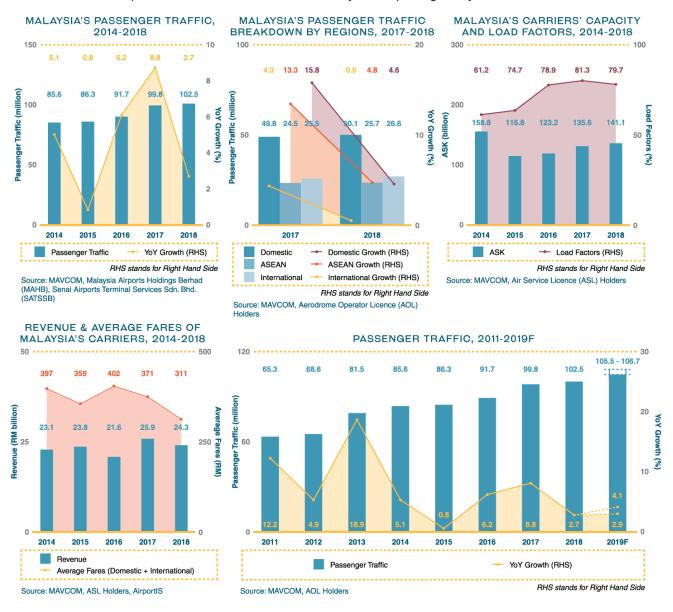
Malaysian Aviation Commission

INDUSTRY OUTLOOK & PERFORMANCE

The below outlines the performance of the Malaysian civil aviation industry in 2018 and outlook for 2019.

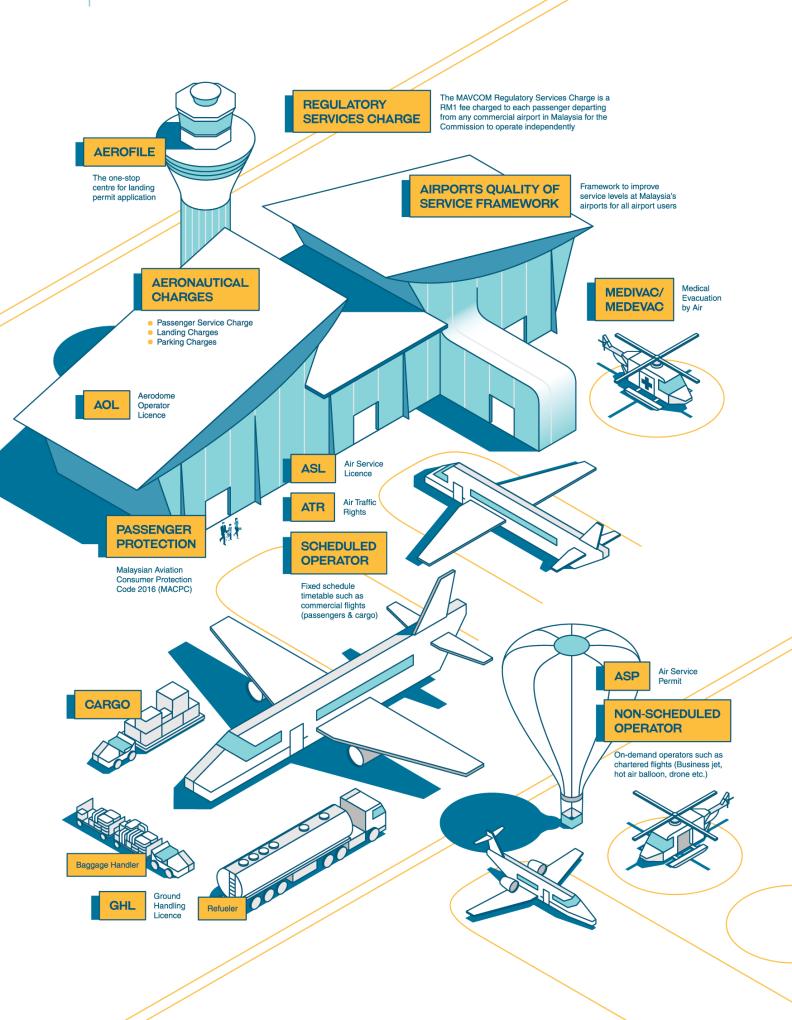
Summary:

- Malaysia surpassed the 100 million passenger traffic mark for the first time in 2018. Total passenger traffic
 for the year saw a growth of 2.7 per cent year-on-year (YoY) to 102.5 million.
- The growth was mainly attributed to international traffic growth, which was equally driven by both Association of Southeast Asian Nations (ASEAN) & non-ASEAN travel, registering 4.8 per cent growth and 4.6 per cent growth respectively.
- Overall average fares in 2018 (RM311) was lower compared to RM371 in 2017.
- Malaysian carriers generated a lower revenue of RM24.3 billion, a 6.2 per cent dip from the previous year's revenue of RM25.9 billion.
- Available seat kilometres (ASKs) for Malaysian carriers grew by 4.1 per cent YoY, meanwhile average load
 factors decreased to 79.7 per cent as demand for air travel was not significantly stimulated by the overall
 lower average fares.
- MAVCOM estimates a 2.9 per cent to 4.1 per cent YoY growth in passenger traffic in 2019, driven by domestic consumption and continued demand for Malaysian exports globally.



MAVCOM's bi-annual industry report *Waypoint* features a macro overview and outlook of the civil aviation sector, analysis on industry structure and performance, as well as reviews of the various segments within the civil aviation industry in Malaysia. The reports are available on MAVCOM's website at www.mavcom.my.

LICENSING & AIR TRAFFIC RIGHTS



LICENCES AND PERMITS ISSUED BY MAVCOM

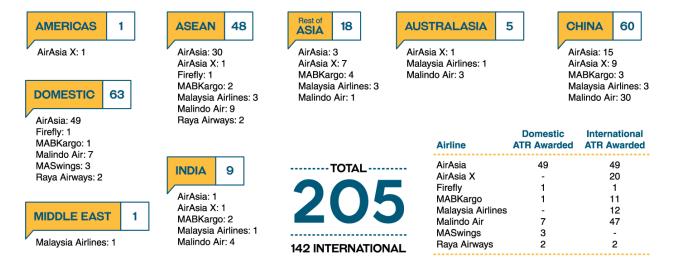
FROM 1 JANUARY 2018 - 31 DECEMBER 2018



An updated list of licences or permits issued by the Commission since inception can be found on MAVCOM's website at www.mavcom.my.

AIR TRAFFIC RIGHTS (ATR)

AWARDED BY MAVCOM IN 2018



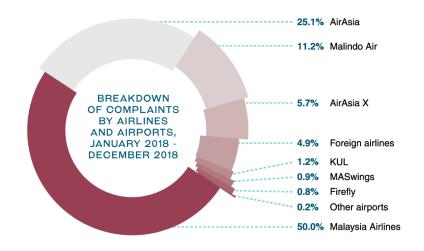
An updated list of Air Traffic Rights issued by the Commission since inception can be found on MAVCOM's website at www.mavcom.my.

CHAMPIONING CONSUMER RIGHTS

To protect the rights and interests of air passengers, the Malaysian Aviation Consumer Protection Code 2016 (MACPC) was gazetted in 2016. The MACPC provides transparency and guidelines on consumer rights and

procedures to seek recourse. To facilitate the implementation of the MACPC, MAVCOM had set up a Complaints Management System (CMS) to assist consumers whom are dissatisfied with a complaint resolution offered by airlines or airports.

MAVCOM publishes bi-annual consumer reports which tabled complaints received at half-year periods and the status of its resolution by data derived from the CMS. More information can be found on www.mavcom.my.



Malindo

Foreign

KUL stands for KL International Airport 1 and KL International Airport 2 Source: MAVCOM

Malavsia

CONSUMER COMPLAINTS BY AIRLINE AND CATEGORY, JANUARY 2018 - DECEMBER 2018

Category	Air	Asia	AirA	sia X	Fire	efly		ines	MAS	wings		ir		ines	To	tal
Communication of change in flight status	1	-	1	-	-	-	6	-	-	-	2	-	-	-	10	-
Complaints handling	1	6	-	-	-	-	6	10	-	-	-	1	-	-	7	17
Customer service	15	14	4	2	1	1	45	28	1	-	6	11	3	2	75	58
Denied boarding	34	17	6	9	3	1	66	70	-	1	8	5	13	10	130	113
Facilities or in flight services	9	3	4	-	-	1	26	13	-	1	7	12	-	-	46	30
Flight cancellation	29	8	8	7	2	3	108	51	4	2	14	31	5	2	170	104
Flight delays	43	51	5	11	2	2	151	101	6	3	35	60	5	9	247	237
Flight rescheduling	4	-	-	-	-	-	12	-	-	-	3	-	1	-	20	-
Food and beverage	1	2	-	-	-	-	11	1	-	-	1	1	-	-	13	4
Frequent flyer program	11	1	-	1	1	-	13	13	-	-	1	1	-	-	26	16
Mishandled baggage	81	55	19	15	2	-	197	173	1	1	47	46	40	22	387	312
Online booking	80	42	10	11	1	4	71	46	-	-	16	16	5	2	183	121
Price of tickets	4	-	1	-	-	-	2	-	-	-	2	-	1	-	10	-
Refunds	90	80	33	20	2	2	105	82	2	3	37	87	7	16	276	290
Safety and security	2	2	-	-	-	-	1	3	-	-	1	-	-	-	4	5
Special assistance (Person with Disability)	3	-	-	-	-	-	2	-	-	-	1	-	-	-	6	-
Upgrading or downgrading	-	1	-	-	-	-	1	4	-	-	-	-	-	1	1	6
Others	14	8	4	-	-	-	16	13	1	-	7	3	3	1	45	25
Grand Total	422	290	95	76	14	14	839	608	15	11	188	274	83	65	1,656	1,338

2018 2017 Others include: Complaints on change of operating airport, processing fee charged by airlines, sports equipment charges and any other complaints

CONSUMER SURVEY

MAVCOM conducted its annual consumer survey in 2018 with the intention of measuring consumers' awareness of their travel rights as well as appraising passenger satisfaction levels for the aviation industry.



TOP 3 RIGHTS CONSUMER ARE AWARE OF



Claims for mishandled baggage

2017



Airlines duty of care during flight delays



Assistance to persons with disability

2018



Price of flight ticket



TOP FACTORS FOR FLIGHT TICKET PURCHASE

Time suitability



Direct flight



Comfortable seating is also gaining higher importance

OVERALL SATISFACTION ON AIRPORT'S CUSTOMER SERVICE

Responsiveness

81 89

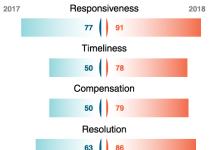
Timeliness

44 86

Resolution

OVERALL SATISFACTION ON





FACTOR AFFECTING FLIGHT TICKET PURCHASE



survey in 2017 with regards to the top three factors affecting flight purchase

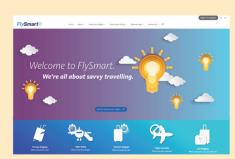
Source: MAVCOM's Consumer Survey 2018

FLYSMART

FlySmart is a sub-brand established by MAVCOM as a consumer-centric initiative to champion air travel rights in the aviation industry. The Commission developed FlySmart with the purpose of educating passengers on their air travel rights, empower them to make the best of their air travel journeys while serving as a platform for consumers to lodge complaints involving airlines or airports.



FlySmart Facebook and Instagram page Source: www.flysmart.my and @flysmart_my



FlySmart website (www.flysmart.my) Source: MAVCOM

COMPETITION & POLICY ADVISORY

MAVCOM has published seven guidelines regarding the aviation industry in 2018. These guidelines provide guidance to industry players on how the provisions in Part VII of The Malaysian Aviation Commission Act 2015 [Act 771] are enforced in practice.

Guidelines Published by MAVCOM:

Guidelines on	Guidelines on
Aviation Service	Anti-Competitive
Market Definition	Agreements
Guidelines on	Guidelines on
Abuse of	Substantive
Dominant	Assessment
Position	of Mergers
Application Pr	Notification and ocedure for an rger or a Merger
Guidelines on the	Guidelines
Determination of	on Leniency
Financial Penalties	Regime

MAVCOM had also granted individual exemptions which are outlined below:

Receipt of Applicat	ion Applicants	Status
19 October 2018	Singapore Airlines LimitedDeutsche Lufthansa AG	MAVCOM expects to issue its decision on the individual exemption application in 2019
22 June 2016	All Nippon Airways Co., Ltd.United Airlines Ltd.	Granted an individual exemption for a period of five years from 11 May 2017
Source: MAVCOM		

MAVCOM'S REGULATORY DEVELOPMENT IN 2018

- The Malaysian Aviation Commission Act 2018 [Act A1559]
- Malaysian Aviation Commission (Code of Conduct) Regulations 2018 [P.U.(A) 115/2018]
- Malaysian Aviation Commission (Aviation Services Charges) (Amendment) Regulations 2017 [P.U.(A) 427/2017]
- Malaysian Aviation Commission (Regulatory Services Charges) Regulations 2018 [P.U.(A) 81/2018]

STUDY ON AIRFARES DURING FESTIVAL PERIODS

Highest

MAVCOM undertook a study to analyse the pricing patterns of airfares for domestic flights in Malaysia during selected peak seasons using a price multiplier methodology. The study found that the highest price multipliers occurred during the Chinese New Year period with six out of the ten routes (with the highest price multipliers) were those connecting Peninsular Malaysia to Sabah and to Sarawak.

On average, airfares for routes between Peninsular and Sabah and Sarawak, have been on a downward trend since 2011. The average airfares on these routes declined from RM342 in January 2011 to RM305 in December 2018.

The Commission is not in favour of the implementation of price regulations as a way to control price of airfares during peak seasons. The study showed that enforcing strict price regulations such as implementing a floor price, a ceiling price or a surcharge rate may result in consequences such as negative higher airfares during non-peak seasons and may discourage competition between airlines. Instead, the Commission has facilitated airlines to increase their flight capacity as a means to reduce airfares during peak seasons.

HIGHEST PRICE MULTIPLIER FOR EACH ROUTE CATEGORY

Max.

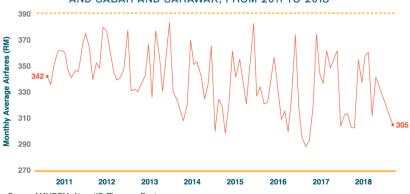
Base

No.	Price Multiplier	Route	Peak Season	Airline	Airfare (RM)*	Airfare (RM)**
1	5.7x	IPH - JHB	Chinese New Year	Malindo Air	1,074	187
2	4.2x	JHB - SBW	Chinese New Year	AirAsia	988	236
3	4.2x	JHB - KCH	Chinese New Year	AirAsia	788	188
4	3.6x	PEN - MKZ	Chinese New Year	Malindo Air	657	185
5	3.4x	KUL - SBW	Chinese New Year	AirAsia	844	248
6	3.1x	KUL - KCH	Hari Raya Aidilfitri	Malaysia Airlines	1,142	364
7	3.1x	KUL - BKI	Hari Raya Aidilfitri	Malaysia Alrlines	1,337	438
8	3.0x	JHB - BKI	Chinese New Year	AirAsia	911	309
9	2.9x	JHB - PEN	Chinese New Year	AirAsia	500	170
10	2.9x	KUL - PEN	Chinese New Year	Malindo Air	558	191

- * Maximum airfare: The highest of the lowest recorded airfares during the peak seasons (inclusive of airline base fares, Passenger Service Charge, and other related charges)
- ** Base airfare: The yearly average airfares for 2016 and 2017 (inclusive of airline base fares, Passenger Service Charge, and other related charges)

Source: MAVCOM, Airlines' websites, AirportIS

AVERAGE AIRFARES FOR ROUTES CONNECTING PENINSULAR AND SABAH AND SARAWAK, FROM 2011 TO 2018



Source: MAVCOM, AirportIS, Thomson Reuters

SNAPSHOT ON AIRPORTS



► International Airport

- 1. Langkawi International Airport (LGK)
- Penang International Airport (PEN)
- Yenang International Airport (PEN)
 Kuala Lumpur International Airport (KUL Terminal 1 & 2)
 Senai International Airport (JHB)
 Kuching International Airport (KCH)
 Kota Kinabalu International Airport (BKI)

Domestic Airport

- 1. Sultan Abdul Halim Airport (AOR)

- Sultan Ismail Petra Airport (KBR)
 Sultan Azlan Shah Airport (IPH)
 Sultan Abdul Aziz Shah Airport (SZB)
- 5. Malacca Airport (MKZ)
- 6. Sultan Mahmud Airport (TGG)
- Kerteh Airport (KTE)
- 8. Sultan Ahmad Shah Airport (KUA)
- 9. Tanjung Manis Airport (TGC)
- 10. Sibu Airport (SBW)
- 11. Bintulu Airport (BTU) 12. Miri Airport (MYY)
- 13. Mulu Airport (MZV)
- 14. Limbang Airport (LMN)
- 15. Labuan Airport (LBU)
- 16. Sandakan Airport (SDK)
- 17. Lahad Datu Airport (LDÚ)
- 18. Tawau Airport (TWU)

► STOLport

- 1. Pangkor STOLport (PKG)
 2. Redang STOLport (RDN)
 3. Tioman STOLport (TOD)
 4. Mukah STOLport (MKM)
 5. Kapit STOLport (KPI)
 6. Belaga STOLport (BLG)
 7. Long Akah STOLport (LKH)
 8. Long Lellang STOLport (LGL)
 9. Marudi STOLport (MUR)
 10. Long Seridan STOLport (ODN)
 11. Long Pasia STOLport (GSA)
 12. Lawas STOLport (LWY)
 13. Semporna STOLport (SMM)
- 13. Semporna STOLport (SMM)
- 14. Kudat STOLport (KUD)
- 15. Long Semado STOLport (LSM)
- 16. Ba'kelalan STOLport (BKM)
- 17. Bario STOLport (BBN)
- 18. Long Banga STOLport (LBP)

TERMINAL DESIGN CAPACITY AND TERMINAL CAPACITY UTILISATION RATE OF AIRPORTS IN MALAYSIA, 2018

No.	Airports	Terminal Design Capacity (mppa)	2018 Passengers Handled (mppa)	2018 Terminal Utilisation Rate (%)
1	Sultan Abdul Aziz Shah Airport (SZB)	1.50	1.96	130.9
2	Lahad Datu Airport (LDU)	0.10	0.12	124.8
3	Penang International Airport (PEN)*	6.50	7.79	119.8
4	Miri Airport (MYY)	2.00	2.35	117.5
5	Mulu Airport (MZV)	0.05	0.06	115.1
6	KL International Airport - Terminal 1 (KUL-T1)*	25.00	28.29	113.2
7	Sultan Ismail Petra Airport (KBR)	1.50	1.69	112.5
8	Kuching International Airport (KCH)*	5.00	5.56	111.3
9	Tawau Airport (TWU)	1.50	1.64	109.4
10	Senai International Airport (JHB)*	3.50	3.52	100.7
11	Kota Kinabalu International Airport (BKI)*	9.00	8.62	95.8
12	Bintulu Airport (BTU)	1.00	0.92	92.3
13	Sibu Airport (SBW)	1.80	1.58	87.7
14	KL International Airport - Terminal 1 and 2 (KUL)*	70.00	59.99	85.7
15	Kerteh Airport (KTE)	0.10	0.08	83.9
16	KL International Airport - Terminal 2 (KUL-T2)*	45.00	31.92	70.9
17	Langkawi International Airport (LGK)*	4.00	2.74	68.4
18	Sandakan Airport (SDK)	1.40	0.95	67.9
19	Sultan Mahmud Airport (TGG)	1.50	0.89	59.6
20	Limbang Airport (LMN)	0.08	0.05	56.8
21	Sultan Abdul Halim Airport (AOR)	1.50	0.82	54.5
22	Sultan Azlan Shah Airport (IPH)	0.60	0.32	52.6
23	Sultan Ahmad Shah Airport (KUA)	0.50	0.26	51.8
24	Labuan Airport (LBU)	2.20	0.57	26.1
25	Malacca Airport (MKZ)	0.50	0.05	10.5

refers to International airports within Malaysia SZB, MYY, IPH and MKZ also conducts operations to international destinations Source: MAVCOM, Aerodrome Operator Licence Holders

MAVCOM'S DEVELOPMENT

OF THE AERONAUTICAL CHARGES FRAMEWORK

MAVCOM's move towards a cost-based mechanism for the framework in Malaysia is in line with the principles outlined by International Civil Aviation Association (ICAO) as well as international best practices used by major airports worldwide.

- The framework is premised on a Regulated Asset Base (RAB) methodology, a funding model in which the base is the value of the assets that an airport operator is expected to make a fair rate of return.
- In 2018, MAVCOM consulted and updated industry players in the development of the framework through two Consultation Papers so that the views of all parties involved are taken into consideration.
- The final framework is targeted to be announced in October 2019 before taking effect on 1 January 2020.

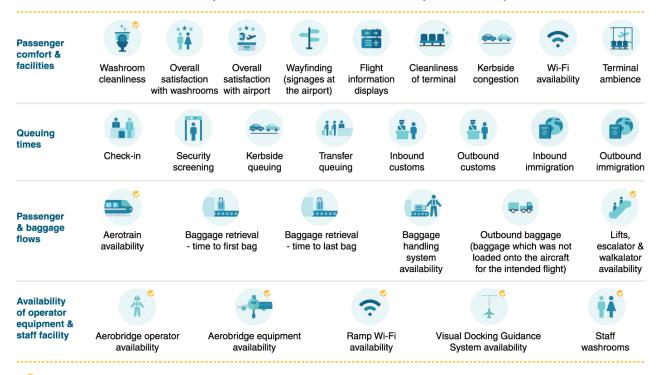
AIRPORTS QOS FRAMEWORK

The Airports Quality of Service Framework (Airports QoS Framework) was introduced by MAVCOM in 2018 to improve passenger comfort at airports by improving service levels, and to facilitate better airport user experience for airlines, ground handlers and other users of airports in Malaysia.

The framework sets service standards and key performance indicators. In the event where minimum service levels are not maintained or achieved, the airport operator could be imposed with a financial penalty of a certain percentage of the airport's aeronautical revenues.

MAVCOM has been working closely with industry stakeholders in implementing the framework across airports in Malaysia. Of the total 28 service quality criteria, eight service quality elements have been implemented in KUL Terminals (KL International Airport and KL International Airport 2) beginning 1 September 2018 and 1 October 2018, respectively. All 28 service quality elements are targeted for implementation by the first quarter of 2020, along with implementation at other airports such as Subang, Langkawi and Kota Kinabalu in that same year. The framework will then progressively be extended at other airports within Malaysia.

AIRPORTS QOS FRAMEWORK IN KUL TERMINALS (KLIA AND klia2)



AVIATION SERVICES IN SABAH & SARAWAK

Compared to Peninsular Malaysia, the states of Sabah and Sarawak are less populated, but with a larger land mass. Air transportation plays an important role in this region given its geography and sparse population density.

There are limited land transport options and travelling within the states' borders could prove to be difficult – while land connectivity along the coastal areas are being improved with the construction of the Pan Borneo Highway. In 2018, a total of 3.3 million passengers departed from Kota Kinabalu International Airport (BKI), while in Sarawak, 2.9 million passengers flew out of Kuching International Airport (KCH).

BKI has emerged as Malaysia's third largest international airport after KUL and Penang International Airport (PEN) due to its proximity to North Asia and Sabah's own attractiveness as a destination. Its non-ASEAN (Association of Southeast Asian Nations) traffic is larger than PEN with more direct flights to Korea and China.

AIR TRAFFIC RIGHTS AWARDED TO LOCAL CARRIERS FOR OPERATIONS IN SABAH AND SARAWAK FROM MARCH 2016 TO DECEMBER 2018

	S	abah	Sara	wak
Airline	Domestic	International	Domestic In	nternational
AirAsia	23	10	26	6
AirAsia X	-	1	-	-
Malaysia Airline	s 4	9	2	1
Malindo Air	8	29	7	1
MASwings	-	-	3	-
Raya Airways	2	1	-	-
Total	37	50	38	8
Grand Total		87	4	6

LIST OF LICENCE AND PERMIT HOLDERS OPERATING IN SABAH AND SARAWAK IN 2018

Licence Type	Holders Operating in Sabah	Holders Operating in Sarawak
ASP	1	3
GHL	2	2
AOL	-	1
Total	3	6

Source: MAVCOM

AIR TRAVEL STATISTICS BETWEEN EAST AND PENINSULAR MALAYSIA IN 2018

_		Number of pa	ssengers			Load Factors (%)	
Route	AirAsia	Malaysia Airlines	Malindo Air	Total	AirAsia	Malaysia Airlines	Malindo Air
BKI - KUL	1,686,969	692,263	392,614	2,771,846	84.21	68.43	77.88
BKI - JHB	261,787	-	-	261,787	85.05	-	-
BKI - KBR	47,887	-	-	47,887	85.27	-	-
BKI - PEN	199,587	-	-	199,587	85.03	-	-
BTU - KUL	276,155	125,142	-	401,297	83.65	58.98	-
KCH - JHB	409,618	-	-	409,618	85.17	-	-
KCH - KBR	47,887	-	-	47,887	85.27	-	-
KCH - KUL	1,452,771	569,449	260,502	2,282,662	81.84	67.58	77.36
KCH - PEN	181,004	-	-	181,004	85.07	-	-
LBU - KUL	179,101	145,989	38,213	363,303	84.32	62.15	77.59
MYY - KUL	631,404	230,069	-	861,473	83.88	61.77	-
TWU - KUL	550,977	154,777	-	705,754	84.51	66.62	-
SBW - KUL	653,285	112,306	-	765,591	82.52	51.68	-
SDK - KUL	319,618	78,996	-	398,614	84.64	66.71	-

Source: MAVCOM, AirportIS

Out of 1,679
complaints MAVCOM
received in 2018, 52
were from Sabah while
81 came from
Sarawak. The
Commission is
currently developing a
consumer protection
code which will provide
compensation and
care that are
specifically tailored for
passengers passing
through STOLports.

TOP COMPLAINTS BY CATEGORY FOR SABAH IN 2018

Refunds 23.1% 21.2% Mishandled baggage
Online booking 19.2% 11.5% Flight cancellation
Flight delays 9.6% 5.9% Denied boarding
Customer service 1.9% 1.9% Others
Safety & security 1.9% 1.9% Complaints handling
Offloaded 1.9%

TOP COMPLAINTS BY AIRLINE OR AIRPORT FOR SABAH IN 2018

32AirAsia3MASwings11Malaysia Airlines1Foreign airlines4Malindo Air1airports

Source: MAVCOM

TOP COMPLAINTS BY CATEGORY FOR SARAWAK IN 2018

Mishandled baggage 28.4% 21.0% Refunds
Flight delays 12.3% 11.1% Flight cancellation
Online booking 9.9% 4.9% Others
Denied boarding 3.7% 2.7% Customer service
Food & beverage 1.2% Flight rescheduling
Frequent Flyer Programs 1.2% 0ffloaded
Complaints handling 1.2%

TOP COMPLAINTS BY AIRLINE OR AIRPORT FOR SARAWAK IN 2018

38 Malaysia Airlines 3 AirAsia X
27 AirAsia 3 Malindo Air
8 MASwings 2 Foreign airlines

To better understand the needs and air travel requirements of those living in Sabah and Sarawak, proper research and fieldwork is required. In light of this, MAVCOM conducted a Rural Air Services (RAS) survey from September to October 2018, comprising of 1,030 respondents who flew with MASwings in the past six months from the date of the survey. A summary of the findings can be viewed in the following diagram:

SUMMARY OF THE RAS SURVEY CONDUCTED BY MAVCOM IN 2018



RURAL AIR SERVICES (RAS)

Since MAVCOM's establishment, the role of administering Public Service Obligation (PSO) routes such as the RAS, has been managed by the Commission. In Malaysia, the principal example of PSO is the RAS which connect remote, sparsely populated, or otherwise inaccessible parts of Malaysia with the rest of the country. Although the Ministry of Transport remains as the principal decision maker for RAS, the Commission is empowered to govern PSO schemes within the Malaysian civil aviation industry.

In 2007, RAS operations were formally returned to Malaysia Airlines System (MAS). MAS then formed MASwings, an entity established to serve RAS routes. The costs for the operation of RAS by MASwings is fully funded by the Malaysian Government in the form of subsidies and aircraft rental payments.

As of December 2018, MASwings operated 49 RAS routes with 19 routes which were serviced by ten Aerospatiale ATR 72-500 aircraft and 30 routes serviced by six Twin Otter Viking DHC6-400 aircraft. The routes for both the ATRs and Twin Otters are stated below:



Road in rural Sarawak

The Twin Otter Viking DHC6-400 aircraft

The Long Lellang short take-off and landing ports (STOLport) amidst lush greenery and rugged highlands

Landing strip at Ba'kelalan STOLport, Sarawak

LIST OF RAS ROUTES OPERATED BY MASWINGS AS OF DECEMBER 2018

SABAH	(Internal)		SAR	AWAK (Internal)	
KK - Lahad Datu	KK - Labuan	Miri - Mulu	Miri - Limbang	Miri - Long Akah	
KK - Sandakan	KK - Kudat	Miri - Limbang	Miri - Lawas	Marudi - Long Lellang	
Sandakan - Tawau	KK - Sandakan	Miri - Bintulu	Limbang - Lawas	Marudi - Long Akah	
KK - Tawau	Kudat - Sandakan	Miri - Sibu	Miri - Ba'kelalan	Bario - Bakalalan	
SABAH/SARA	WAK (Interstate)	Bintulu - Sibu	Lawas - Ba'kelalan	Sibu - Mukah	
KK - Limbang	KK - Bintulu	Kuching - Bintulu	Miri - Bario	Mukah - Miri	
KK - Lawas	KK - Sibu	Kuching - Sibu	Marudi – Bario	Mukah - Bintulu	
Miri - Labuan	KK - Mulu	Kuching - Miri	Miri - Marudi	Mukah - Kuching	
KK - Miri		Kuching - Mulu	Miri - Long Lellang	Miri - Long Seridan	