

SECTION 5: MASTER PLAN RECOMMENDATIONS

This section provides detailed recommendations for the Master Plan based on the framework outlined in Section 4 of this document.

The key enabler for the Master Plan's Strategic Pillars is the development of an NAP that will provide policy and legislative support for the implementation of the Master Plan.

Based on the issues and challenges and the resultant positioning for the sector articulated in Section 2 of the document, the Master Plan recommendations were developed in accordance with the three Strategic Pillars listed in the framework outlined in Section 4 of the document, namely:

- Pillar 1: Establishing and maintaining a fair and competitive commercial environment
- Pillar 2: Making available appropriate airports infrastructure
- Pillar 3: Developing a strong civil aviation-related human capital development base

The recommendations for the strategic objective, Strategic Pillars, and the NAP are expanded into specific implementation plans with timelines and stakeholders.

Finally, as highlighted in Section 4 of the document, all components of the framework are closely interrelated, and as such, the recommendations need to be implemented on a wholesale and not on a piecemeal basis to ensure the Master Plan's effectiveness.

It is proposed that these recommendations be translated into action items that will be implemented within four phases, given the ten-year implementation period of the Master Plan (2021 – 2030):

- Foundation-setting (where applicable) : Completed by 2020
- Short-term : Completed by 2022
- Medium-term : Completed by 2025
- Long-term : Completed by 2030

Prerequisite: Developing a National Aviation Policy

As mentioned in Sections 1 and 4 of this document, a key imperative for the implementation of the Master Plan is the development of an NAP which will provide guidance and direction to the overall development of the sector. The Policy will need to include the following terms of reference, among others:

- Identification of objectives and priorities for the sector development, with clear directions on the balance of priorities between economic, safety and security, environmental, and societal imperatives
- Overarching policies on the economic management of the sector, including but not limited to liberalization, and ownership and management of transport assets
- Overarching policies on technical, safety and security, and environmental issues related to the sector
- Terms of reference for supplementary guidance for the sector, including legislation, regulations, and related plans and strategies

With regards to the implementation of the Master Plan, there are several recommendations which require policy direction, namely:

- **Liberalization of air routes and the airlines sector:** Recommendations related to increasing the number of airlines operating within and out of Malaysia involve changes in policies related to market access and ownership requirements for airlines
- **Liberalization and increased commercialization of airports:** Recommendations related to developing appropriate airport infrastructure also require policy shifts with regards to funding for development capex. In addition, policy decisions are required for the way in which non-commercial or financially non-viable airport infrastructure is funded

Areas where recommendations require policy shifts are highlighted as action items under the relevant Strategic Pillars.

Recommendations

A. Development of a National Aviation Policy

1. Developing a National Aviation Policy

Implementation period	Foundation-setting
Stakeholders	MOT

Given that the Master Plan's strategic objective is maximizing air connectivity, it is proposed that this objective is embedded as a primary part of the NAP. However, given that the Policy will encompass other areas of the civil aviation sector beyond economic development, the overriding emphasis on maximizing air connectivity will need to be balanced against other objectives: safety and security, technical, and environmental. Table 7 illustrates the proposed terms of reference for the Policy with examples of how they might be actualized.

Table 7: Terms of Reference for the Proposed NAP

Terms of reference	Examples
Identification of objectives and priorities for sector development, with clear directions on the balance of priorities between economic, safety and security, environmental, and societal imperatives	While it is proposed that the commitment towards maximizing air connectivity be embedded into the NAP, this commitment needs to be balanced against other priorities. For instance, the overriding priority for the NAP could be non-compromising stance towards safety and security. This means that airports that do not meet CAAM's technical and safety standards would not be allowed to operate, regardless of the connectivity implications.

Terms of reference	Examples
<p>Overarching policies on the economic management of the sector, including but not limited to liberalization, and ownership and management of transport assets</p>	<ul style="list-style-type: none"> • As highlighted in various parts of the Master Plan, the Plan’s implementation requires the following policy directions: <ul style="list-style-type: none"> ○ <u>Airports</u>: Given the proposal for greater commercialization of the airports³¹ industry outlined further in the Master Plan, how will airport infrastructure be funded in the future? ○ <u>Airlines</u>: What are the policy imperatives for ASAs, including redlines for negotiations? In addition, policy shifts are required in relation to ownership requirements for airlines operating from Malaysia. ○ <u>ANS</u>: Will ANS continue to be under the jurisdiction of CAAM and funded by the GoM? Are there plans to privatize ANS? How will this impact the funding, operations, and efficiency of ANS going forward to 2030?
<p>Overarching policies on technical, safety and security, and environmental issues related to the sector</p>	<ul style="list-style-type: none"> • Technical and safety: The CAAM has highlighted that there are airports and STOLports which do not meet technical and safety standards. Policy directions are required as to the continuing operations of these facilities. • How would the NTP’s commitment towards the promotion and investment in green transport be implemented in the aviation sector? Will this require government funding?

³¹ Refer to MAVCOM Position Paper on Malaysia’s Airports Industry Structure (December 2019).

Terms of reference	Examples
<p>Terms of reference for supplementary guidance for the sector, including legislation, regulations, and related plans and strategies</p>	<ul style="list-style-type: none"> • Operationalising the NAP requires enabling guidance documents. • Apart from legislation and regulations which may have to be established, the Master Plan also needs to be combined with a Technical Master Plan to form a comprehensive National Aviation Master Plan, which will be fully guided by the NAP. • A National Airport Strategic Plan is also required, covering, among others: <ul style="list-style-type: none"> ○ Commitment to multi-modal connectivity for airport development ○ Delineation of commercial and non-commercial airports, which will affect the funding for these airports ○ Decisions relating to new airports or extensions to existing airports to be subject to a robust economic, operational, and environmental impact analyses

Source: MAVCOM

Objective: Maximizing Air Connectivity

As stated in Sections 2 and 3 of this document, air connectivity is strongly dependent on the existence of a strong economic base, tourism, and trade. In addition, MAVCOM’s analysis has found that air connectivity is positively influenced by the number of airlines flying into a country, as well as, the availability and accessibility of multi-modal public transportation.

Hence, initiatives to improve Malaysia’s air connectivity beyond the Master Plan’s Strategic Pillars should be focused on strengthening Malaysia’s economic base and ensuring seamless, multi-modal connectivity. Also, while airlines sector should be left to operate on a purely commercial basis, policy levers could be utilized to encourage more airlines to operate into and out of Malaysia. These include exploring long-term policy transformation, such as changing the ownership and control regime to principal place of business, as well as, granting ninth freedom right, perhaps on a unilateral basis.

Recommendations

A. Strengthen Malaysia's economic base

1. Coordinating tourism development plans with air routes in terms of the ATR negotiations with other countries
2. Coordinating the development of air connectivity with trade initiatives, such as the LTFMP

B. Better utilization of ASAs

1. Ensuring ASAs are linked to connectivity considerations

C. Multi-modal, seamless connectivity

1. Establishing a policy commitment for transportation development plans to consider their impact and connectivity with other modes of transport, including at the last mile

A. Strengthen Malaysia's economic base

1. Coordinating tourism development plans with air routes in terms of the ATR negotiations with other countries

Implementation period	Foundation-setting, with periodic reviews
Stakeholders	MOTAC, Tourism Malaysia, state governments, MOT, MAVCOM, domestic and foreign airlines, airports

As part of the Tourism Transformation Plan 2.0 developed by MOTAC, the focus on developing air connectivity had been part of Entry Point Project 11 (EPP 11), which was aimed at attracting more medium-haul³² tourist arrivals. As such, the EPP 11 aimed to increase flight frequencies to 10 priority cities in Australia, China, India, Japan, South Korea, and Taiwan, namely: Beijing, Delhi, Melbourne, Mumbai, Osaka, Seoul, Shanghai, Sydney, Taipei, and Tokyo. These priority cities had been chosen because Australia, China, India, Japan, South Korea, and Taiwan are expected to contribute over 90% of the incremental tourist arrivals from medium-haul countries by 2020.

MOTAC is subsequently developing the National Tourism Policy (NTMP) with potential changes in promoted air routes. In this regard, MAVCOM and industry players have been invited to participate in the development of the NTMP, and therefore are able to coordinate plans in relation to air routes with tourism development plans.

³² Defined in EPP 11 as flights of between four to six hours.

2. Coordinating the development of air connectivity with trade initiatives, such as the LTFMP

Implementation period	Foundation-setting, with periodic reviews
Stakeholders	MOT, LTFMP Task Force, MITI, Royal Malaysian Customs, EPU/MEA, DOS, MAVCOM, air freight companies, airlines, airports

With regards to trade, we note that Malaysia’s LTFMP includes various measures aimed at improving Malaysia’s air connectivity in general, and air freight connectivity in particular. This includes measures such as:

- Encouraging and enabling new air cargo volumes from Indonesia, Singapore, Thailand, and other ASEAN markets through air connectivity in addition to improvements to road transport connectivity, as well as, enhancing domestic connectivity from key airports to KUL
- Establishing a national freight data programme. This is imperative given that there is a paucity of disaggregated and detailed data on air freight, which hampers efforts at determining long-term strategies for the cargo sector, including requirements for multi-modality
- Facilitating the adoption of the latest technology. There is a need for government ministries and agencies to provide regulatory clarity on the adoption of these technologies, such as high-precision tracking equipment, testing drones, sensors, and data loggers

It is proposed that the final recommendations for the Economic Master Plan for the Malaysian Civil Aviation Sector that are related to passenger and freight connectivity ensure that the coordination with these existing measures is continuously reinforced, as well as, reviewed and updated when necessary.

In addition, various master plans, such as the Fourth Industrial Master Plan and the LTFMP, recognize the importance of close engagements between the relevant stakeholders from both government and industry. We recommend that existing working groups covering the transport and logistics sector convened by the GoM, such as the National Logistics Task Force, should give due consideration to the air cargo industry as part of their wider work covering the wider logistics industry. In particular, the working groups should consider the two following areas:

- **Ensuring air cargo meets the needs of the economic base**
Given the developments that will shape the air cargo industry in the future, government and industry stakeholders should jointly work towards ensuring that the industry can cater to the needs of the underlying economic base. Changes in patterns of international trade and commercial activities mean that the air cargo sector needs to adapt to meet those needs—for example, by providing sufficient frequency and capacity to cater to just-in-time supply chains or high-precision tracking capabilities to facilitate e-commerce activities. We recommend that the GoM keeps close engagement with industry stakeholders to ensure that the air cargo industry develops sufficiently to perform its role as a catalyst to the wider economy and to identify and implement measures to remedy any shortcomings that are identified

- **Improving trade facilitation and behind-the-border measures**

As previously discussed, behind-the-border measures on trade facilitation play a crucial role in the air cargo industry as air cargo operations need to be complemented by low processing time and cost in order to be attractive. These involve various ministries, departments, and agencies that cover various parts in the process of air cargo shipments. To this end, government engagement should provide a platform for cross-agency collaboration to implement improvements in behind-the-border measures to reduce the processing time and cost of air cargo operations

B. Better utilization of ASAs

1. Ensuring ASAs are linked with connectivity considerations

Implementation period	Long-term
Stakeholders	MOT, MAVCOM

To date, Malaysia has signed bilateral ASAs with 106 countries. However, Malaysian carriers have utilized³³ 3rd and 4th freedom rights in the respective ASAs for only 26 countries, in contrast to 44 countries when Malaysia Airlines System (MAS) was at its peak network size. Among these 26 ASAs, eight of them are restricted while 18 are unrestricted i.e., open skies agreements.

As at December 2018, of the 26 ASAs currently being utilized, Malaysian carriers have tended to utilize the 18 unrestricted ASAs more than they have restricted ASAs. Malaysian carriers operate seven or more (i.e. at least daily) flights per week to 16 of the 18 countries with which Malaysia has unrestricted ASAs, with the exceptions being Laos and Pakistan, with which Malaysian carriers operate seven flights or fewer per week. In addition, Malaysian carriers had utilized more than 80% of the ATRs provided in two restricted ASAs, which are with Australia and India.

On the other hand, foreign carriers are not reciprocating the utilization of their ASAs with Malaysia. For example—with the exception of the Japanese and Saudi Arabian carriers which currently utilize 100%—foreign carriers such as those from Bangladesh, Nepal, and Pakistan utilize less than 50% of their restricted ASAs with Malaysia. Furthermore, Australian carriers do not utilize the restricted rights at all. For the unrestricted ASAs, there were no carriers from countries such as Cambodia, Laos, Macao, Myanmar, New Zealand, and the US operating into Malaysia.

³³ Unrestricted ASAs do not have limits in terms of types of aircraft, number of seats, and number of frequencies that can be deployed by the designated carriers in the ASAs, whereas the restricted ASAs specify restrictions to capacity deployment. Utilization of an ASA means operating at least one flight into a country that is a party to an ASA.

There are various reasons for the discrepancy between the number of ASAs signed and their utilization rates. This discrepancy may be connected to the constraints on Malaysia's air connectivity imposed by a relatively weak economic base, in addition to the deteriorating service delivery of Malaysia's airports and ground-handling services. It also implies that a more comprehensive ASAs strategy is required that is linked with air connectivity requirements. Such a strategy is particularly important given that ASAs—especially with more developed countries and regions such as the EU—increasingly involve commitments that go beyond ATRs and include issues such as proscribing subsidies. Given the potential for more trade-offs, it is even more imperative that Malaysia obtains the maximum amount of benefits from these agreements.

Other ways in which ASAs may be utilized to facilitate an increase in the number of airlines operating within and from Malaysia, and which require policy decisions, are:

- **Changing the regime for the designation of Malaysian carriers from substantial ownership (51%) to a principal place of business (PPOB) mechanism**
 - The existing airline ownership and control requirements limit the financing opportunities available to airlines in terms of foreign investment and increases airlines' reliance on government support. They also restrict the ability of airlines to better structure their international networks
 - The adoption of the PPOB requirement in lieu of the ownership and control requirements would entail domestic regulatory changes, as well as, the renegotiation of Malaysia's ASAs. An example of a state adopting the PPOB principle is Hong Kong
 - In view of ASEAN's growing economies and the strong economic activities and passenger traffic intra-ASEAN and ASEAN-Dialogue Partners, Malaysian carriers may be in a good position to capitalize on the establishment of ASEAN community carriers for further expansion. However, the creation of ASEAN community carriers may also result in a decrease of connections through Malaysia, as carriers are allowed to fly from any point within ASEAN. This further emphasizes the need for a strong economic base in Malaysia to continuously generate demand for flights into and within Malaysia
- **Granting cabotage (ninth freedom) right in ASAs**
 - The grant of cabotage right should be weighed by its costs and benefits. For example, Australia generally does not intend to permit cabotage. However, it may consider, in exceptional circumstances, granting cabotage for strategic purposes, such as to gain access to another state's domestic market or to allow foreign operators to serve domestic services on routes that are not served by local carriers
 - Amongst the possible costs of the grant of cabotage right to foreign operators are: reduced direct investment in the country's aviation sector, a decrease in air services and connectivity for regional areas—in the event that local airlines scale back their operations in response to competition from foreign operators—and lesser local employment

- Given Malaysia’s close economic ties with ASEAN Member States (four out of Malaysia’s top ten trading partners are ASEAN Member States – Indonesia, Singapore, Thailand, and Vietnam), Malaysia may consider prioritizing the grant of ninth freedom right intra-ASEAN. In the Chilean experience, its pursuit of cabotage right (and the liberalization of foreign ownership in airlines) allowed its strong national carrier to expand within the Latin American region and become one of the region’s major airlines
- The grant of cabotage right to foreign operators should be carried out on a case-by-case basis, as its impact would vary based on the parties and circumstances involved. The grant of cabotage right should be exercised pursuant to clear objectives such as a strategic objective of getting reciprocal access to another domestic market to the benefits of Malaysian carriers or to increase competitiveness on certain Malaysian domestic routes

C. *Multi-modal, seamless connectivity*

1. Establishing a policy commitment for transportation development plans to consider their impact and connectivity with other modes of transport, including at the last mile

Implementation period	Foundation-setting, with periodic reviews
Stakeholders	MOT, EPU, MAVCOM, APAD

The commitment towards seamless connectivity—which is part of the third Policy Thrust of the NTP currently being developed—should be embedded in future transportation plans, regardless of mode. For instance, should plans to develop the Kuala Lumpur-Singapore High Speed Rail (HSR) be revived, the impact of the HSR on air transport should be considered, particularly given that approximately 10% of international passenger traffic in Malaysia is between Kuala Lumpur³⁴ and Singapore, as well as, the fact that around 50% of passengers for JHB travel to and from KUL and SZB.³⁵

Conversely, development plans for airports should also consider their connectivity with available land transport options, particularly at the last mile.

We propose that large-scale transportation developments, whether by land, sea, or air, be subject to a feasibility study which includes an impact analysis on other modes of transport as part of the pre-commencement process, especially if such investments require government approval to proceed.

³⁴ KUL and Skypark Terminal Sultan Abdul Aziz Shah Airport, Subang (“SZB”).

³⁵ MAVCOM estimates that the HSR would reduce air passenger growth by up to 500 basis points, or 3mn passengers, if the HSR is fully operational by 2027 as originally planned.

Strategic Pillar 1: Establishing and Maintaining a Fair and Competitive Commercial Environment

Enhancements to Malaysia’s air connectivity, as well as, the development of an optimal airports infrastructure need to be built on a foundation of a fair and competitive commercial environment. This, in turn, will be based on a phased approach in enforcing relevant measures, including for competition and liberalization of ownership for firms in the sector.

Recommendations

A. Enforcing a sound and updated aviation-related competition law

1. Applying competition law based on fair competition principle in the short- to medium-term
2. Applying competition law based on free competition principle in the medium- to long-term
3. Incorporating competitive neutrality principle and rules on subsidies
4. Revision of Competition-related Guidelines to ensure relevance

B. Promoting liberalization of ownership-related measures for the civil aviation industry

1. Phased approach to liberalize ownership/equity policy of airlines
2. Phased approach to liberalize ownership/equity policy of ANSP

C. Reducing government interference in commercial decision-making

1. Abolishing the golden share in MAHB

D. ASEAN community carrier

1. Championing the establishment of a community carrier in ASEAN

A. *Enforcing a sound and updated aviation-related competition law*

Regulators in many jurisdictions are moving away from enforcing the traditional economic regulation instruments to enforcing competition laws for the aviation services market as it becomes more liberalized and open to competition. In the case of Malaysia, the Competition Act 2010 [Act 712] was applied to regulate competition matters in the aviation services market between 2012 and 2016. When MAVCOM became operational on 1 March 2016, it took over the function of regulating competition matters in the industry from the Malaysia Competition Commission (MyCC) as it applies Part VII: Competition of Act 771 to the aviation services market.

1. Application of competition law based on fair competition principle

Implementation period	Current to medium-term
Stakeholders	MAVCOM

Currently, MAVCOM applies the fair competition principle when applying and enforcing the competition law in Part VII of Act 771. This is currently consistent with the promotion of the application of fair competition principle by the ICAO. However, the ICAO does not provide an official definition of the principle, preferring instead to leave the details and interpretation to its Members.

2. Application of competition law based on free competition principle

Implementation period	Medium- to long-term
Stakeholders	MAVCOM

Competition laws for the aviation services sectors in most jurisdictions are undertaken by their respective competition authorities. The application of these generic competition laws, including Act 712, are mostly based on the free competition principle.

MAVCOM will close this gap by moving to applying the free competition principle on a phased basis, in the medium- to long-term. It must be noted that the adoption of free competition principle will affect the application and enforcement of competition law in Part VII of Act 771 vis-à-vis the overall function of MAVCOM—that is, MAVCOM may need to have a narrower approach when undertaking its competition work, prioritizing free market over public interest, for instance.

3. Incorporation of competitive neutrality principle and state aid rules

Implementation period	Medium- to long-term
Stakeholders	MAVCOM

MAVCOM notes that already certain ASAs and free trade agreements (FTAs) have incorporated the competitive neutrality principle and subsidies/state aid rules to reflect the existence of such principle and rules in the competition laws of certain jurisdictions. As observed earlier, Part VII of Act 771 currently does not incorporate the competitive neutrality principle nor enforce subsidies rules. MAVCOM will undertake a study to review Part VII of Act 771 and to recommend the appropriateness of incorporating such principle and rules in Part VII of Act 771 in the future.

4. Revision of Competition-related Guidelines to ensure relevance

Implementation period	Medium- to long-term
Stakeholders	MAVCOM

MAVCOM will undertake periodic review of its competition-related Guidelines to ascertain relevance and the need for revision, if necessary. This may include, for example, vertical common ownership and common ownership with minority shareholdings and/or control.

B. Promoting liberalization of ownership-related measures for the civil aviation industry

1. Phased approach to liberalize ownership/equity policy of airlines

Implementation period	Medium- term to long-term
Stakeholders	MOF, MOT, MAVCOM

Plans to re-list the flag carrier may be the first step towards a more open environment in the future. Already other countries are considering more relaxed approach towards foreign equity shareholdings for their airlines sector but still within the boundaries of sovereignty principle for airspace.

In charting its future policies regarding airline nationality requirement, Malaysia should deliberate on whether there is a need to liberalize its airline nationality requirement in order to further develop its aviation industry. The factors that should be considered include the availability of domestic capital, as well as the effects of such liberalization on the market, industry, and consumers, taking into account the experiences of other countries.

However, a number of States have liberalized the nationality requirement for their airlines by applying the principal place of business requirement, the regulatory control requirement, and/or the ownership and control by a national of any Party within a group of States (such as the EU community carrier). Based on the ICAO, there are 316 and 142 bilateral ASAs that recognized airline nationality based on the PPOB and community interest, respectively³⁶.

Given that the airline nationality requirement is governed at both the domestic and international levels, any liberalization would necessarily entail changes to the States' domestic laws as well as amendments to the existing ASAs. Unilateral liberalization of the airline nationality requirement by a State might have minimal impact. A foreign-owned airline established in a State would be limited to domestic operations, since other States may withhold their authorization for that airline to provide international air services under the ASAs that contained the ownership and control requirements.

2. Phased approach to liberalize ownership/equity policy of ANSP

Implementation period	Medium- term to long-term
Stakeholders	MOF, MOT, MAVCOM

Malaysia's ANSP is currently under the purview of CAAM and is the only part of the aviation services value chain that has yet to be privatized and/or liberalized. In the longer term, the GoM may want to consider and commence work to privatize the ANSP in phases, to address the resource constraints that it is facing to develop this sub-sector.

C. *Reducing government interference in commercial decision-making*

1. Abolishing the golden share in MAHB

Implementation period	Short-term
Stakeholders	MOF and MAHB

The GoM no longer holds a golden share in the flag carrier following its restructuring programme. As such, the GoM should be able to abolish its golden shares in the airport operators as the role and functions of golden shares are superseded by the implementation and enforcement of newer regulatory instruments as contained in Act 771. Furthermore, abolishing the golden shares in the airport operators may make the enterprises more attractive to foreign investors who are considering taking up larger equity stakes in the enterprise. A potential negative is the impact on fund-raising activities as the golden share may accord MAHB with sovereign ratings, which may not be available if it is abolished.

³⁶ Out of 2,913 ASAs. ICAO (2018). World Air Services Agreements (WASA) database. Available at <https://data.icao.int/wasa>

D. ASEAN Community Carrier

1. Championing the establishment of a community carrier in ASEAN

Implementation period	Long-term
Stakeholders	MOT, MAVCOM, airlines

This recommendation recognizes the growth and potential of an airline to become a community carrier in the region as has been undertaken in Europe as part of its single market integration generally, and single aviation market, specifically. An ASEAN community carrier could be Malaysia’s flag carrier, dominant airlines (AirAsia), or an ASEAN-based airline.

An ASEAN community carrier can be defined as an airline that is substantially-owned and effectively controlled by one or more ASEAN Member States and/or its nationals. This requires:

- the carrier to be incorporated and have its PPOB in the territory of the Contracting Party that designates the airline
- the Contracting Party designating the airline to have and maintain effective regulatory control

The establishment of a community carrier would not only require unilateral liberalization by Malaysia, but also entails negotiating for broader and more liberal ownership provisions in ASEAN regulatory instruments. It must be noted that currently, the appetite of the ASEAN Member States is low for such a model but in the long-term, this could change as ASEAN faces competition from non-ASEAN airlines.

While this is a long-term action plan, work could commence in the short- to medium-term to assess the costs and benefits of this recommendation. For example, championing the establishment of a community carrier in ASEAN may come at the expense of the growth and support for the flag carrier. Also, while allowing for cabotage may be positive for consumers who benefit from more choices and connectivity (and potentially lower prices), it could have adverse implications on domestic airlines, which would face greater competition in the market.

Strategic Pillar 2: Making Available Appropriate Airports Infrastructure

Given that one of the factors driving air connectivity is the number of airlines flying into a country, connectivity is also intrinsically linked with the availability of appropriate—that is, financially and operationally optimal and efficient—airports infrastructure for these airlines to fly into.

Recommendations

Given the critical importance of providing optimal and efficient airports infrastructure to improving Malaysia’s air connectivity, and taking into consideration the findings from MAVCOM’s review of Malaysia’s airports industry, we propose greater commercialization of airports, in addition to action plans to improve service levels.

It should be noted that reforms to the Malaysian airports industry need to take into consideration the terms of the existing OA between MAHB and the GoM which expires in 2034 and needs to be coordinated with the proposed terms of the OA extension, which is currently being negotiated.

A. Greater commercial behaviour of airports

1. Granting full capex responsibility to operators
2. Introducing competition in two phases

B. Improving service levels

1. Full implementation of the QOS Framework for all airports
2. Reforming the ground-handling sub-sector
3. Developing a framework to measure the efficiency of Malaysia’s airports
4. Committing to integrated terminals

H. Greater commercial behaviour of airports

1. Granting full capex responsibility to operators

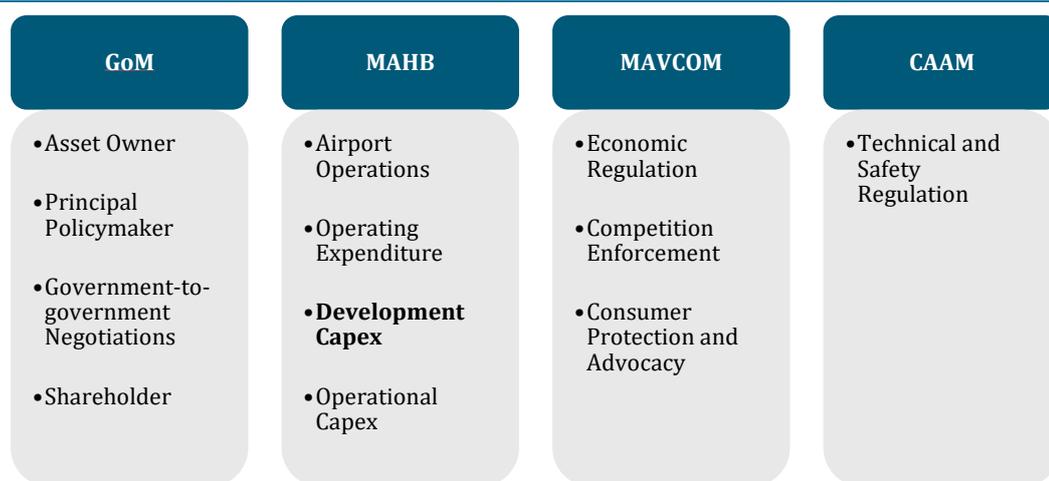
Implementation period	Medium- to long-term
Stakeholders	MAHB, MOT, MOF

Changes in corporate governance would enhance the commercial behaviour of airport operations: granting full responsibility over all capex and opex to airport operators, and eventually abolishing the golden share in MAHB.

This will require a change in the terms of the OA to become a full-fledged concession agreement. The OA may need to be terminated as the proposed changes will deviate from the existing underlying principles governing the relationship between the GoM and the operator.

The proposed delineation of responsibilities between the GoM, MAHB, and independent regulators in the industry is outlined in Figure 16. The key change is in fully transferring the responsibility for development capex to MAHB, in addition to its current responsibility over operational capex.

Figure 16: Proposed Delineation of Responsibilities between GoM, MAHB, MAVCOM, and CAAM



Source: MAVCOM

Given the costs involved in terminating the existing OA, it is proposed that the extension to the OA, which is currently being negotiated, include clauses that will enable the airport operator to be fully responsible for all capex and opex.

2. Introducing competition in two phases

Given the term of the current OA, and the GoM's inability to fund airport development, we propose that competition is introduced to the airports industry in two phases:

a) Decentralization of MAHB

Implementation period	Medium to long-term
Stakeholders	MAHB, MOT, MOF

Airports such as PEN, BKI, and Kuching International Airport (KCH) should be run by fully autonomous subsidiaries of MAHB. This depends on MAHB being amenable to exercise its right under Article 8.3(b) of the OA which allows for such changes.³⁷ This would allow for the decentralization of certain airports without having to resort to the termination of the OA. Otherwise, the existing OA would need to be terminated to allow separate agreements to be entered into with the individual airport operators in charge of the different airports.

The latest discussions on the extension of the OA indicates that MAHB is indeed amenable to the concept of breaking-up the current network into separate clusters.

³⁷ Article 8.3(b) of the OA allows the airport operator to delegate its obligations in the OA to one of its wholly-owned subsidiaries on the condition that the airport operator remains responsible for such delegated obligations.

b) Introducing different airport networks

Implementation period	Long-term
Stakeholders	MAHB, MOT, MOF

This will allow for competition within the existing airports network, without resorting to full-fledged privatization, as well as, allow for cross-subsidies. To effect this change, we propose that a new term be included in the OA extension which permits it to be reviewed by the GoM should the need to introduce more competition arises.

1. Improving service levels

1. Full implementation of the QOS Framework for all airports

Implementation period	Foundation-setting
Stakeholders	MAVCOM, MAHB, SATSSB, other airport operators

As mentioned in Section 2 of this document, MAVCOM has developed a QOS Framework for Malaysia's airports—initially rolled out at KUL-T1 and KUL-T2 in 2018³⁸—which imposes a set of penalties linked to the deteriorations in airport service levels. Service-quality levels measured include those for operational infrastructure such as the aerotrain and toilet facilities, and operational efficiency such as queueing and baggage-handling times.

We propose that the QOS Framework to be implemented for all airports in Malaysia.

2. Reforming the ground-handling sub-sector

a) Linking ground-handling services to airport performance (via strengthening Conditions of Use)

Implementation period	Medium- to long-term
Stakeholders	MAHB, MOT, MOF

One of the issues raised by airports with regards to the QOS requirements is that some of the requirements are related to the levels of service provided by GHSPs, which have contractual agreements with airlines via service-level agreements (SLAs) rather than airports. The latter therefore claim to have no visibility or control over these GHSPs' service levels. Therefore, one way to mitigate for this disconnect between airports' and GHSPs' service levels is for airports to link their Conditions of Use for GHSPs with the relevant QOS requirements.

b) Liberalizing the ground handling sector

Implementation period	Medium- to long-term
Stakeholders	MOT, MAVCOM, GHL holders, airports, airlines

A more long-term measure to improve the competitiveness of the sector would be to introduce liberalization. While this requires a policy decision by the MOT, the Ministry has indicated that given the capacity constraints faced by the sector, it would be amenable to liberalizing the industry, particularly for the international-designated airports.

³⁸ The QOS had since been extended to include LGK, SZB, and BKI airports in 4Q 2018.

The GoM may want to consider allowing for majority and up to 100% foreign-owned GHSPs to operate in Malaysian airports, as international experience highlights that foreign-owned GHSPs may have better funding capacity

3. Developing a framework to measure the efficiency of Malaysia's airports

Implementation period	Foundation-setting
Stakeholders	MAVCOM

Given that returns are linked to efficiency, not only in terms of operations, but also financial management, MAVCOM intends to develop a framework to measure the efficiency of civil aviation sector players in Malaysia, including airports.

4. Committing to integrated terminals

Implementation period	Short-term
Stakeholders	MOT, airport operators

One of the key findings from MAVCOM's work on connectivity, as well as, study of airports is that integrated terminals offer more operational efficiency, and therefore, enhance connectivity.

For instance, when looking at KUL's hub efficiency, although KUL overall had more incoming flights per week than SIN and Suvarnabhumi International Airport (BKK) in 2016, each incoming passenger could only connect to 19.5 outgoing flights, compared to the 54.5 and 52.5 outgoing flights at SIN and BKK, respectively. It should be noted that the figure for KUL represents KUL-T1 and KUL-T2 combined, even though these two terminals currently do not have any airside connectivity, and therefore, effectively function as two separate airports. Passengers who need to connect between flights at the KUL-T1 and KUL-T2 would have to pass through border control, check out their baggage, and travel between the two terminals via landside transport. This burdens passengers by increasing travel time and total costs as some passengers would have to obtain temporary visas to enter the country in order to access landside transport to move between the terminals.³⁹

Hence, there needs to be a policy commitment, which is then adopted in the NASP, that airport terminals need to be integrated, and in instances where disparate terminals have been built, airside and landside connectivity need to be provided.

³⁹ For instance, during the Master Plan Introductory Workshop held on 28 November 2017, MOTAC had highlighted a case where a family of tourists from India had to pay a visa fee of RM1,800 when transiting between KUL-T1 and KUL-T2 due to the lack of airside transit facilities. MOTAC had also highlighted its cooperation with India's Hyderabad Airport in implementing seamless transit to improve passenger experience.

Strategic Pillar 3: Developing a Strong Civil Aviation-Related Human Capital Development Base

Along with a fair and competitive commercial environment, a strong human capital base is also an important foundation for the Malaysian civil aviation sector. However, as highlighted in Section 2 of this document, the sector’s human capital development at a strategic level is constrained by the following:

- A lack of a comprehensive and accurate current workforce database
- An absence of coordination and standardization in industry qualifications and certifications
- Globally-accepted standards of quality assurances on training and qualifications are not uniformly applied
- Aviation professional is not a career of choice except for pilots and flight crew
- The non-existence of a centralized training fund

Therefore, several recommendations had been developed during the Interim Workshop by participants from MAVCOM, Talentcorp, the MOHR, and the MOT.

Recommendations

While there is broad agreement amongst key stakeholders that human capital development is an industry-driven initiative, there is still a need for industry-wide coordination, with proposed recommendations during the foundation-setting, short-, medium- and long-term periods of the Master Plan. The delineation of responsibilities for the public and private sectors for the human capital development of the Malaysian civil aviation industry would be as follows:

A. Setting the baseline to develop a coordinated, industry-wide talent development strategy

1. Establishing a human capital database for the sector
2. Establishing a human capital development working committee for the sector
3. Study the sector workflow and value chain

B. Developing and implementing an industry-wide coordinated talent development strategy

1. Developing effective career-pathing for the sector
2. Setting up a pool training fund
3. Developing industry training modules involving partnerships between industry and academia

A. *Setting the baseline to develop a coordinated, industry-wide talent development strategy*

1. **Establishing a human capital database for the sector**
2. **Establishing a human capital development working committee for the sector**
3. **Study the sector workflow and value chain**

Implementation period	Foundation-setting
Stakeholders	MAVCOM, CAAM, MOT, MOHR, industry players

Given the lack of a comprehensive and disaggregated database of the human capital supply and demand for the sector, the foundation-setting period should be utilized to establish the baseline for the sector, which would entail the development of a National Occupational Skills Standards, as well as, a critical occupations list (COL).

The work to develop and maintain the database should be undertaken by a working committee consisting of representatives from the industry, MOHR, MOT, MAVCOM, and CAAM.

B. Developing and implementing an industry-wide coordinated talent development strategy

1. Developing effective career-pathing for the sector

Implementation period	Short- to medium-term
Stakeholders	Working committee

The baseline established should then be used to develop prospective career paths for the sector, which then can be used in branding efforts to establish a career in the sector as one of the careers of choice. This would include career-pathing for business-related professions, such as network route planning and aviation business management.

2. Setting up a pool training fund

Implementation period	Short- to medium-term
Stakeholders	MOHR, MOT, MAVCOM, CAAM, industry players

It is also proposed that a “transfer fee” be paid into the training fund by the new company in cases where an employee in the sector switches employers to ameliorate the impact of such “poaching” of staff. This is adapted from the policy practised in the banking industry.

3. Developing industry training modules involving partnerships between industry and academia

Implementation period	Medium-term
Stakeholders	Learning institutions, industry players

While such institutions exist, for example, the Centre of Excellence in Sepang initially set up by AirAsia, they have not been focused on developing the human capital base for non-technical professions in the sector. Hence, such partnerships would enable an early introduction to the business and management sides of the Malaysian civil aviation sector.

Priority Recommendations

Although it is proposed that all of the Master Plan’s recommendations are implemented holistically, Table 8 outlines action and implementation items with the highest priority. It should be noted that some of these action items may have a long implementation period.

Table 8: Priority Recommendations for the Master Plan

Strategic Pillar	Sub-sector	Action Item	Implementation Item	Implementation Period	Stakeholders
Establishing and maintaining a fair and competitive commercial environment	All	Reducing government interference in commercial decision-making	Abolishing the golden share in MAHB	Short-term	MOF, MAB
Making available appropriate airports infrastructure	Airports	Greater commercialization of the airports industry	Granting full capex responsibility to operators	Medium- to long-term	MAHB, MOT, MOF
			Fully implementing the QOS framework for all airports	Foundation-setting	MAVCOM, MAHB, SATSSB, other airport operators
		Improving service levels	Reforming the ground-handling sub-sector	Medium- to long-term	MOT, MAHB, MAVCOM, ground-handlers
		Committing to integrated airport terminals	Medium- to long-term	MOT, airport operators	