

Aviation Policy in Indonesia and Its Relation to ASEAN Single Aviation Market

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Abstract: The study seeks to clarify the development of Indonesia's aviation policy, primarily in relation to the proposed air transport liberalization in Southeast Asia region, ASEAN Single Aviation Market (ASAM). The study begins by reviewing aviation policy and industry development in Indonesia related to air passenger services. The study also highlights Indonesia's progress towards ASAM. Challenges and opportunities are then identified. Indonesia is still reluctant towards full implementation of ASAM due to the issue of benefit reciprocity. Ratification of agreements is conducted in stages to give time for airlines and airport sectors to adjust. Infrastructure capacity and quality remain as the biggest challenge for Indonesia.

Keywords: air transport, liberalization, ASEAN Single Aviation Market, Indonesia

1. INTRODUCTION

The ten members of Association of Southeast Asian Nations (ASEAN) have adopted agreements to liberalize air transport industry in the region. Air transport is one of the priority sectors in the proposed ASEAN Economic Community (AEC), an economic integration plan in the region. The current objective related to air transport sector is to establish an ASEAN Single Aviation Market (ASAM) by 2015. It is considered as an important milestone to increase connectivity, economic growth, and social welfare in the region. Despite the potential benefits, there are challenges to effectively implement ASAM. The identified challenges arise from the fact that member states have such disparate level of economic development and geography condition. Each member state has different priority on air transport, and it is reflected in the disparity of their policies, airlines and airports competitiveness.

Indonesia is the largest country within ASEAN in terms of population and total land area. Its population of 231.4 million represents 39% of the total ASEAN population and its land area of 1.86 million square kilometer is 42% of total land area. It consists of around 17,000 islands and has numerous large cities. As of 2012, Indonesia has 29 international airports, the highest number in the region, while the second highest owned by the Philippines with 10 international airports. Singapore and Brunei Darussalam only have one international airport and no domestic operation. These circumstances lead to a question—often raised by Indonesian government and industry stakeholders—whether benefits of air transport liberalization will accrue equally among member states.

With this context in mind, the present study seeks to clarify the development of Indonesia's aviation policy and industry. Little attention has been given to the reform in Indonesia's air

transport policy and industry. The study also highlights Indonesia's stance, to clarify whether Indonesia is ready for an arrangement that can credibly live up to the promise of ASAM. Being the largest market in ASEAN, Indonesia's participation will very much affect the effectiveness of the proposed air transport liberalization. The study also points out several challenges and opportunities that can be sought for Indonesia to shape up its way towards ASAM.

The rest of paper is organized as follows. Section 2 explains current development of aviation policy, airline and airport industry in Indonesia. Section 3 clarifies Indonesia's stance and compares Indonesia's liberalization efforts with other member states. Section 4 analyzes the challenges and opportunities of Indonesia. Section 5 concludes the study.

2. DEVELOPMENT OF AVIATION POLICY AND INDUSTRY

2.1 Aviation Law

Aviation law in Indonesia is first enacted in 1958 and it has been amended twice in 1992 and 2009. The latest is Law No. 1/2009 on Aviation in which specifies broad regulations on airports and airlines, including regulation on scheduled and non-scheduled air passenger service. This law is supplemented by other decrees, e.g., government and minister decrees, which support the regulation in more specific details, for example on airline maintenance and tariff issues.

Deregulation of Indonesia domestic market is started in 1999 through the enforcement of Law No. 5/1999 that restricts any monopoly practices including in air transport sector. Prior to deregulation, domestic and international flights were served dominantly by Garuda Indonesia and Merpati Airlines, both are state-owned airlines. Deregulation brought significant changes to the domestic aviation landscape, especially after the advent of Minister Decree No. 11/2001 that allowed scheduled airline to obtain license by only operating two aircrafts. The number of scheduled airline companies increased from 7 in 1999 into 27 in 2004, according to data from Ministry of Transportation. Until now domestic market can be served only by local airlines where foreign ownership is limited to non-dominant 49% share. Domestic airline tariff also remains regulated where government enforces ceiling prices for all domestic routes.

As in many countries in Asia and elsewhere, aviation industry in Indonesia remains moderately liberalized. Market access is given mostly through bilateral agreements with selected trading partners. With regards to open sky, government is cautious in relaxing market access rights. Government opts for a gradual liberalization rather than a rapid approach as emphasized in Article 90 of Law No 1/2009, "market liberalization towards the unrestricted air space (open skies) to and from Indonesia for foreign airlines shall be implemented gradually by bilateral and multilateral agreement."

As of February 2013, Indonesia has air service agreements with 65 countries. Horizontal agreement between Indonesia and European Union (EU) is signed in 2011 (European Commission, 2011). A horizontal agreement is an international agreement negotiated by the Commission on behalf of all EU Member States with a third country. EU-Indonesia horizontal agreement places several provisions in air service between EU member states and Indonesia; it removes nationality restrictions and allows any EU carriers to operate flights between Indonesia and EU member states. The agreement, however only applies to EU member states where a bilateral agreement with Indonesia already exists. This is in line with Article 87 of Law No 1/2009 stating that "in the case of plurilateral agreements on air transport with an organization/a

community of foreign countries, the implementation of the agreement is conducted based on bilateral agreements with each country member.”

Indonesia also conducts open skies agreement with the United States (US). The agreement is signed in 2004 and it removes restrictions on fare, capacity, frequency, type of aircraft, and number of designated airlines. It allows any US carrier to conduct passenger service from points in the US and intermediate points to any points in Indonesia (fifth freedom) and also allows cargo service between Indonesia and any points in the world (seventh freedom). Garuda Indonesia is currently the only Indonesian carrier serving EU-Indonesia and US-Indonesia routes, and mostly through code sharing with other foreign airlines.

On December 2012, government announces a roadmap of international relation on air services through Decision of the Director General No. 480/2012 as a response towards increasing number of market access requests from other countries. With regards to any bilateral and multilateral agreements, the decree allows market access traffic right for foreign airlines only up to fifth freedom, thus continues to resist domestic cabotage operation. The decree allows agreements entailing double disapproval tariff and multi designated airlines.

2.2 Regulator

The regulations for aviation sector are administered by the Directorate General of Civil Aviation (DGCA), an agency under Ministry of Transportation. DGCA also holds the role to manage most of airports in the country through its technical operation units. There are 233 public airports in Indonesia. Twenty-six of the public airports are managed by two separate state-owned companies, Angkasa Pura I and Angkasa Pura II, while the other airports are managed by DGCA. Within this context, DGCA currently performs two roles, as regulator and airport operator.

DGCA, together with Angkasa Pura I and Angkasa Pura II, were also responsible for providing air navigation service in every airport that they manage. The authority was taken over in January 2013 by Indonesia Air Navigation Service Provider (PPNPI), a newly-established non-profit state-owned company. PPNPI performs as a single air traffic manager in the country.

Indonesia's flag airline, Garuda Indonesia, holds the authority to coordinate and allocate international flight slots in airport, and this is a general mechanism in Asia Pacific in the early development of air transport sector (Hooper, 2002). Slot coordinating authorities in many countries are nowadays held by independent bodies or by the air transport regulator. Indonesia and Philippines are two of ASEAN member states that assign the slot coordination authority to flag airline (see Table 1). Due to increasing traffic in major airports, Indonesia Slot Coordinator (IDSC) is finally established in 2011, specified under Directorate General Regulation No. 569/2011, as a separate agency to coordinate domestic flights slots. There are seven airports that are coordinated by IDSC: airports in Jakarta, Surabaya, Denpasar, Medan, Makassar, Balikpapan and Jayapura. Despite IDSC status as a separate agency, it is still headed by Garuda Indonesia's officer.

Figure 1 shows the overview of air transport bodies in Indonesia. The roles of government are very significant in air transport sector. Most of the tasks are done by government agencies or government-owned companies.

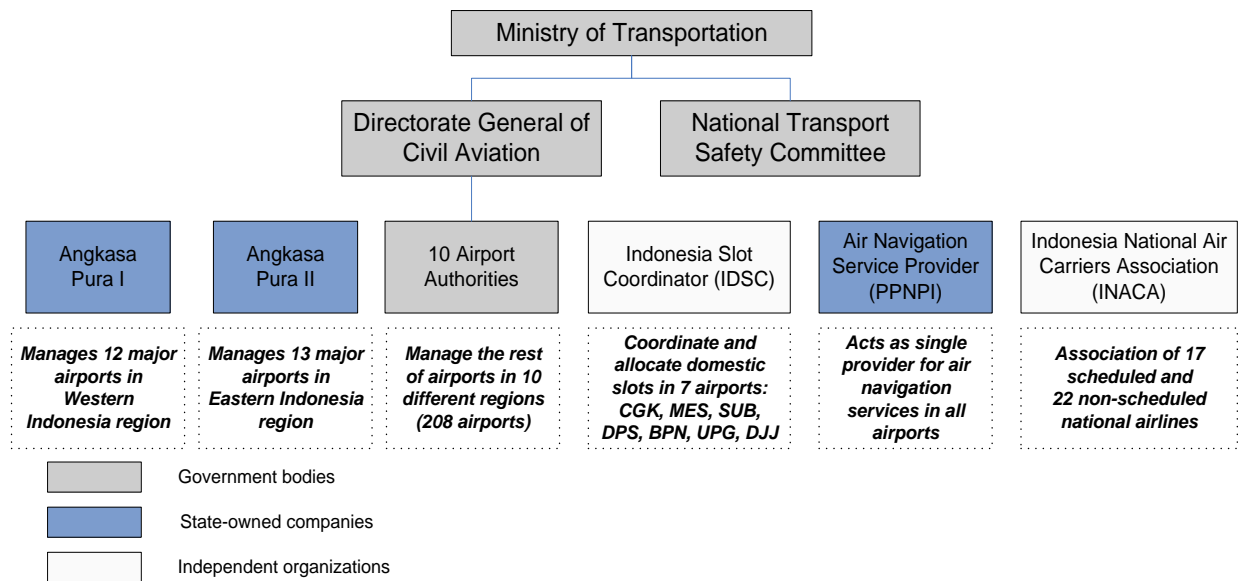


Figure 1. Air transport bodies in Indonesia

Table 1. Slot coordinators in ASEAN member states

Member states	Airport slot coordinator	Status of slot coordinator
Singapore	Changi Airport Slot Coordinator	Independent organization under air transport regulator
Malaysia	Airport Coordination Malaysia	
Thailand	Slot Coordination Committee Thailand	
Vietnam	Civil Aviation Administration of Vietnam	Air transport regulator
Cambodia	State Secretariat of Civil Aviation	
Indonesia	Indonesia Slot Coordinator (domestic), Garuda Indonesia (international)	Independent organization and flag airlines
Philippines	Philippine Airlines	Flag airlines

2.3 Airports

All public airports in Indonesia are owned and managed by the government through state-owned companies (Angkasa Pura I and Angkasa Pura II) and airport authorities of DGCA. The state-owned companies and the airport authorities are responsible in managing aeronautical non-traffic and commercial services in airports. Angkasa Pura I manages 13 major airports in Eastern region, while Angkasa Pura II manages 13 major airports in Western region, including capital city airport’s Soekarno-Hatta.

Minister Decree No. 11/2010 contains regulations related to airport operation. The decree entails airports to be categorized into two types: hub and spoke airports. Hub airports are categorized into three: primary, secondary and tertiary hubs. Currently there are 68 hubs out of 233 public airports and among them there are 8 primary, 19 secondary and 41 tertiary hubs. Primary hubs are those that handle more than 5 million passengers per year. Majority of the spoke airports require financial support and subsidies from government. It is reviewed that there are

over 90 spoke airports with annual air passenger traffic below 500,000 in Indonesia. Many of these airports are losing money and hence require financial support.

Sixteen of Indonesia's 26 largest airports are currently operating above design capacity, according to data from Angkasa Pura I and Angkasa Pura II. Jakarta is the most congested, with existing terminals operating well above capacity and the airport's two runways fully utilized during peak hours. The airport serves more than 50 million passengers in 2012, more than twice its design capacity. A major upgrade project for Soekarno-Hatta Airport finally commenced in 2013 and will increase airport's capacity to 62 million passengers. However, by the time the project is completed (expected to be 2015) the airport will likely again be operating above capacity. Several other major airport expansions are undergoing (see Table 2). Expansion in Surabaya airport is expected to be finished in 2013, although it will still be behind the growth curve as the expansion will only increase the capacity to 12 million passengers, a figure it has already surpassed. New airport is built in Medan (Kuala Namu Airport) with capacity of 9 million passengers to replace the old Polonia Airport. Airport expansions in Denpasar and Balikpapan are also expected to finish in 2013.

Table 2. Comparison of capacity, traffic and planned expansion in several airports

(in Million Passengers)	Jakarta	Surabaya	Denpasar	Makassar	Medan	Balikpapan	Yogyakarta
Traffic in 2012	52.5	13.8	12.8	7.5	7.2	5.6	4.3
Capacity	22	7.4	9.4	7.3	1	1.4	1
Planned Expansion	62	12	25	-	9	11	-

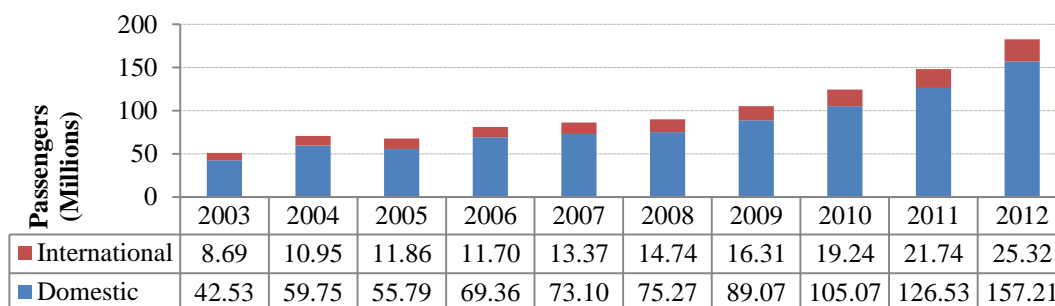
Source: Angkasa Pura I, Angkasa Pura II (retrieved from interview)

2.4 Airlines

Indonesia's economy has experienced a significant growth in the past years, contributing to soaring demand of air travel. There are 157 million domestic passengers and 25 million international passengers (see Figure 2) where 48% of them travelling to ASEAN states. The total traffic increased by 23% from 2011 and the growth is projected to continue.

After the advent of Minister Decree No. 11/2001 that allows airline to obtain license only by operating two aircrafts, the number of airline companies increased rapidly and creating safety concern. After series of accidents, all Indonesian airlines were banned by the EU in 2007. Under current law on aviation, airlines seeking a license must own at least five aircrafts. As of February 2013, there are eight major scheduled airlines operating in Indonesia, and among them – Garuda Indonesia, Tiger Mandala, Batavia, Indonesia AirAsia – are no longer banned from entering EU airspace.

Airline groups in Indonesia own several brand identities where the main company offers different service from the subsidiary. This strategy aims to accommodate ranges of customers, from low-end to high-end customers. Indonesia is possibly unique as it is the only country with law that requires airline companies to identify their services into three categories: no-frill, medium, or full service. For each category, different ceiling prices are imposed for domestic flights, stipulated under Minister Decree No.26/2010, which are 100%, 90% and 85% of stated ceiling prices, respectively for full-service, medium and no-frill airlines.



Source: Angkasa Pura I, Angkasa Pura II, Ministry of Transportation (retrieved from interview)

Figure 2. Domestic and international air traffic

Table 3. Major scheduled airlines in Indonesia

Major Scheduled Airlines	Market share (domestic) 2012	Market share (international) 2012	First Hub	Second Hub	Ownership/Status
Garuda Indonesia	22.82%	37.03%	Jakarta	Denpasar	State-listed (Government 69.14%, Listed 27.98%)
Lion Air	41.59%	10.80%	Jakarta	Surabaya	Private-owned
Indonesia AirAsia	2.20%	40.58%	Jakarta	Denpasar	Private-owned (AirAsia Berhad 49%)
Sriwijaya Air	12.20%	2.25%	Jakarta	Surabaya	Private-owned
Batavia Air*	10.25%	3.59%	Jakarta	Surabaya	Private-owned
Merpati Nusantara	2.64%	1.10%	Makassar	Surabaya	State-owned (Government 95.79%, Garuda 4.21%)
Wings Air	3.37%	1.43%	Makassar	Surabaya	Subsidiary of Lion
Citilink	2.12%	0%	Surabaya	Jakarta	Subsidiary of Garuda
Tiger Mandala	1.81%	3.22%	Jakarta	Medan	Private-owned (Tiger 33%)

Note: Batavia Air filed bankruptcy in January 2013. Source: Indonesia National Air Carriers Association (retrieved from interview)

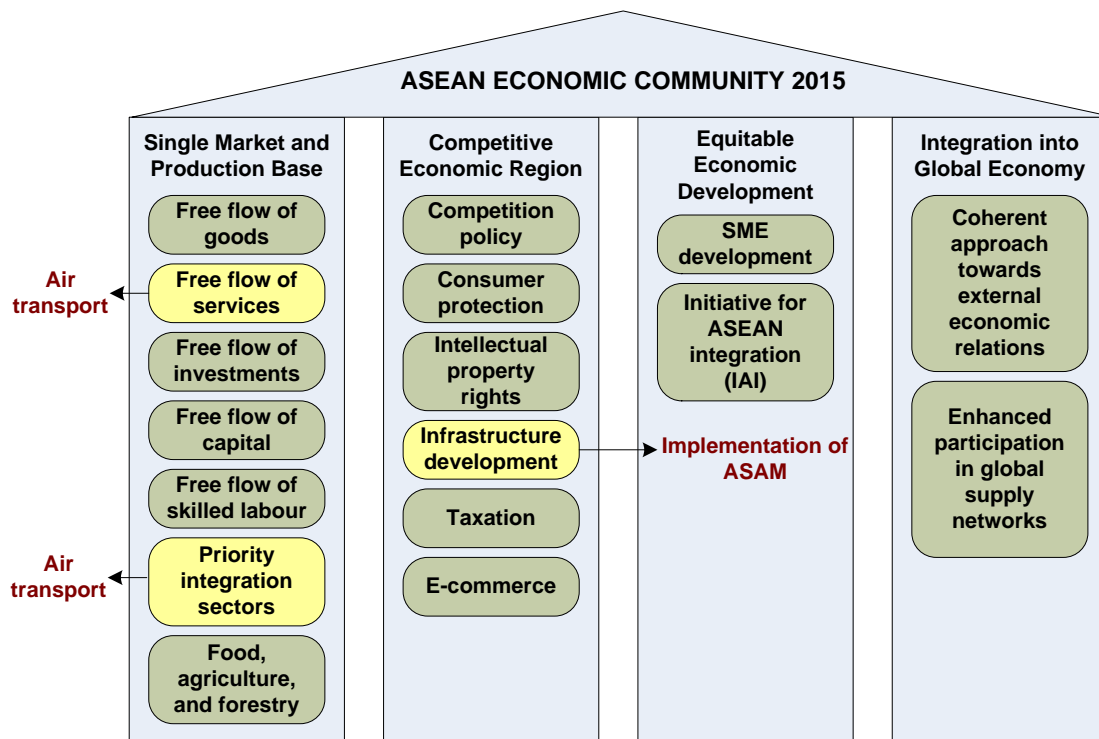
Five largest airlines – Lion, Garuda, Indonesia AirAsia, Sriwijaya and Batavia – account for more than 90% of the domestic and international routes in 2012 (see Table 3). Batavia stops operation since 30 January 2013 due to bankruptcy (Osman, 2013). Private-owned Lion Group is the domestic market leader and captured around 41% of the domestic market share in 2012, including 3% share by its regional subsidiary Wings Air.

Flag carrier and publicly traded airline group Garuda is committed to closing the gap with Lion by focusing on rapid domestic growth at both ends of the market. Garuda Indonesia positions as the leader at the full-service end of the market targeting for premium passengers, while its subsidiary Citilink focuses at low-cost end competing with Lion on domestic trunk routes. While Lion and Garuda focus on domestic market, Indonesia AirAsia has instead been focusing primarily on the international routes to ASEAN region. Indonesia AirAsia has bigger share of international market than Garuda. Meanwhile, Mandala Air has resumed service in April 2012 under Tiger Mandala brand after having been suspended for one-year due to financial difficulty. Mandala is now 33% owned by Tiger, Singapore’s low-cost carrier.

Wide archipelagic area of Indonesia requires airlines to have multiple hubs. Other than Jakarta, some airlines set up hub in Surabaya, Denpasar or Makassar. Consolidation in Indonesia is likely in the next years given there are now eight major airlines competing on trunk routes. Considering the character of airline industry with relatively low operating margin, airlines may find it difficult to recover their full cost in such competitive markets, even in a market with 231 million populations. The smaller domestic carriers, or those in the middle of market between the low-cost and full-service business models, are the most vulnerable, as the case of Batavia.

3. INDONESIA’S STAND IN ASEAN SINGLE AVIATION MARKET (ASAM)

Air transport liberalization plan in ASEAN has been discussed as early as 1995 during the fifth summit of ASEAN Leaders in Bangkok (Forsyth et al., 2006). ASEAN Single Aviation Market (ASAM) is one of the agendas in the proposed establishment of an ASEAN Economic Community (AEC), which is also targeted to be in place by 2015. AEC envisages four characteristics: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. Air transport sector and ASAM falls under the first and second characteristics (see Figure 3). Air transport is one of the service sectors that member states agree to liberalize, and also one of the designated 12 priority sectors for economic integration within ASEAN. Moreover, under infrastructure development agenda, implementation of ASAM is emphasized.



Source: adapted from ASEAN Economic Blueprint (ASEAN, 2008)

Figure 3. ASAM position in ASEAN Economic Community 2015 Blueprint

There are two agreements that become the basis of ASAM implementation related to air passenger services: Multilateral Agreement on Air Services (MAAS) signed in 2008 and Multilateral Agreement on the Full Liberalization of Passenger Air Services (MAFLPAS) signed in 2010. The main provisions of these agreements are:

- Relaxation on market access. It is specified under protocols in each agreement (see Table 4). ASAM only enforces third, fourth, and fifth freedom of traffic rights. Seventh freedom and domestic cabotage traffic rights are not included in the 2015 plan.
- Relaxation on airline ownership and control. The agreements give option for member states to exercise “principal place of business”, in addition to a more conventional “substantial ownership and effective control”. As explained in Tan (2010), “principal place of business” allows airline’s majority of shares to be owned by outside of the designating state, as long as the seat of incorporation remain in the designating state. Such formulation allows foreign capital invested on designated airline beyond the customary 49% limit. This option, however, is subject to acceptance by the contracting party who receive service application from the designated airline.
- A common policy is adopted for user charges, tariffs, capacity, competitive behaviors and other forms of regulation.

It is important to note that ASAM requires the ratification or acceptance of a minimum of three states before it can enter into force, and it is only among those states that have ratified or accepted it. Therefore, single aviation market enforced in ASEAN does not translate into full-liberalized aviation sector. This practice is different from EU Open Aviation Area that allows seventh freedom and domestic cabotage traffic rights in all EU members’ airspace.

Table 4. ASEAN Multilateral agreements on air passenger services

Agreements	Implementing Protocols	ASEAN target	Indonesia target ^a
Multilateral Agreement on Air Services (MAAS) 2008	Protocol 1. Unlimited third and fourth freedom traffic rights within the ASEAN Sub-region	December 2008	2011-2012
	Protocol 2. Unlimited fifth freedom traffic rights within the ASEAN Sub-region	December 2008	2011-2012
	Protocol 3. Unlimited third and fourth freedom traffic rights within the ASEAN Sub-region	December 2008	2011-2012
	Protocol 4. Unlimited fifth freedom traffic rights within the ASEAN Sub-region	December 2008	2011-2012
	Protocol 5. Unlimited third and fourth freedom traffic rights between ASEAN capital cities	December 2008	2014
	Protocol 6. Unlimited fifth freedom traffic rights between ASEAN capital cities	December 2010	2014
Multilateral Agreement on the Full Liberalization of Passenger Air Services (MAFLPAS) 2010	Protocol 1. Unlimited third and fourth freedom traffic rights between any ASEAN cities	December 2010	2013 ^b , 2015 ^c
	Protocol 2. Unlimited fifth freedom traffic rights between any ASEAN cities	December 2013	2013 ^b , 2015 ^c

Note: ^(a) According to Decision of Director General No. 480/2012; ^(b) Ratify unlimited third and fourth freedom for any ASEAN airlines to/from designated points in Indonesia (Jakarta, Medan, Surabaya, Makassar and Denpasar); ^(c) Ratify unlimited third and fourth freedom for any ASEAN airlines to/from all points in Indonesia

To date, five countries have ratified the MAFLPAS agreement: Malaysia, Myanmar, Singapore, Thailand and Vietnam. Indonesia decides to postpone the ratification. Under Decision of Directorate General No. 480/2012, Indonesian government specifically declares its roadmap and sets target that is different from the ASEAN target to give some time for airlines and airports to reform (see Table 4). In 2013, Indonesia will ratify Protocol 1 and Protocol 2 of MAFLPAS only to several designated points. Later in 2015 Indonesia will fully ratify both of MAFLPAS protocols.

Indonesia has pursued liberalization on progressive basis and most likely will continue to do so. For example, in March 2005 government imposed ban on new low-cost airlines' operations to four major cities: Jakarta, Surabaya, Denpasar and Medan. In early 2009, Indonesia relaxed the ban on the Singapore low-cost, Tiger Airways, with the condition that Tiger revamps its services to Indonesia to offer more premium airline services (Liaw, 2009). In January 2013, Indonesian and Singaporean government finally agree to allow airlines from both countries to fly more often between Changi Airport and several Indonesia cities, including Jakarta, Surabaya and Medan. Garuda Indonesia and Lion Air also have been given permission to carry out flights from Singapore to other parts of Asia (Kaur, 2013).

Indonesian carriers tend to oppose the idea of air service liberalization in ASEAN. They view that liberalization is better be pursued bilaterally and selectively according to market need. ASAM is considered unnecessary because current bilateral air service agreements with all member states suffice the need for all Indonesian carrier operation (INACA, 2010). Garuda and other carriers lobby Indonesian government to postpone the ratification of ASAM agreements.

Table 5. General regulation of air transport service in ASEAN

Member States	MAFLPAS Ratification Status	Domestic tariff regulated	International tariff regulated	National Clause	Foreign equity participation
Brunei	Not yet	-	No	Allows "principal place of business"	Puts limitation, but no numerical limited is stated
Cambodia	Not yet	Yes	Yes	Allows "substantial ownership"	Puts limitation, but no numerical limited is stated
Singapore	14/03/2011	-	No	Allows "principal place of business"	No limitation on equity participation
Indonesia	Not yet	Yes	No	Allows "substantial ownership"	Maximum permitted foreign equity is 49%
Malaysia	24/05/2011	No	No	Allows "substantial ownership"	Maximum permitted foreign equity is 49%
Myanmar	01/07/2011	No	No	Allows "substantial ownership"	Puts limitation, but no numerical limited is stated
Vietnam	30/09/2011	Yes	No	Allows "substantial ownership"	Maximum permitted is 30% (single foreign investor) and 49% (total foreign equity)
Philippines	Not yet	Yes	Yes	Allows "substantial ownership"	Maximum permitted foreign equity is 40%
Lao PDR	Not yet	Yes	No	Allows "substantial ownership"	Puts limitation, but no numerical limited is stated
Thailand	02/09/2011	Yes	Yes	Allows "substantial ownership"	Maximum permitted foreign equity is 49%

Source: ASEAN Air Transport Instruments and Status of Ratifications (2012), Member states' aviation policies

Meanwhile, Singapore and Malaysia have indicated their compliance to liberalize the capital city's third/fourth freedom flights immediately after 2008 agreement. In February 2008, the Singapore–Kuala Lumpur route is partially relaxed for low-cost airlines (Kaur, 2008). This was then followed by a complete relaxation in December 2008, and there is now unlimited capacity between Singapore and Kuala Lumpur for all designated carriers from the two countries (Tan, 2009). Singapore in particular has pursued open skies policy since at least the 1960s (Raguraman, 1986). Foreign airlines are freely granted access to, from, and beyond Singapore in exchange for reciprocal traffic rights. These traffic rights are important to complement its very small domestic market.

On the other hand, Indonesia and Philippines are more reluctant to liberalization given their large domestic market. Indonesia decides to open five major airports including its primary airport Soekarno-Hatta in Jakarta until 2013 (see Table 4). Philippines keeps restrictions on its primary Ninoy Aquino airport in Manila, but offer open access to secondary airports, such as in Cebu, Davao, Zamboaga and Laoag (the regulation is specified in Executive Order 29, enforced by Philippines government in March 2011). Indonesia's policy related to national clause and foreign equity participation is similar with majority of member states (see Table 5).

Progress towards AEC have been monitored regularly through scorecard mechanism and is reported to the ASEAN Leaders. Scorecard mechanism is undertaken in four phases: 2008-2009, 2010-2011, 2012-2013 and 2014-2015. On the latest 2010-2011 result, in transport area (including air and maritime transport), Indonesia is the only member state that implemented less than half of the targeted measures, while the rest of the member states have implemented more than half (ASEAN, 2012). However, Dee (2010) measured actual barriers to trade in air transport services, and Indonesia is considered less restrictive compared to Vietnam, Lao PDR, Brunei, Myanmar, Cambodia, even Malaysia.

In summary, there have been some progress towards ASAM, but more relaxation efforts are needed from all member states—particularly from Indonesia—to meet all protocols and requirements specified in the agreements. The reality today is that not all inter-city (including inter-capital city) flights have been totally relaxed as required in the agreements' protocols.

4. THE WAY FORWARD

We identify development of Indonesia's aviation policy and its stance towards ASAM in previous sections. The aviation policy has evolved from restrictive into a more dynamic market-oriented, although majority of power still relies on government. Indonesia has shown its liberalization efforts in incremental fashion. Indonesia, however, will face increasing pressure from its neighbors since it is currently the only member state that is resistant to open its market (Bellman, 2013).

Cases studies in the past have suggested that open skies can bring economic benefits. The net effects may vary across markets, but there are some common effects (Oum et al., 2009): (1) increased competition, reduced airfare and traffic stimulation, (2) productive efficiency improvement in airlines, and (3) increasing employment. Indonesia Infrastructure Initiative (IndII) estimates that ASAM implementation will account to around 299 million USD in additional direct Gross Domestic Product (GDP) and an additional 16,000 direct jobs in Indonesia in 2025. If indirect and induced impacts are included, the differentials will increase to around 650 million USD and 29,000 jobs in 2025 (IndII, 2011).

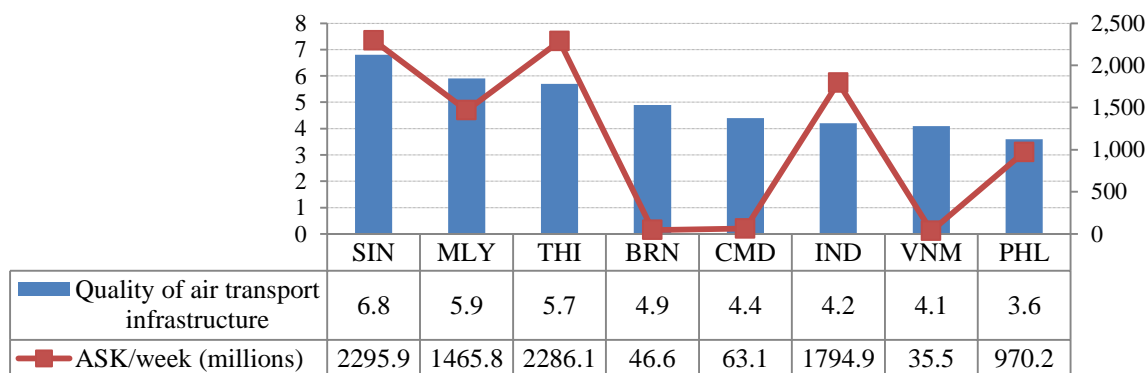
To gain these promising economic benefits, several challenges need to be overcome. We identify several challenges and opportunities that Indonesia is facing, related to what has been described in previous sections.

4.1 Cooperation to Improve Airports

Airport infrastructures pose the largest challenge to the Indonesia's air transport industry. With a projected real GDP growth of over 6%, domestic and international air travel is expected to increase in the next years. The World Bank estimates that by 2021, the Indonesian middle class with enough disposable income to buy air travel will grow from 130 million people to more than 240 million. There have been some plans to improve infrastructures, however the current efforts are considered insufficient to keep up with the growth, as shown in Section 2.2.

The quality of Indonesia's airports lags behind majority of ASEAN member states, based on World Economic Forum Global Competitiveness Report (see Figure 5). On the other hand, Indonesia has relatively high demand of passenger air travel, reflected in the high number of available seat kilometer (ASK). Airport infrastructure quality in Indonesia varies across provinces, ranging from Class I (the highest) to Class V (the lowest). Air transport passenger services are concentrated in western region; the airports there are mostly classified as Class III or above. Meanwhile, airports in eastern region, especially in Papua and neighboring Maluku, are mostly classified as Class IV or below (Pisu, 2010).

Further expansions are needed to improve capacity and quality of airports, both for major airports in western region and minor airports in eastern region. These expansions are generally capital-intensive, and airports cannot rely solely on government fund. Under Law No. 1/2009, private companies are allowed to manage and invest in airports. Cooperation/partnership with private parties in airport sector is encouraged through specific mechanisms, such as built-operate-transfer, built-operate-own, contract management, and initial public offerings. In 2011, there are 13 public-private partnership projects related to airport developments, and six were already executed. There are four public-private partnership projects in 2012, one is considered priority project and the rest are potential projects (National Development Planning Agency, 2012): (1) new airport in South Banten, West Java (priority); (2) new airport in Kertajati, West Java (potential); (3) new airport in Kulon Progo Yogyakarta, Central Java (potential); and (4) new airport in north coast of Bali (potential).



Note. The highest score is 7. Lao PDR and Myanmar are not included. Source: WEF Index (2012-2013)

Figure 5. Comparison of quality of air transport infrastructure and ASK

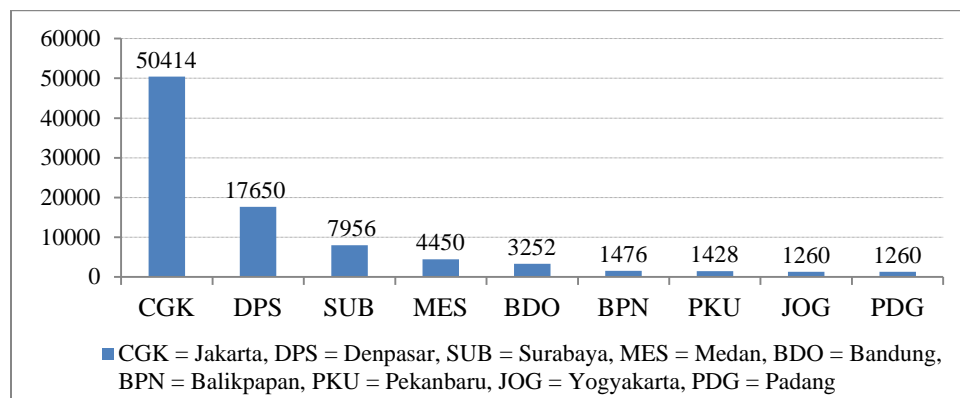
Airlines have also responded to this issue by offering cooperation to airport, for example airline group Lion announced its plan to collaborate with airport operator Angkasa Pura I to develop facilities in four airports in eastern region: in Biak, Lombok, Manado, and Makassar (Jakarta Post, 2012). The collaboration includes constructing hangar and aircraft maintenance facilities. This airline-airport cooperation practice is beneficial for both parties as it helps secondary airports to improve facilities, as well as for Lion to strengthen its network. Ministry of State Enterprises recently encourages airline-airport cooperation, specifically between Garuda Indonesia and Angkasa Pura (Cakti and Chevny, 2013).

Case studies in the past have suggested that airlines and airports benefit greatly from cooperation (Fu et al., 2011). For example, airlines obtain competitive advantage by securing key airport facilities, while airports receive financial support from airlines. However, despite the potential benefits, airline-airport cooperation can raise anti-competitive concerns considering airport slots and terminals are essential input for all airlines' operation. The role of government as regulator in these cooperation practices is thus important to ensure fairness and to oversee possibility of anti-competitive cooperation.

4.2 Secondary Cities as Alternative Hubs

Airports with highest passenger throughputs are mostly located in western and central region. It is reviewed that more than 70% of all passengers fly into or out of Soekarno-Hatta. Indonesian government also currently opts to open only five major airports for ASAM (see Table 4). The network of air transport in Indonesia is thus imbalance, especially for the eastern region which is lagging behind.

There is an opportunity to funnel passengers through alternate hubs. Regional secondary bases are necessary given the capacity constraints at major airports such as Jakarta and Surabaya, and also because Indonesia's economic growth is spreading to smaller cities, opening up new opportunities for growth outside the main hubs. Several Indonesian airlines have planned to expand their networks to smaller cities. Garuda Indonesia, for example, plans to develop secondary hubs as part of its Quantum Leap program. The secondary hubs include cities such as Balikpapan in East Kalimantan.



Source: CAPA (2013)

Figure 6. Weekly seats between Singapore and several cities in Indonesia (March 2013)

Links to ASEAN cities from Indonesia still relies heavily through primary airports. For example, Changi Airport in Singapore connects largely through Jakarta, Denpasar and Surabaya (see Figure 6). In 2012, Changi Airport cooperates with local authority in South Sulawesi to increase air traffic between Makassar and Singapore (Endah, 2012). Makassar is planned to serve as hub for eastern region. The annual traffic in Makassar Airport increased 12.69% from 5.5 million in 2011 to 6.3 million in 2012.

There are other underserved secondary points in Indonesia that would be best linked into a hub type connecting network. Traditionally, the emphasis was on capital cities to provide gateway to Indonesia domestic hinterlands, but now with ASAM there is opportunity to be more dependent on secondary cities to provide international connection.

4.3 External Relations with Third Countries

Relationship between ASEAN member states with third countries are arranged under “ASEAN-plus” approach. This approach is essentially an agreement between the member states on the one hand, and the third country on the other. ASEAN and China signed air transport agreement with 2 protocols: (1) Protocol 1 (signed in 2011) covers unlimited third and fourth freedom traffic rights between any points in contracting parties; (2) Protocol 2 (signed in 2012) covers fifth freedom traffic rights between 28 secondary points in China and 10 secondary points in ASEAN.

Indonesia includes Mataram Airport in the agreement. Under Protocol 2, Indonesian carriers will be allowed to transit to one of other nine opened airports in ASEAN before flying to any of the 28 airports in China. For example, an Indonesian carrier can serve Mataram to Kinabalu, and then take passengers from Kinabalu to continue to a point in China.

This agreement seems lucrative for ASEAN airlines as they can fly unlimited flights to any Chinese point (subject to slot restrictions in congested airports such as Beijing). However, this may create network unbalance as ASEAN airlines can fly to China only originally from points in their own territory, while China can connect any point in their domestic hinterland with any point in ASEAN. To fly directly from other points would require the grant of seventh freedom among member states, however this is currently out of 2015 ASAM agreement.

Table 6. Bilateral agreements between ASEAN member states and third country

Countries	No of ASAs	Bilateral agreement				Horizontal Agreement
		Australia	US	China	India	EU
Brunei	36	Yes	Yes (1997)	Yes	Yes	No
Cambodia	12	No	No	Yes	Yes	No
Indonesia	65	Yes	Yes (2004)	Yes	Yes	Yes (2011)
Lao PDR	14	No	Yes (2008)	Yes	No	No
Malaysia	82	Yes	Yes (1997)	Yes	Yes	Yes (2007)
Myanmar	45	Yes	No	No	Yes	No
Philippines	57	Yes	Yes (1995)	Yes	Yes	No
Singapore	>100	Yes	Yes (1997)	Yes	Yes	Yes (2006)
Thailand	94	Yes	Yes (2005)	Yes	Yes	No
Vietnam	56	Yes	Yes (2004)	Yes	Yes	Yes (2006)

Source: US Open Sky Partners, EU Air Transport Agreement, China Air Service Cooperation, India Bilateral Air Service Agreements, Australia Air Service Agreements, as of January 2013. No of ASAs as of August 2011.

Moreover, agreement with third countries limited to third and fourth freedom may duplicate existing open bilateral agreement. Indonesia already has open bilateral agreements with US and EU, as explained in Section 2. Indonesia also has bilateral agreement covering third and fourth freedom with other major countries such as China, India and Australia (see Table 6).

ASEAN's arrangements with external partners are important to the economies of the region. Of the 5.21 million weekly seats operated internationally into and out of member states, 52.3% relate to intra-ASEAN routes and the other 47.2% to markets outside the region. The East Asia countries represent the most significant opportunity for ASEAN, as reflected by the extensive trade and aviation ties between the region and China, Japan, and South Korea (Thomas et al., 2008). This particular challenge pertains not only for Indonesia, but also for other member states.

5. CONCLUSIONS

This paper presents an extensive overview of Indonesia's current development in aviation policy, airline and airport sectors related to air passenger services. Indonesia's aviation policy has evolved from restrictive into a more dynamic market-oriented, although majority of power still relies on government. Indonesia has shown its efforts to move towards ASAM in incremental fashion. Government has started to address some issues related to regulatory and airport infrastructures. Indonesia is more likely to accept staged, rather than rapid, liberalization as it will give airlines and government more time to adjust. Indonesia most likely will face increasing pressure from its neighbors in the near future since it is currently the only member state that is resistant to open its market.

Infrastructure capacity and quality remain as the biggest challenge. We identified the potential opportunities for Indonesia to gain benefits from ASAM, such as cooperation to improve airports, opening secondary cities as alternative hubs, and pursuing more external relations between ASEAN and third countries. Opening only major airports such as Jakarta and Surabaya will be troublesome considering that those airports face serious capacity and infrastructure limitations. There is more to be gained from liberalization by opening up secondary points which today lack direct links to other ASEAN cities.

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APPENDIX

Third freedom of traffic right: the privilege to carry traffic from the carrier's national territory to a partner's territory.

Fourth freedom of traffic right: the privilege to carry traffic from a partner's territory to the carrier's national territory.

Fifth freedom of traffic right: the privilege to carry traffic between two partners' territory and the flight has to originate or end in carrier's national territory.

Sixth freedom of traffic right: the privilege to carry traffic between two partners' territory via point in carrier's national territory.

Seventh freedom of traffic right: the privilege to carry traffic between two partners' territory without having to originate or end in carrier's national territory.

Ninth freedom of traffic right (domestic cabotage): the privilege to carry traffic between two domestic points in partner's territory