



Australia Indonesia Partnership
Kemitraan Australia Indonesia



INDONESIA'S STRATEGY FOR **OPEN SKIES**

INITIAL REVIEW AND SCOPING STUDY



**INDONESIA
INFRASTRUCTURE
INITIATIVE**



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July 2010

INDONESIA INFRASTRUCTURE INITIATIVE

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Mott MacDonald

Jakarta, July 2010

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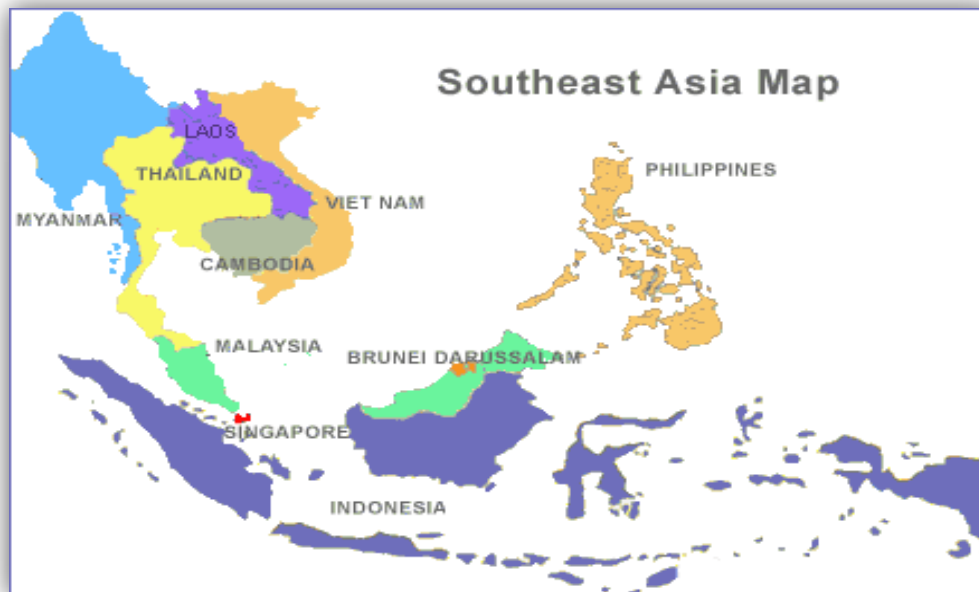
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EXECUTIVE SUMMARY

This report was prepared following the appointment of Mott MacDonald by Indonesia Infrastructure Initiative (IndII) to conduct an initial review and scoping study covering the planned full implementation of an open sky policy for the ten ASEAN (the Association of Southeast Asian Nations) member states in 2015.

Map of Southeast Asia Showing ASEAN Member States



Source: ASEAN

The main aims of ASEAN include the acceleration of economic growth, social progress and cultural development in the region and to collaborate more effectively for the expansion of trade, the improvement of transportation and communications facilities and the raising of the living standards of their peoples.

ASEAN Liberalisation

A roadmap for the liberalisation of international air services in the ASEAN region between 2005 and 2015 was adopted in 2004 by ASEAN Transport Ministers. This roadmap provided concrete actions that ASEAN member states would pursue to achieve greater and significant air liberalisation in ASEAN through a staged and progressive implementation.

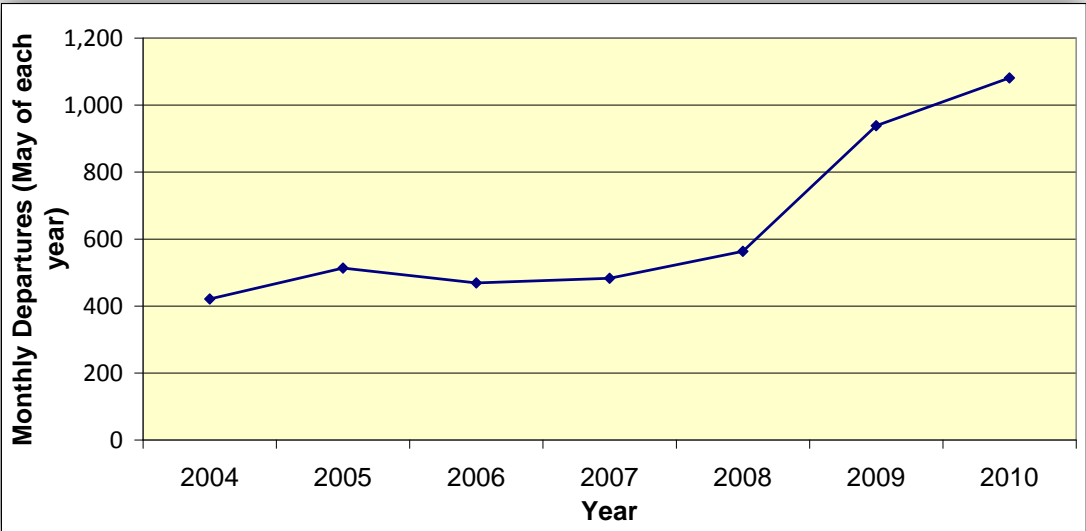
The roadmap included issues specific to both air freight and scheduled passenger air services and whilst multilateral agreements have been agreed, member states must ratify these agreements through new bilateral air services agreements and amendments to their respective air transport policy and regulations.

The open skies agreement signed by the ASEAN countries last year has had a significant impact on the region, the harmonisation of its operations and development.

The region has experienced many positive changes as a result of the open skies agreement, with considerable increases seen in flights and airlines operating on certain routes. The Kuala Lumpur to

Singapore route, for example, in May 2010 had Malaysia Airlines, Air Asia, Silk Air, Tiger Airways, Singapore Airlines, Firefly, JetStar Asia and Sri Lankan Airlines all operating services, which will enhance customer choice. The figure below details the development in the number of flight departures on the route during May of each year from 2004 to 2010:

Development of Monthly Departures on Kuala Lumpur to Singapore Route (May of each year 2004 to 2010)



Source: Innovata SRS Data Bureau Report May 2010

So far Indonesia has yet to ratify the two agreed ASEAN multilateral agreements, i.e. the multilateral agreement on the full liberalisation of air freight services and the multilateral agreement on air services. The latter will bring a gradual relaxation of traffic rights ahead of the full liberalisation of passenger services.

The multilateral agreement on the full liberalisation of passenger services is in its final stages of drafting and is expected to be agreed by member states in November 2010. Once ratified by the member states the agreement will mean the liberalisation of third, fourth and fifth freedom traffic rights between international airports within the ASEAN region.

This assessment report details the agreed and drafted ASEAN multilateral agreements and highlights the key elements that will impact on the Indonesian aviation scene.

Indonesian Airlines

Garuda Indonesia “Garuda” is the state-owned national flag carrier and has the largest fleet and seat capacity amongst Indonesian airlines, with shares of 26% and 30% respectively.

Garuda plans to add 23 Boeing 737-800 aircraft in 2010 plus 1 Airbus A330-200 and almost double its fleet from 67 to 116 aircraft by 2014. Other aircraft on order include 10 Boeing 777-300ER for delivery in 2011 that will be primarily used for services to Europe and additional Boeing 737-800 and Airbus A330 aircraft.

In comparison, Singapore Airlines has a fleet of 105 passenger aircraft; Malaysia Airlines a fleet of 81 passenger aircraft and Thai Airways a fleet of 86 passenger aircraft.

In 2009 Garuda carried 8.4mn domestic passengers and 2.2mn international passengers. The total of 10.6mn passengers in 2009 was an increase of 5.9% compared with 2008.

Garuda was the dominant Indonesian international airline in 2009 with a market share of around 45%. It is likely to be overtaken in 2010 by Indonesia Air Asia.

Garuda resumed services to Europe in June 2010, with a daily service to Amsterdam. The airline plans to open another four routes to Europe in 2012, London, Frankfurt, Rome and Paris.

There has been a rapid growth of Indonesian low cost airlines, including Lion Air, Batavia Air, Sriwijaya Air and Indonesia Air Asia. The domestic market share of Lion Air in 2009 of around 30% exceeded that of Garuda. The low cost airlines have created an important market niche. Domestic air fares can be very low, thus enabling first time travellers to access air transportation.

Lion Air has current orders for 148 Boeing 737-900ER, which will quadruple the current fleet size and make it the largest Indonesian airline.

Indonesian Airlines in total plan to add an additional 800 aircraft by 2014, three times the current fleet size.

Traffic at Indonesian Airports

Annual aircraft movements at Indonesian airports increased from around 865,000 in 2005 to 1.017 million in 2009, a growth of 18%. International aircraft movements increased over the period at an average annual growth rate of 6.8%; domestic aircraft movements increased over the period at an average annual growth rate of 3.8%.

The share of domestic aircraft movements was 88% in 2009.

Annual passenger numbers at Indonesian airports increased from around 69 million passengers in 2005 to 98 million in 2009, a growth of 42%. International passenger numbers increased over the period at an average annual growth rate of 9.3%; domestic aircraft movements increased over the period at an average annual growth rate of 9.0%.

The share of domestic passengers was 84% in 2009.

Annual air freight at Indonesian airports increased from around 690,000 tons in 2005 to 872,000 tons in 2009, a growth of 26%. Air mail traffic grew from around 15,000 tons in 2005 to almost 25,000 tons in 2009, a growth of over 61%.

The average annual growth rate of international freight and mail over the period was 6.6%, compared with the average annual growth rate of domestic freight and mail of 6.0%.

The share of domestic air freight was 67% in 2009.

Indonesian Airports

Indonesia has 29 international airports, of which 5 are designated as “Utama” or major airports:

- Soekarno-Hatta, Jakarta;
- Ngurah Rai - Bali;

- Juanda – Surabaya;
- Polonia – Medan
- Sultan Hasanuddin – Makassar.

28 airports are designated as “International Regional” airports; 11 are designated as “International Hajj” airports and 7 are designated as “International Specialist Cargo” airports.

Indonesia – Main Regions and Cities



According to airlines schedules data, in May 2010 only 14 of the designated international airports had scheduled international services.

The five airports designated as major international airports above have been designated as “international airports” by DGCA for the purposes of the open skies agreement.

The open skies arrangement has meant that the development of regional hub airports is even more important. Malaysia, Thailand and Singapore and other ASEAN members, have been planning and investing in airport infrastructure for a number of years.

At Jakarta Soekarno-Hatta airport passenger growth in 2009 was +15% compared with 2008. However, the airport is likely to be heavily congested at certain periods, particularly in the domestic passenger terminals, with annual demand likely to be around 40 million passengers (mppa) in 2010 compared with a theoretical annual capacity of 22mppa.

There are plans to increase the ultimate capacity of the airport to 65mppa. There are currently two runways – and a plan to add a third runway. It is unlikely to be able to obtain land for a fourth runway.

Eight out of 13 AP I airports show annual demand currently exceeding annual capacity by 150%+.

Six out of 12 AP II airports show demand currently exceeding capacity by 150%+.

Indonesia – SWOT

There are considerable strengths: a large home market, unsatisfied demand, large distances, inadequate surface transport alternatives, a large growing economy, low wage costs, etc.

Air transport is vital to enhance connectivity between Indonesia's main islands. Within major island groups such as Sumatra, Kalimantan, Sulawesi and Papua surface transport alternatives are inadequate. Domestic shipping is not a realistic alternative.

The weaknesses include lack of compliance with international standards; a relatively poor safety record; low productivity; infrastructure, particularly airports, Air Traffic Control and tourism and lack of adequate training, management and supervision of human resources.

The opportunities include political and economic stability continued and accelerating economic growth; increased employment and tourism and an enhanced regional role and standing.

The threats include increased airline competition, e.g. Air Asia and Tiger Airways; lack of political will; regional stability; market saturation and disasters, natural and terrorism.

Indonesian Airspace

Indonesia's airspace, infrastructure and air traffic management services currently falls short of international standards in many areas. For example, Indonesia has no radar cover over most of its airspace and where radar cover is available it is often compromised by terrain, obscuring significant areas of its airspace, often quite close to major airports. These issues make it difficult to provide:

- Efficient Air Traffic Services
- Effective Air/Ground communications
- Rapid Search and Rescue response

Indonesia ATM suffers from inefficient routings and a relatively poor safety record.

Safety will be a very important consideration in the transition period to open skies.

Indonesia within ASEAN

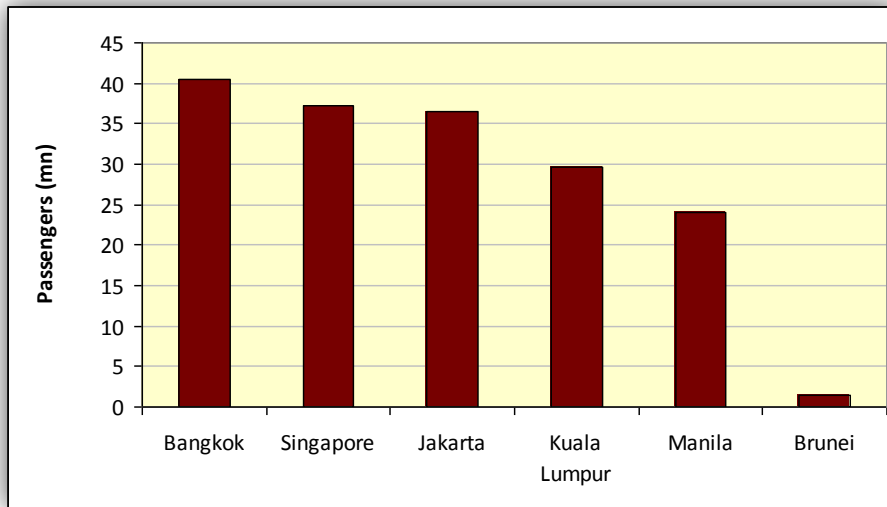
Indonesia has both the largest population and economy within ASEAN.

Indonesia has a 24% share of the ASEAN aircraft fleet and a 21% share of ASEAN aircraft seat capacity.

Indonesia's seat share is less than its aircraft fleet share which is indicative of the fact Indonesian airlines use smaller aircraft than those operated by airlines domiciled in Malaysia, Thailand and Singapore.

Jakarta was the third largest airport in the ASEAN region in 2009:

Passenger Traffic at Major ASEAN Airports 2009



Source: Airports Council International

Conclusions

The evidence suggests that strong local economies and local airlines, facilitated by a large domestic market provide the best basis for a positive approach to open skies regimes. Where they are adopted, experience shows that open skies regimes accelerate market and economic growth.

Indonesia needs to demonstrate and trade its willingness for a more open air services regime to facilitate increased market development and trade opportunities to benefit the Indonesian economy and also to create opportunities for Indonesian airlines in overseas markets.

Operational and compliance performance have to be addressed to enable Indonesia's vast domestic market and cost base to provide it with a massive home advantage to exploit the opportunities arising from open skies. But those issues have to be addressed urgently.

As the largest ASEAN country Indonesia has all to play for. However, the relatively poor infrastructure and regulatory oversight must be made comparable with international best practices and Stage 2 of the study will be conducted to identify any shortcomings and suggest remedial actions to help optimise the returns that Indonesia should expect from implementation of the ASEAN open sky policy in 2015.

CHAPTER 1: INTRODUCTION

Mott MacDonald was appointed by Indonesia Infrastructure Initiative (IndII) to conduct an initial review and scoping study covering the planned full implementation of an open sky policy for the ten ASEAN countries in 2015.

1.1 STUDY AIMS AND OBJECTIVES

The aim of the study is to contribute to the long term development of Indonesia by producing a strategy, or road map, for the implementation of the ASEAN regional open sky policy in 2015. The specific objectives of the study are to identify ways to:

- Accommodate the open sky policy in the national aviation regulation;
- Prepare the national aviation industry for regional competition.

The work was undertaken in two stages:

- Stage 1 is a “rapid” initial assessment of the current situation and identification of the key issues impacting implementation of an open-sky policy in Indonesia, to include recommendations for future actions that could lead to....
- Stage 2 that would investigate in more depth the main issues identified in Stage 1.

1.2 CONTENT OF STAGE 1

The Stage 1 report comprises:

1.2.1 Challenges of Introducing an Open Sky Policy (authored by Laurie Price)

This section provides a general introduction to the global evolution of the open sky policy process.

1.2.2 Review of Main Documents (authored by Peter Kenworthy)

This section provides a brief summary of:

- The Multilateral Agreement on Full Liberalisation of Air Freight Services (MAFLAFS) signed on 20th May 2009;
- The Multilateral Agreement on Air Services (MAAS) signed on 20th May 2009. This agreement refers to third, fourth and five freedom rights between certain points and capital cities of ASEAN countries.
- The full Liberalisation of Passenger Air Services (MAFLPAS) is not yet agreed and is expected to be signed in November 2010. This agreement refers to third, fourth and five freedom rights between any ASEAN city with an international airport. At the date of this report Indonesia is proposing only five international airports to be included under this agreement.

The potential impact of these three agreements on the Indonesian aviation sector is also reviewed.

1.2.3 Current Situation in the Indonesian Aviation Sector (authored by Professor Dr. K. Martono, Chris Whittle, Patrick Folley, Kim O'Neill and Andrew Gibson)

This section assesses the current situation of the Indonesian aviation sector, including its preparedness to implement the MAFLAFS and MAFLPAS agreements.

1.2.4 Impact of ASEAN Open Skies Agreement on Member Countries (authored by Professor Dr. K. Martono, Peter Kenworthy, Chris Whittle and Patrick Folley)

This section reviews the current situation regarding the implementation of ASEAN Open Sky Policy in other ASEAN countries that are signatories to the agreement, namely: Brunei Darussalam; Cambodia; Laos; Malaysia; Myanmar; Philippines; Singapore; Thailand and Vietnam.

1.2.5 Terms of Reference – Stage 2 (authored by all members of team, co-ordinated by Chris Whittle)

Based on the findings in the previous sections of the report, a recommendation is made for the next stages of the activity. Terms of reference are developed for incoming consultants in potential subsequent stage(s).

1.2.6 Acknowledgements

Mott MacDonald expresses its deepest gratitude to IndII and DGCA for supporting this study and for the administrative support, and also to the airlines, airport administrations and international associations for the generous assistance extended during the conduct of the study.

CHAPTER 2: CHALLENGES OF INTRODUCING AN OPEN SKY POLICY

Air Service Agreements (ASAs) were a direct result of the establishment of the five freedoms of the air post the 1944 Chicago Convention in order to provide an international standard and agreement for the operation of air services and the right to pick up and set down passengers and cargo. It was a key part of the establishment of the International Civil Aviation Organisation (ICAO).

ASAs were drawn up against the background of a very different world: one that was still in conflict in Europe and the Far East with the end of the Second World War. One that was still fairly protectionist, driven by the USA, where air transport was in its infancy and technology and aircraft performance restricted what could be achieved, where the world was divided between political ideology and where concepts of increasing personal disposable wealth and freedom to travel were restricted to particular segments of society.

The situation in 2010 is very different politically, economically, socially and from a technological standpoint. Nowhere in the world is now more than 24 hours from anywhere else. Any individual with US\$800 can fly half way round the world.

It is against this background that Indonesia needs to show and trade its willingness for a more open air service regime to be able to increase market development and trade opportunities both to benefit the broader Indonesian economy but also create opportunities for Indonesian airlines in overseas markets. If they can address their operational and compliance performance then Indonesia's vast domestic market and cost base could provide it with a massive home advantage to exploit the opportunities arising from open skies. But those issues have to be addressed urgently.

That requires openness and a willingness to talk to those who may also be influenced by open skies. The whole issue of open skies is about freeing the air transport industry from the shackles of restrictions on their ability to ply their trade and reap the potential rewards that an ability to respond freely to market opportunity and development will, or should bring.

2.1 OPEN SKIES – THE THEORY

The theory of introducing open skies is that the removal of market entry and operational restrictions and consequent liberalisation it brings will, in most cases, lead to an increase in air services, including networks, routes, frequency, schedules products, prices and innovation. This in turn will lead to an increased opportunity to travel stimulated by the new opportunities.

The results are an accelerated growth in air traffic that stimulates growth in the economy, economic activity and increased employment.

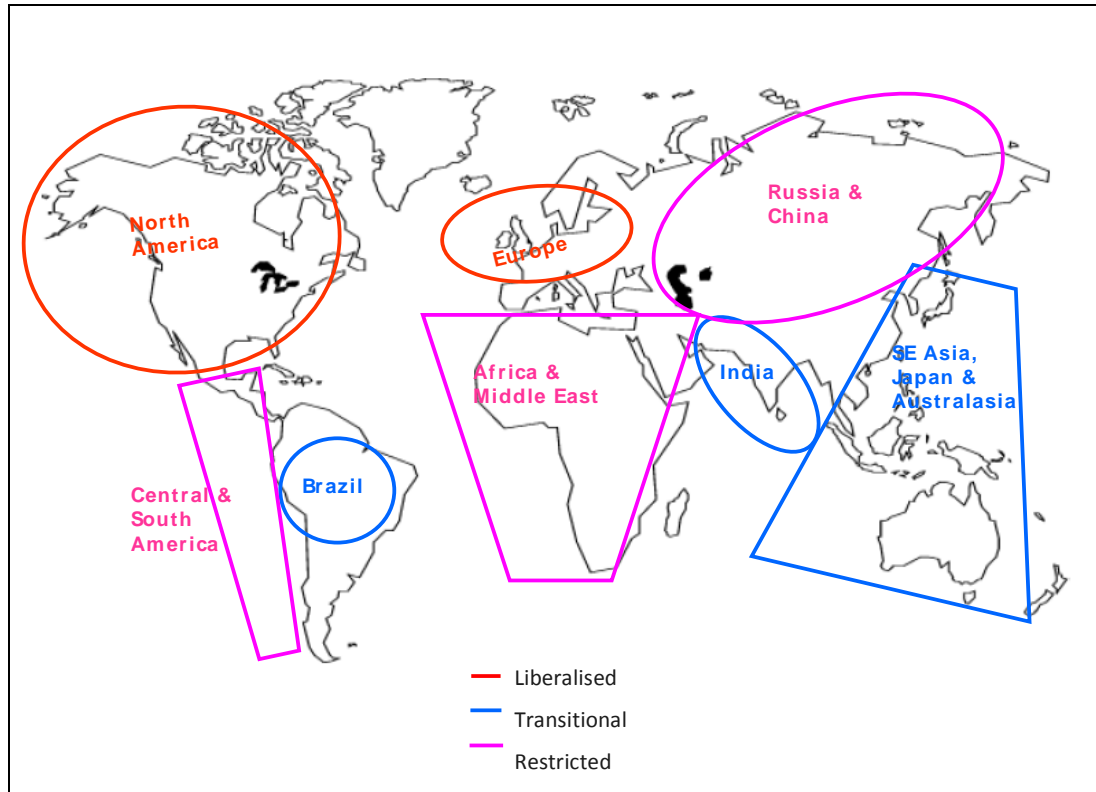
In the USA, which in 2010 still accounts for a third of world air travel, passenger numbers have more than doubled since deregulation was introduced at the end of the 1970s, whilst air fares have reduced by 50% in real terms. Whilst developments in technology and rising living standards have also contributed to this process, deregulation has been instrumental in accelerating traffic growth and associated economic activity wherever it has been introduced around the world.

Appendix A provides background and insight to the deregulation that has already occurred within USA, within Europe and between the European Union and USA.

2.2 PROGRESS TOWARDS OPEN SKIES – GLOBAL PERSPECTIVE

The figure below shows the progress that has been made to date towards the implementation of Open Skies agreements across the world:

Figure 2-1: Global Progress on Implementation of Open Skies Agreements



Source: Mott MacDonald

2.2.1 Deregulation/Open Skies Regime

North America has seen full deregulation of domestic air services since 1979. It pioneered the low cost /no frills airline business model, led by operators such as Southwest Airlines whose cost structure and agility enabled it to exploit the new market opportunities in ways that the long established, legacy airlines could not. It is perhaps no coincidence that many of the original legacy airlines have either gone out of business, e.g. Pan American, Braniff and Eastern or been absorbed into other larger airline groupings e.g. TWA to American, Northwest to Delta and most recently Continental to United. Deregulation has spawned new entrants such as Jet Blue and Air Tran and increased the pace of consolidation as the traditional airlines have tried to compete.

In terms of international air services to and from the USA, only part deregulation has occurred in specific markets, usually where the US believes it has a particular advantage or bargaining position, sometimes on issues outside of aviations!

Europe has embraced full deregulation of internal air services since the mid 1990s. Following EC enlargement, this extended to all EU27 states. Some of the new Eastern European airlines exploited their lower cost base to establish new operations to serve the wider European market e.g. Wizz Air.

As with the USA, Europe has moved cautiously to embrace international air services deregulation, which has been more selective and focussed on the relationships with those countries / areas generating the largest traffic flows such as the USA and points in the Middle East. Although most European countries have been careful not to concede too much “freedom” where the balance of opportunity has not been equal. For instance the UK with a population of 60 million generating 240 million air passengers a year has long resisted the demands of Singapore with a population of 4.8 million generating some 37 million passengers a year to allow Singapore Airlines unlimited fifth freedom rights to the USA from London.

Asia is generally in transition from a regulated to a deregulated environment. The extremes being the totally deregulated approach adopted by Singapore, based on the strength of its economy, its geographic location, the reputation and performance of its home based airline and an unswerving political and policy commitment to develop air transport as a key determinant of the country’s economic fortunes. The other extreme are much more restrictive regimes where the bilateral approach adopted is to protect trade and other interests. There is a whole spectrum in between according to the level of economic maturity, the market focus, the strength and reputation of the local airline and other trade and political considerations.

For the rest of the world progress is mixed with countries such as Brazil having adopted a deregulated position domestically whilst others such as those in large parts of Africa have taken a more restricted approach.

It is worth noting that in general the new post deregulation carriers have been generally profitable whilst the legacy carriers have endured increasing losses, amounting among IATA world airlines to \$10.6 billion in 2009.

The evidence suggests that strong local economies and local airlines, facilitated by a large domestic market (Singapore Airlines notwithstanding) provide the best basis for a positive approach to open skies regimes. Where they are adopted, experience shows that open skies regimes accelerate market and economic growth.

2.3 ESSENTIAL REQUIREMENTS TO SECURE OPEN SKIES BENEFITS

A review of global experience suggests that the essential requirements to secure the benefits of an open sky policy include:

- Compliance with ICAO Standards and Annexes
- A strong hub/gateway airport
- That the hub/gateway airport is used as the operating base for a domiciled network airline with
- strong financial backing
- a sound investment strategy
- The based airline should also have a proven track record of performance and delivery of:
- Operational integrity
- Efficiency and productivity
- Low unit cost base
- Product quality
- Service integrity

- Value for money
- Innovation
- Strong leadership
- The based airline should enjoy a significant market share advantage through its market presence and coordination of all the key elements including relationship with the airport and air navigation service provider (ANSP).
- It should also have a marketing and public relations flair and include effective use of distribution media via a cohesive distribution strategy including the optimal use of Global Distribution Systems (GDS) and the internet.

2.4 INGREDIENTS FOR SUCCESS

The ingredients for the successful adoption and exploitation of open skies and a deregulated regime cover both national and local issues.

One of the most fundamental requirements is the existence of a strong, single regulatory oversight covering economic and safety issues as is the case in both North America and the European Community. Albeit that in Europe, there is still some residual economic and safety regulation at a national level with the UK Civil Aviation Authority still exerting influence over airline financial fitness and some aspects of safety regulation in addition to the EC roles and those of European Aviation Safety Agency (EASA).

Ensuring economic convergence with stable exchange rates and the ability for the free flow of investment and funds is also essential.

Economic stability is key, but also political and civil stability, as the recent developments in both Thailand and Greece have shown.

Crucial to realising the positive benefits from deregulation is the existence of adequate and appropriate infrastructure, requisite standards and spare capacity at airports and for airspace.

The airport must be able to recognise the needs of any new market segment in terms of operational requirements of the facilities from runway slots, aircraft stands and passenger terminal availability to such issues as self handling and branding.

2.5 ISSUES TO RESOLVE

There are a number of other issues that need to be recognised and addressed to a greater or lesser degree. Some will go to the heart of key economic and social policies and goals, whilst others are of more limited importance and impact. These include:

- Airline ownership and control - local v foreign
- Investment
- Registration
- Standards
- Access

- Inertia
- Airport/Chamber of Commerce/local business interests
- Associated infrastructure – tourism development, hotels, resorts etc.

In terms of ownership, control, and investment, many countries require that not more than 25% or at best 49% of an airline operating within, or to / from a state is owned by foreign nationals. This can limit both the availability of investment and the quality of the backing, which may not help towards the overall achievement of the goals.

There can be similar controls in terms of the use of non-state registered aircraft which may limit the availability of specific aircraft and sources, because a lease is involved and the lessor wishes to retain a specific registration to confirm title.

It will also be necessary that whatever “regulated” oversight standards are applied the actual service delivery standards conform to industry norms.

It will also be necessary that where a new open skies policy is adopted, removing all official regulatory barriers to a development, that non regulatory barriers are not allowed to develop in their place preventing access to the specific market. Corporate, government or even cultural inertia will need to be resisted.

Other interests, including airports, Chambers of Commerce and other local business interests will need to be kept informed to ensure a seamless approach.

Finally, realisation of the total positive impacts will only be achieved once the regulatory barriers are removed, and that adequate associated infrastructure in terms of tourism development, hotels, resorts etc are also put in place.

2.6 OPEN SKIES IN INDONESIA – SWOT ANALYSIS

The following is a strengths, weakness, opportunities and threats analysis for the introduction of an open sky policy in Indonesia:

Table 2-1: Indonesia Open Skies SWOT Analysis

Strengths	Weaknesses
1. Large home market	1. Compliance with international standards
2. Unsatisfied demand	2. Safety record
3. Strategic geographical position	3. Low productivity
4. Distances between major population centres	4. Infrastructure
5. Inadequate surface transport alternatives	a. Airports
6. Large growing economy	b. Air Traffic Control
7. Low wage cost	c. Tourism
	5. Fragmentation / harmonisation
	6. Lack of training
	7. Corruption

Opportunities	Threats
<ol style="list-style-type: none"> 1. Accelerated economic growth / GDP 2. Increase in employment 3. Increase in tourism 4. Strong regional role and standing 5. Political and economic stability 	<ol style="list-style-type: none"> 1. Competition – e.g. Air Asia & Tiger Airways 2. Political will 3. Regional stability 4. Market saturation 5. Disaster: <ol style="list-style-type: none"> a. Natural b. Terrorism

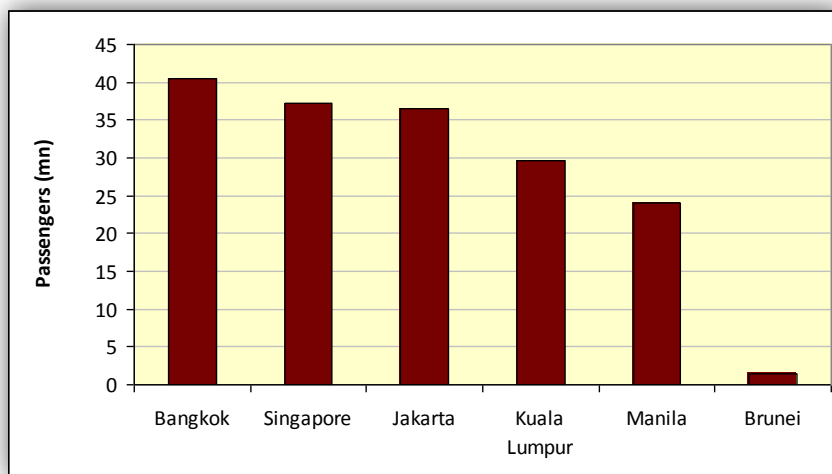
Source: Mott MacDonald

2.6.1 Challenges Facing Indonesia & Implementation of ASEAN Open Sky Policy

Indonesia has both the largest population and economy within ASEAN. Indonesia is the world’s largest archipelago with the associated need to link geographically separated regions for which air transport is uniquely suited. It is also the world’s largest Muslim nation and is ethnically diverse. This combination of physical geography, economic conditions; social composition and focus also creates challenges and opportunities

It is also a fact that, by comparison with Singapore which has just one airport, Indonesia has 29 potential international airports. This creates market, operational and logistic challenges. It means effort is fragmented and there is less international traffic at the main international hub than is the case at Bangkok or Singapore:

Table 2-2: Passenger Traffic at Major ASEAN Airports 2009



Source: Airports Council International

The approach and solutions need to recognise this.

It is also recognised that although making good progress, Indonesia is not as technically advanced as other ASEAN member states, which places it at a technical and competitive disadvantage. Although, it should be remembered that the same was also true of China until relatively recent times!

As yet, training, supervision and management of human resources are reportedly well below international standards and place Indonesia at a significant disadvantage. This will be a major challenge for the future.

Some of the innate tensions due to the heterogeneous nature of ASEAN countries generate barriers and problems that have been less apparent when compared to the situation pertaining in EU countries.

Ongoing environmental and climate change legislation and protocols and the lack of apparent “offsets” may also thwart attempts to introduce more liberal regimes. Some countries may well be more advanced in the introduction of offsets/compliance requirements and therefore disadvantage the less developed countries. Such considerations will need to be considered as part of any change in air services agreements.

Balancing the needs of social and economic cohesion and the need to support vital air links along the archipelago including the possible requirement to include regional link / Public Service Obligation (PSO) protection into any changes may also pose problems. Particularly as any relaxation of air service regulation tends to result in increased service and competition on the most dense routes and reduced and inferior service on thinner but nevertheless vital links.

The role, plans and future strategies of Garuda Indonesia “Garuda” and other Indonesian airlines and their contribution to international trade and tourism links for Indonesia, will be crucial to the outcome of any discussion and any eventual change in policy and legislation.

2.7 POTENTIAL BENEFITS OF ASEAN OPEN SKY POLICY

The review of the impact of open skies policies in other parts of the world illustrates the potential benefits of removing all but the most limited of economic and service restrictions. Removing barriers to trade results in increased economic activity and opportunity as has been shown effectively in North America and Europe and also selectively in other Far East markets.

Only a small proportion of the population of the ASEAN region actually travel by air. This means that there is strong potential for growth, particularly given that air travel is the most convenient form of transport for the population given the fact that all the countries are separated by water.

Effort and investment is required to bring both parts of Indonesian infrastructure and operational compliance to match prevailing international standards, but for Indonesia open skies remains a goal worth striving for.

The Country has the ability, manpower, ingredients and latent talent to achieve and realise the benefits. It must secure the will and policy.

CHAPTER 3: REVIEW OF MAIN DOCUMENTS

3.1 INTRODUCTION

Before proceeding to a review of the main documents a preamble to open skies agreements is provided below together with the progress to date on the implementation of open-sky policy in ASEAN countries.

3.2 BACKGROUND TO OPEN SKIES AGREEMENTS

Open Sky (liberalised) air service agreements primarily deal with rules governing market access (route and traffic rights), airline designation, airline capacity, airline ownership and control, tariff approval and standards of airline safety and aviation security. Section 2 of this report has looked at the historical context of air services liberalisation around the world.

Whilst deregulation has applied in a number of domestic markets around the world, internationally it is relatively recent occurrence. Non-scheduled international services have operated in a less regulated environment but for scheduled services protectionism has remained. The Paris Agreement of 1956 provided a multilateral agreement for non-scheduled air services.

The International Air Services Transit Agreement (IASTA) also concluded at the Chicago Convention allowed the multilateral exchange of rights to be permitted (particularly 1st and 2nd freedom traffic rights). Indonesia has never ratified this agreement, although DGCA confirm that Indonesia obeys the agreement and uses the content as a reference.

3.3 BACKGROUND TO INTRODUCTION OF OPEN SKIES POLICY IN ASEAN COUNTRIES

Below is an extract from the Joint Media Statement following the Tenth ASEAN Transport Ministers Meeting held November 2004 in Phnom Penh, Cambodia:

“We adopted the Action Plan for ASEAN Air Transport Integration and Liberalization 2005-2015 which provides strategic actions to further liberalize air services in ASEAN and promote an enabling environment for a single and unified air transport market in ASEAN. In line with the 2003 Bali Concord II which aims to achieve integration of the eleven priority sectors, including air travel, by 2010, we also endorsed the Roadmap for Integration of Air Travel Sector. The Roadmap sets specific actions and milestones for greater integration and liberalization of ASEAN air freight and passenger services. It will be formalized later this month at the Tenth ASEAN Summit in Vientiane, Lao PDR, together with those of the other priority sectors.”

This roadmap provided concrete actions that ASEAN Member countries could pursue to achieve greater and significant air liberalisation in ASEAN through a staged and progressive implementation. The roadmap included issues specific to both air freight and scheduled passenger services.

After some delay, for those ASEAN countries ratifying the 2009 Multilateral Air Services Agreement, they have removed third, fourth and fifth freedom limits on flights between ASEAN capital cities. Lee Yuen Hee, Singapore's deputy transport secretary, who negotiates air services agreements for Singapore, expects ASEAN to execute another multilateral agreement during 2010.

The ASEAN Multilateral Agreement on the Full Liberalisation of Passenger Air Services, expected to be signed later this year, he says will "sustain the momentum of liberalisation". This new accord will allow 3rd/4th freedom traffic rights between any ASEAN international airport later this year and the opening of fifth freedoms between any ASEAN international airports by June 2013, desiring to achieve full liberalisation by 2015. Lee explains this is "part of the region's vision to establish the ASEAN Economic Community by 2015.

Indonesia's recent request to delay Open Skies could change this schedule, but Andrew Herdman, director general of the Association of Asia Pacific Airlines says: "ASEAN is moving in the right direction. Third and fourth freedoms between capital cities are now in effect. On the rest of this roadmap agreement, implementation depends on how quickly each country ratifies. So we are moving at a patchy pace." Yet, he does not share the view of some that ASEAN's progress is too slow. "ASEAN is quite diverse," he notes. "Given that diversity, it has moved as fast as it can."

Lee views ASEAN's accords as "significant achievements for such a diverse group of nations that do not have many of the supporting features of an economic union such as the EU, nor the level of sophisticated development of the USA". ASEAN deserves credit for its progress, Lee maintains. "What European states took more than five decades to construct and are still fine-tuning, is being undertaken by ASEAN in less than half that time frame."

Herdman adds that ASEAN, unlike the EU, lacks authority to negotiate as a block or bind its members. Thus, ASEAN's current aviation talks with China are for "a framework agreement", he explains. Once that is concluded later this year, each ASEAN member will still need to sign its own bilateral with China. After China, Lee says, "ASEAN is also looking to commence negotiations with India on a similar air services agreement this year."

Even if ASEAN cannot bind its members, it is still the only regional group besides the EU to look outward. Herdman observes: "ASEAN is no longer just a southeast Asian organisation. The rest of Asia realises the value of engaging with ASEAN as a group."

In the implementation, two or more ASEAN member countries which are ready can negotiate, conclude and sign implementing agreements in line with ASEAN-X Formula, on a pluri-lateral, multi-lateral or sub-regional basis. The other Member Countries could join in the implementation when they are ready. ASEAN Member countries can also conclude more liberal and bilateral agreements for air services. ASEAN Member Countries were given the flexibility with regard to the implementation of the proposed timeline for specific measures.

Through the Senior Transport Officials Meeting (STOM) and the Air Transport Working Group (ATWG) two agreements were concluded on 20th May 2009 and work continues on the drafting of a third agreement:

- The ASEAN Multilateral Agreement on the Full Liberalisation of Air Freight Services (MAFLAFS). Once ratified by member countries removes all restrictions on capacity, frequency and aircraft type with regard to 5th freedom rights between specified points (protocol 1) and 3rd/4th/5th freedom rights between international airports (protocol 2) air freight services. In addition a relaxation on tariff approvals and ownership rules applies. A more detailed analysis of the agreement is set out in the next section.
- The ASEAN Multilateral Agreement on Air Services (MAAS). Annex 1 gives an open route schedule between countries and Annex 2 contains 6 implementing protocols with regard to liberalising 3rd/4th/5th freedom traffic rights within ASEAN sub-regions, intra-sub region and between capital cities.

- A draft ASEAN Multilateral Agreement on the Full Liberalisation of Passenger Air Services (MAFLPAS) is expected to be agreed in the latter months of 2010. The agreement, once ratified by Member countries, contains an open route schedule (no specification of points) for 3rd/4th/5th freedom traffic within the ASEAN region between international airports.

It should be noted that all efforts of liberalisation within ASEAN applies to international services and domestic (cabotage) traffic rights are not part of the ASEAN liberalisation process.

3.4 REVIEW OF AGREEMENTS

ASEAN has made more rapid progress on achieving a multilateral agreement on the full liberalisation of air freight services and therefore this agreement is reviewed first.

3.4.1 Multilateral Agreement on Full Liberalisation of Air Freight Services (MAFLAFS)

This agreement was signed 20 May 2009 in Manila and so far both protocols have been ratified by Malaysia, Myanmar, Singapore, Thailand and Vietnam (5 of the 10 ASEAN countries)

The routings relating to route/traffic rights are contained in two protocols:

Protocol 1

The designated carriers of each contracting party shall be allowed to operate international air freight services among designated points with international services with full 3rd 4th and 5th freedom traffic rights

There are seven designated points in Indonesia: Batam, Balikpapan, Biak, Makassar, Manado & Pontianak, the main international airports are excluded.

Protocol 2

This protocol extends the freedoms in protocol 1 among points with international airports (for Indonesia this means the addition of Jakarta, Medan, Surabaya and Bali). Capacity and frequency is unrestricted (both protocols).

Airline designation in this agreement is multiple so, once ratified, gives routing and traffic rights to any number of designated airlines.

The airline ownership rules in this agreement are also liberalised giving market access to airlines with the following ownership:

- substantial ownership and effective control of designated airlines vested in the contracting party designating the airline and/or nationals of the contracting party or
- incorporated/principal place of business in the territory of the contracting party designating the airline, substantially owned and effectively controlled by one or more ASEAN member states or its nationals and the contracting party maintains effective regulatory control or

- as above provided that such arrangements will not be equivalent to allowing an airline or subsidiaries to traffic rights not otherwise available to that airline.

With regards to safety, article 5 covers the recognition by one contracting party the certificates of air worthiness, competency and licenses issued or validated by the other contracting parties and consultations can be requested concerning air safety.

With regard to security, immediate consultations can be requested and failure to reach a satisfactory agreement shall constitute grounds to withhold, revoke, suspend, impose conditions on or limit the operating authorisation.

With regard to cargo tariffs they are not required to be filed with either contracting party, unless national law requires prior approval. Operation of leased aircraft is permitted and is covered in the agreement, the aircraft change of gauge provisions are also covered

Fair competition to compete and equal opportunity to compete are the essences of the agreement and safeguards exist to protect anti-competitive behaviour with regard to:

- Fares below the cost of providing air services to which they relate and...
- Addition of excessive capacity,

Should these practices be sustained, rather than temporary and have a serious negative economic effect or cause damage to another airline, driving an airline out of business or represent an abuse of a dominant position on a particular route.

3.4.2 Multilateral Agreement on Air Services (MAAS)

This agreement was signed in Manila on 20th May 2009.

As at March 2010 the agreement has been ratified by Malaysia, Myanmar, Singapore, Thailand and Viet Nam

The routing schedule contained in Annex 1 is liberal and Annex 2 contains the 6 implementing protocols for the liberalisation of 3rd/4th/5th traffic freedoms within ASEAN sub regions, intra sub-regions and between capital cities.

Concerning the 3rd/4th freedom traffic rights:

Protocol 1

This protocol covers services in the ASEAN sub-regions and specifies points within each sub-region that are liberalised: concerning Indonesia they are:

BIMP-EAGA sub-region: Balikpapan, Manado, Pontinak and Tarakan in Indonesia to/from Bandar Seri Begawan (Brunei), Kota Kinabalu, Lubuan, Kuching & Miri (Malaysia), Davao, General Santos, Puerto Princesa and Zamboanga (Philippines)

IMT-GT sub-region: Medan, Pandang, Banda Aceh & Nias in Indonesia to/from Langkawi, Penang, Alor Star, Ipoh & Kota Bharu (Malaysia), Hat Yai, Narathiwat, Pattani, Trang & Si Thammarat (Thailand)

Protocol 3

Covers services from designated points in Indonesia to destinations in the other ASEAN countries (other than those detailed of the ASEAN sub-regions to which that contracting party belongs (i.e. those specified in protocol 1).

In essence this will allow the Indonesia points of Balikpapan, Manado, Medan and Padang to Phnom Penh (Cambodia), Vientiane, Luang Phabang and Pakse (Laos), Yangon & Mandalay (Myanmar) and Ha Noi, Da Nang, Dien Bien Phu, Phu Bai, Cat Bia and Lien Khuong (Viet Nam)

Protocol 5

Covers services of each contracting party to operate air services from its capital city to the capital cities of the other contracting parties without capacity, frequency or aircraft limitation i.e. Jakarta to Bandar Seri Begawan, Phnom Penh, Vientiane, Kuala Lumpur, Yangon, Manila, Singapore, Bangkok and Ha Noi.

Concerning the 5th freedom traffic rights

There are three 5th freedom protocols (2, 4 & 6) similar to those for 3rd/4th freedom traffic rights covering the sub-regions, non-capital and capital cities.

ASEAN points to non-ASEAN points remain subject to the agreement between the aeronautical authorities of the contracting parties concerned.

Each contracting party undertakes to accord designated airlines of all contracting parties no less favourable treatment than that accorded to its own airlines with respect to cities with international airports, provided they have ratified this agreement.

The agreement grants operational flexibility as each designated airline may, on any or all flights that serve a point in the territory of the contracting party, without geographical limitation and at its option:

- Operate flights in both directions;
- Combine flights numbers within one aircraft operation;
- Serve behind, intermediate and beyond points in ASEAN;
- Omit stops;
- Transfer traffic from any of its aircraft at any point on the routes;
- Serve points behind any point in its territory with or without a change of aircraft or flight number, and advertise as a through service.

Capacity and frequency on the routes specified is un-restricted, airline designation is multiple.

Ownership rules are:

- substantial ownership and effective control vested in the contracting party designating the airline and/or nationals of the contracting party or

- incorporated/principal place of business in the territory of the contracting party designating the airline, substantially owned and effectively controlled by one or more ASEAN member states or its nationals and the contracting party maintains effective regulatory control or
- as above provided that such arrangements will not be equivalent to allowing an airline or subsidiaries to traffic rights not otherwise available to that airline.

Safety and security articles are similar to those of the MAFLAFS.

Tariffs do not need to be filed unless national law requires this; if this is the case then the principle of reciprocity may be applied. Attention to tariffs that may be objectionable - discriminatory, high, restrictive, use of dominant position, low due subsidy.

Operation of leased aircraft is permitted.

Code-sharing and block space agreements are permitted with both airlines of the same party and/or the other contracting party provided the underlying traffic rights exist.

Safeguards, fair competition and state aid provisions are similar to those in the MAFLAFS agreement.

The agreement is subject to ratification or acceptance by the contracting parties

3.4.3 Draft Agreement ASEAN Multilateral Agreement on the Full Liberalisation of Passenger Air Services (MAFLPAS)

The MAFLPAS is in draft form and is expected to be signed in November 2010. This agreement refers to third, fourth and five freedom rights between any ASEAN cities having an international airport. Indonesia is only proposing five international airports to be included under this agreement

Whilst Indonesia currently has fourteen airports with international schedule services to ASEAN countries, it proposes to initially restrict the number of international airports contained within this new agreement. The five airports it proposes are Jakarta, Medan, Surabaya, Denpasar Bali & Ujung Pandang. Other airports (such as Bandung) which already have international services via the bilateral agreements between Indonesia and the respective ASEAN country are not proposed to be included. Indonesia fears that opening all international airports to unrestricted international traffic rights within ASEAN will significantly disadvantage the country's incumbent airlines. Given the large number of international airports in Indonesia compared to other ASEAN countries Indonesia fears its ASEAN neighbour airlines could launch far more services from their respective hubs to Indonesian 'secondary' cities than Indonesian airlines; this in turn could undermine the growth of Indonesia's hub airport. For this reason Indonesia wants to phase in, over time, the opening of their regional airports to international services (save those already permitted via existing bilateral agreements).

3.5 RATIFICATION OF AGREEMENTS

A number of ASEAN countries have already ratified the 2009 multilateral agreements. The situation at 8th March 2010 was as follows:

The Multilateral Agreement on Full Liberalisation of Air Freight Services (MAFLAFS) signed 20th May 2009 has been ratified by:

- Malaysia: 15 December 2009
- Myanmar: 7 August 2009
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

With regard to the Multilateral Agreement on Air Services (MAAS) annex 1 relating to open route schedules has not been ratified by any Member country as the draft MAFLPAS once signed will cover the fully liberalised routing schedule. However the 6 protocols in Annex 2 have been ratified as follows:

Protocol 1 on unlimited third and fourth freedom traffic rights within the ASEAN sub-region signed on 20th May 2009:

- Malaysia: 23 January 2010
- Myanmar: 7 August 2009
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

Protocol 2 on unlimited fifth freedom traffic rights within the ASEAN sub-region signed on 20th May 2009:

- Malaysia: 23 January 2010
- Myanmar: 7 August 2009
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

Protocol 3 on unlimited third and fourth freedom traffic rights between the ASEAN sub-regions signed on 20th May 2009:

- Malaysia: 23 January 2010
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

Protocol 4 on unlimited fifth freedom traffic rights between the ASEAN sub-regions signed on 20th May 2009:

- Malaysia: 23 January 2010
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

Protocol 5 on unlimited third and fourth freedom traffic rights between ASEAN capital cities signed on 20th May 2009:

- Malaysia: 23 January 2010
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

Protocol 6 on unlimited fifth freedom traffic rights between ASEAN capital cities signed on 20th May 2009:

- Malaysia: 23 January 2010
- Singapore: 3 July 2009
- Thailand: 13 October 2009
- Viet Nam: 22 December 2009

In summary Malaysia, Singapore, Thailand and Viet Nam have signed up to all protocols of MAAS and Myanmar has signed up to the annexes within MAAS relating to 3rd/4th/5th freedom traffic right liberalisation within their sub-region.

3.6 ASEAN AGREEMENTS WITH OTHER STATES

India and ASEAN countries had taken a step forward in their longstanding plans to forge an open skies air services agreement and intend to open formal negotiations in the coming months. The agreement will allow for multiple airline designations, unlimited route, frequency and capacity schedules, and full exercise of third, fourth and fifth freedom traffic rights, for airlines from India and all ASEAN member states. India and ASEAN have been discussing such a proposal for many years.

ASEAN has also started bloc negotiations with several neighbours, including Australia, China and New Zealand.

3.7 POTENTIAL IMPACT OF AGREEMENTS ON THE INDONESIAN AVIATION SECTOR

Whilst Stage 2 of the project will appraise in detail the likely impacts on specific airlines and airports in Indonesia, this section highlights some general themes of impact to the aviation sector by more liberal air services agreements.

Fundamentally competition in the sector will significantly increase as airlines launch new services both on existing operated routes and on new airport pairs. Opportunities for airlines, both existing and new will increase and the business models adopted by 'legacy' airlines will have to adapt. Business models of existing airlines will need to respond to the changing environment as consumers will be offered new products. Likewise Airports will need to adapt their infrastructure as products change. For example, a growth in low cost carrier (LCC) services requires a more efficient use of airport infrastructure to achieve quicker turn-rounds and a more simplified process.

If currently existing in existing bilateral agreements, capacity restrictions, routing and traffic right restrictions, airline designation limits and ownership restrictions will be removed in a more liberal environment. The growth of competing air services will place additional pressure on existing airport and airspace infrastructure and investment in facilities will need to respond to this growth.

It must be noted that some of the existing bilateral agreements between Indonesia and ASEAN countries have quite liberal routing and traffic right schedules. For example, between Indonesia and Singapore route and traffic rights already exist for both Indonesian and Singaporean airlines between any points on Indonesia and Singapore. Between Indonesia and Malaysia the bilateral already allows traffic rights between any Indonesian point and six points in Malaysia for Indonesian airlines and between any point in Malaysia and seven points in Indonesia for airlines registered in Malaysia.

Increased market access for foreign (ASEAN) airlines and increased foreign ownership in Indonesian airlines will result. As liberalisation spreads, how to maintain and promote fair competition will become an issue. Competition laws will need to be developed.

Consumer protection policies (covering the contractual relationship between airlines and their users) will need to be addressed; competition doesn't necessarily give guarantees of service levels that customers can expect and in other areas where deregulation has occurred these factors have been considered.

Airline alliances for the ASEAN carriers will develop as liberalisation evolves and incumbent legacy carriers will regroup and probably consolidate over time. Recently Vietnam Airlines joined the STAR alliance and Garuda is likely to join Skyteam. Likewise the growth of the low cost operations by both existing Indonesia owned LCC airlines (such as Lion Air and Indonesia Air Asia) and ASEAN (non-Indonesian owned) will accelerate. The current financial status of incumbent airlines will be an important factor as to which airlines seize the opportunities brought about by liberalisation within ASEAN.

Whilst cabotage will not be allowed for ASEAN foreign airlines, and is consistent with the Indonesia Civil aviation act of 2009, domestic markets will be impacted from a more competitive intra-ASEAN service network. The patterns of transfer passengers to/from the Indonesia domestic network will change as more capacity is offered on direct services.

CHAPTER 4: CURRENT SITUATION IN THE INDONESIAN AVIATION SECTOR

4.1 INTRODUCTION

This section of the report reviews the current situation in the Indonesian aviation sector.

4.2 AIR TRANSPORT POLICY

The Ministry of Air Communications (Transportation) assigns responsibility for civil aviation policy to the Directorate General of Civil Aviation (DGCA) through the Aviation Act Number 1, 2009, together with a number of Presidential and Ministerial Decrees.

Under these arrangements, DGCA is responsible for the safety and regulation of civil aviation in Indonesia, including regulatory oversight of airport and airworthiness standards as well as regulating Air Traffic Control, airspace management and Air Service Agreements.

The organisation of the management of air transport in Indonesia is modelled on that of the US Federal Aviation Administration (FAA).

The instruments governing the management of air transport are as follows:

- Aviation Act Number 1, 2009, which replaced Aviation Act Number 15, 1992.
- Government Regulation
- Presidential Decree
- Ministerial Decree
- Directorate General Decree
- Regulation (CASR)
- Staff Instruction (SI)
- Advisory Circular (AC)
- Safety Circular
- Airworthiness Directive

Air policy in Indonesia has exhibited both positive and negative impacts. The positive impacts have been mainly for the consumer, whereas it has impacted negatively on other transport modes, e.g. the bus service from Jakarta to Medan was withdrawn and there is a continuing threat to state-run sea transportation companies.

A further impact has been the bankruptcy of a number of airlines, including Seulawah, Sempati, Bouraq, together with a number of new entrant airlines that also failed. It is debatable the extent to which policy was to blame for their demise as there may have been other factors.

4.3 REGULATION

DGCA is responsible for the safety and regulation of civil aviation in Indonesia, including:

- Regulatory oversight of airport and airworthiness standards;
- Regulating Air Traffic Control;
- Airspace management;
- Air Service Agreements
- Preparing the formulation of policies of the Ministry of Transportation in the field of air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Implementing policies on air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Preparing standardisation, norms, guidance, criteria, system and procedures for air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Performing certification and/or licensing on air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Supervising, in the sense of monitoring and assessment, the implementation of policies on air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Controlling, in the sense of providing directives, guidance, technical guidance on the implementation of policies in air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Law enforcement/corrective actions with respect to the implementation of policies in air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;
- Evaluating and reporting the implementation of policies in air transportation, airports, flight security, air navigation, aircraft airworthiness and operation;

4.4 AIRLINES

In May 2010 Indonesia had 19 domiciled airlines licensed to fly scheduled services and 42 airlines licensed to fly non-scheduled services. Some airlines are licensed to operate both scheduled and non-scheduled services.

The full list of scheduled airlines is detailed in Appendix B.

There are:

- 16 scheduled passenger airlines;
- 3 scheduled cargo airlines;
- 42 non-scheduled airlines. Some scheduled airlines are also licensed to operate non-scheduled services.

4.4.1 Scheduled Airlines

The sixteen scheduled passenger airlines operate 250 passenger aircraft, with a capacity of 37,351 seats, equivalent to an average of 149 seats per passenger aircraft.

The three scheduled cargo airlines operate 8 cargo aircraft with a capacity of 150 tonnes, equivalent to an average capacity of 19 tonnes per cargo aircraft.

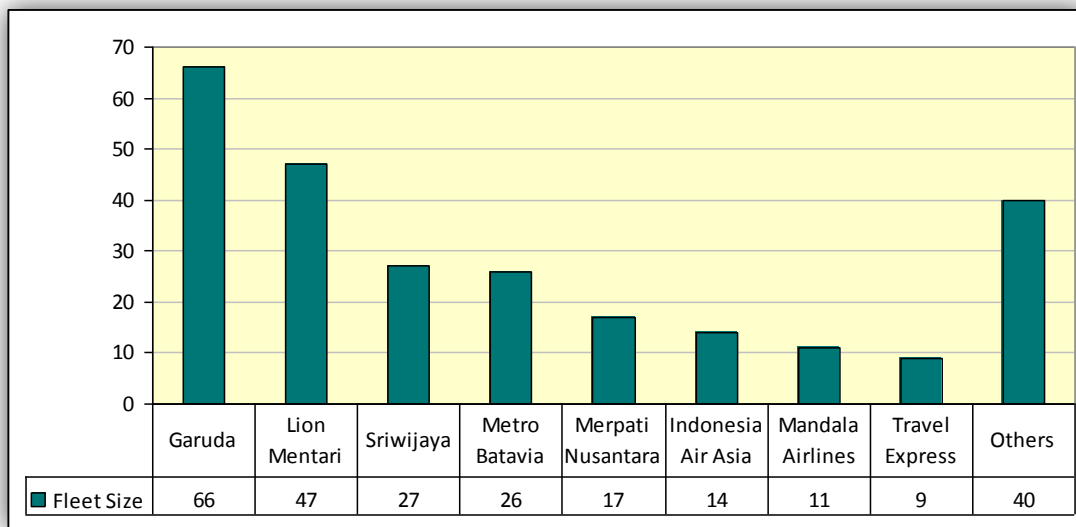
4.4.2 Non-scheduled Airlines

There are a significant number of non-scheduled airlines registered in Indonesia. These vary in size and operational capability commensurate to the role that each performs.

4.4.3 Indonesian Airlines – Fleet Size

Figure 4.1 details the fleet sizes of Indonesia’s eight leading airlines:

Figure 4-1: Indonesian Airlines – Aircraft Fleet Sizes (May 2010)



Source: DGCA Annual Reports & Statistics 2008/2009

Garuda and Lion Air are the largest airlines and together have over 45% of the total scheduled passenger aircraft fleet of Indonesia.

In terms of aircraft orders, Garuda plans to add 23 Boeing 737-800s in 2010, together with 1 Airbus A330-200. *"The airline has an aggressive fleet-expansion plan that is part of its 'quantum leap' transformation strategy,"* - President and CEO Emirsyah Satar. The eventual plan is to almost double the fleet from 66 to 116 aircraft by 2014.

Other aircraft on order include 10 Boeing 777-300ER for delivery in 2011 that will be primarily used for services to Europe and additional Boeing 737-800 and Airbus A330 aircraft.

Lion Air has current orders for 148 Boeing 737-900ER, a quadrupling of the current fleet size. *"With the new Boeing 737-900ER fleet, Lion Air will expand its routes to the Asia-Pacific Region."*- Lion Air Press Release.

Mandala Airlines has current orders for 25 Airbus A320s, more than doubling the size of the current fleet.

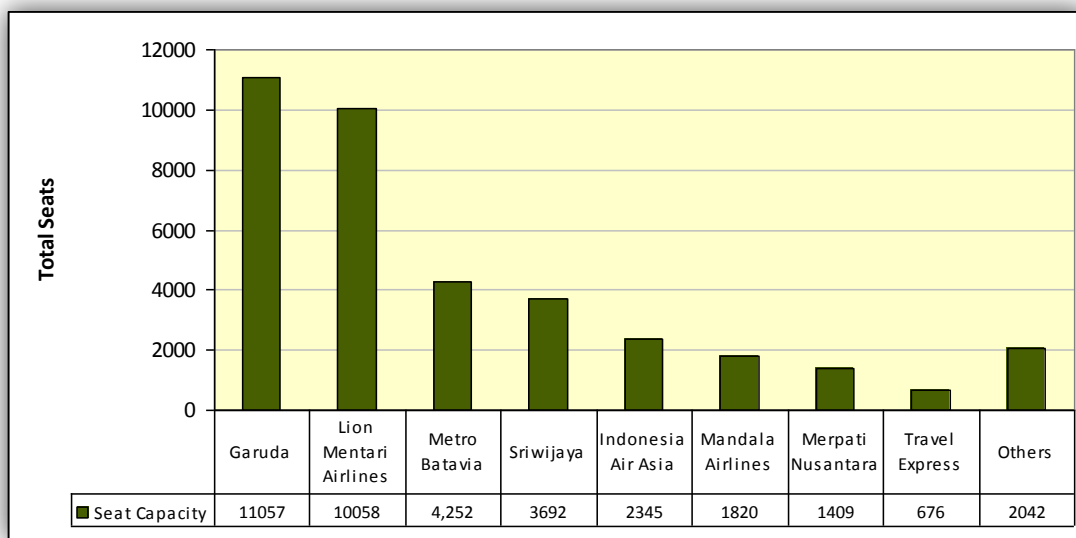
Merpati Nusantara is due to take delivery of 15 MA60 aircraft in June/July 2010. The airline also plans to lease 11 Saab340B and 7 ATR72 aircraft.

It is understood that Indonesian airlines plan to add an additional 800 aircraft by 2014, equivalent to over three times the current fleet size.

4.4.4 Indonesian Airlines – Seat Capacity

Figure 4-2 below details the capacity, expressed in available seats of Indonesia's leading eight airlines:

Figure 4-2: Indonesian Airlines – Seat Capacity (May 2010)



Source: DGCA Annual Reports & Statistics 2008/2009

Garuda and Lion Air are the major airlines and together have nearly 57% of scheduled passenger seat capacity of Indonesian airlines.

Garuda has an average seat capacity of 168 per aircraft compared with an average of 214 seats per aircraft for Lion Air.

4.4.5 Indonesian Airlines – Market Share, Fleet Size & Capacity

Table 4-1 below details the market share of fleet size and seat capacity, for Indonesia's seven leading airlines:

Table 4-1: Indonesian Airlines – Market Share: Fleet Size & Capacity (May 2010)

Airline	Market Share (Fleet)	Market Share (Capacity)
Garuda	25.7%	29.6%

Airline	Market Share (Fleet)	Market Share (Capacity)
Lion Air	18.3%	26.9%
Sriwijaya Air	10.5%	11.4%
Batavia	10.1%	9.9%
Merpati Nusantara	6.5%	6.3%
Indonesia Air Asia	5.4%	4.9%
Mandala Airlines	4.3%	3.8%
Travel Express	3.5%	1.8%
Others	15.6%	5.5%

Source: DGCA Annual Reports and Statistics 2008/2009

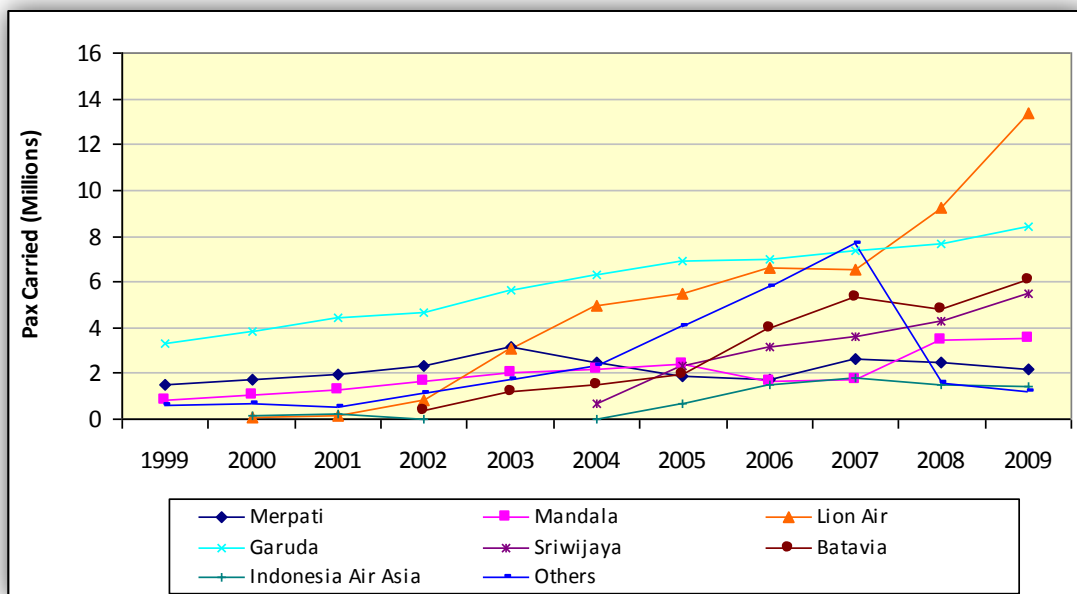
Garuda is the leading Indonesian airline in terms of both fleet and capacity market shares. Lion Air will soon overtake Garuda as it continues to take delivery of the Boeing 737-900ER aircraft it has on order.

4.4.6 Indonesian Airlines – Performance on Domestic & International Routes

4.4.6.1 Domestic Routes

Figure 4.3 below details the development of annual domestic passengers for each major Indonesian airline for each year from 1999 to 2009:

Figure 4-3: Indonesian Airlines – Annual Domestic Passengers 1999 to 2009

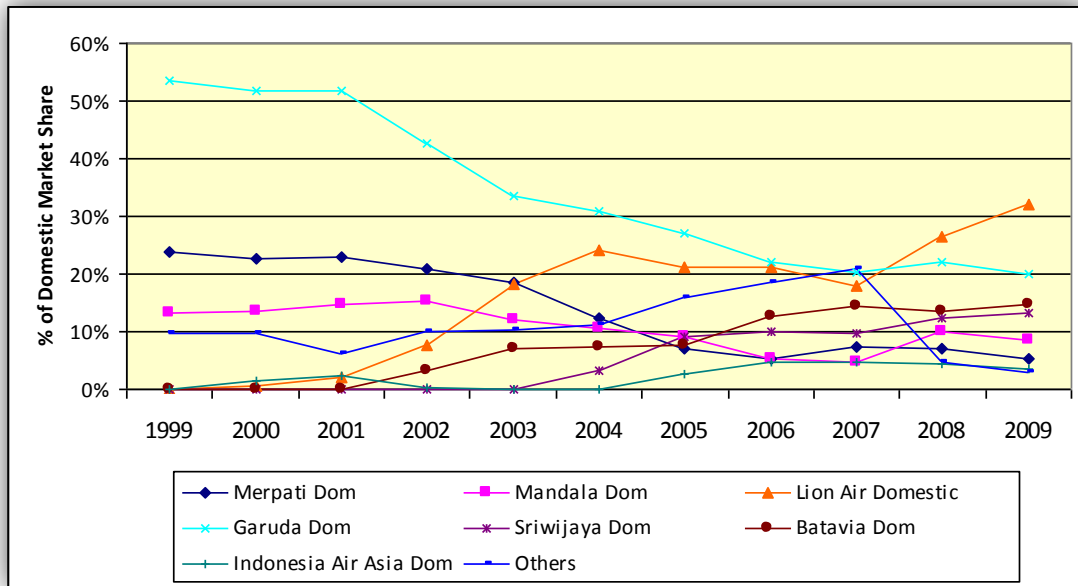


Source: DGCA Annual Reports and Statistics 2008/2009

Figure 4.3 shows the significant decline in domestic passengers suffered by both Garuda and Merpati Nusantara between 1999 and 2009 and the significant growth of domestic passengers carried by Lion Air between 2007 and 2009. Other low cost airlines such as Batavia and Sriwijaya Airlines also recorded strong growth in domestic passenger traffic.

The figure below details the development of annual domestic passenger market share for each major Indonesian airline for each year from 1999 to 2009:

Figure 4-4: Indonesian Airlines – Annual Domestic Passenger Market Share 1999 to 2009



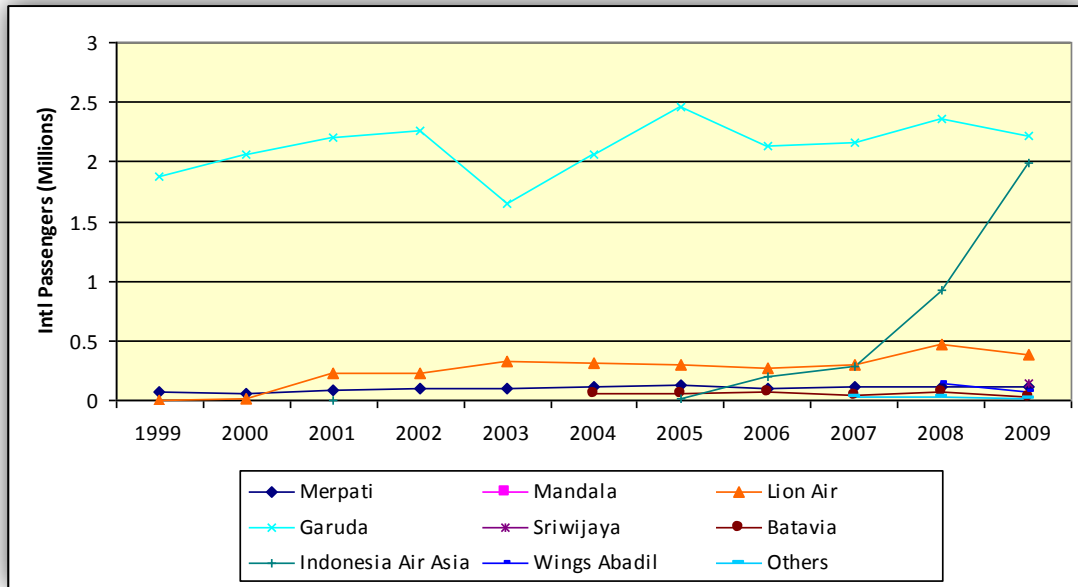
Source: DGCA Annual Reports and Statistics 2008/2009

Figure 4-4 shows the significant decline in domestic passenger market share suffered by both Garuda and Merpati Nusantara between 1999 and 2009 and the increase in market share by Lion Air from 2007 onwards.

4.4.6.2 International Routes

Figure 4-5 below details the development of annual international passengers for each major Indonesian airline for each year from 1999 to 2009:

Figure 4-5: Indonesian Airlines – Annual International Passengers 1999 to 2009

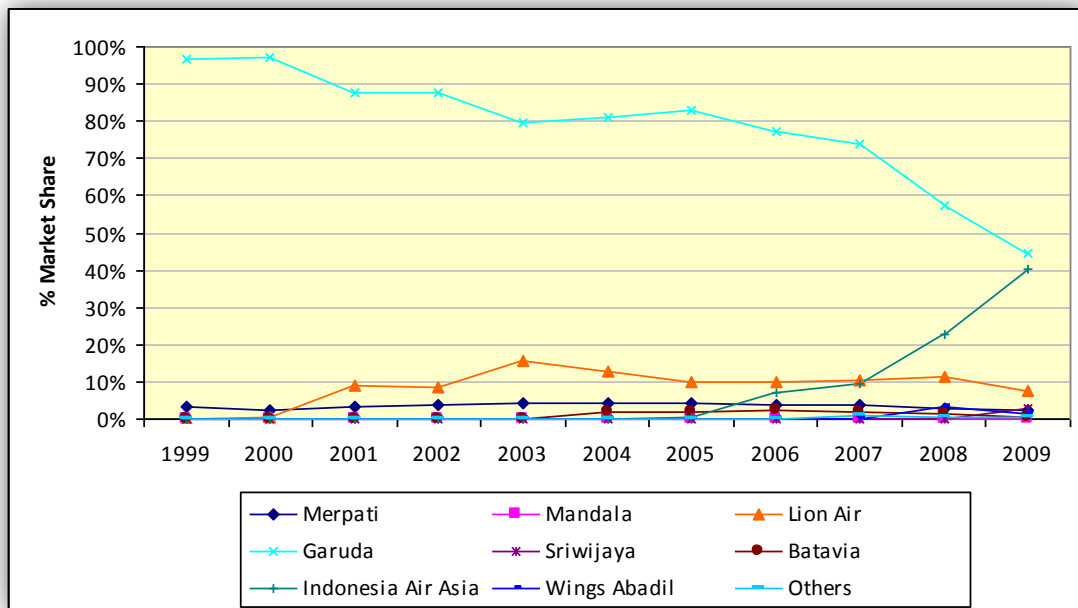


Source: DGCA Annual Reports and Statistics 2008/2009

Garuda has been the dominant airline in terms of international passengers for the whole period 1999 to 2009. However, since 2007 Indonesia Air Asia has increased passenger traffic significantly and is likely to overtake Garuda in 2010.

Figure 4.6 below details the development of the annual international passenger market share for each major Indonesian airline for each year from 1999 to 2009:

Figure 4-6: Indonesian Airlines – Annual International Passenger Market Share 1999 to 2009



Source: DGCA Annual Reports and Statistics 2008/2009

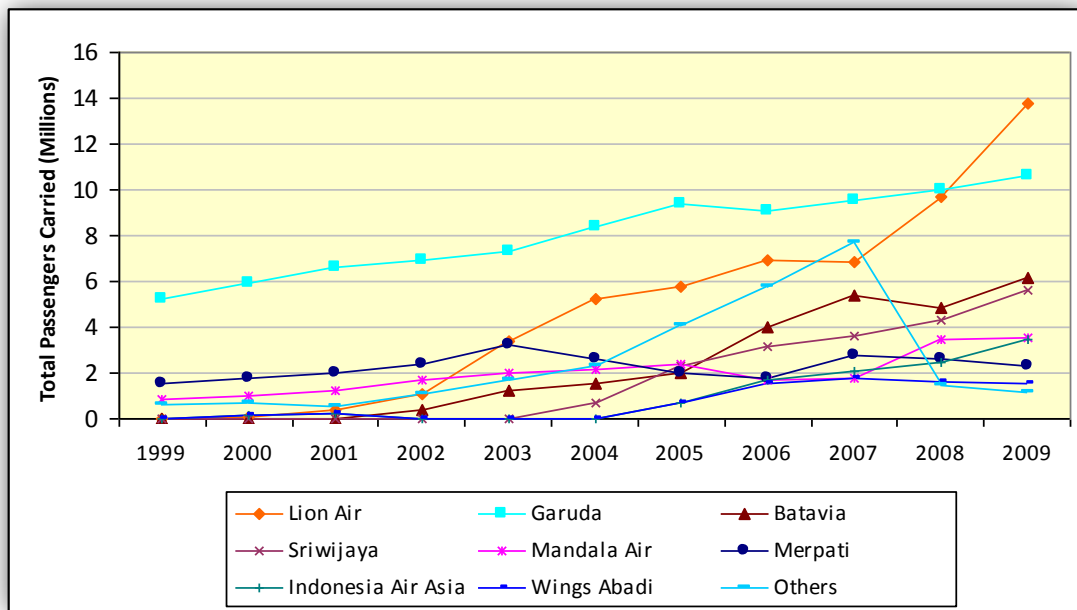
Garuda and Indonesia Air Asia have a combined market share approaching 90%. Garuda's market share has been steadily declining, whilst that of Indonesia Air Asia increased strongly between 2007 and 2009.

Garuda has a comparatively weak international route network compared with airlines such as Singapore Airlines, Malaysia Airlines and Thai Airways.

4.4.6.3 Domestic and international Routes

Figure 4-7 below details the development of combined domestic and international passengers for each major Indonesian airline for each year from 1999 to 2009:

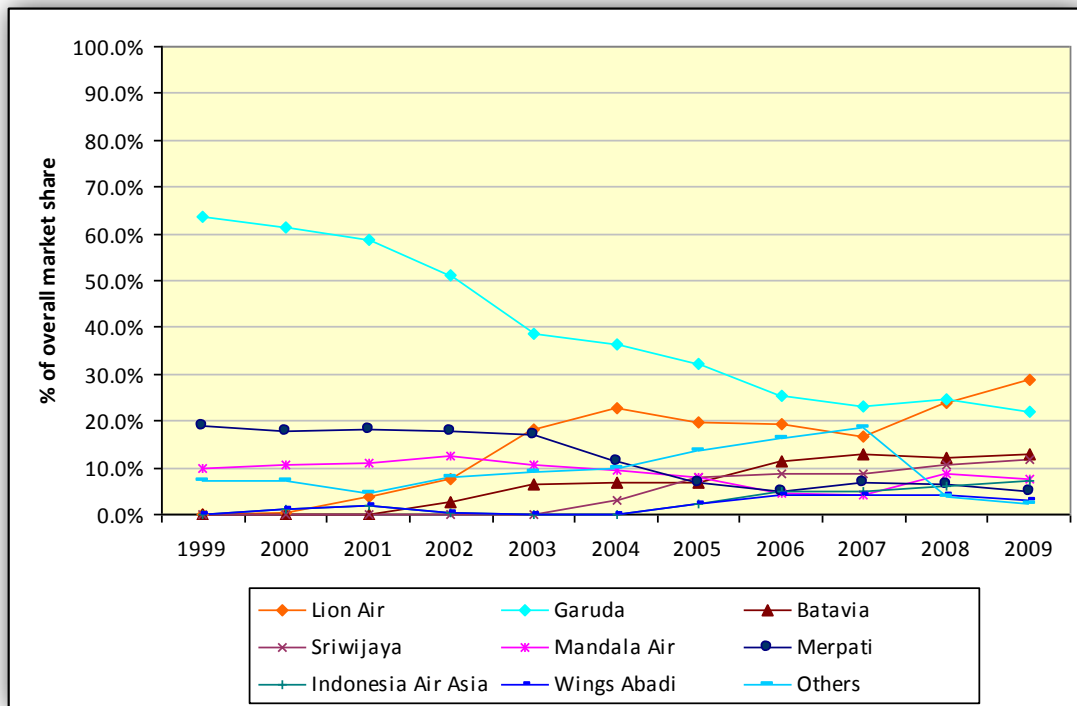
Figure 4-7: Indonesian Airlines – Annual Domestic & International Passengers 1999 to 2009



Source: DGCA Annual Reports and Statistics 2008/2009

Lion Air was the largest Indonesian airline in terms of passengers carried in 2009, followed by Garuda and Batavia Airways.

Figure 4.8 below details the development of annual combined domestic and international passenger market share for each major Indonesian airline for each year from 1999 to 2009:

Figure 4-8: Indonesian Airlines – Annual Domestic & International Passenger Market Share 1999 to 2009

Source: DGCA Annual Reports and Statistics 2008/2009

Garuda and Lion Air combined account for almost 50% market share of passengers carried by Indonesian airlines in 2009. Lion Air overtook Garuda as the airline with the largest market share in 2009.

Both Garuda and Merpati Nusantara have suffered strong and continuing declines in market share particularly from 2002 onwards.

4.4.7 Ownership

The Civil Aviation Act 2009 laid down the legal grounds to regulate national airlines:

- Capital entirely or majority owned by Indonesian citizen(s)
- Bank guarantee
- Operational and managerial competence of airline business management
- Ownership vested in an Indonesian entity
- Aircraft ownership of at least 5 owned and minimum of 5 operating services
- Implementation of multilateral agreement or multi sector agreements remain subject to bilateral air transport agreement

4.4.8 Airline Profiles

4.4.8.1 Garuda Indonesia Airlines

Garuda is the national airline of Indonesia and is 100% owned by the Indonesian government.

The airline has a current fleet of 66 aircraft and plans to increase to 116 aircraft by 2014. In comparison, Singapore Airlines currently has a fleet of 105 passenger aircraft; Malaysia Airlines a fleet of 81 passenger aircraft and Thai Airways a fleet of 86 passenger aircraft.

In 2009 Garuda carried 8.4mn domestic passengers and 2.2mn international passengers. The total of 10.6mn passengers in 2009 was an increase of 5.9% compared with 2008.

Number of employees: approximately 5,500.

The airline was recently voted the world's most improved airline at the World Airline Awards. It was designated by Skytrax as a 4 star airline, which is a seal of Quality Approval, awarded to airlines delivering a good quality performance.

The airline is a candidate to join the Skyteam Alliance and has signed a commercial cooperation agreement with KLM

Garuda resumed services to Europe (Amsterdam) on June 1st 2010 and reportedly plans to serve Frankfurt, London, Paris and Rome.

4.4.8.2 Lion Air

Ownership: Rusdi Kirana and family

Fleet + orders: The airline has a current fleet of 47 aircraft and has 148 aircraft on order.

Number of employees: Not known.

Lion Air commenced services in 2000 with one aircraft in its fleet. Within eight years of operation, Lion Air now flies to more than 36 cities in Indonesia and to international destinations including Singapore, Malaysia and Vietnam using a fleet of new Boeing 737-900ER aircraft.

The airline is currently seeking government approval before it expands international services to Australia in the first quarter of 2011. The airline is also reportedly interested in flying to China, Thailand and India.

Lion Air is the launch customer of the Boeing 737-900ER and the largest operator of Boeing 737-900ER, the newest member of Boeing's Next-Generation 737 aircraft family.

4.4.8.3 Indonesia Air Asia

Ownership: Indonesian Private Investors (51%), Air Asia (49%)

Fleet + orders: 17

Number of employees: Not Known

An associate airline of the Air Asia Group, the airline commenced service in December 2004.

4.4.8.4 Batavia Air

Ownership: PT Metro-Batavia (100%)

Fleet + orders: 39

Number of employees: Not Known

Originally known as Metro Batavia, the airline was established in 2002. The airline flies both domestic and international services.

4.4.8.5 Sriwijaya Air

Ownership: PT Babelino (80%), Musi Banyuasin Administration (Not Known) and Prodexim Sumsel (Unknown)

Fleet + orders: 25

Number of employees: Not Known

Sriwijaya Airlines operates domestic services from Jakarta to more than 30 destinations, and an international route to Davao in the Philippines.

4.4.8.6 Mandala Airlines

Ownership: 51% by Cardig International and 49% by private equity firm Indigo Partners.

Fleet + orders: 9, with 25 aircraft on order

Number of employees: Not known

Mandala Airlines will commence its first international flights in June 2010 serving Singapore, Hong Kong and Macau. Balikpapan to Singapore, Jakarta to Singapore, Hong Kong and Macau.

4.4.8.7 Merpati Nusantara Airlines

Ownership: 93% by Indonesian government; 7% by Garuda

Fleet + orders: 33 (15 orders)

Number of employees: 2,630

It is understood that the Indonesian government plans to transform Merpati Nusantara Airlines into a commuter airline for Garuda before 2012 in an effort to rescue the airline from bankruptcy¹.

4.4.9 Financial Performance

Indonesian airlines are required to file their financial accounts with DGCA, but few do.

In 2009 Garuda achieved a net profit of IDR1,009 trillion with an operating profit of IDR807.6 billion. However, it is understood that the airline has a considerable debt burden. In 2008 the airline recorded IDR669 billion in profits - source: news release 18.03.10 on GA website.

Garuda has reportedly reached a settlement on its debt with the European Credit Agency, paving the way for it to proceed with a US\$400mn initial public offering (IPO) later in 2010.

The state-owned airline Merpati Nusantara is reported to have debts of Rp 3 trillion (USD324mn). The airline is projecting a loss of Rp 27 billion in 2010, after achieving a profit of Rp 5.4 billion in 2009.

4.5 CONCLUSIONS – AIRLINES

- Garuda is currently the largest airline in Indonesia in terms of fleet size and seat capacity. It is the fourth largest airline in ASEAN ranked according to airline fleet size.
- Garuda's dominant market share amongst Indonesian airlines is being challenged by Lion Air, which has largest market share on domestic routes and carried more domestic and international passengers combined than Garuda in 2009.
- Indonesia Air Asia is about to overtake Garuda in terms of market share on international routes.
- Garuda has a comparatively weak international route network compared with airlines such as Singapore Airlines, Malaysia Airlines and Thai Airways and this is encouraging international passengers to route through their hubs rather than using Indonesian airlines and gateway / hub airports.
- Increased competition is driving down revenue yields and operating margins. This will provide a challenging environment for airlines to maintain profitable operations.
- 800 new aircraft are due to be delivered to Indonesian airlines over the next 5 years. With both congested airspace and some airports operating with demand well in excess of capacity this will also provide a challenging environment in which to successfully grow the airline business.

A key question for Stage 2 of the study will be how well prepared are Indonesian domestic airlines to face the competitive environment that ASEAN open skies will bring?

¹ Source: Aviator.aero Weekly - News & Aircraft Availability (09JUN2010)

4.6 AIRPORTS

4.6.1 Classification of Airports

According to Ministerial Decree there are four airport classifications:

- International airports, including Medan, Jakarta, Surabaya, Ngurah Rai/Bali and Hassanuddin/Makassar;
- Regional airports;
- Hajj airports;
- Cargo airports.

For the purpose of this report the focus will be on international airports.

The policy for designation of international airports is based on:

- National airport master plan;
- National defence and security considerations;
- Current and potential tourism development;
- Geographical potential;
- Airport access;
- Intra and multi-modal facility;
- National interest;
- Connections to city centre.

Without fully complying to these requirements an airport will not be designated for open skies.

4.6.2 Ownership of Airports

The Ministry of Transportation website lists a total of 201 airports in Indonesia. Of these 23 airports are managed by state-owned enterprises.

- PT Angkasa Pura I (API) manages the eastern area airports, of which there are 13 in total;
- PT Angkasa Pura II (APII) manages the western area airports, of which there are 12 in total.

A further 164 airports are managed by the technical implementation unit (UPT) under the management of DGCA. There are also a few privately-owned airfields, e.g. mining companies.

For API and APII airports management is provided by an airport administrator who coordinates government administration functions including customs, immigration, quarantine, security, aviation security and safety.

The airport administration is responsible to the Director General of Air Communications (DGAC)

Under the terms of the Civil Aviation Act number 1 of 2009, the airport administration will be replaced by an airport authority. The airport authority will be designated and responsible to the Minister of Transport.

The airport authority will have the authority to:

- Coordinate government activities at the airport
- Arrange, control and oversee the implementation of the provisions on safety, security, processing and comfort at the airport
- Arrange control, oversee and implement environmental preservation provisions;
- Arrange, control and oversee the utilization of land and/or water surface of the airport in accordance with the airport master plan;
- Arrange, control and oversee the utilization of aviation operational safety zone and airport working environmental areas and airport interest environmental areas
- Arrange, control and oversee the implementation of operational performance standard of service provision at the airport; and
- Impose administrative sanctions to airport business entity, airport operation unit, and/or other business entities failing to meet the requirements of aviation safety, security, smooth process, and comfort in accord with the rules of law.

4.6.3 International Airports

Indonesia has 29 international airports, of which 5 are designated as “Utama” or major airports:

- Soekarno-Hatta, Jakarta;
- Ngurah Rai - Bali;
- Juanda – Surabaya;
- Polonia – Medan
- Sultan Hasanuddin – Makassar.

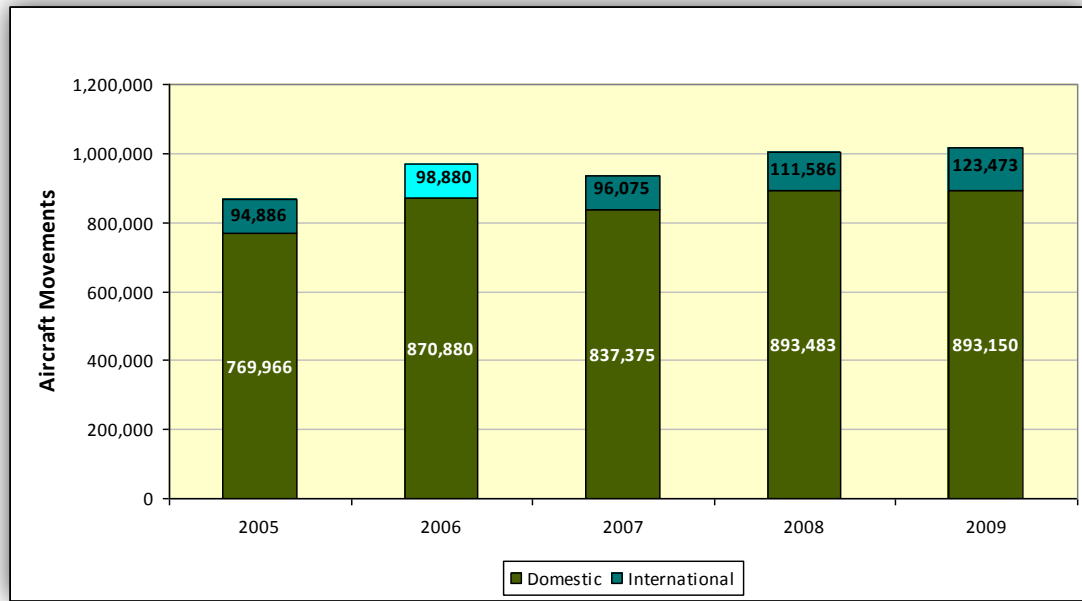
28 airports are designated as “International Regional” airports; 11 are designated as “International Hajj” airports and 7 are designated as “International Specialist Cargo” airports.

According to airlines schedules data, in May 2010 only 14 of the designated international airports had scheduled international services.

The five airports designated as major international airports above have been designated as “international airports” by DGCA for the purposes of the open skies agreement.

4.6.4 Aircraft Movements

Figure 4.9 below details the development of total annual domestic and international aircraft movements at Indonesian airports for each year from 2005 to 2009:

Figure 4-9: Indonesian Airports – Annual Domestic & International Aircraft Movements 2005 to 2009

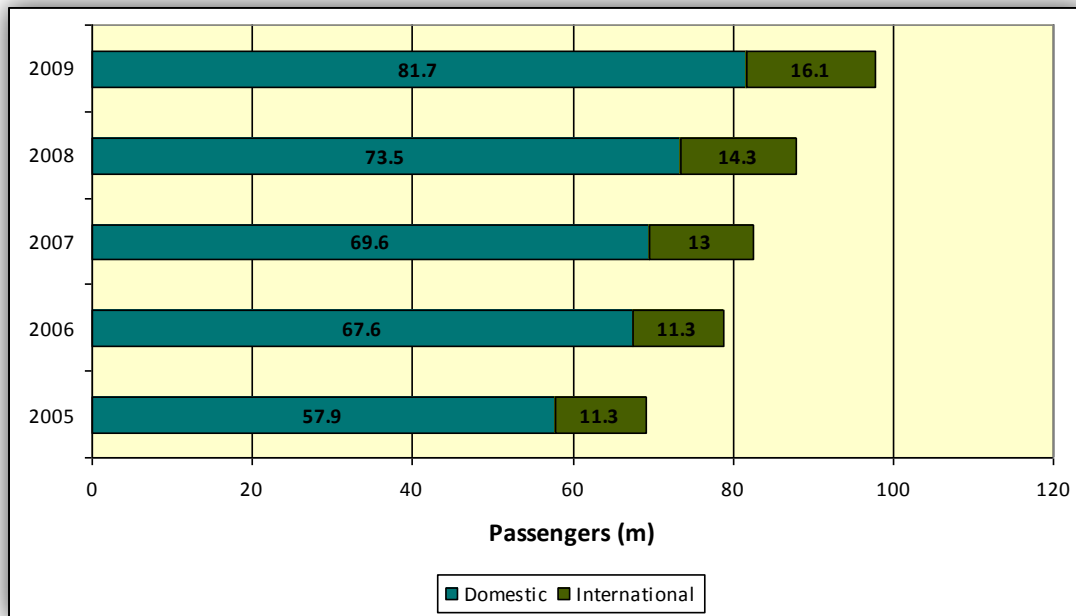
Source: DGCA

Annual aircraft movements increased from around 865,000 in 2005 to 1.017 million in 2009, a growth of almost 18%. The average annual growth rate of international aircraft movements over the period was 6.8%, compared with the average annual growth rate of domestic aircraft movements of 3.8%.

In 2005 the share of domestic aircraft movements was 89%; by 2009 the share had decreased slightly to 88%.

4.6.5 Passengers

Figure 4-10 below details the development of total annual domestic and international passenger numbers at Indonesian airports for each year from 2005 to 2009:

Figure 4-10: Indonesian Airports – Annual Domestic & International Passengers 2005 to 2009

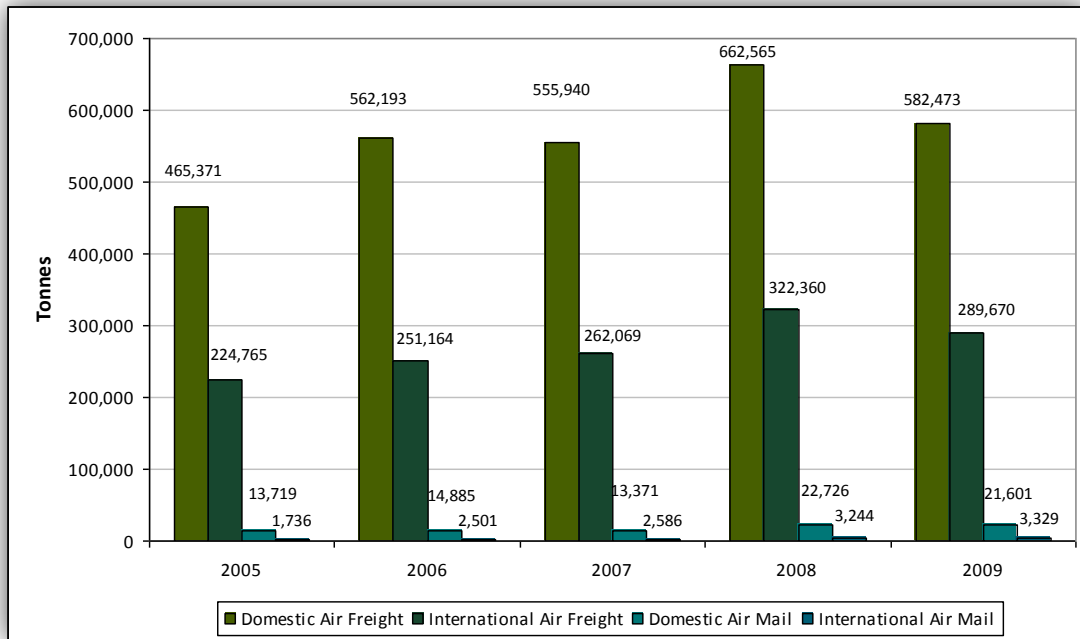
Source: DGCA

Annual passenger numbers increased from around 69 million passengers in 2005 to 98 million in 2009, a growth of over 42%. The fact that passenger traffic has grown at a much greater rate than aircraft movements is due to the use of larger aircraft. The average annual growth rate of international passengers over the period was 9.3%, compared with the average annual growth rate of domestic passengers of 9.0%.

In 2005 and 2009 the share of domestic passengers was 84%.

4.6.6 Air freight and mail

Figure 4-11 below details the development of total annual domestic and international air freight and mail at Indonesian airports for each year from 2005 to 2009:

Figure 4-11: Indonesian Airports – Annual Domestic & International Air Freight & Mail 2005 to 2009

Source: DGCA

Data reported by DGCA on air freight and mail traffic is less reliable than information on aircraft movements and passenger numbers.

Annual air freight increased from around 690,000 tons in 2005 to 872,000 tons in 2009, a growth of over 26%. Air mail traffic grew from around 15,000 tons in 2005 to almost 25,000 tons in 2009, a growth of over 61%.

The average annual growth rate of international freight and mail over the period was 6.6%, compared with the average annual growth rate of domestic freight and mail of 6.0%.

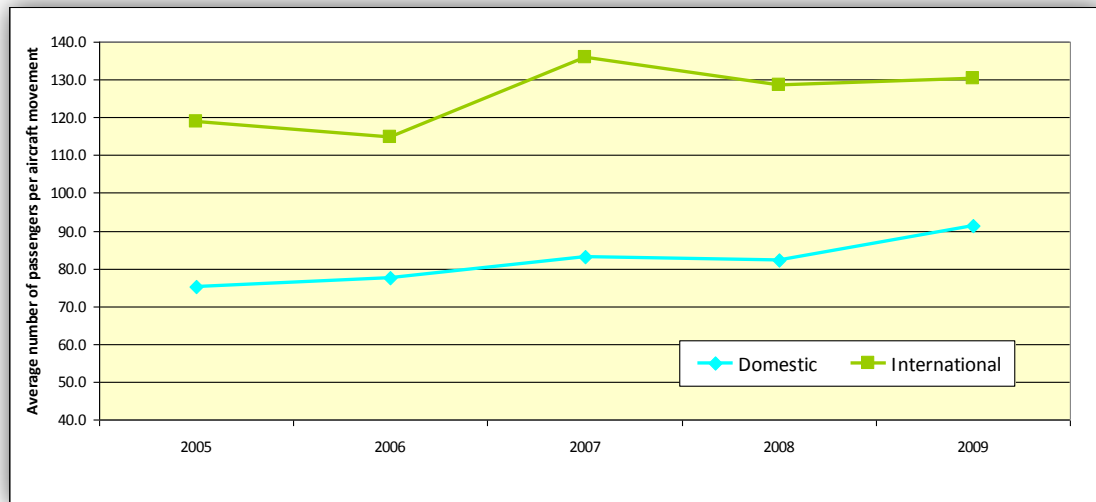
In 2005 and 2009 the share of domestic air freight was 67%.

The average annual growth rates of international and domestic air freight and mail were less than those achieved by passengers.

4.6.7 Passengers per Aircraft Movement

Figure 4-12 below details the development of the average number of domestic and international passengers per aircraft movement at Indonesian airports for each year from 2005 to 2009:

Figure 4-12: Indonesian Airports – Annual Domestic & International Passengers per Aircraft Movement 2005 to 2009



Source: Mott MacDonald analysis of DGCA data

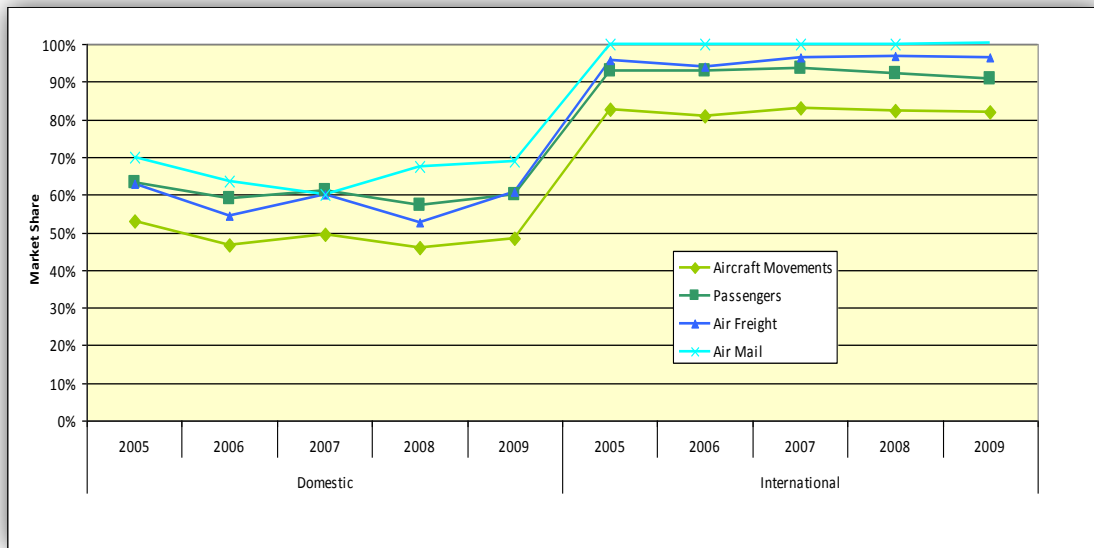
The average number of domestic passengers per domestic aircraft movement increased from around 76 in 2005 to 91 in 2009, an increase of 20%. This significant increase was mainly due to the introduction by Lion Air of the 210 seat Boeing 737-900ER aircraft on domestic services.

Average number of international passengers per international aircraft movement increased from around 120 in 2005 to 130 in 2009, an increase of 8%.

4.6.8 Market Share – Designated Open Skies Airports

Figure 4-13 below details the domestic and international aircraft movements, passengers and air cargo market shares achieved by the five international airports already designated for open skies for each year from 2005 to 2009:

Figure 4-13: Designated Open Skies Airports: Market Shares – Domestic & International Passenger & Cargo 2005 to 2009



Source: Mott MacDonald analysis of DGCA data

The figure above shows that the five designated airports already have a very high share of international passenger and air cargo markets.

4.6.9 Demand vs. Capacity – API and APII Airports

4.6.9.1 API Airports

Table 4-2 below details total passenger numbers at each API airport in 2009 and the estimated passenger terminal capacity, based on an average of 100 passengers per thousand square metres.

Table 4-2: Demand vs. Capacity: API Airports 2009

Location/Airport Name	Terminal Capacity (m ²)	Terminal Capacity (Pax 000s)	Domestic Pax (2009) 000s	Intl Pax (2009) 000s	Transit Pax (2009) 000s	Total Pax (2009) 000s	Pax as % of Capacity
Ambon/Pattimura	7,900	790	631	0	32	663	84%
Bali/Nagurah Rai	79,075	7,908	4,551	4,937	134	9,622	122%
Balikpapan/Spininggan	12,274	1,227	4,115	46	150	4,311	351%
Biak/Frans Kaisiepo	3,148	315	203	0	111	313	100%
Kupang/ El Taru	3,850	385	823	0	3	826	215%
Makassar/Sultan Hasanuddin	61,185	6,182	3,713	77	1,274	5,064	82%
Manado/Sam Ratulangi	25,063	2,506	1,178	74	8	1,260	50%
Mataram/Selaparang	4,960	496	1,108	64	2	1,174	237%
Semarang/Achmad Yani	6,708	671	1,633	24	0	1,657	247%
Solo/Adi Sumarmo	13,000	1,300	582	192	0	774	60%
Surabaya/Juanda	54,193	5,419	8,733	1,145	631	10,509	194%
Yogyakarta/Adi Sutjipto	8,680	868	3,137	189	43	3,368	388%
Syamsudin Noor/Banjar Masin	9,043	904	2,062	11	6	2,079	230%
Total	289,709	28,971	32,468	6,758	2,394	41,620	144%

Source: AP1 data

Note: The estimate of passenger terminal capacity is only a crude measure since other factors can impact on passenger capacity. In all cases, demand versus capacity at individual airports will need to be determined on a case by case basis.

Passenger traffic at API airports, including transfer passenger, accounted for around 41% of total passengers at Indonesian airports in 2009.

From Table 4-2 it is evident that at least 7 of the 13 airports appear to have serious capacity shortfalls, i.e. passengers exceed theoretical passenger terminal capacity by >150%.

4.6.9.2 APII Airports

Table 4-3 below details total passenger numbers at each APII airport in 2009 and the estimated passenger terminal capacity, based on information provided by APII.

Table 4-3: Demand vs. Capacity – APII Airports 2009

Location/Airport Name	Terminal Capacity (m ²)	Terminal Capacity (Pax 000s)	Domestic Pax (2009) 000s	Intl Pax (2009) 000s	Transit Pax (2009) 000s	Total Pax (2009) 000s	Pax as % of Capacity
Banda Aceh/Sultan Iskandar Muda II	Not Known	550	485	89	0	575	104%
Bandung/Husein Sastrenegara	Not Known	660	254	274	0	528	80%
Jakarta/Soekarno- Hatta	Not Known	22,000	27,781	7,583	1,780	37,144	169%
Jakarta/Halim Perdanakusumah	Not Known	170	183	8	0	191	113%
Sultan Thaha Jambi	Not Known	250	805	0	0	805	322%
Medan/Polonia	Not Known	900	3,840	933	183	4,956	551%
Padang Pariaman/ Minangkabau	Not Known	1,300	1,652	171	21	1,844	142%
Palembang/S.M Badaruddin II	Not Known	1,000	1,717	94	0	1,811	181%
Pekanbaru/Sultan Syarif Kasim II	Not Known	1,200	1,850	22	0	1,872	115%
Pontianak/Supadio	Not Known	1,380	1,560	22	0	1,582	115%
Taniung Pinang/Raja Haji Fisabilillah	Not Known	198	156	0	2	158	80%
Depati Amir/Pangkal Pinang	Not Known	800	959	0	0	959	120%
Total	Not Known	30,408	41,242	9,287	2,001	52,530	173%

Source: APII data

Note: The estimate of passenger terminal capacity is only a crude measure since other factors can impact on passenger capacity. In all cases, demand versus capacity at individual airports will need to be determined on a case by case basis.

Passenger traffic at APII airports, including transfer passenger, accounted for around 51% of total passengers at Indonesian airports in 2009.

From Table 4-3 it is evident that at least 5 of the 12 airports appear to have serious capacity shortfalls, i.e. passengers exceed theoretical passenger terminal capacity by > 150%.

4.6.10 Soekarno-Hatta Airport

Soekarno-Hatta airport is Indonesia's main gateway/hub airport. It was ranked as the 23rd largest airport in world in 2009, based on ACI rankings, up 12 places from its ranking in 2008.

In 2009 the airport handled 273,000 aircraft movements, an increase of 9.1% compared with 2008; 37.1mn passengers an increase of 15.2% compared with 2008 and 433,000 tons of air cargo a decrease of 8.3% compared with 2008.

The average annual growth of passenger traffic between 2002 and 2009 was 17.4% for domestic passengers and 5.6% for international passengers. Air cargo increased at an average annual growth rate of 5.1% over the same period.

Table 4-4: Soekarno-Hatta Airport – Market Share of Indonesian Airports

	Aircraft Movements	Passengers	Freight	Air Mail
Domestic	25%	34%	37%	47%
International	40%	47%	75%	88%

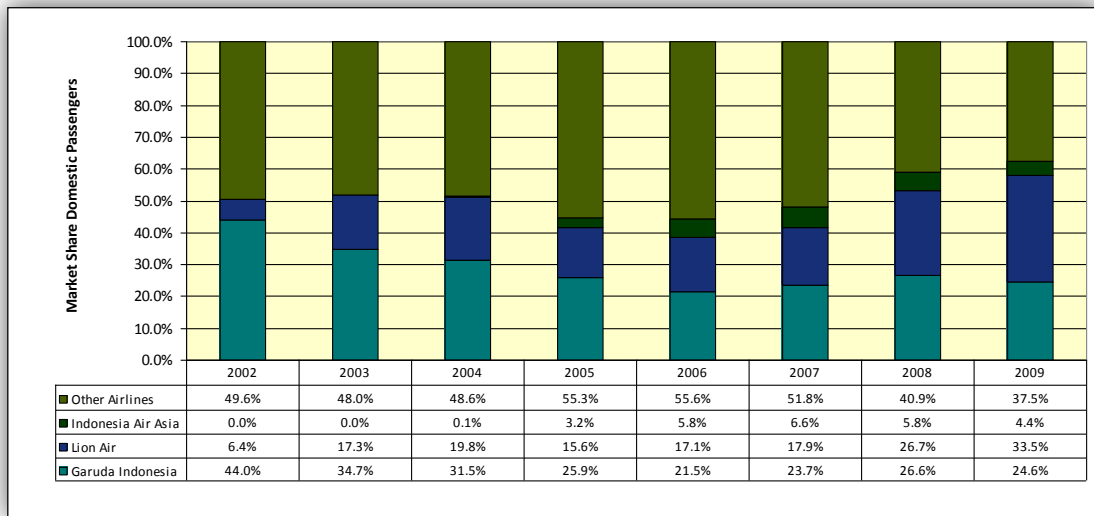
Source: DGCA

Because Soekarno-Hatta airport is the national hub it attracted a much higher market share in terms of international compared with domestic traffic. The airport was particularly dominant in terms of international air freight and mail.

4.6.10.1 Domestic Passengers

Figure 4-14 below details the trend in the annual market share of airlines carrying domestic passengers at Soekarno Hatta between 2002 and 2009:

Figure 4-14: Airline Market Share – Domestic Passengers at Soekarno-Hatta 2002 to 2009



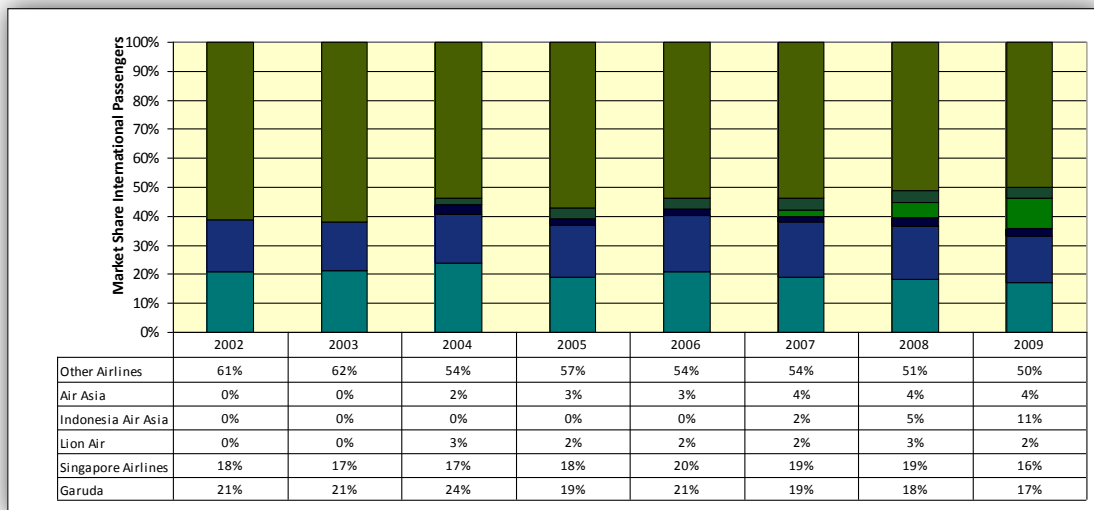
Source: APII data

Figure 4.14 shows the decline in market share of Garuda and increase by Lion Air, particularly from 2008 onwards. Garuda and Lion Air combined accounted for a market share of over 58%. The market share achieved by “Other Airlines” declined markedly from 2008 onwards.

4.6.10.2 International Passengers

Figure 4-15 below details the trend in the annual market share of airlines carrying international passengers at Soekarno-Hatta between 2002 and 2009:

Figure 4-15: Airline Market Share – International Passengers at Soekarno Hatta 2002 to 2009



Source: APII data

Figure 4.15 shows the gradual decline of Garuda’s market share, mainly caused by increased activity by Indonesia Air Asia. All airlines had reduced market shares in 2009 compared with the previous year, except Indonesia Air Asia, which more than doubled market share from 5% in 2008 to 11% in 2009.

4.6.11 Soekarno-Hatta demand vs. capacity

The airport is likely to be heavily congested at certain times of the day/year, particularly within the domestic passenger terminals, given that a total of 37 million passengers (mppa) were handled in 2009 compared with a theoretical capacity of 22mppa. Detailed knowledge of peak days and busy hours will be required to better understand the situation regarding congestion.

Despite the likely congestion problem, *forbestraveler.com* confirmed Soekarno-Hatta as the second most on-time international airport worldwide, i.e. having the most flights less than 15 minutes late, behind Tokyo's Haneda Airport.

APII management have plans in place to increase the ultimate capacity of the airport from 22mppa to 65mppa.

The airport currently has 2 runways and APII management would like to add a third runway. It is very unlikely to obtain the land required for a 4th runway.

4.6.12 Soekarno-Hatta airport future development

The airline industry is adapting to changing circumstances, particularly the challenges of liberalisation and increased competition.

Because of this airports have to adapt their infrastructure to meet the needs of their customers, i.e. the airlines. Soekarno-Hatta airport is no exception and it will have to improve to remain a competitive gateway for flights from/to Indonesia. The main objective is to improve the efficient handling of transit and transfer passengers. This will require significant infrastructure and facility rearrangement to optimise terminal usage to support the gateway function, including immigration, customs, quarantine, baggage claim area, etc.

In long term, each of the four passenger terminals should have an international terminal alongside the domestic terminal, a people mover system and enhanced baggage handling system as essential facilities.

4.7 CONCLUSIONS – AIRPORTS

Indonesia's airports have seen strong domestic and international passenger growth in the past five years and this growth looks set to continue, given the forecasts of strong economic growth and with some 800 new aircraft due to be delivered to Indonesian airlines over the next five years

A number of major airports in Indonesia, including Soekarno-Hatta, appear to have a severe imbalance between demand and capacity.

There is a programme of continuing infrastructure development to increase capacity at a number of Indonesian airports, including Medan

The key questions for Stage 2 of the study will be:

Whether Indonesia's major international hub/gateway airport should be moved from Jakarta to Medan, particularly given the latter airports strategic location close to Kuala Lumpur and Singapore and...

The ability of the five designated Indonesian international airports to successfully handle the increase in the number of international passengers as a result of the implementation of the open skies agreement.

4.8 AIRSPACE MANAGEMENT

Indonesia has a very large geographical area, measuring some 5,000kms East/West, and 1,800kms North/South. The archipelago has some 17,000 islands, mountainous terrain, jungle, severe weather, volcanic eruptions, smoke haze, forest fires, floods, earthquakes and tsunamis. Indonesia is the second most disaster prone country in the world, which makes for a very demanding Air Transport Management (ATM) environment!

ICAO main requirements in terms of airspace management are for safety, capacity, efficiency and global interoperability.

It is understood that Indonesia has no radar cover over most of airspace, which makes air / ground communications and search and rescue operations very difficult. The lack of radar cover also contributes to inefficient routings and a relatively poor safety record. Improvements to communications, navigation and surveillance are required urgently.

4.8.1 ICAO Standards

ICAO obligations require that airspace design must be safe, comply with ICAO standards and the ATM system be capable of handling increased traffic.

Similarly, airports must meet ICAO standards and be able to cope with increased demand.

There is also a requirement for safety oversight, exemplified by the Universal Safety Audit Oversight Programme (USAOP). Safety will be of paramount importance during the transition period to open skies.

4.9 SAFETY AND SECURITY

DGCA is responsible for the safety and regulation of civil aviation in Indonesia.

The challenges that the implementation of an open sky policy will bring include:

- Potential use of airports by a wider range of international carriers;
- International services at regional airports previously only having operated domestic services
- Busier airspace and an increase in the number of pilots unfamiliar with Indonesian airspace and airports;
- Increased passenger and baggage throughput placing strain on airport infrastructure and operating practices;

- Possibility for increase in air freight, or creation of new freight businesses at airports;

The expectation is that rigorous compliance with international aviation safety and security standards will be required in order to meet the above challenges.

Garuda has attained IATA Operational Safety Audit (IOSA) Certification and is the only airline in Indonesia to do so. The IATA Operational Safety Audit (IOSA) program is an internationally recognised and accepted evaluation system designed to assess the operational management and control systems of an airline. IOSA's quality audit principles are designed to conduct audits in a standardised manner.

4.9.1 Compliance with ICAO Standards

ICAO obligations are that airports must meet ICAO standards, in particular:

- Annex 9: Facilitation
- Annex 11: Air Traffic Services
- Annex 14: Aerodromes (Design)
- Annex 17: Security

Airports can be expected to be subject to ICAO's USAOP, described above.

4.10 SAFETY AND OPEN SKIES

The following are extracts from a UK parliamentary Select Committee report:

"[European] Commission reports on the air transport market contain no suggestion that liberalisation of the market has impacted on safety."

"In the United States, the Federal Aviation Administration (FAA) told us there were an average of 6 fatal accidents each year affecting commercial aviation prior to deregulation in 1978. Since then the average has been only 3.5 fatal accidents each year."

The evidence from the above is that deregulation in Europe and the US has not compromised air safety.

4.11 HUMAN RESOURCES

In accordance with Civil Aviation Act, Number 1 of 2009, the government is responsible for the training and development of human resources in aviation field. These resources relate specifically to aircraft, air transportation, airport management, air navigation, aviation safety and aviation security.

The Indonesian Minister of Transport has stipulated a policy on preparation and development on human resources in aviation field covering manpower planning, education and training, expansion of job opportunities and supervision, monitoring and evaluation.

CHAPTER 5: IMPACT OF ASEAN OPEN SKIES AGREEMENTS ON MEMBER COUNTRIES

This section of the report reviews the impact to date of the ASEAN open sky policy.

5.1 INTRODUCTION TO ASEAN

ASEAN comprises ten member states, namely Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

Figure 5-1: Map of SE Asia showing ASEAN Member States



Source: ASEAN

It is a diverse region with multiple governments and regulators.

5.1.1 ASEAN – Key Economic Indicators

Table 5.1 below details some of the key economic indicators for ASEAN countries.

Table 5-1: ASEAN Key Economic Indicators 2009

Country	Land Area km ²	Population (000)	Population Density Persons per km ²	GDP (Current Prices) US\$ million	GDP per capita (Current Prices) US\$
Brunei	5,765	406	70	14.167	34,827
Cambodia	181,035	14,958	83	10,368.2	693.2

Country	Land Area km ²	Population (000)	Population Density Persons per km ²	GDP (Current Prices) US\$ million	GDP per capita (Current Prices) US\$
Indonesia	1,860,360	231,370	124	546,527	2,362.1
Lao PDR	236,800	5,922	25	5,742	969.6
Malaysia	330,252	28,306	86	191,618.4	6,769.5
Myanmar	676,577	59,534	88	24,023.6	403.5
Philippines	300,000	92,227	307	161,148.8	1,747.3
Singapore	710	4,988	7,023	177,568.7	35,602.0
Thailand	513,120	66,903	130	264,230.1	3,949.5
Vietnam	331,212	87,228	263	96,317.1	1,104.2
ASEAN	4,435,830	591,841	133	1,491,690.6	2,520.4

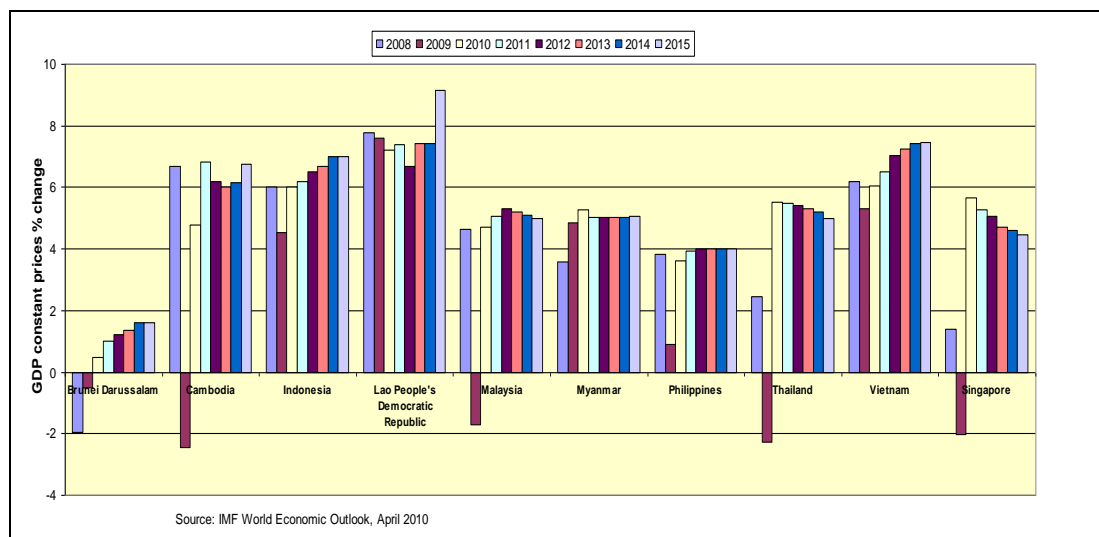
Table 5.1 shows that Indonesia (within ASEAN) has:

- 42% of the land area;
- 39% of the population;
- 37% of the GDP;
- 94% of the average GDP/capita.

The population of Indonesia has increased by 30 million in the last decade and was estimated to be 231 million in 2009. At current rates of growth the population could be 300 million by 2030.

The GDP Growth Forecast by ASEAN country is shown in Figure 5.2 below:

Figure 5-2: GDP Growth Forecast for ASEAN Countries 2010 to 2015

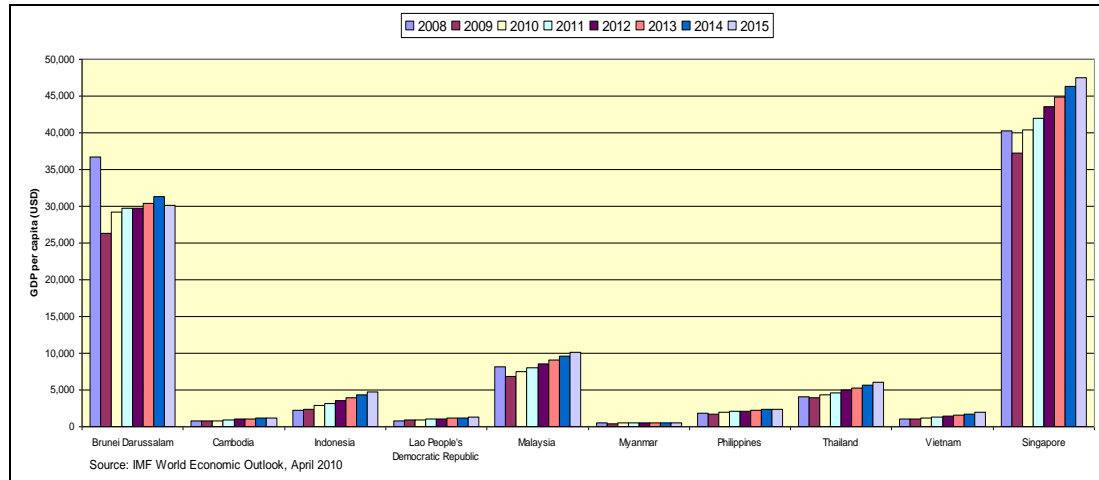


Source: IMF World Economic Outlook, April 2010

Indonesia is forecast to be one of the fastest growing economies in ASEAN.

Indonesia's GDP per capita is also forecast to increase:

Figure 5-3: GDP per capita Forecast for ASEAN Countries 2010 to 2015



Source: IMF World Economic Outlook, April 2010

5.1.2 Tourism

As the table below shows, Indonesia lags well behind Malaysia, Thailand and Singapore in terms of the number of tourist arrivals:

Table 5-2: Tourist Arrivals in ASEAN Countries (000s)

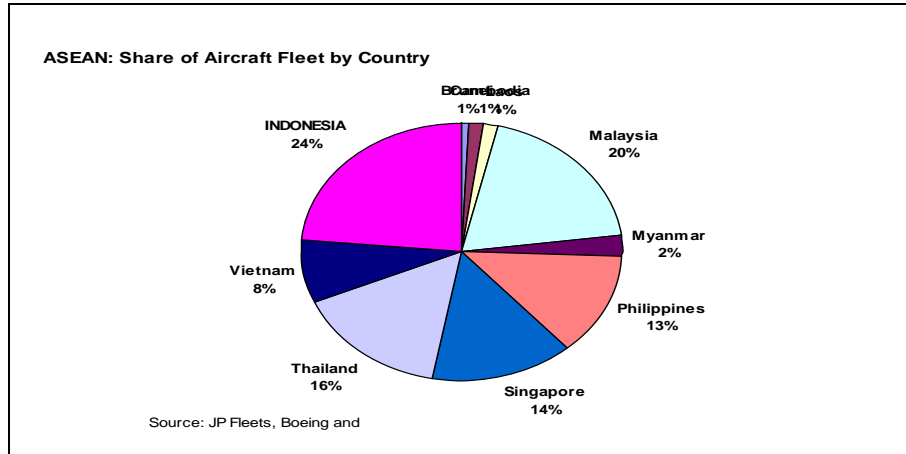
Country	2008			2009		
	Intra ASEAN	Extra ASEAN	Total	Intra ASEAN	Extra ASEAN	Total
Brunei	98.0	127.7	225.8	45.4	47.4	92.8
Cambodia	552.5	1,573.0	2,125.5	622.3	1,304.3	1,926.6
Indonesia	2,774.7	3,459.8	6,234.5	1,582.4	4,115.9	5,698.3
Lao PDR	1,285.5	719.3	2,004.8	1,039.6	264.1	1,303.7
Malaysia	16,637.0	5,415.5	22,052.5	18,386.4	5,259.8	23,646.2
Myanmar	462.5	198.3	660.8	524.0	238.5	762.5
Philippines	254.1	2,885.3	3,139.4	-	-	-
Singapore	3,571.4	6,545.1	10,116.5	3,249.7	5,459.9	8,709.7
Thailand	4,125.2	10,459.0	14,584.2	4,007.6	10,083.4	14,091.0
Vietnam	515.6	3,782.2	4,253.7	318.9	3,453.3	3,772.3
ASEAN	30,276.4	35,121.3	65,397.7	29,773.3	30,226.8	60,003.1
Indonesia Share	9%	10%	10%	5%	14%	9%

Source: ASEAN

5.2 INDONESIA'S SHARE OF ASEAN AIRCRAFT FLEET AND SEAT CAPACITY

Indonesia has a 24% share of the ASEAN aircraft fleet and a 21% share of ASEAN aircraft seat capacity:

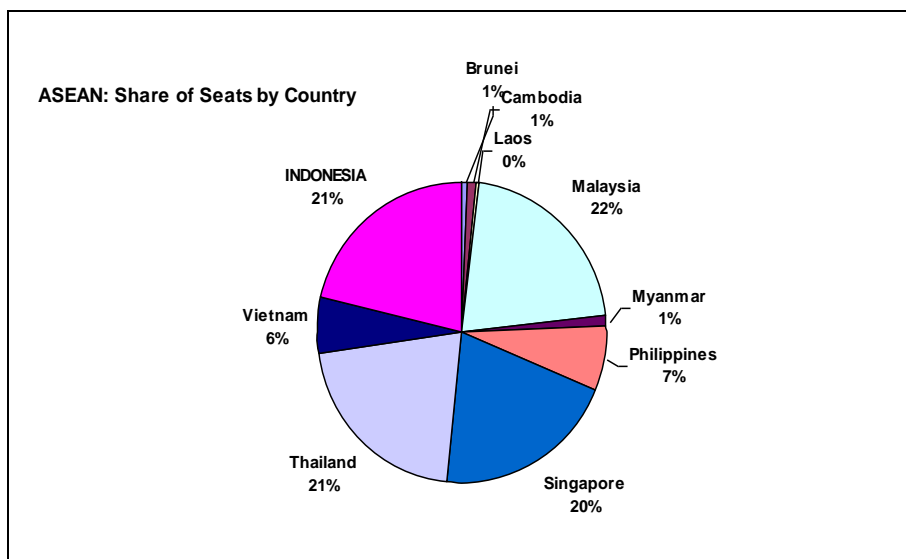
Figure 5-4: ASEAN Countries Share of Aircraft Fleet



Source: JP Fleets

Indonesia has the largest share of the total aircraft fleet within the ASEAN member states. Indonesia has a 24% share, followed by Malaysia with 20%, Thailand with 16% and Singapore with 14%.

Figure 5-5: ASEAN Share of Aircraft Seats



Source: JP Fleets

Malaysia has the largest share of aircraft seat capacity within the ASEAN member states. Malaysia has a 22% share, followed by Indonesia and Thailand with 21% each and Singapore with 20%.

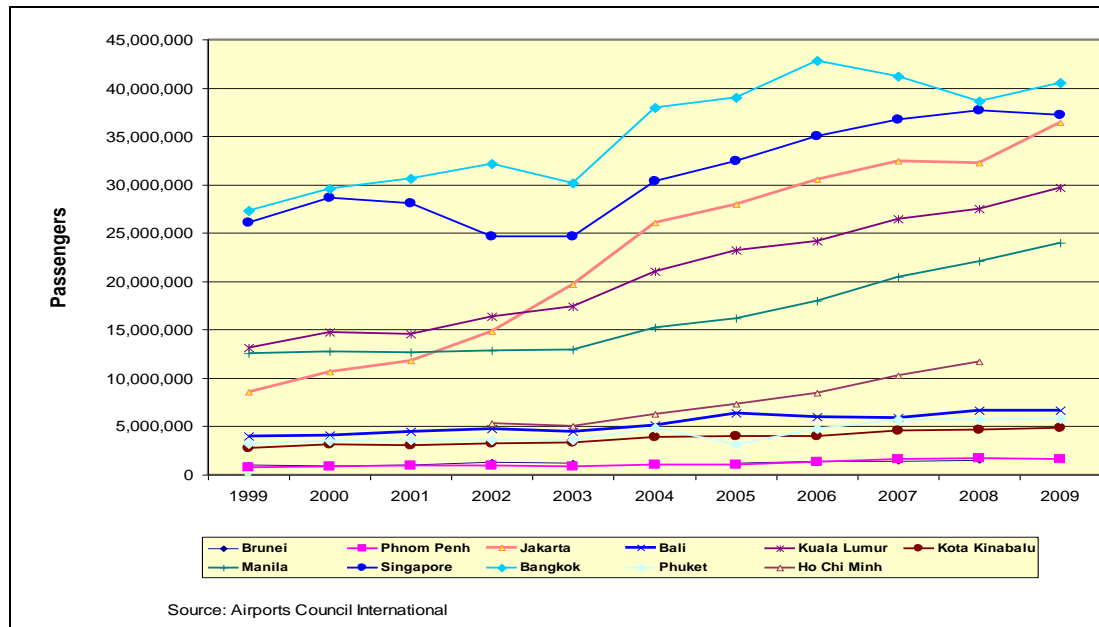
Indonesia's seat share is less than its aircraft fleet share which is indicative of the fact Indonesian airlines use smaller aircraft than those operated by airlines domiciled in Malaysia, Thailand and Singapore.

Indonesia's share of the ASEAN air transport market does not reflect its economic and demographic dominance.

5.3 PASSENGER TRAFFIC AT ASEAN AIRPORTS

Even ahead of the full liberalisation of Air Traffic within ASEAN, the region has seen considerable growth in air passenger numbers, with Singapore's Changi Airport, for example, seeing record traffic in 2008, with a total of 37.7 million passengers. The most significant areas of growth, however, were Malaysia, Indonesia and the Philippines.

Figure 5-6: Passenger Traffic at Major ASEAN Airports



Source: Airports Council International

Jakarta (Soekarno-Hatta) was the third largest airport within ASEAN in 2009 and looks set to overtake Singapore in 2010.

However, as was noted earlier, passenger demand at Jakarta (Soekarno-Hatta) is much greater than available capacity and therefore to satisfy demand growth urgent action will be required.

5.3.1 Traffic growth within ASEAN countries

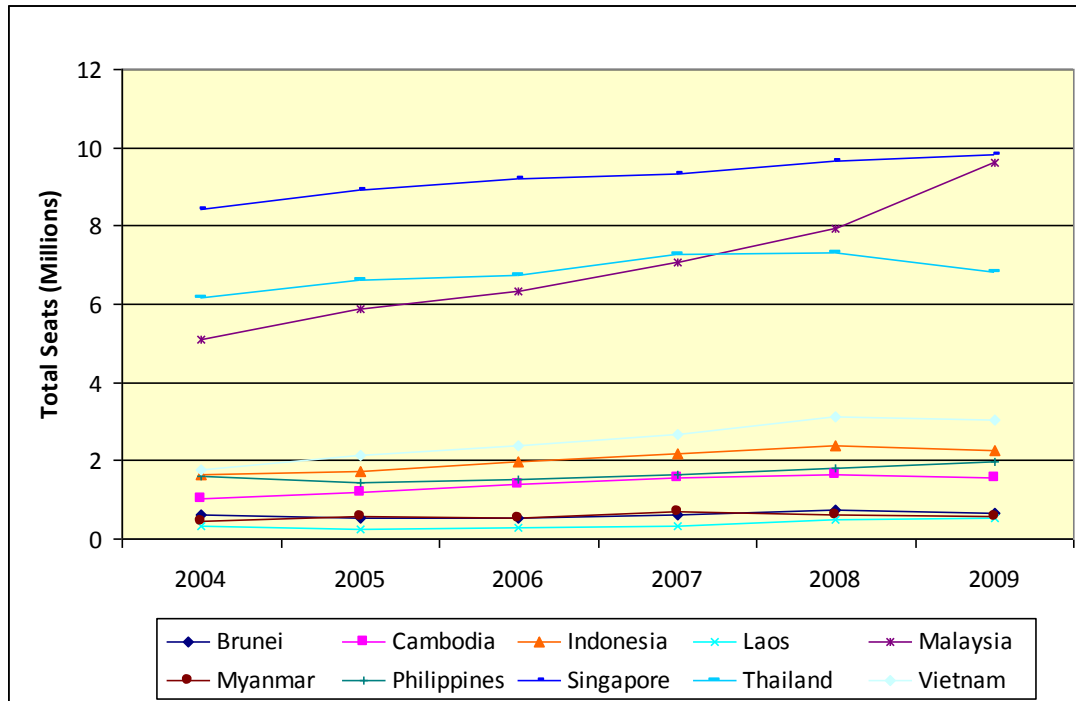
Full liberalisation of cargo and partial liberalisation in passenger traffic was only finalised in December 2009, and given full liberalisation of international passenger services within ASEAN is yet to take place, it is too early to assess the impact of the an open sky policy. However the early signs are that the ASEAN open sky policy will bring benefits to the member states.

5.3.2 Route development between ASEAN countries

The following graph shows the development of annual international intra-ASEAN capacity since 2004. Capacity to/from Singapore accounted for 27% of the total followed by Malaysia (26%), Thailand (18%) and Viet Nam (8%). Capacity between Indonesia and other ASEAN countries accounted for only 6% of the intra-ASEAN international total, ranking the country as 5th in the intra-ASEAN league stakes.

Whilst total intra-ASEAN capacity grew by 3% in 2009, this was as a result of strong growth to/from Malaysia and Philippines and modest growth to/from Singapore and Laos. All other countries saw capacity reductions with capacity to/from Indonesia reducing by 6% in 2009.

Figure 5-7: Intra-ASEAN capacity



Source: Innovata SRS Database

The strong growth in Malaysia-ASEAN international traffic can partially be explained by some liberalisation in the bilateral traffic agreements with other ASEAN states but also by the multi-designation of carriers in the home market.

5.3.3 New Airline Start Ups And Emergence Of Low Cost Airlines

AirAsia CEO Tony Fernandes said the airline is "much closer to achieving our dreams of boosting the growth of Kuala Lumpur as the low-cost hub in Asia" as the LCC announced the addition of four additional daily Kuala Lumpur to Singapore flights beginning Dec. 1.

At that point it will operate the route six-times-daily as its staged liberalization, which started in February, continues. Fernandes told ATWOnline that the current double-daily service has achieved a 90% load factor, and continuing his warning to competitors he said AirAsia is "more importantly preparing Malaysia as the global hub for low-cost travel in the region."

The Centre for Asia Pacific Aviation said the Kuala Lumpur to Singapore route is expected to be one of the fastest-growing in the world next year and that LCCs from both sides will "rush to take advantage of market liberalization."

In a report, CAPA said opening of the route "is merely a curtain raiser for the opening of the ASEAN capital cities liberalization initiative from January, which promises to unleash the next round of route development and traffic growth in the region." Airlines from the 10 Member countries will be permitted to operate unlimited frequencies between capital cities within the grouping as a "preliminary step" toward ASEAN open skies by 2015.

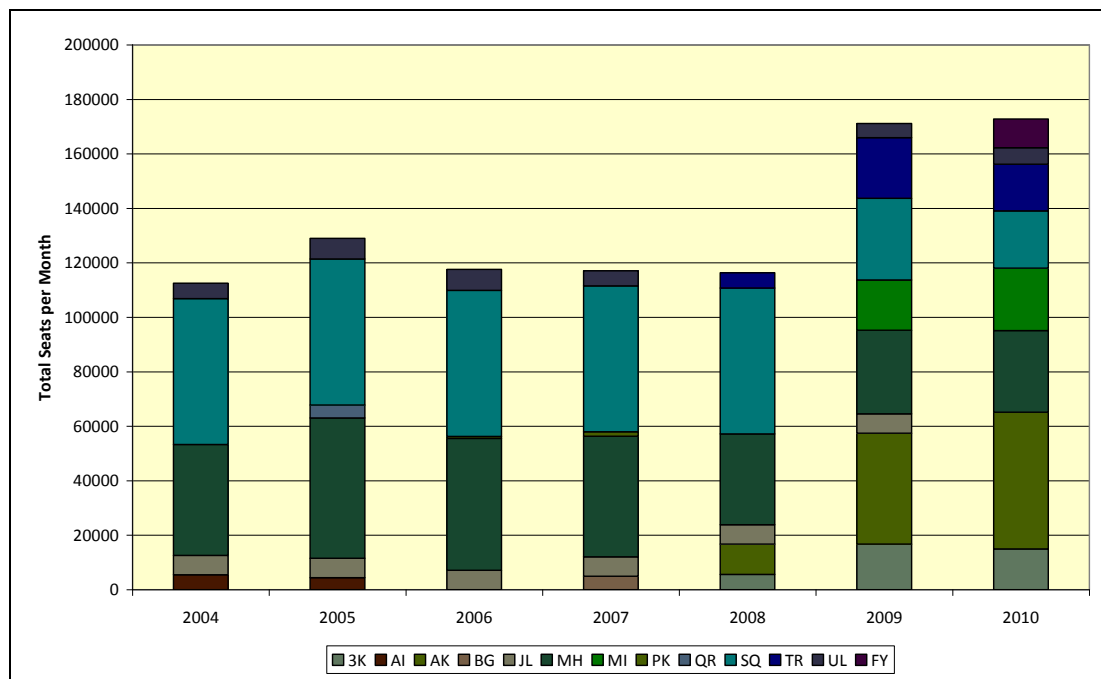
5.3.4 Changes In Airline Ownership Rules

Ratification of the MAAS and proposed MAFLPAS by a member country will open new investment opportunities for airlines within ASEAN. Article 3 of both the MAAS and proposed MAFLPAS allow ownership of airlines in a country to perform intra-ASEAN services and be controlled by one or more ASEAN member states. Note this will not apply to domestic cabotage services where ownership rules will remain unchanged.

5.3.5 Increases In Competition On Specific Routes

The following graph illustrates the growth in both capacity offered and number of carriers operating between Kuala Lumpur and Singapore. The number of operators on the route has increased over time as has the total market size. Tiger Airways and Jetstar Asia have announced their own plans to increase Kuala Lumpur to Singapore service significantly.

Figure 5-8: Capacity by airline Kuala Lumpur – Singapore



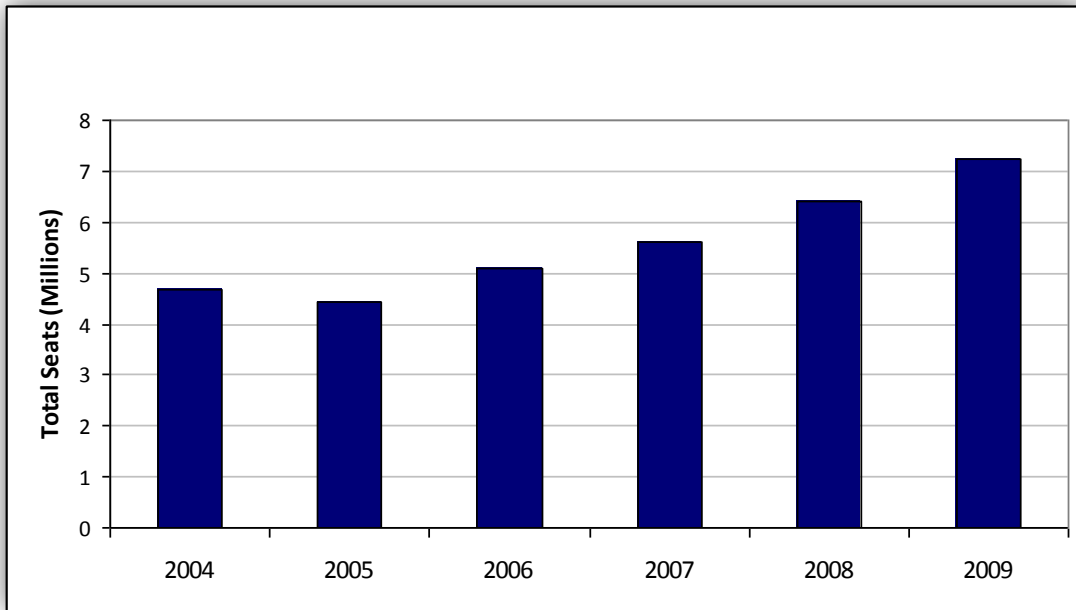
Source: Innovata SRS Database

5.3.6 Access to key airport hubs

With regard to existing Indonesia to ASEAN capacity, Indonesia to Singapore and Malaysia accounts for 93% of the total. Indonesia to Thailand accounts for most of the balance with some small volumes to Brunei and most recently Viet Nam.

Indonesia's access to ASEAN hub airports is thus dominated by Singapore and Kuala Lumpur and both are served from 4 points in Indonesia: Jakarta, Denpasar-Bali, Medan and Surabaya.

In 2009 Indonesia to ASEAN international capacity totalled 7.2million seats of which 3.4m were offered between Indonesia and Singapore and 3.3million seats between Indonesia and Malaysia. The following figure shows the development of Indonesia-ASEAN international capacity:

Figure 5-9: Indonesia-ASEAN International Seat Capacity

Source: Innovata SRS Database

5.3.7 Indonesia domestic capacity growth

Whilst domestic markets are not part of the proposed deregulation the following figures highlight the flight and seat growth over the same period as analysed above. The Indonesia-ASEAN capacity in 2009 was 7.2 million seats compared to domestic capacity of 45 million seats

Figure 5-10: Total Flights Operated – Indonesian Domestic Market 2004 to 2009

Source: Innovata SRS Database

Figure 5-11: Total Available Seats – Indonesian Domestic Market 2004 to 2009

Source: Innovata SRS Database

5.4 ASIA-PACIFIC – REGULATORY PERSPECTIVES

There is no single regional body dedicated to air transportation liberalisation, although both ASEAN and Asia-Pacific Economic Cooperation (APEC) are becoming more involved in aviation policy issues.

The Transportation Working Group (TPTWG) of APEC aims to achieve the liberalisation of transportation services and works to enhance the safety of APEC transport systems to encourage economic development in the Asia-Pacific region.

The TPTWG has a clearly defined set of priority action areas based on the 2006 Leaders' Declaration, the 2007 Transportation Ministerial Meeting Statement and the Transportation strategic direction paper. It includes developing timetables and strategies to work towards the liberalisation of air services and work together on a balanced package of options for addressing greenhouse gas emissions from aviation.

However, the global regulatory agenda is still dominated by the US and EU.

CHAPTER 6: TERMS OF REFERENCE – STAGE 2

6.1 INTRODUCTION

The terms of reference for a potential Stage 2 of the study effectively provide the road map that should be followed to enable Indonesia to implement the ASEAN regional open sky policy.

Stage 2 of the study will develop a strategy to determine how the Indonesian national aviation sector can take successfully participate and benefit from the ASEAN open sky policy.

The road map to liberalisation will include details of planning steps for the period up to 2015, with those steps being specified for all the main stakeholders in the Indonesian aviation sector, including implementers; government; airlines; airports and other service providers.

There are several key issues that should be addressed before implementation can take place. These include:

- The human resources needed to deliver the aviation product within all disciplines must be properly trained, supervised and managed to the best international standards.
- Can a multiple passenger air services agreement with ASEAN countries be successfully implemented due to the differing economic conditions within the region?
- The implementation of open skies is likely to see stronger airlines gaining more benefits. What are the prospects for Indonesia's airlines to withstand such competitive pressures and will the potential benefits of an open sky policy be sufficient to risk losing some local airlines due to increased competition?
- Will the economic and social benefits derived from an open sky policy be sufficient to offset any potential decline in the capacity offered by Indonesian airlines as opposed to foreign airlines?
- Indonesia has many entry airports compared with, say Singapore and it is not possible to balance the exchange traffic. The logical approach would be reciprocity.
- There is no regional Civil Aviation Conference within ASEAN / Asia/Pacific.
- Is Jakarta the optimal hub/gateway for Indonesia?
- What should be done to address the capacity / demand imbalance at a number of major Indonesian airports?

The road map comprises a number of subject headings as follows:

- Air transport policy
- Demand forecasts
- Economic and social impact
- Impact on airlines
- Impact on airports
- Impact on Indonesian airspace
- Impact on safety and security
- Human resources

6.2 AIR TRANSPORT POLICY

The air transport policy of Indonesia is described in the Civil Aviation Act Number 1 (2009). In Stage 2 it will necessary to confirm what amendments will need to be made to the Act and how it can be strategically adjusted to accommodate the implementation of the ASEAN open sky regional policy.

It will also be necessary to determine whether there is a requirement for the introduction of a competition law regime. This will need to be determined by taking due consideration of national law.

It is recommended that an international aviation lawyer is appointed to opine on if and how the Civil Aviation Act should be amended to accommodate the implementation of a regional open skies policy.

6.3 DEMAND FORECASTS

A demand forecast is required to assess the impact of traffic growth before and after the implementation of the open sky policy in 2015, particularly at international airports.

The first task will be to review any national or local air traffic demand forecasts produced by DGCA in support of the national airport master plan.

The forecast will determine the likely growth in annual passenger, cargo and aircraft movements at Indonesia's main airports, i.e. the 12 airports handling over 1.5 million per passengers in annum in 2009, for the period up to and including 2025.

The markets will be further segmented as follows:

- Passengers: domestic, international, transfer;
- Cargo: domestic air freight, international air freight, domestic air mail, international air mail;
- Aircraft movements: passenger, cargo, business and general aviation, military. The aircraft movement forecast would need to be closely identified with the work currently being done by LFV Consulting.

A peak day, busy hour forecast will also be required for at least the five designated international airports of Soekarno-Hatta, Surabaya, Bali, Medan and Makassar. Depending on the findings from work done within the airports section of Stage 2 it may be necessary to determine peak day, busy hour rates at other Indonesian airports.

6.4 ECONOMIC & SOCIAL IMPACT

6.4.1 Objective

It is important to understand the likely scale of the socio-economic costs and benefits of the liberalisation of the air transport market from the phased implementation of the ASEAN open sky policy.

In particular, it will be important to understand the extent to which wider economic benefits, particularly through the development of trade and tourism, will exceed the potential costs to Indonesian airlines.

A further consideration will be whether there are distributional implications which arise from liberalisation both in terms of economic effects and social effects and the extent to which these are consistent with regional policy.

6.4.2 Linkage to other aspects of the work programme

As detailed above demand forecasts are to be produced for 12 key airports. These airports and the regions which they serve will form the core of the quantitative assessment of economic benefits.

6.4.3 Work plan – Task 1, Inception meetings

An inception meeting with the client and with representatives of the DGCA is proposed in order to understand the key issues for the economic assessment. This would probably take place as part of the overall project inception meetings. Allowance is made for other initial meetings to ensure a smooth project set up.

6.4.4 Task 2 – Collection of Basic Economic Data

This will involve collation of statistics about airport usage, airport and aviation industry employment and expenditure, tourism data, economic data and projections for each of the 34 regions of Indonesia. It is envisaged that the majority of this data collection will be done locally in Indonesia and that a substantial part of this data collection will be common between the forecasting exercise and the Economic Assessment. The aim will be to substantiate the economic impact of air transport activity in Indonesia today to provide a baseline against which to test the impact of various liberalisation scenarios.

It should be noted that unless specific data is available about the activity of individual airlines and at the main airports, this may limit the ability to test the impact of liberalisation on individual regions or to test whether economic benefits more generally outweigh any costs to the airlines. Ideally, to address this, collation of existing published and unpublished data regarding the aviation industry should be supplemented by specific data regarding employment, wages and salaries and the supply chain at each of the main airlines and airports. Such data collection would extend the programme as currently envisaged and add to the cost of the project and has been excluded at this stage.

6.4.5 Task 3 – Analysis of Costs and Benefits

Based on information collected in Task 2, an assessment of the baseline economic impact of the current level of air service provision will be established.

This will provide a platform for a quantified assessment of the economic benefits of different liberalisation scenarios based on forecasts being prepared for the 12 principal airports. This will largely be within a GDP accounting framework but will also consider wider economic benefits by reference to consumer welfare through examination of potential air fare and journey time saving benefits and specific benefits by way of the potential for increased tourism.

This task will bring together a structured economic appraisal of different liberalisation scenarios to demonstrate the net benefits (or costs) to Indonesia at each phase. A key item for consideration in the analysis will be to identify winners and losers, specifically in terms of benefits to the economy as a whole set against any specific implications for Indonesian airlines.

We will also include an analysis of how improved air service connectivity arising from liberalisation will support economic growth more widely using a Business Connectivity Index, which will allow comparison of the level of business related air connectivity before and after liberalisation. This provides a proxy for assessing how liberalisation will contribute to wider economic growth. Although other studies have attempted to quantify the relationship between improved air services and wider economic growth, it is impossible to prove causality and reliance on such statistical relationships is widely discredited. Instead, it is proposed to explore such relationships and to capture the wider economic benefits through discussion with key stakeholders and through mapping key economic growth priorities for Indonesia against the potential for liberalisation to deliver improved air service connections to support this growth.

6.4.6 Task 4 – Regional Stakeholder Workshop

It is proposed to play these draft results back to a stakeholder workshop or workshops to be held in Jakarta, involving representatives of key regional interests and the air transport industry.

A key issue for discussion in this workshop will be the wider impact which improved air service connections will deliver both for Indonesia as a whole and for specific regions to validate the analysis of business connectivity.

This workshop will also allow consideration of issues at the smaller airports, for which quantitative forecasts are not being prepared. The aim will be to ensure that the wider regional socio-economic implications are captured, including any specific regional issues.

6.4.7 Task 5 – Preparation of Draft Report

Our results will be brought together with the full evidence base in a section of the overall study report. We envisage presenting the draft to the client group and other key stakeholders before finalisation.

6.5 AIRLINES

The following statement is indicative of the concerns for the viability of the Indonesian airline sector following the implementation of the open sky policy:

“We will prioritize national interests in the implementation of open sky. We will surely protect national airlines.” Herry Bakti S. Gumay, Director- General of Civil Aviation, Ministry of Transportation.

The introduction of a more liberal aviation regulatory regime within ASEAN countries creates both opportunities and threats to Indonesian airlines. The liberalisation of Air Service Agreements provides the catalyst for enhanced:

- Market access for both Indonesia and ASEAN carriers;
- Airline designation;
- Traffic rights;
- Capacity and frequencies;
- Product enhancement;
- Enhanced distribution systems;
- Tariff approval (airline pricing);
- Airline ownership rules.

Stage 2 of the project will analyse the potential impacts to Indonesian airlines from the relaxation of controls on the above factors and will be achieved through a combination of desk research, questionnaires and interviews with airlines (both Indonesian and key ASEAN carriers) and the Indonesian DGCA.

It is proposed that the current operating and financial performance of the main Indonesian airlines will be analysed to understand their capabilities to operate in an open sky environment.

Opportunities exist for both incumbent and new airlines in Indonesia and it is proposed that existing bilateral agreements between Indonesia and ASEAN countries are fully reviewed to ascertain current restrictions to elements of liberalisation proposed within the Multilateral agreements.

A full review of both existing Indonesia-ASEAN and intra-Indonesia traffic by Indonesian and ASEAN airlines is proposed with scenarios developed for market and airline growth. The business models of full service (network) carriers and low cost carriers will be analysed and for the incumbent carriers of Indonesia a SWOT analysis is proposed to determine how liberalisation will affect each airline.

It is proposed the impacts to and reactions from airlines in other liberalised markets will be identified along with the specific airline industry conditions existing within the ASEAN region and Indonesia.

6.6 AIRPORTS

The key tasks in Stage 2 will be to determine the full extent of the demand capacity imbalance at Indonesia's designated international airports and to assess the readiness of those airports to facilitate both the current levels of international traffic and the projected increase indicated in the traffic forecast.

Demand and capacity would be assessed according to peak demand, rather than annual demand, busy hour rates and peak aircraft stand demand as this is the more useful measure.

It is understood that DGCA has a national airports master plan that would be reviewed to understand current plans for infrastructure development at existing airports and details of new airports under construction.

The latest ICAO reports on each relevant airport would be studied and discussed with the ICAO representative and/or members of the Civil Aviation Transformation Team.

Existing regional airports with solely domestic services will require the provision of inbound and outbound border controls to accommodate new international services. To achieve this will require:

- A capital works programme to establish these controls;
- Passport control on departures;
- Immigration on arrivals;
- Customs on arrivals;
- Bonded freight facilities;
- Office and staff accommodation for control authorities;
- Check that airport operating practices accord with ICAO Annex 9.

6.6.1 Airport Safety Implications

Airport safety implications will require:

- A review of existing regional airport infrastructure, prior to new international services, for compliance with ICAO Annexes (Annex 14 in particular) in advance of potential audits;
- Put in place a capital works programme to rectify non compliances , or establish operational procedures to mitigate them;
- Check that airport operating practices accord with international standards;
- Ensure that the Aerodrome Manual and operational procedures are available in an accessible format to all parties operating at the airport;
- Check that forecast traffic demand does not exceed maximum safe capacity of airport facilities, e.g. maximum terminal occupancy for fire safety.

6.6.2 Airport security implications

The security implications of open skies will require:

- A review of existing regional airport infrastructure, prior to new international services, for compliance with ICAO Annex 17 in advance of potential audits;
- Put in place capital works programme to rectify non compliances, or establish operational procedures to mitigate them;
- Particular issues are likely to be;
- Hold baggage screening;
- Integrity of airside/landside boundary;
- Control of staff access to airside;
- Control of vehicular access to airside;
- Freight screening.
- Check that passenger security processing facilities are sufficient to meet forecast traffic demand whilst maintaining appropriate level of scrutiny.

The study team will visit at least the five designated international airports to produce a detailed assessment as to whether the correct procedures are in place and being properly applied to achieve facilitation, safety and security objectives.

The visits are likely to extend to a number of other airports largely dictated by the results from the traffic forecast. These visits are likely to be more of a high level assessment of compliances compared with the detailed assessment of the five designated airports.

6.7 AIRSPACE

Indonesia's air traffic management (ATM) system suffers from a significant lack of capacity. Existing international traffic is not handled satisfactorily, which means that significant improvements in ATM are urgently required.

LFV Consulting is currently working to produce an air traffic management (ATM) master plan. The terms of reference for the LFV study have been reviewed with the following comments:

The terms of reference refer to:

- Indonesia's legislation for the reorganisation of air navigation service providers (ANSP);
- ICAO's requirements for the future development of ATM;
- The ASPIRE agreement (between US, Australia and New Zealand).

Although the document mentions that Indonesia's ATM system falls below international expectations, the master plan does not address the issues that will specifically influence traffic demand and traffic patterns expected across Indonesia's airspace in the medium term. It is this demand that should drive ATM service levels and master planning activity.

Specifically, the terms of reference do not mention the ASEAN agreement or make any reference to the expected impact of open skies on traffic patterns from 2015 onwards.

Indonesia occupies an important strategic position within the Asia Pacific region. The ASEAN States will collectively probably have full or partial open skies with third countries, including USA, Australia, New Zealand, Austria, UAE and others.

Under the ASEAN open skies agreement, all ASEAN member states, together with extended open skies partner countries will have unrestricted access to each other's airports. This access includes unlimited rights to:

- Designate airlines
- Grant route rights (3rd, 4th and 5th freedoms)
- Frequencies
- Destinations

This means that many more routes will open up across Indonesian airspace and Indonesia will be required to service this traffic safely, efficiently and cost effectively and in time for the ASEAN open skies target date of 2015. It is especially important to understand the shape of the near and medium term growth in traffic that will be largely driven by ASEAN development.

The direct impact of open skies on airspace operations will be an:

- Increase of air traffic in Indonesian airspace;
- Increase in the number of routes crossing Indonesian airspace;
- Increase in complexity, particularly with more crossing traffic;

- Demand for direct and efficient routings.

Significant investment in the ATM infrastructure will be required to meet the increased demand expected following implementation of the open skies agreement.

It will be important to have good projections of the shape of the growth in future air traffic. This is best done, by careful consideration of the major city pairs crossing Indonesian airspace, incorporating extended ASEAN 3rd, 4th or 5th freedom rights, and studying the inherent demand and the expected capacity to be provided by the major regional airlines.

The following actions are required to address the demands resulting from the ASEAN “Open Skies” agreement:

- Review current airspace design;
- Review expected growth in air traffic – both to/from Indonesian airports and also major city pairs within ASEAN;
- Develop an airspace plan;
- Redesign airspace;
- Identify infrastructure investments needed;
- Develop an airport upgrade programme;
- Identify organisational changes;
- Develop a manpower plan, particularly to address the requirement for more Air Traffic Controllers;
- Adopt new technology, e.g. ADS-B, Datalink, achievable but an early start is required;
- Requirement for an integrated ATM provider;
- Introduction of new ATM techniques, procedures, training.

6.7.1 Airspace safety implications

In view of likely increase in air traffic movements and possible increase in average aircraft size at regional airports, there will be a need to review appropriateness of existing;

- Aircraft routings;
- Air traffic management procedures, aircraft separations etc.;
- Aerodrome obstacle charts and other aeronautical information;
- Ensure that the air traffic control procedures are available in an accessible format to all parties operating at the airport.

APPENDIX A: HISTORY OF AIRLINE DEREGULATION IN USA & EUROPE

A.1. AIRLINE DEREGULATION IN THE UNITED STATES

A.1.1 Historical Context

In the United States, between 1937 and 1984, the federal Civil Aeronautics Board (CAB) regulated all domestic interstate air transport routes as a public utility, setting fares, routes, and schedules. The CAB also controlled inter-carrier agreements and mergers and was responsible for consumer issues. The CAB was obliged to ensure that airlines had a reasonable rate of return and it promoted air travel by generally attempting to hold fares down in the short-haul market, to be subsidised by higher fares in the long-haul market. Airlines that flew only intrastate routes were not regulated by the CAB. Those airlines were regulated by the governments of the states in which they operated.

This rigid system encountered tremendous pressure in the 1970s. Under CAB regulation, investment and operating decisions were highly constrained. CAB rules limiting routes and entry and controlling prices meant that airlines were limited to competing only on food, cabin crew quality, and frequency. As a result, both prices and frequency were high, and load factors—the percentage of the seats that were filled—were low. Indeed, in the early 1970s load factors were only about 50 percent. On top of this, the 1973 oil crisis radically changed the economic and aviation environment, as did technological advances such as the jumbo jet.

Most of the major airlines, whose profits were virtually guaranteed, favoured the rigid system. But passengers forced to pay escalating fares did not, nor did those communities which subsidised air service at ever-dearer rates. Congress became concerned that air transport in the long run might follow the nation's railroads into trouble.

In response to these changes and concerns, the Airline Deregulation Act (Public Law 95-504) was signed into federal law on October 24, 1978. The main purpose of the act was to remove government control over fares, routes and market entry (of new airlines) from commercial aviation. The CAB's powers of regulation were phased out entirely by 1984 allowing passengers to be exposed to market forces in the airline industry. The Act, however, did not remove or diminish the FAA's regulatory powers over all aspects of airline safety, nor did it impact the infrastructure grid which remains subject to government control and economic distortions. Thus, the 1978 Act meant that airlines were only partially deregulated.

A.1.2 Benefits of Deregulation

Even the partial freeing of the air travel sector has had overwhelmingly positive results. Air travel has more than doubled since 1978 while prices have fallen 50 per cent in real terms. After deregulation, airlines reconfigured their routes and equipment, making possible improvements in capacity utilisation. For example, average load factors today are around 80 per cent compared to 50 per cent prior to deregulation.

The fare savings are a direct result of allowing airlines the freedom to innovate in routes and pricing. After deregulation, the existing airlines quickly moved to a hub-and-spoke system, whereby an airline selected some airport (the hub) as the destination point for flights from a number of origination cities (the spokes). This increased capacity utilisation (i.e. load factors), allowing fare reduction. The hub-and-spoke model survives among the legacy (i.e. before deregulation) carriers, but deregulation allowed new airlines to emerge that typically fly point to point. While the network hubs model offers

consumers more convenience for routes, the point-to-point routes have proven less costly for airlines to implement. The new airlines that emerged following deregulation were termed Low Cost Carriers (LCCs) because they were not saddled with the high labour costs associated with the legacy airlines, where generous salaries and inefficient work rules had been established and strengthened under regulation and held in place by the Railway Labor Act.

High labour costs and the network hub business model hurt legacy airlines' competitiveness. As a result the LCCs have increasingly gained market share over the legacy airlines. Hub-and-spoke systems decreased unit costs but created high fixed costs that required larger terminals, investments in information technology systems, and intricate revenue management systems. The LCCs have thus far successfully competed on price due to lower hourly employee wages, higher productivity and no pension deficits. The LCCs also have far simpler price structures, increased price transparency from online web sites, and decreased reliance on travel agencies.

A.1.3 Antitrust Law

Historically, the CAB had antitrust jurisdiction over airline mergers. When Congress disbanded the CAB, it temporarily transferred merger review authority to the Department of Transportation (DOT). In 1989, the Justice Department assumed merger review jurisdiction from the DOT that, when combined with its antitrust authority under the Sherman Act, made it the primary antitrust regulator of the airline industry.

Unfortunately, as a form of regulation, antitrust laws have inhibited post-deregulation restructuring efforts, and have made it harder to bring salaries and work rules in line with the realities of a competitive marketplace. The antitrust regulatory laws inhibit the restructuring of corporations and block needed consolidation since the antitrust authorities view with suspicion efforts to retain higher prices through mergers.

The Justice Department has contested past domestic merger proposals but antitrust law also applies to international alliances, arrangements that attempt to ameliorate restrictive foreign ownership and competition laws. While labour contracts, airport asset management, and other business practices are themselves high barriers to restructuring, these difficulties are magnified by antitrust regulatory hurdles. Restrictions on cabotage (allowing foreign airlines to operate domestic services) have also shielded domestic airlines from international competition, reducing the need to restructure in response.

A.1.4 Infrastructure Issues

A network can be efficient only if the flows and the grid interact smoothly. The massive expansion of air travel following deregulation should have resulted in comparable expansions—either in the physical infrastructure or in more sophisticated grid management, but infrastructure improvements have been slow to materialise resulting in increased congestion and delays.

Airport construction and expansion face almost insurmountable political and regulatory hurdles. The number of federal requirements associated with airport finances has grown considerably in recent years and is tied to the awarding of grants from the federal Airport Improvement Program (AIP). Federal law restricts the fees airports charge air carriers to amounts that are “fair and reasonable.” These fee restrictions, although promoted as a way to provide non-discriminatory access to all aircraft, limit an airport's ability to recover costs for air carriers' use of airfield and terminal facilities.

Allowing airports more flexibility to price takeoffs and landings based on supply and demand also help ease congestion at overburdened airports.

Similarly, for air traffic control, using pricing mechanisms to allocate the scarce resource of air traffic capacity would help reduce congestion and more efficiently allocate resources. Air traffic control operation is a business function distinct from the regulation of air traffic safety. Currently both are managed by the Federal Aviation Authority (FAA). Implementing cost-based structures by privatising air traffic control is a controversial and politically daunting issue in the United States, but over 30 nations—including the UK, Australia, New Zealand and Canada—have already taken this step.

The air transportation system of the United States is acknowledged to be under increasing stress. NextGen is a wide-ranging transformation of the entire National Airspace System (NAS) of the United States to meet future demands and avoid gridlock. It moves away from legacy ground based technologies to new and more dynamic satellite-based technology. The new capabilities and the highly interdependent technologies aim to change the way that the system operates, reduce congestion, and improve passengers' experiences.

A.1.5 Conclusion

The economic liberalisation of air travel has been part of a series of “deregulation” moves based on the growing realisation that a politically controlled economy served no continuing public interest. U.S. deregulation has been part of a greater global airline liberalisation trend, especially in Asia, Latin America, and the European Union.

A.2. EUROPEAN AVIATION LIBERALISATION

A.2.1 EU Regulations

In June 1992 the European Council of Ministers agreed the Third Aviation Liberalisation Package. The Third Package was the culmination of a gradual process of liberalisation of the Community air transport market to which Member States committed themselves in 1986. The decision to create a single market in aviation formed part of the move to a single internal market across the whole range of economic activity, as embodied in the Single European Act.

As its name suggests, there were two earlier packages of aviation liberalisation, the First Package, adopted in December 1987, and the Second Package, adopted in July 1990. Before that time the intra-Community market was governed by bilateral agreements between Member States. These tended to rigidly control route entry and capacity and often allowed airlines to pool their revenues. Many international routes were single designation, so that only one airline of each country was permitted to operate. Fares were almost entirely set by agreement between the airlines under the auspices of IATA: indeed using IATA was a formal requirement of a number of bilateral agreements.

In 1983 the Council adopted Directive 83/416/EEC to liberalise some inter-regional air services in the Community, but Member States still insisted on a number of restrictive conditions. This was followed by a more general package of measures, the First Aviation Liberalisation Package, agreed in December 1987. The First Package essentially left the bilateral framework in place but relaxed some restrictions. It removed ‘single designation’ provisions so that any number of airlines were able to operate on the major international routes in the Community; overrode the insistence of a number of Member States that their national airline be given a fifty per cent share of the market; removed most capacity restrictions; gave airlines automatic but limited right to operate ‘fifth freedom’ services

linking points in the territories of two or more other Member States; and removed the ability of Member States to block proposals for economic low fares.

The Second Aviation Liberalisation Package, agreed in July 1990, comprised three Council regulations on fares, market access and the application of Article 85 of the EC Treaty. It built on the First Package by introducing an element of 'double disapproval' for fares under which a fare set by an airline for a route between Member States would be permitted unless both States disapproved it; this applied to applications for increases in fares above five per cent. The Second Package also opened up routes between almost all European Community airports; relaxed restrictions on fifth freedom services; and eased restrictions on multiple designation of airlines on particular routes.

It is only with the **Third Aviation Liberalisation Package** that a substantially liberalised internal Community market was achieved. The three main Regulations comprising the Third Package were as follows:

- **Regulation 2407/92/EC** (the Licensing of Air Carriers Regulation) provided for common specifications and criteria for the licensing of carriers and the provision of a Community air transport certificate with effect from 1 January 1993. Included in the Regulation was a statutory requirement for air carriers to hold insurance to cover liability in case of accidents in respect of passengers, luggage, cargo, mail and third parties. Governments are not allowed to discriminate between airlines seeking licences to establish themselves on their territory other than for technical or economic reasons such as solvency of financial viability. Any airline which meets common safety, nationality and fitness criteria is entitled to an operating licence anywhere in the Community. The restrictions on charter airlines and limits on the number of 'seat only' sales are abolished. Separate rules apply for airlines operating light aircraft;
- **Regulation 2408/92/EC** (the Route Access Regulation) set out the rules on access for Community air carriers to intra-Community air routes. From 1 January 1993 airlines would have full access to all routes between Member States and the right to offer services between airports in two other Member States, the so-called seventh freedom of the air. Full, unrestricted access to all routes within the Community commenced on 1 April 1997 for both scheduled and charter services, the eighth freedom of the air (also called 'consecutive cabotage'). Article 6 provided safeguards for new inter-regional services and Article 10 prevented capacity limitations except for environmental and/or air traffic reasons;
- **Regulation 2409/92/EC** (the Fares Approval Regulation) set down further rules on fares and rates for air services; that from 1 January 1993 airlines would be able to set their own fares on services both within and between Member States subject to the safeguards against unfair pricing (including notification to the Commission).

The Licensing of Air Carriers Regulation, the Route Access Regulation and the Fares Approval Regulation were repealed in 2008 and their provisions recast in a single Air Services Regulation (ASR) (**Regulation 1008/2008/EC**), which came into force on 1 November 2008.

A.2.2 State Aid including Public Service Obligations (PSOs)

Competition can be restricted not only by businesses but also by governments, if they grant public subsidies to businesses. For this reason, the EC Treaty in principle prohibits any form of State aid that is likely to distort intra-Community competition, on the grounds that it is incompatible with the common market. However, an absolute ban would be untenable, so the Treaty provides for a number of exceptions to the principle prohibiting aid. Subsidies for airlines take various forms, including operational grants, direct subsidies and indirect financial assistance. Examples include

capital injections, debt write-offs, fare subsidies, and favourable tax treatments, as well as less visible forms of state support which nonetheless favour national airlines.

Another strand of State aid is the Route Development Fund (RDF), as outlined a European Commission communication in December 2005. This provides guidance as to when public aid can be paid temporarily to airlines to provide the necessary incentives to create new routes or new schedules from regional airports, until such time that they these new routes or schedules can be run profitably.

As for public service obligations (PSOs), Article 4 the Route Access Regulation harmonised the procedures for ensuring the operation of lifeline air routes. The PSO provides the basis on which non-commercial but socially and economically necessary air services can be subsidised by national or local authorities, notwithstanding the single market. This has since been replaced by the provisions in Article 16 of the Air Services Regulation.

A.2.3 Airport Slot Allocation

It was agreed in 1992 that changes in the allocation of runway slots would have to be tackled at community level if the benefits of liberalisation of air transport were to be realised. Regulation 95/93/EEC ('the Slot Allocation Regulation'), as later amended by Regulation 894/2002/EC and 793/2004/EC, first came into effect in May 1993. It is based on IATA rules but with some amendments. It applies to all airports that have been designated as 'fully co-ordinated', i.e. those airports where there is insufficient capacity to meet demand.

The Slot Allocation Regulation required the formation of a co-ordination committee at co-ordinated airports. Membership of the co-ordination committees includes airlines, the airport operator, air traffic control, and general and business aviation representatives. The main provisions of the Regulation which affected the practical arrangements for slot allocation were:

- recognition of the long established principle of 'grandfather rights' under which an airline holding and using a slot in one summer season or winter season has first claim on that slot in the next equivalent season; 18 a list of these routes is available on the European Commission website
- recognition of the secondary rules established by IATA including the period of use of a slot and re-timings of existing slots for specific reasons which are given priority over completely new slot demands;
- the creation of a slot pool into which are placed newly created slots (through increases in hourly scheduling limits); slots returned either voluntarily or under the 'use it or lose it' condition and slots otherwise unclaimed under grandfather rights or the IATA secondary rules;
- allocation of fifty per cent of the pool slots to new entrants²¹ unless they request less; and
- a requirement that airlines must use their slots for at least 80 per cent of the period for which they are held or, subject to certain specified exceptions, the slots are withdrawn and placed in the pool.

Regulation 793/2004/EC made extensive technical changes to the original Slot Allocation Regulation, but no significant amendment to the slot allocation process: the most notable consequence was the introduction of sanctions for the misuse of airport slots.

The Commission promised a more radical review of the Slot Allocation Regulation and, in January 2007, began a consultation with Member States and other interested parties on the operation of the

Regulation. Following the consultation the Commission published a communication in October 2007, which appeared in its final form in April 2008.

A.2.4 Impacts of European Liberalisation

In October 1996 the European Commission published a communication on the impact of the Third Package, only three years after the measures had first been implemented and six months before 'full cabotage' would be complete. The Commission concluded that liberalisation had happened "in a progressive way and without major upsets" and there had been no 'big bang': "there has been no spectacular reduction in the fares, nor any dramatic disappearance of the more important carriers, nor a substantial penetration of the domestic markets by foreign competitors". However, the Commission concluded that "effects of this process, although slow, are nevertheless quite clear and it is satisfactory to note that in the end almost all operators have made use of the new possibilities offered by the third package".

In 1998 the UK CAA published a report on the first five years of the single aviation market. This was followed by a further communication by the European Commission in 1999.

The CAA report found that the liberalisation of European aviation had resulted in a substantial increase in competition, although this could be undermined by the growth in airline alliances and by airport congestion. While the single market had not led to a reduction in the number of European airlines, one reason for this was the inability of major airlines to exploit long-haul traffic rights out of other Member States due to the absence of EU-wide aviation agreements with third countries.

The Commission's 1999 communication stated that, whilst the increasingly competitive aviation environment had brought benefits to consumers, some of the responses by the airlines to this environment could undermine these benefits. The Commission also indicated that it was investigating the regulatory and commercial barriers restraining the complete development of competition in the aviation single market. Part of this was the commissioning of a study which found that there was an overall consensus that the regulatory regime was working well, albeit with concerns in the following areas:

- access to slots and airport capacity issues;
- inability of small and medium carriers to compete with major airline loyalty schemes;
- differences in regulatory environment across the Member States in relation to slot allocation, negotiation of bilateral agreements and award of PSOs; and
- Ground handling charges and quality.

A.2.5 Conclusion

Not knowing what would have happened in the absence of liberalisation makes it difficult to assess the impact of the single aviation market in Europe with any precision. But the new regulatory environment certainly has fostered innovation and enterprise, resulting in more routes served and greater competition on many existing routes. As happened in the United States, the emergence of low cost carriers, which would have been impossible prior to liberalisation, has changed the way many people think about air transport, and has necessitated a competitive response from their longer-standing rivals. Consumers have benefited from a wider range of choice, both in locations served and in quality and type of service. The evidence on fares is mixed. Fares at the bottom end of the market have fallen, but it is less clear what impact liberalisation has had on premium fares. As a

general observation, for many – though certainly not all - users there is a wider range of fares/services packages available than previously. By contrast, liberalisation has had only limited impact on the basic structure of the airline sector, almost certainly because this is influenced to such a key extent by the traditional international regulatory framework, which is outside the direct control of any one country or even group of countries.

A.3. THE EUROPEAN UNION & UNITED STATES OPEN SKIES AGREEMENT

A.3.1 US-UK Agreements

A complex bilateral agreement between Britain and the United States defined the rules under which airlines could fly the Atlantic until the 'Open Skies' agreement took effect in 2008, see below). The first agreement, signed in Bermuda on 11 February 1946, became known as Bermuda 1. On 22 June 1977 a second agreement, Bermuda 2, was reached and superceded Bermuda 1. It was subsequently amended in September 1988, June 1990 and March 1991.

Heathrow is a prized hub and under Bermuda 2 its use for transatlantic traffic was restricted to four airlines; two from the United States and two from the UK. These were American Airlines, United Airlines, British Airways and Virgin Atlantic. Routes between Heathrow and the United States were also restricted under Bermuda 2. Some United States airports such as New York JFK could be served by all four airlines, while other US cities could only be served by the two airlines from the United States or the two airlines from the United Kingdom. Bermuda 2 contained further, equally complicated, rules relating to transatlantic services into and out of UK airports, other than Heathrow.

Between 1992 and 2002, further discussions were held to try and lift the restrictions of Bermuda 2 and achieve an Open Skies agreement between the United States and the UK. The key goals of each side were complete freedom by United States airlines to operate transatlantic services into Heathrow and free access by UK airlines to United States domestic markets. Despite numerous attempts, no substantive progress was made and neither of these goals were achieved.

A.3.2 US-EU Agreements

The European Commission (EC) had increasingly viewed bilateral air agreements negotiated individually by each Member State with third countries to be incompatible with an integrated European aviation strategy.

On 5 November 2002, the European Court of Justice (ECJ) delivered its judgment in the cases which the Commission had brought against eight Member States regarding those countries' signing bilateral air service agreements with the United States. In delivering its judgment, the Court considered that Member States had made commitments in areas where competence had been transferred to the Community, such as computerised reservation systems (CRS), intra-Community fares and rates and airport slots.

The ECJ's judgments resolved the question of shared competence between the Member States and the Community. They also placed an obligation on the Member States in question to bring their bilateral agreements into line with Community law.

On 5 June 2003, the Council of Ministers granted the Commission two mandates relating to air service agreements. Firstly, a negotiation mandate with the United States, and secondly, a negotiation mandate with all third countries for the revision of clauses relating to the ownership and

control of airline companies and all matters coming under the 'exclusive external competence of the Community'.

A.3.3 Open Skies Negotiations 2003 to 2006

It was intended that any agreement reached as a result of the EU-US negotiations would replace the bilateral agreements between individual Member States and the US. The EU-US Air Transport Agreement would establish an Open Aviation Area (OAA or 'Open Skies') between the two territories.

The negotiations therefore covered all the arrangements governing air transport between and within the EU and US. This includes:

- the rules governing market access (routes, capacity, frequency);
- how air fares are set;
- how to ensure effective application of competition rules; and
- how to ensure maintenance of high standards of airline safety and aviation security.

The negotiations were also intended to address opening up each side's internal market to the airlines of the other side. A key element in this would be the removal of the special restrictions which apply to foreign ownership and control of airlines in the US and the EU.

The theory behind Open Skies is that it would ultimately produce a more competitive market and generate greater choice of services and lower fares for travellers while taking into account the need to maintain the security and safety of air travel. It would give EU and US airlines complete freedom to serve any pairs of airports in the EU and US (when negotiations began EU airlines were only able to operate between their own Member State and the US and between airports within the EU). Relaxing restrictions on ownership and control would also make it easier for EU and US airlines to enter into mergers and take-overs with each other.

The negotiations focused on competition, safety, pricing, state aid, the environment, consumer protection, and foreign ownership. The main issue preventing agreement was cabotage, i.e. allowing European airlines to carry passengers and cargo between two points within the United States. As a result the negotiations, which began in 2002, stalled repeatedly over the following four years. In order to make progress, a two stage agreement was proposed, in which difficult issues such as cabotage were "put aside" and left to be negotiated under the second stage.

A.3.4 Open Skies Stage 1 Agreement 2007

On 2 March 2007 the European Commission agreed the November 2005 text of the draft EU-US Air Transport Agreement. It was approved by all Member States at a meeting of the Transport Council on 22 March, and was signed at the EU-US summit on 30 April. This is a first stage agreement. As part of the agreement, negotiations on the second stage would have to begin within 60 days of the date of provisional application of the first part (originally 28 October 2007, finally 30 March 2008).

The main elements of the Agreement are:

- "Community carrier" concept permitting EU airlines to operate to the US from any point in the EU;

- Removal of all restrictions on international routes between the EU and US (3rd/4th freedom rights), and routes beyond the EU and US (5th freedom rights) - 16 Member States already have “open skies” with the US. This agreement extends “open skies” to the remaining 11 Member States, 6 of whom do not currently have an agreement with the US;
- Removal of all restrictions on pricing on all routes between EU and US, except for US carriers which can not price-lead on intra-EU routes;
- Removal of all restrictions on 7th freedom flights for all-cargo services operated by EU airlines but no additional 7th freedom all-cargo rights for US airlines;
- 7th freedom rights for passenger services for EU airlines only, between the US and any point in the European Common Aviation Area (ECAA);
- Unlimited code sharing between EU, US and third country airlines;
- A new Annex detailing the rules on ownership, investment and control of US and EU airlines

The main tangible impact of EU-US Open Skies has been that carriers serving the former Bermuda 2 gateways - such as Dallas/Fort Worth, Houston and Atlanta etc – have moved from Gatwick to Heathrow. This has led to the transfer to Heathrow of a significant number of transatlantic flights, particularly by British Airways, Delta, Continental and American Airlines. This increased competition at Heathrow has reduced the dominance of British Airways and American Airlines and has opened up the possibility of an alliance between the two airlines. However, the first stage of the EU-US Open Skies agreement has done little, so far, to open up the wider market outside of Heathrow.

A.3.5 Open Skies Stage 2 Negotiations 2008 to Date

The European areas of priority for the second stage are:

- further liberalisation of traffic rights;
- additional foreign investment opportunities;
- effects of environmental measures and infrastructure constraints;
- further access to Government-financed air transportation; and
- wet-leasing.

There is also a mechanism to ensure progress to a second stage agreement to a strictly defined calendar, with the right for each Party to suspend rights if the second stage agreement has not been reached.

Negotiations on stage 2 began on 15 May 2008 in Ljubljana, Slovenia. It was reported that the focus for European negotiators would be on opening up the US market, particularly in terms of airline ownership, and in ending the protectionist ‘Fly America’ programme whereby US Government staff, including military personnel, are compelled to fly with US carriers or their partners. However, there was recognition that in a US Presidential and Congressional Election year, the US would be reluctant to make any agreement that could leave its airlines vulnerable to takeovers from European airlines. From the American viewpoint, it was reported that they would propose to broaden the agreement, rather than deepen it, by extending its provisions to approximately 60 non-EU countries. Although there was no significant outcome to the Ljubljana meeting, there was speculation before the US elections in November that the US might consider liberalising its airline ownership rules.

Talks resumed in June 2009 and though no agreement was reached representatives of European airlines were said to be 'optimistic'. Both parties indicated their willingness to reach agreement before the end of 2010. Another round of talks commenced in January 2010 with issues to be debated including greater opportunities for European airlines to invest in US carriers and preventing restrictions on night flights at European airports. There appeared to be no real enthusiasm on either side to address the issue of opening up the internal US market further to foreign operators.

A draft second stage agreement was finally reached on 25 March 2010. A European Commission press notice set out the terms of the Agreement: "... the 2007 agreement did not directly address the key issue of reform of airline ownership and control rules. The provisional agreement reached this week includes a commitment to engage in a process towards such reform. The European Union, based on the positive experience of the EU internal market, has long pressed for such an outcome, arguing that it would represent a key step towards liberating the airline industry from the outdated regulatory constraints in the area of foreign investment that prevent it from acting like any other industry. The provisional agreement sets out a number of incentives to encourage reform: When the United States changes its legislation to allow EU investors majority ownership of US airlines, the EU will reciprocally allow majority ownership of EU airlines by US investors and US airlines will benefit from additional market access rights to and from the EU. Progress towards this outcome will be reviewed regularly.

The negotiators also achieved significant improvements in terms of regulatory cooperation, including environmental matters, security issues and the social dimension in relation to the legal rights and labour standards of airline employees.

The draft agreement also states that market access will be further opened with EU carriers gaining further access to US Government-financed traffic ("Fly America"). Subject to certain changes to the legal framework for noise-based airport restrictions, EU airlines will gain in the future new commercial opportunities to fly between the US and non-EU countries. Furthermore, a number of obstacles to EU and US investments in 3rd countries' airlines will be removed.

The Agreement will have to be approved by the 27 EU Transport Ministers and the European Parliament.

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APPENDIX B: SCHEDULED LICENSED INDONESIAN AIRLINES

Indonesian Airlines with Scheduled Licenses (Passenger and Cargo)

Airline	Scheduled Licence	Non-scheduled Licence
PT. Garuda Indonesia	✓	✓
PT. Merpati Nusantara	✓	
PT. Mandala Airlines	✓	
PT. Lion Mentari Airlines	✓	
PT. Indonesia Air Asia	✓	
PT. Kartika Airlines	✓	
PT. Metro Batavia	✓	
PT. Riau Airlines	✓	
PT. Wings Abadi	✓	
PT. Trigana Air Service	✓	✓
PT. Travel Express	✓	
PT. Sriwijaya Air	✓	
PT. Republic Express (Khusus Kargo)	✓	
PT. Indonesia Air Transport	✓	✓
PT. Kalstar Aviation	✓	
PT. Cardig Air (Khusus Kargo)	✓	
PT. Dirgantara Air Service	✓	
PT. Travira Air	✓	
PT. TRI-MG Intra Asia Airlines (Kargo)	✓	

Source: DGCA

APPENDIX C: GOVERNMENT MEDIA RELEASE ON ASEAN OPEN SKIES

The Government Guarantees to Protect National Airlines in Open Sky

Pusat Komunikasi Publik 10 April 2010

(Jakarta, 04/09/10) National airlines are asked not to be excessively worry about the implementation of Asean aviation liberalization (ASEAN Open Sky) starting on the next 2015 since the Government will give maximum guarantee to those national airlines.

“We will prioritize national interests in the implementation of open sky. We will surely protect national airlines,” said Director General of Civil Aviation Ministry of Transportation (MOT) Herry Bakti S. Gumay in Jakarta, Friday (04/09).

Herry said that the protection given by the Government was that foreign airlines would only allowed to fly regional routes to five airports, prepared by the Government, point to point from their origins. Those airports were Soekarno Hatta Airport Jakarta, Polonia Airport Medan, Ngurai Rai Airport Denpasar, Juanda Airport Surabaya, and Hasanuddin Aiport Makassar. Foreign airlines would not be given any permission to fly domestic routes.

“They are only allowed to fly from abroad directly to Indonesia with a condition that the flight slots in the designated airports are still available. If it is full, the Government has the authority to forbid foreign airlines flights to those airports,” he said.

Aside from that, Herry added that the Government would also accommodate national airlines plan to expand their bussinesses by facilitating the process in issuing licenses and permits for new regional routes. Herry said that licenses for the last two routes being process were route frequency addition for Jakarta-Tokyo by Garuda Indonesia and new route Palembang-Kualalumpur by Sriwijaya Air.

“I agree that the interests of national airlines need to be protected since we have a great number of passengers here in Indonesia. I think Garuda, Mandala, Sriwijaya, Lion and Batavia are ready to compete with foreign airlines,” he said.

Previously, Chairman of Indonesia National Air Carriers Association (INACA) Emirsyah Satar asked the Government to protect the interests of national airlines in the implementation of open sky. He reasoned that compare to other countries in Asean, Indonesia had the most market potentials for passengers that can not be released to foreign airlines merely on the basis of the implementation of open sky.

“If foreign airlines get special advantages and facilities in Indonesia, Indonesian airlines should get the same things in abroad,” said Emirsyah. (DIP/RD/dum)

Source: Ministry of Transport website – DGCA News.

APPENDIX D: CONSULTANT'S RESPONSE TO COMMENTS ON DRAFT REPORT

Feedback for the Draft Final Report for Act #191: National Strategy for the Implementation of the ASEAN Open Sky Policy (Stage 1)

No.	Comments	Consultant's Response
1.	<p>Tri Sunoko, Director of Air Services, DGCA</p> <p>On the draft report of Stage 1:</p> <p>The SWOT analysis has not included a geographical perspective. It is considered important to find out whether Indonesian geographical position will yield economic result and whether it will be profitable within and outside the ASEAN region.</p> <p>The Analysis presented is too general and needs to be re-focused by taking into account the conditions and capacity of Indonesian aviation sector</p> <p>On the Agreement Review, we think it is irrelevant to say that Indonesia has not ratified several international agreements like IASTA because the fact is that Indonesia obeys the agreement and uses the content as a reference.</p>	<p>The geography and location of Indonesia are important factors for the development of domestic and international passenger and cargo traffic. Stage 2 of the study will include demand forecasts and quantification of the socio-economic benefits to Indonesia of the ASEAN regional open sky policy.</p> <p>Stage 1 of the study was intended as a brief overview of the Indonesian air transport sector. Stage 2 will investigate the conditions and capacity of the aviation sector in greater detail.</p> <p>Stage 1 report amended to include this comment.</p>

No.	Comments	Consultant's Response
	<p>On the terms of Reference for Stage 2:</p> <p>a. Air Transport Policy</p> <p>The Study should not only analyze Law No. 1/2009 but also how the Law can be strategically implement to support the implementation of ASEAN Open Sky. Considering the internal and external aviation situation, the study should develop a strategy on how Indonesia can take part in ASEAN Open Sky</p> <p>The Roadmap to liberalization should include planning steps for the next 5 years up to 2015</p> <p>Those steps are to be specified by the implementers: government, airlines, airports, other service providers, etc</p> <p>Regarding the Regulatory aspect to finalise ASEAN agreement ratification, the study should also recommend steps taken for the finalization based on the preparedness of Indonesian national aviation sector</p> <p>Economic Social Impact</p> <p>Please provide a comparison on economic and social impact if Indonesia implements or does not implement ASEAN Open Sky. This will provide Options and be easier for the government to make a decision. Please also provide a benchmark for this comparison.</p> <p>On the outcome, it is important to stress out that the roadmap should provide comprehensive steps to be taken by all key stakeholders in Indonesian Aviation Sector.</p>	<p>There are two questions here. On i) Stage 2 will consider strategic implementation as well as review of the existing Law; ii) Stage 2 of the study will determine the strategy for how Indonesia should participate in ASEAN Open Sky.</p> <p>Included as part of Stage 2.</p> <p>Included as part of Stage 2.</p> <p>Included as part of Stage 2.</p> <p>Included as part of Stage 2.</p> <p>Comments noted and taken forward as a deliverable for Stage 2.</p>

No.	Comments	Consultant's Response
2.	<p data-bbox="302 276 1032 300">Katrin Hewitt, Government and International Relations, Air Service Australia</p> <p data-bbox="302 368 1391 520">The authors make the assumption that "radar = safety" which is not strictly true. Indonesia actually has extensive radar coverage, although the radars are largely uncalibrated and poorly maintained. Focussing on a technology like radar as a solution to improve airspace management and aviation safety is exactly the problem that the Indonesians have had for a long time. They need to concentrate on fixing the basics (like using standard aircraft separation) first, rather than be encouraged to buy more radars.</p> <p data-bbox="302 866 1330 922">In Section 4.11 there is reference to a policy of improving the capability of human resources based on Law 1/2009. We have seen no progress on this issue to do.</p> <p data-bbox="302 1038 1391 1126">There is an assumption that Open Skies will lead to more air routes. Currently Indonesia has too many poorly designed and underutilised air routes. I imagine in the short term there will be a rationalisation of routes, followed by a move away from pre determined air routes towards flexible user-preferred routes.</p>	<p data-bbox="1422 368 2007 762">Comments noted. This comment will be shared with LFV Consulting. Airspace reorganisation needs to be "top down" and implies both physical restructuring of routes and sectors and the specification of separation standards across Indonesian airspace. Separation standards, in turn, need to be supported by infrastructure in a "joined up" way. The physical geography of Indonesia will significantly influence the surveillance technology deployed to support air traffic management. Radar has its part to play, but cannot resolve many of Indonesia's airspace issues (due to the terrain and oceanic nature of Indonesia, current radar coverage is patchy). We expect technologies such as ADS-B to play a significant role.</p> <p data-bbox="1422 879 1962 935">The issue of human resource training will be explored in greater detail in Stage 2.</p> <p data-bbox="1422 1051 1973 1139">Comments noted. This comment will be shared with LFV Consulting. The traffic forecast will determine the requirement for air routes.</p> <p data-bbox="1422 1160 2007 1342">Growth in traffic across Indonesian airspace will largely be a consequence of the expected continued economic growth of the ASEAN States (including Indonesia) and the liberalisation of the ASEAN market coupled with Indonesia's geographical position within the ASEAN region. We also expect this to drive airspace reorganisation.</p>

No.	Comments	Consultant's Response
3.	<p>LFV Aviation Consulting</p> <p>The Mott MacDonald Open Skies Report gives a good instruction to different issues related to the implementation of Open Sky Policy in the ASEAN region. In Section 6.7 the impact of Open Sky to Indonesia's ATM system and the ToR for LFV Consulting is discussed. A number of actions are defined to ensure that demands from the ASEAN "Open Skies" agreement are discussed. A number of actions are defined to ensure that demands from the ASEAN "Open Skies" agreement are addressed. They are all important actions that need careful attention. In the light of the LFV Consulting contract for the update of the Indonesian ATM Master Plan we have the following comments:</p> <p>1. Review Current Airspace Design; Comment: Will be addressed at a high level without going into details.</p> <p>2. Review expected growth in air traffic – both to/from Indonesian airports and also major city pairs within ASEAN; Comment: Will be done as part of the update of Traffic Analysis.</p> <p>3. Develop an airspace plan; Comment: This is outside the scope of the ATM master plan update and would need to be addressed in a specific activity.</p>	<p>We are pleased to read these positive comments about the Stage 1 report.</p> <p>It is important that the consultants appointed to undertake the Stage 2 study work closely with LFV Consulting to ensure the optimum decisions on the ATMs are produced.</p> <p>Noted. Has this work previously been done by Airservices Australia (identifying known shortcomings of Indonesia's airspace?)</p> <p>We are concerned that there will be two organisations preparing demand studies. The consultant as part of Stage 2 will need to produce demand forecasts to support the socio-economic study.</p> <p>Noted. Has this work previously been done by Airservices Australia (incorporating expected ASEAN demands?)</p> <p>Noted.</p>

No.	Comments	Consultant's Response
	<p>4. Redesign airspace; Comment: The need of redesign of airspace could be included in the Master Plan at a high or general level but should result in a specific activity.</p> <p>5. Identify infrastructure investments needed; Comment: Will be done as part of the update of the Master Plan.</p> <p>6. Develop an airport update programme; Comment: This is outside the scope of the ATM Master Plan update and would need to be addressed in a specific activity.</p> <p>Identify Organisational Changes; Is in general outside the scope of the ATM Master Plan update but will anyway be briefly discussed in the ATM Master Plan.</p> <p>8. Develop a manpower plan particularly to address the requirement for more air traffic controllers. Comment: This is outside the scope of the ATM Master Plan update and needs to be addressed in a specific activity but the urgent need for action will be stated in the updated ATM Master Plan as an urgent shortcoming in the development of future 'ATM' in Indonesia.</p> <p>9. Adopt a new technology, e.g. ADS-B Datalink, achievable but an early start is required; Comment: Will be addressed as part of the update of the ATM Master Plans.</p> <p>10. Requirement for an integrated ATM provider; Comment: Will be addressed as part of the update of the ATM Master Plan.</p>	<p>Noted.</p> <p>Noted. Has this work previously been done by Airservices Australia?</p> <p>Noted.</p> <p>Noted. We concur that the lead times to develop a new cadre of air traffic controllers makes this an urgent activity.</p> <p>Noted.</p> <p>Noted</p> <p>Noted.</p>

No.	Comments	Consultant's Response
	<p>11. Introduction of new ATM techniques, procedures, training.</p> <p>Comment: Will be addressed as part of the update of the ATM Master Plan.</p>	
4.	<p>Public Advisory Unit, Ministry of Transport</p> <p>Overview and General Comments</p> <p>The report issued by Mott MacDonald on 16 June 2010 has provided full background of the working activities. The existing documents have been reviewed thoroughly and provide the full picture of Open Sky policy aspects, including legal, practicability/operability, and predicted impacts of the implementation Open Sky policy in several developing countries.</p> <p>As stated under the TOR, the consultant is required to review the national regulations for the implementation of Open Sky Policy and view other elements that will affect the effectiveness for the implementation of Open Sky Policy in term of benefit that will appear; this includes national aviation industry, airport, and airlines companies. It seems that it has already been fulfilled by the consultant. Further the details of the exercise can be made for the Stage 2.</p> <p>The report suggests a demand projection exercise (it needs to include the traffic that could be captured by Indonesian airlines). This exercise detail on traffic modelling could be crucial in the stage 2 activities in developing the economic model of Open Sky implementation for Indonesia.</p> <p>Although the consultant has shared several key issues that should be addressed before implementation can take place, the Stage 2 needs to be more focussed on how Indonesia could benefit from such implementation of Open Sky Policy in ASEAN. This can be categorized as follows:</p> <p>Demand Forecast and Market Share</p> <p>It should answer the following questions on regional issues:</p> <p>How the traffic in every single ASEAN country will grow</p>	<p>We are pleased to read these positive comments about the Stage 1 report.</p> <p>We believe it will be necessary for an experienced aviation lawyer to review the national regulations to opine on how the ASEAN open sky policy can be introduced; also to opine on the impact of the open sky policy on national competition law.</p> <p>The demand projection exercise described will be undertaken in Stage 2. It will be crucial in determining the socio-economic benefits to Indonesia of an open sky policy.</p>

No.	Comments	Consultant's Response
	<p>What about the existing and the projected market share between the airlines in the region? What would be the potential market that could be captured by Indonesian Airlines? How to capture the potential market share so that Indonesia could be benefited?</p> <p>It should answer the following questions on regional issues: How the national traffic of domestic and international markets will grow? About the existing and the projected market share between the airlines of the region? What would be the potential market that could be captured by Indonesian Airlines? How to capture the potential market share so Indonesia could be benefited?</p> <p>2. Safety and Security</p> <p>The terms of reference for a potential Stage 2 of the study effectively form the road map that should be followed to enable Indonesia implement the ASEAN Open Sky Policy. It also should include the road map to meet international standards on safety issues, as well as on aviation industry and infrastructure.</p> <p>3. Regulation</p> <p>The report states "The Air Transport policy of Indonesia is described in the Civil Aviation Act number 1 (2009). In Stage 2 it will be necessary to confirm whether amendments will need to be made to the Act to accommodate the implementation of a regional Open Skies policy."</p>	<p>The main focus will be on Singapore, Malaysia and Thailand.</p> <p>This will included as part of Stage 2 work This will included as part of Stage 2 work</p> <p>There will be a series of interviews with Indonesian airlines as part of Stage 2. These will include discussions on strategies to be employed to maximise the opportunities from the open sky policy.</p> <p>To be determined in the demand forecasts To be determined in the traffic forecasts</p> <p>To be determined in the traffic forecasts</p> <p>We will form part of the discussions to be held with stakeholders in Stage 2.</p> <p>Noted and agreed.</p>

No.	Comments	Consultant's Response
	<p>4. Airport</p> <p>In the stage 2, the consultant needs to provide review on the applicability of 5 Indonesia airports as a main gate on the implementation on the implementation of Open Sky Policy; if this is the case, what would be the rationale of the of the selection of these 5 airports, or if it is not, what the alternatives would be.</p> <p>Finally, the consultant should provide recommendation & prioritising of what designated airports should prepare in order to improve performance and capacity in the next 4 years.</p> <p>5. Human Resources</p> <p>Review on the HR can lead to the strategy for Indonesia to fulfil the HR needs and how these could meet with international best practices.</p> <p>6. Auxiliary Facilities</p> <p>What would be the main element that will be crucial in the implementation of Open Sky Policy?</p> <p>How can the supporting industries (e.g. fuel, maintenance, ground handling etc.) catch up with the increasing demand?</p> <p>What types of incentives are required for national companies to compete with other companies in the region?</p> <p>7. Airlines</p> <p>It is necessary to explore a kind of marketing strategy between national airlines and tourism industry in order to increase the passenger volume. This marketing strategy should observe of air travellers' characteristics (tariff elasticity, behaviour, etc)</p> <p>The 2nd stage roadmap should provide recommendations of what airlines should prioritise in order to enhance their performance and safety record in the next 4 years.</p>	<p>Noted and agreed.</p> <p>Noted and agreed.</p> <p>Noted and agreed.</p> <p>Noted and agreed.</p> <p>This question will be answered in Stage 2 – it is assumed that fuel, aircraft maintenance and ground handling are the auxiliary facilities referred to.</p> <p>This question will be answered in Stage 2</p> <p>This question will be investigated in Stage 2</p> <p>The consultants will meet with selected Indonesian airlines and representatives from the tourism industry to examine</p>

No.	Comments	Consultant's Response
	<p>8. Benchmark</p> <p>There should be a benchmarking study against international best practices of countries that have implemented Open Sky policies, preferably developing countries, or other markets whose characteristics are comparable to that of Indonesia.</p> <p>Suggestions for Outputs of Stage 2</p> <p>The consultant's main output for Stage 2 should be in the form of a road map that should be followed to enable Indonesia to implement the ASEAN regional Open Sky Policy. The road map will reflect the set of main actions and its following activities and will appoint the key responsible agencies to undertake the actions.</p> <p>The set of key action plan will not only bear MOT responsibilities, but it will involve other agencies such as MOF, MSOE and industry players. The follow up results of stage 2 will be the establishment of an inter-ministerial committee that will supervise the implementation of the set of actions.</p>	<p>this important issue.</p> <p>Noted and agreed.</p> <p>Noted and agreed.</p> <p>Noted and agreed.</p> <p>Noted and agreed.</p>
5.	<p>Maria Renny, Transport Program Officer, IndII</p> <p>Part 6.2: As has been mentioned in the presentation before, as amending the Civil Aviation Act seems to be very difficult, there should be an option given of producing a new implementing regulation to accommodate open sky implementation.</p>	<p>We believe it will be necessary for an experienced aviation lawyer to review the national regulations to opine on how the ASEAN open sky policy can be introduced; also to opine on the impact of the open sky policy on national competition law.</p>

No.	Comments	Consultant's Response
	<p>Part 6.4: The Activity seems very supportive on the implementation of Open Sky in Indonesia. I just wonder whether the decision to open 5 airports is a must. The TOR provides choices of not implementing open sky, opening up 5 airports, and full implementation of open sky. Is it possible to provide options between the first and second choice? I understand that Indonesia has committed to implement Open Sky, yet if providing 5 airports is a disadvantage to domestic flights, then scaling down the freedom may be an option. Especially if comparing it with the number of airport in each ASEAN city implementing Open Sky.</p> <p>Part 6.6: To confirm, I don't think that Indonesia has a national airport master plan yet, it's more like a strategic paper.</p> <p>Part 6.7: the team should then work closely with the ATM team.</p> <p>Regarding the actions to take, it is insufficient in my opinion just to identify infrastructure investment needed. In order to get more buy in from MOF, an investment/business plan is required.</p>	<p>Indonesia has agreed to the opening up of five international airports and therefore there is unlikely to be any other option. It is unlikely there will be any disadvantage to domestic flights.</p> <p>This will have to be confirmed with DGCA.</p> <p>Agreed. Noted.</p>
6.	<p>David Shelley, Transport Technical Director, Indll</p> <p>Requests to see the work plan/program for Stage 2 (for comment) before the final version of Stage 1 Final report is submitted.</p>	Completed

GLOSSARY

ASEAN	Association of Southeast Asian Nations
ADS-B (Automatic Dependent Surveillance – Broadcast)	Automatic broadcast of aircraft position and barometric altitude via aircraft Mode S Transponder.
Datalink	Transmission of aircraft operational data via satellite link or ground station). Satellite would be preferred in Indonesia's remote environment.
USAOP	Universal Safety Audit Oversight Programme ICAO's audit of National Safety Regulators and their regulatory oversight of aircraft and ATM operations Each national authority is subject to independent audit every 6 years. ICAO publishes the results of these audits on its website.
First Freedom	The right to fly over a foreign country, without landing there
Second Freedom	The right to refuel or carry out maintenance in a foreign country on the way to another country
Third Freedom	The right to fly from one's own country to another
Fourth Freedom	The right to fly from another country to one's own
Fifth Freedom	The right to fly between two foreign countries during flights while the flight originates or ends in one's own country
Sixth Freedom	The right to fly from a foreign country to another one while stopping in one's own country for non-technical reasons
Seventh Freedom	The right to fly between two foreign countries while not offering flights to one's own country
Eighth Freedom	The right to fly between two or more airports in a foreign country while continuing service to one's own country
Ninth Freedom	The right to do traffic within a foreign country without continuing service to one's own country
ANSP	Air navigation service provider