Aviation Maintenance, Repair and Overhaul in Selangor

Since the Malaysian government started to promote Malaysia as a new hub for Maintenance, Repair and Overhaul activities, Selangor has become the centre of attention for MRO investments. Offering advanced infrastructure, including the largest international airport and the most air-traffic of Malaysia, as well as a highly trained and educated workforce, Selangor is a prime opportunity to locate MRO activities expanding into ASEAN.

Since the region has been resilient during the economic crisis, sustained growth in air cargo and air travelling with Thailand, Indonesia and Malaysia ahead highlighted potentials. ASEAN reached a throughput of 211 million passengers in 2011, while Europe with almost the same population recorded about 1.6 billion. Growing by at least 3% in the coming years, ASEAN offers the opportunities of a developing market with rising investments.

<table>
<thead>
<tr>
<th></th>
<th>Malaysia</th>
<th>Selangor</th>
<th>Rank in Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>29m</td>
<td>5.6m</td>
<td>1</td>
</tr>
<tr>
<td>GDP (2010)</td>
<td>559,554m</td>
<td>128,815m</td>
<td>1</td>
</tr>
<tr>
<td>GDP Growth (2010)</td>
<td>7.2%</td>
<td>10.8%</td>
<td>1</td>
</tr>
<tr>
<td>Investment Volume (2012, RM bn)</td>
<td>41 (100%)</td>
<td>11.7 (28.5%)</td>
<td>1</td>
</tr>
<tr>
<td>Workforce (2012)</td>
<td>13.1 million (100%)</td>
<td>2.82 million (21.5%)</td>
<td>1</td>
</tr>
<tr>
<td>MRO Companies</td>
<td>35</td>
<td>30</td>
<td>85 %</td>
</tr>
<tr>
<td>Turnover (2012) RM</td>
<td>4.9 billion (estimate)</td>
<td>4 billion (estimate)</td>
<td>83.3 %</td>
</tr>
<tr>
<td>Confirmed Investment (2012)</td>
<td>473 million</td>
<td>473 million</td>
<td>100 %</td>
</tr>
<tr>
<td>Workforce Target</td>
<td>20,000</td>
<td>16,000</td>
<td>80 %</td>
</tr>
<tr>
<td>Air Traffic 2011 (Passenger)</td>
<td>46.4 million</td>
<td>38.3 million</td>
<td>82.5 %</td>
</tr>
<tr>
<td>Air Traffic in 2011 (Passenger Throughput - Airports)</td>
<td>KLIA: 37 million</td>
<td>Subang: 1.3 million</td>
<td></td>
</tr>
</tbody>
</table>
| Investment Incentives for MRO Companies | • Income Tax Exemption of 100 % (stat. income) for up to 10 years  
• Income Tax Exemption of 100 % for conversion, upgrading, refurbishment etc.  
• Investment Tax Allowance of up to 60 % for 5 years for companies already invested in Malaysia but expanding, modernising etc.  
  o More details on page 5-6 |
| Useful Contacts                | • Department of Civil Aviation (2012): http://www.dca.gov.my  
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1. Market Overview – MRO Sector in Selangor

Malaysia’s MRO industry, not unlike the global composition, can be divided into three main categories and a smaller group of other suppliers. The three main categories are airframes, engines and components. Over the last 6 years, the industry has been growing and demonstrated a robust potential with an estimated turnover of RM 4.9bn in 2012. The Malaysian Department of Civil Aviation (DCA) registered 25 MRO related corporations until June 2011, while the Malaysian Investment Development Authority as well as the Malaysian Industry-Group for High Technology already list more than 30 related corporations. Since the Malaysian government intends to tap the potential of 5% of the global MRO market, this trend and growth is promising. Looking at the companies involved in the three categories above and registered with DCA, most of them are located in Selangor and capitalise on the beneficial infrastructure at the two main airports available in the state. Subang and also Kuala Lumpur International Airport (KLIA) are in this context preferred locations. In order to understand the current market, it might be useful to introduce the corporate players already invested in the state. With companies such as Rolls-Royce’s civil aviation unit as well as the largest local MRO, Malaysia Airlines maintenance subsidiary, located at Subang and KLIA, there is plenty of reputable industry knowledge already available. In addition, GE’s aviation engine unit and Eurocopter, the world’s largest helicopter manufacturer, have chosen Subang with neighbours such as the local player
Airod Sdn Bhd. The latter has gained a global reputation of excellence and reaches clients in 33 different countries worldwide. With more than 30 companies in Malaysia and mainly Selangor, the potential from this cluster, collaborations and existing facilities at both airports is high.

**Diagram 1 Source: MIGHT 2011/12**

Official statistics confirm that about 50% of all MRO activities are located in Selangor, while another 28% are said to be located in Kuala Lumpur. It is not clear, if this refers to activities around KLIA, which would be in Selangor or specifically corporations operating within the Federal Territory of Kuala Lumpur. However, many corporations are today also looking into other industrial areas, whenever close and direct proximity to the airport is not necessary.

In recent months, new MRO investors have introduced their investment project to the state government, which were finally announced in 2013. Especially, the Swiss company SR Technics with a new service centre in Shah Alam, but also further investments of local companies such as Airod or Sepang Aircraft Engineering will further boost the growth of MRO. SR Technics will bring along an excellent package of knowledge and experience from its former holding company Swiss Air, which today belongs to Germany’s Lufthansa. Some of the local corporations again are partnering with EADS or Eurocopter directly, to support military and civil aircraft or helicopter maintenance. In this context, Selangor benefits from a healthy domestic direct investment trend as much as from technology and innovation inflows from international corporations as portrayed in the map below.
In general, the trend for ASEAN and Malaysia as stable save-haven is gaining momentum. Among some of the key advantages for this investment destination is also the improved protection of Intellectual Property Rights in comparison to China. Malaysia follows the British judicial system and tradition, which offers a more common understanding of the rule of law in the country. Furthermore, the political sphere of Malaysia is rather creating a very conducive and open environment for foreign investors.

Coming back to the map above, there are two particularly interesting aspects to mention. Certainly, Selangor presents itself as the main hub for MRO activities. However, it is also worth mentioning that most MRO companies are focused on Subang and thereby the older but upcoming Sultan Abdul Aziz Shah Airport also known as Subang Skypark. The new Skypark is receiving investments of up to RM 70m to create new hangars and also retail, hospitality and other facilities in an even bigger investment project. However, for new MRO investors, there are more locations available. KLIA offers the potential for MRO companies to expand and be close to the
heaviest air traffic in Malaysia. Rolls-Royce has established a new air-customer service centre at KLIA. Besides, cities such as Petaling Jaya, Shah Alam and Klang are already home to companies such as Airfoil, Hamilton Sundstrand and the new SR Technics facility. Initial investments will reach USD 30 to 50 million and create an even stronger profile for Selangor being a prime MRO investment destination. Finally, there are also confirmed investments from different domestic companies such as Airod or Sepang Aircraft Engineering in 2012, which will amount to more than RM 478 million (USD 155 million).

2. Why to invest in Selangor?

![Diagram showing benefits to invest in Selangor]

2.1 Selangor – MRO Hub in Malaysia and ASEAN

Malaysia and in particular Selangor provide a rare set of infrastructure, skilled workforce and beneficial government policies for global MRO corporations. Two of the main benefits are the already existing airports of the state. Kuala Lumpur International Airport, KLIA, is the largest international airport of Malaysia by far and also offers sufficient land for interested MRO companies to settle close to the airport. With up to 39 million passengers and more than 600,000 tonnes cargo, the airport dominates air transportation in the country. Besides, further low-cost-carrier terminals are part of the most recent
expansions. In addition, the Sultan Abdul Aziz Shah Airport, Subang remains a high growth potential, especially in regard to passenger movements. With more than 1.4 million passengers in 2012, also Subang reached a new height coming from only 72,000 passengers in 2003. The low-cost-carrier model and the convenience reaching Subang from Kuala Lumpur as well as Selangor easily will drive further growth. Besides, many MRO companies in Malaysia have already settled in close proximity to Subang clearly proving the supportive environment in Selangor and this area.

Highlighting a supportive environment, Malaysia offers probably one of the most competitive incentive packages. “Effective from January 2010, the MRO industry is eligible for a comprehensive tax incentive with the objective to make Malaysia a global centre for aerospace industry in Asia Pacific. The incentive package will be focusing on design, manufacturing and assembling, operator groups, support and monitoring groups. Since the support group is the main focus of this paper, you will find below MRO related incentives only.

The support group consisting of maintenance, repair and overhaul activities (MRO) and training in aerospace, certification and maintenance are eligible for:

- Income tax exemption of 100% of statutory income for a period up to 10 years for companies which offer MRO services and services related to the production of aerospace finished products;
- Income tax exemption of 100% of statutory income for a period up to 15 years for companies involved in conversion, upgrading and refurbishment or remanufacture of aerospace finished products;
- ITA of 60% on the qualifying capital expenditure incurred within a period of five years for MRO companies operating in Malaysia which undertake expansion, modernisation or automation of current business or diversification of current business for related products in the same industry; or
- Double deduction on expenses incurred by employers providing pilot conversion and pilot instructor training

These incentives are effective for applications received by the Malaysia Investment Development Authority from 1 January 2010 until 31 December 2014.” (MIDA 2010)
2.2 Trends and Developments – Asia Pacific and India/China

Promising investment projects focused on MRO activities have been mentioned earlier and will initially place new facilities worth up to USD 200 million into Selangor. Respective corporations have clearly chosen Malaysia because of the strategic location, expansion potential within the region and an advantageous infrastructure. These benefits are a great opportunity to grow and even locate regional headquarters within the state. Besides, more specific investments in the MRO industry, there are also encouraging signs from the demand side. In general, one major trend continues to shape the air transport industry as well as developments in major markets. While Malaysia Airlines starts to consolidate its business, the low-cost carrier movement has caught steam in Malaysia and the whole ASEAN region.

![Air Asia Flight Map](image)

**Picture 3 Air Asia Flight Map, Source: Interflights 2012**

Air Asia was the first player in the market and has been constantly expanding its operations. Just in December 2012, AirAsia CEO Tony Fernandes unveiled an order of another 100 Airbus A320 jets valued at USD 9.4 billion, which will expand and not replace the current AirAsia fleet. Including this latest order, AirAsia alone is expecting 475 new single-aisle aircrafts in the coming years to maintain dominance in its main markets. This strategy comes at a time, when competitors announced to enter the Malaysian market. Indonesia's
market leader Lion Air pushed forward with plans to introduce their own low-cost carrier called Malindo in March 2013, which will increase the airline activities in Malaysia and finally also in Asia-Pacific. Similar setups can be expected in other markets. Lion Air’s CEO Rushi Kirana explained in an interview with the Malaysian newspaper The Star that his expansion plans are likely to increase the passenger throughput of KLIA using the airport as a potential hub for international flights. Malaysia and the local MRO industry are set to profit from these developments, since new low-cost carrier will look into cost-efficient maintenance partners with sufficient experience and capacities.

While the low-cost carrier expansion is an obvious trend in Asia-Pacific and a great opportunity for MRO companies, developments in other regions might contribute as well. India’s airlines have been suffering in recent years. Nevertheless, the Indian MRO market is estimated at USD 1.6 billion and will grow further amid rising living standards and a travel-willing middle class. While unsuccessful and inefficient business models such as Air India and Kingfisher might finally be candidates for M&As, the low-cost carrier model still offers a vast potential.

The growth potentials in India are likely to be similar to China, perhaps at a slower growth rate. China’s MRO market is currently valued at USD 4.4 billion and growing at a fast pace. Even though China has a stronger domestic air travel market, international flights are catching up and expand MRO requirements to Asia-Pacific as well. Overall, this sector is looking at a bright future with Selangor being the focal point of heavy air traffic in Malaysia.

Malaysia Airports Holdings (MAH) also recently announced an initial package of RM70m in incentives in an effort to attract new airlines to fly to Malaysian airports. Among other incentives, new operators will be given 3 years of free landing, which is meant in part to counter a recent tax hike on airlines operating in Malaysia’s airports. This again denotes increasing future demand
in MRO services. As of mid 2012, around 60 airlines offer service into Malaysia.

3. Main Sources

- Department of Civil Aviation (2012): http://www.dca.gov.my