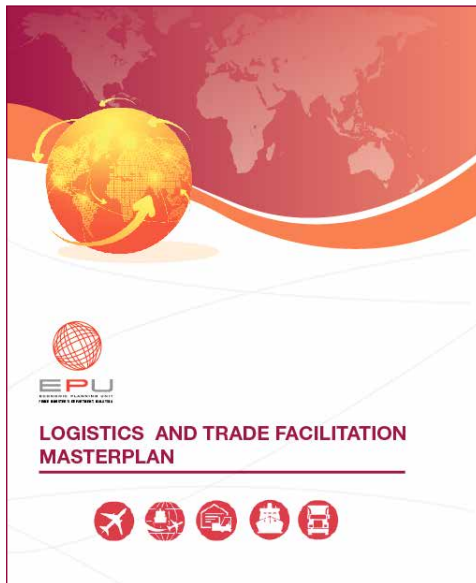


LOGISTICS AND TRADE FACILITATION  
MASTERPLAN (2015-2020)





# CONTENTS

FOREWORD

EXECUTIVE SUMMARY

## 01 UNDERSTANDING LOGISTICS AND TRADE FACILITATION LANDSCAPE

- 1.1 Definition
- 1.2 Significance of the Industry
- 1.3 Malaysia's Strengths
- 1.4 Malaysia's Regional Standing
- 1.5 Issues and Challenges

## 02 MAKING IT HAPPEN: STRATEGIES AND ACTION PLAN

- 2.1 Strategy Shift 1: Strengthening the Institutional and Regulatory Framework
- 2.2 Strategy Shift 2: Enhancing Trade Facilitation Mechanisms
- 2.3 Strategy Shift 3: Developing Infrastructure and Freight Demand
- 2.4 Strategy Shift 4: Strengthening Technology and Human Capital
- 2.5 Strategy Shift 5: Internationalising Logistics Services

## 03 CONCLUSION

## GLOSSARY

GLOSSARY	DEFINITION
ADB	Asian Development Bank
AEC	ASEAN Economic Community
ASEAN	The Association of Southeast Asian Nations
CAGR	Compounded Annual Growth Rate
CVLB	Commercial Vehicle Licensing Board
DCA	Department of Civil Aviation
DOSM	Department of Statistics Malaysia
EC	Economic Council
EPU	Economic Planning Unit
GDP	Gross Domestic Product
ICT	Information and Communication Technology
KETTHA	Ministry of Energy, Green Technology and Water
KLIA	Kuala Lumpur International Airport
KPKT	Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan
KTMB	Keretapi Tanah Melayu Berhad
MAHB	Malaysia Airports Holdings Berhad
MATRADE	Malaysia External Trade Development Corporation
MIDA	Malaysian Investment Development Authority
MITI	Ministry of International Trade and Industry
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
MOHR	Ministry of Human Resource
MOT	Ministry of Transport
MOW	Ministry of Works
MPC	Malaysia Productivity Corporation
NLTF	National Logistics Taskforce
OECD	Organization for Economic Co-Operation and Development
PIAs	Permit Issuance Agencies
PKA	Port Klang Authority
PWD	Public Works Department
RMC	Royal Malaysian Customs
RTD	Road Transport Department
SME	Small and Medium-Sized Enterprises
SPAD	Land Public Transport Commission
UKAS	Public Private Partnership Unit
WTO	World Trade Organization



# Foreword



The Logistics and Trade Facilitation Masterplan provides the strategic framework to resolve bottlenecks in the logistics sector and elevate Malaysia to become a regional player in the medium term. The logistics sector is important as it supports all sectors of the economy, facilitates trade, reduces cost of doing business and contributes to enhancing productivity and efficiency of the economy.

The Masterplan sets out five strategic shifts and 21 action items. The Masterplan will be implemented in three phases. During the first phase beginning 2015, the focus will be on addressing bottlenecks in the sector. In the second phase, initiatives will be introduced to promote domestic growth of the sector and in the third phase, the emphasis will be on creating a regional footprint. It is an ambitious plan but is doable with the commitment of all stakeholders. To ensure certainty of implementation, initiatives proposed in the Masterplan will be part of the Eleventh Malaysia Plan, 2016-2020.

The successful implementation of this Masterplan will increase the contribution of the transport and storage sub-sector to the gross domestic product from 3.6% in 2013 to 4.3% in 2020, an estimated increase of RM22.2 billion. The cargo volume is projected to grow 8% annually to reach 880 million tonnes in 2020. It will also generate 146,000 new jobs by 2020, mostly in the high-skilled category.

To ensure that the Masterplan is implemented expeditiously and in a cost-effective manner, the National Logistics Taskforce will be established and headed by the Minister of Transport. The Taskforce will report regularly to the Special Committee on Services Sector chaired by the Prime Minister.

I would like to offer my sincere appreciation to everyone who has contributed to the formulation of this Masterplan. I urge the government agencies and industry players to come together and bring this Masterplan to fruition.

**Dato' Sri Abdul Wahid Omar**

Minister in the Prime Minister's Department

March 2015

# Foreword

As one of the leading countries in the ASEAN region, Malaysia has created a strong foundation for the future. Development throughout the country has placed our nation at the centre of a thriving economic region, with a robust domestic market and foreign trade. As Malaysia takes the helm as ASEAN Chairman this year, there will undoubtedly be an abundance of fresh opportunities made available as relationships are strengthened between member states.

As cooperation and connectivity amongst member states is enhanced, the region, along with Malaysia is fully expected to see much progress. Every member state is encouraged to work together towards more efficient and sustainable regional growth, with no country being left behind. In this respect, trade facilitation and logistics are key priorities given the pivotal role connectivity and the streamlining of procedures and regulations plays in today's trade environment.

With the finalisation of the ASEAN Transport Strategic Plan coming to fruition this year, it is important for us, as a nation, to expedite our plans to further develop trade facilitation and logistics. It is integral that we are prepared as a nation to not only participate but to be able to meaningfully contribute towards a more integrated region if we are to position ourselves as a key driver of growth.

The strength of the nation's logistics industry lies in our strategic location, connectivity, state of the art facilities, presence of major players in shipping and logistics and importantly our stable political, economic and social environment. This coupled with the various government initiatives such as the ASEAN-China Free Trade Agreement are expected to be catalysts for growth for the logistics industry while establishing Malaysia as a preferred location for value-added logistics services.

The Logistics and Trade Facilitation Masterplan outlines the steps which need to be taken in order to capitalise on our strengths.

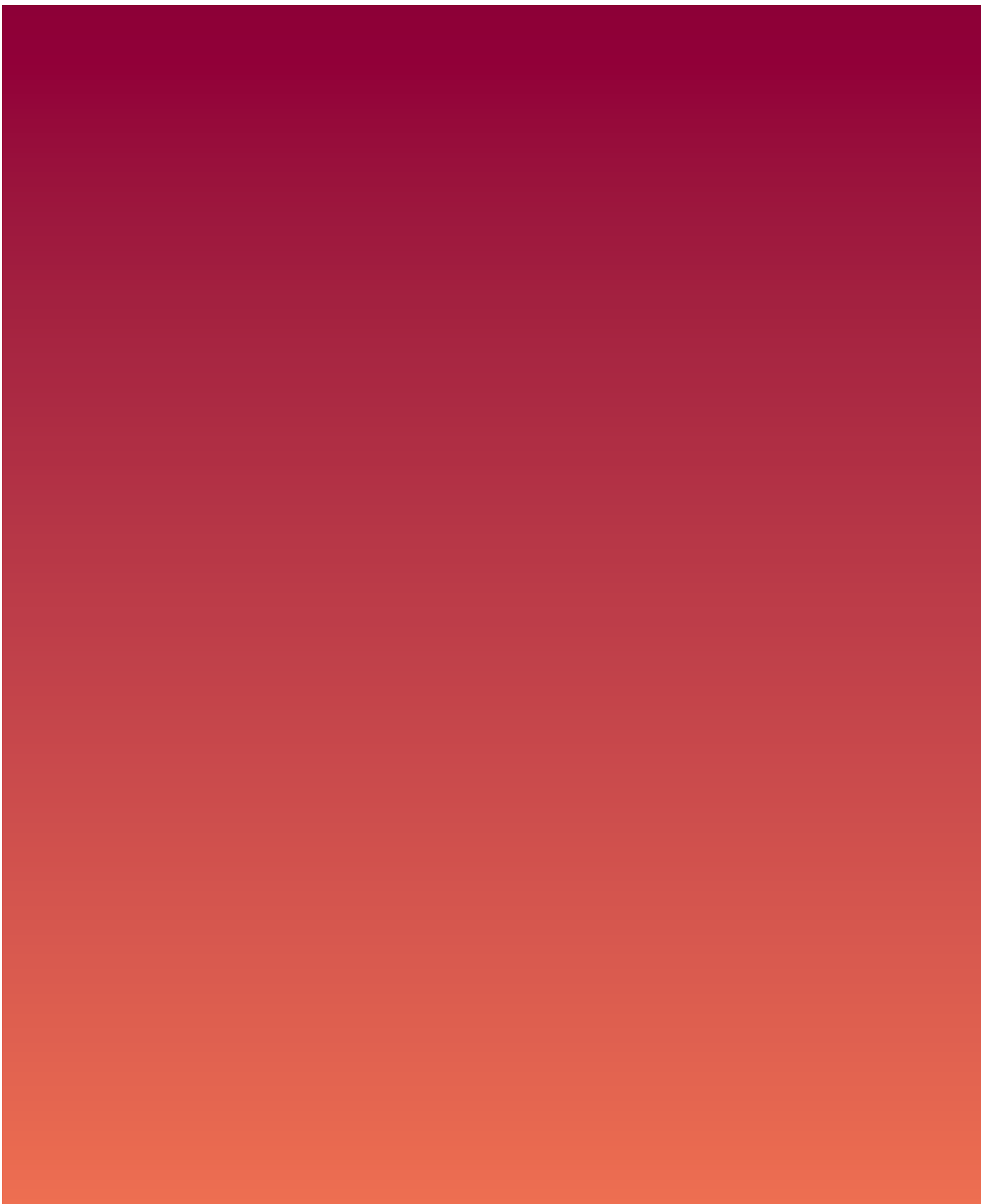
I trust that once this plan follow through, Malaysia will be able to prosper along with the region and create a secure and well-connected business environment for current and future investors as we create an ideal environment for trade.



**YB Dato' Sri Liow Tiong Lai**

Minister of Transport  
March 2015









# EXECUTIVE SUMMARY

# Executive Summary

## Context and Background of the Logistics and Trade Facilitation Masterplan

The logistics industry forms the backbone to the supply chain and is recognised as key to stimulate trade, facilitate business efficiency and spur economic growth. It is also vital to the connectivity to the rest of the world and nation's competitiveness. Given its strategic location, steady economic growth, good regional linkages, and strong transport infrastructure, Malaysia has the right endowments to position itself as a regional logistics gateway.

In cognisance of its potential, the Economic Planning Unit (EPU) developed the Logistics and Trade Facilitation Masterplan (Masterplan) to provide the strategic direction for the development of the logistics industry to further improve its productivity and competitiveness. In developing the Masterplan, extensive stakeholder consultations were carried out with industry players, public sector agencies, non-governmental organisations and academicians. The Masterplan envisions Malaysia as the *"The Preferred Logistics Gateway to Asia"*. To achieve this, five strategic shifts and 21 action items are laid out. The recommendations encapsulated within this Masterplan will be incorporated into the 11<sup>th</sup> Malaysia Plan to ensure implementation.

## Summary of the Recommendations

Five strategic shifts and 21 action items will be implemented to improve overall productivity and to better connect industries with their markets, both locally and internationally. The strategic shifts are as follows:

- **Strategic Shift 1: Strengthening the institutional and regulatory framework**

Strengthen the institutional structure and simplify or streamline the regulations to reduce inefficiencies and duplications.

- **Strategic Shift 2: Enhancing trade facilitation mechanisms**

Increase the efficiency of trade facilitation mechanisms particularly through improvements in cargo clearance system, paperless trading and security of trade documents. This will boost trading activities and reduce the cost of doing business.

- **Strategic Shift 3: Developing infrastructure and freight demand**

Consolidate cargo volume through a well-defined 'hub and spoke' system, provide better connectivity to entry points, optimise usage of existing infrastructure and promote modal shift from road to rail.

- **Strategic Shift 4: Strengthening technology & human capital**

Enhance the adoption of technology to reduce exchange of manual documentation and optimise transport movements. This strategic shift also emphasises on enhancement of human resource capabilities by attracting, nurturing, and retaining skilled talent within the logistics industry.

- **Strategic Shift 5: Internationalising logistics services**

Enhance capabilities of logistics service providers by strengthening internal capabilities and external readiness to enable them to compete at global level.

The implementation of 21 action items in the Masterplan is divided into three phases (Figure 1):

- **Debottlenecking (2015-2016)**

Addressing the root causes that have held back the development of the logistics industry

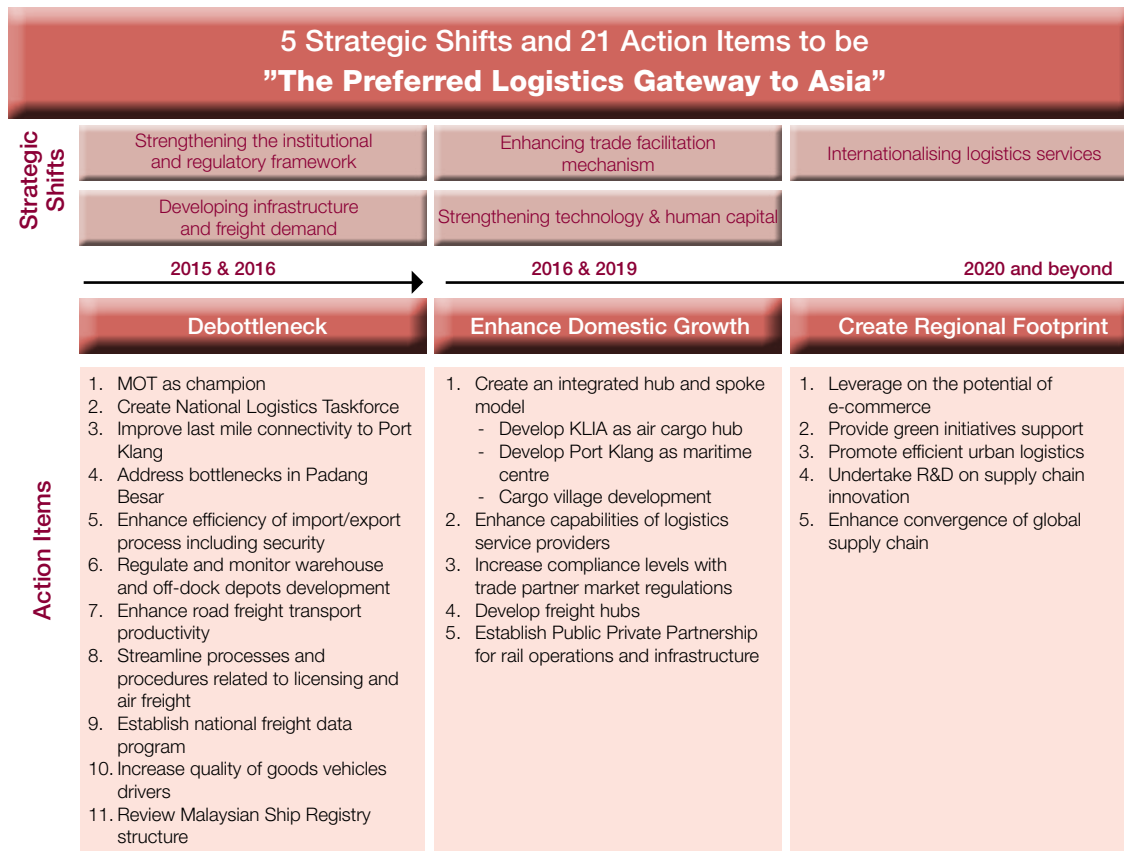
- **Enhancing Domestic Growth (2016-2019)**

Strengthening connectivity and integration of transport services and the capability and competitiveness of logistics service providers

- **Creating Regional Footprint (2020 and beyond)**

Leaving an imprint on the region with frontier logistics services that are of high quality and value

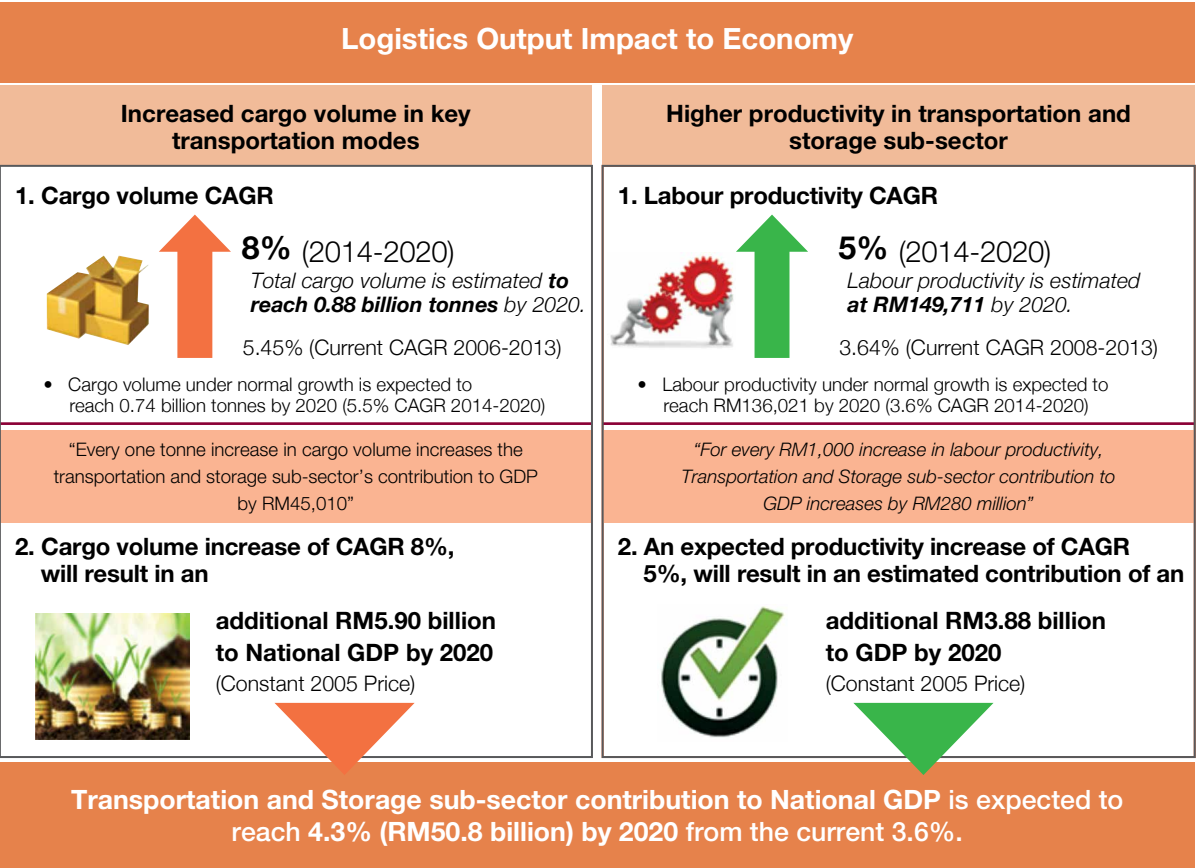
**Figure 1** SUMMARY OF LOGISTICS AND TRADE FACILITATION MASTERPLAN



Strategic and proactive measures to strengthen the logistics industry are expected to result in significant spin-off for the country, in the form of increased business investment, higher employment rate and reduction in the cost of doing business. The implementation of the Masterplan is expected to have an impact in the following areas (Figure 2):

- i. Increased cargo volume
- ii. Increased contribution to Gross Domestic Product (GDP)
- iii. Higher labour productivity in the transportation and storage sub-sector

**Figure 2** MALAYSIA'S POTENTIAL LOGISTICS OUTPUT

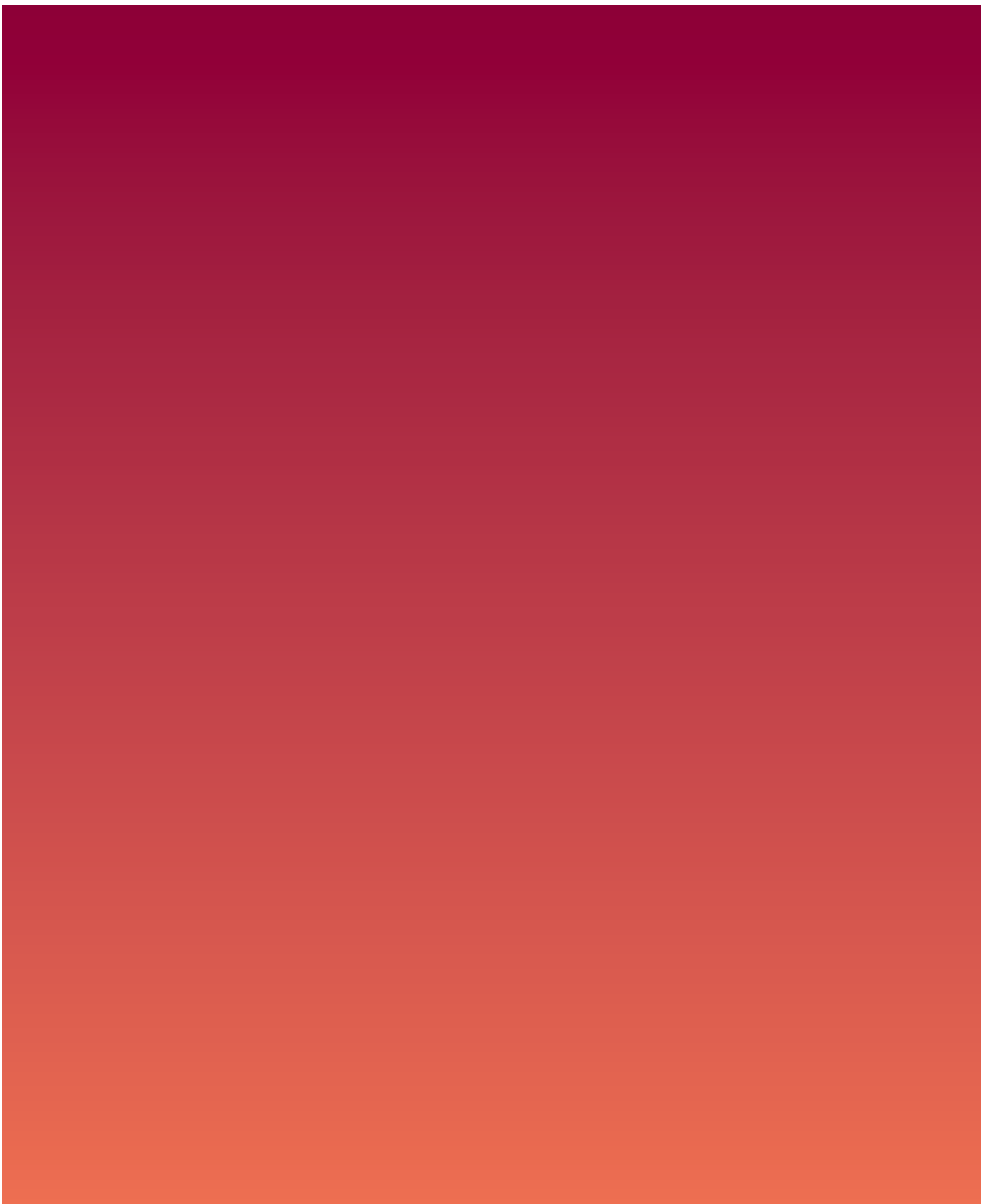


The successful execution of the Masterplan requires a mechanism that can spearhead and monitor the implementation process. In this regard, the National Logistics Taskforce, chaired by the Minister of Transport will be set up.

The functions of the Taskforce include:

- Provide three times annual updates to the Special Committee on Services Sector chaired by the Prime Minister, to gain top-down oversight to effectively address cross-cutting issues
- Lead cluster groups through proactive monitoring. The cluster groups include:
  - Institutional Mechanisms and Regulations
  - Trade Facilitation
  - Infrastructure and Freight Demand
  - ICT-driven Innovation
  - Human Capital Development
- Cluster group members will include representatives from government agencies, industry players and academicians who will be responsible for the implementation of the respective action plan items







# **UNDERSTANDING LOGISTICS AND TRADE FACILITATION LANDSCAPE**

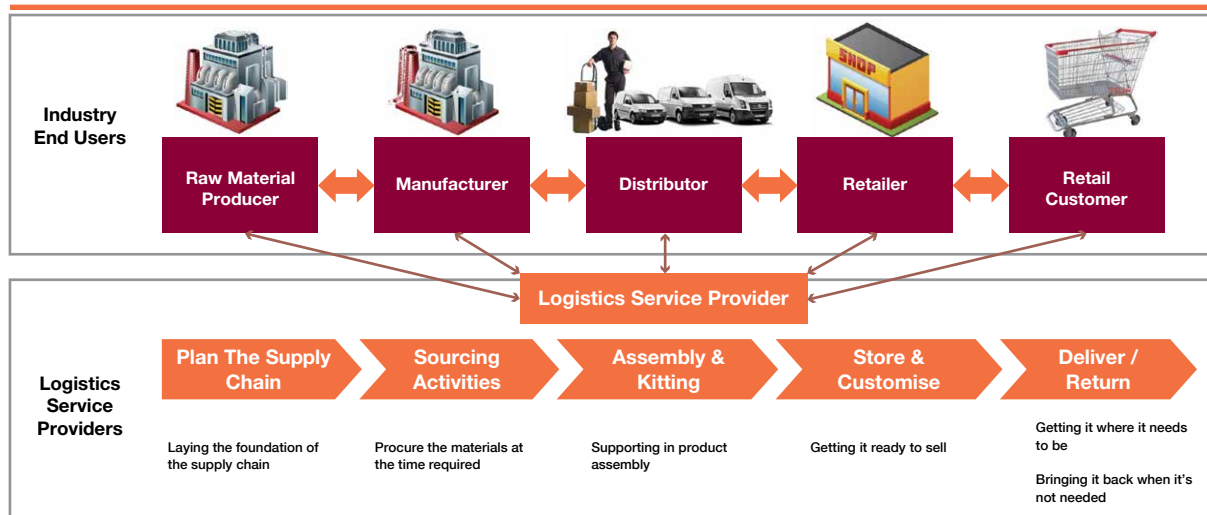
# 1.0 Understanding Logistics and Trade Facilitation Landscape

## 1.1 Definition

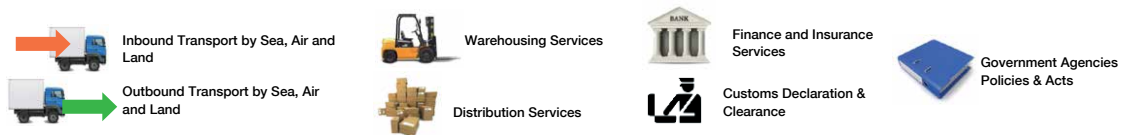
Logistics refers to “the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption to meet customer requirements” (Council of Logistics Management, 1998). The role of logistics spans from warehousing and transportation to integrating the logistics operations of the entire supply chain (Figure 3).

Trade facilitation is defined as “the simplification and harmonisation of international trade procedures, including the activities, practices and formalities involved in collecting, presenting data and other information required for the movement of goods in international trade” (WTO, 2013). In essence, trade

**Figure 3** LOGISTICS AND VALUE ADDED SERVICES ALONG THE SUPPLY CHAIN



### Logistics and Trade Facilitation Support and Services



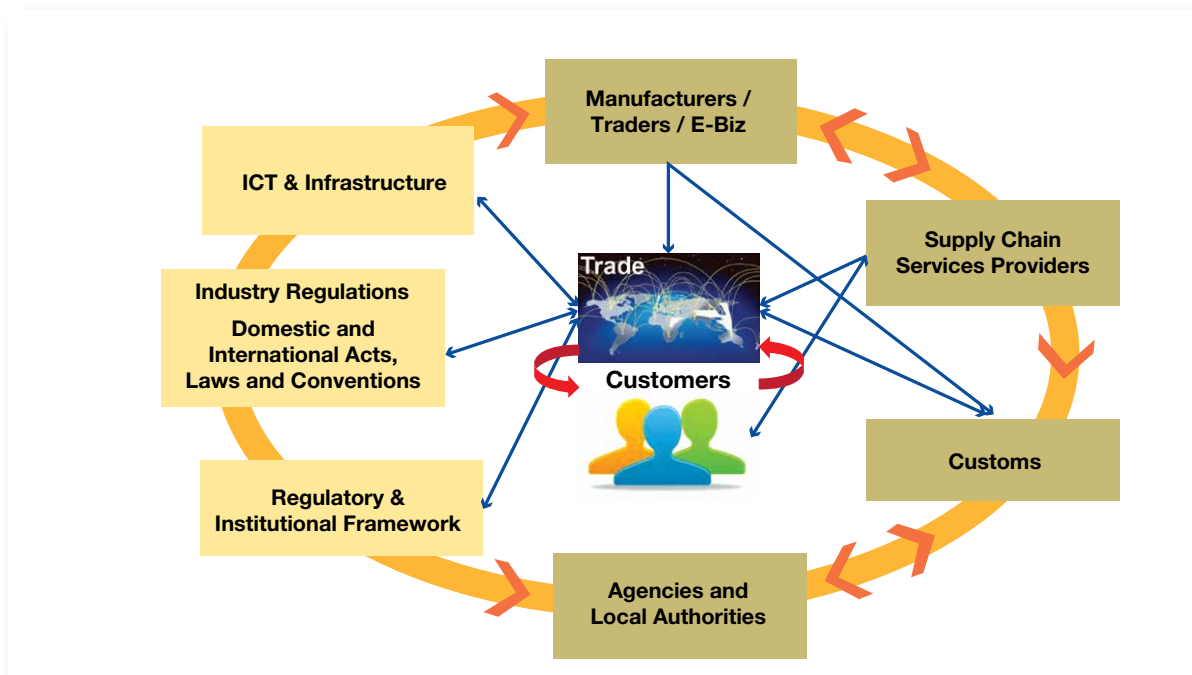


facilitation mechanism results in the ease of moving goods across borders.

The logistics and trade facilitation ecosystem is made up of the following players (Figure 4):

- Manufacturers, traders, e-business organisations, logistics service providers, who are involved in the movement of goods and provision of support services
- Customs officers who facilitate the documentation and clearance of moving and stored goods
- Permit approval agencies and local authorities responsible for licensing and approvals for business operations

**Figure 4** LOGISTICS AND TRADE FACILITATION ECOSYSTEM



## 1.2 Significance of the Logistic Industry

An integrated logistics network, which features interconnectivity among the various transport modes is the catalyst for efficient and seamless movement of goods. Efficient logistics contributes to operational efficiency by reducing time and cost for goods to reach domestic consumers and subsequently increases the comparative advantage of domestic industries. It is also a powerful tool to accelerate convergence with global supply chains and help key export industries connect with international markets. Given its strong backward and forward linkages, the logistics industry is crucial to national competitiveness and economic growth (Figure 5).

**Figure 5** SIGNIFICANCE OF THE LOGISTICS INDUSTRY

<b>Attract Investments</b>	Investment flows are favourable for countries with high international trade movements, coupled with a strong transport infrastructure and efficient trade facilitation environment
<b>Competitive Advantage</b>	Efficient logistics enable competition over larger geography, allowing key export industries to compete for international markets and domestic industries to be more competitive
<b>Integrated Supply Chain</b>	Integrated supply chains are the key to global sourcing. It helps to optimise the movement of goods, thus reducing overall product cost
<b>Outsourcing</b>	Manufacturers outsourcing production of parts and components worldwide to achieve cost competitiveness and to attain economies of scale
<b>Production Concepts</b>	Logistics provides crucial support to just-in-time and zero-inventory production concepts that provide businesses with lower inventory and storage cost
<b>Linkages</b>	The industry plays a cross-functional role by connecting with various sectors and linkages key industries in the economy
<b>Competitiveness</b>	The industry creates multiplier effect. For example, an increase in logistics total factor (labour and capital) productivity of 1% is estimated to increase GDP by AUD2 billion (Australian Logistics Council)

The performance of the logistics sector in 2014 is summarised below:

- 98.5% of cargo volume was handled by sea, the balance is transported by rail and air
- Port Klang accounted for the largest share of sea cargo throughput in Malaysia, handling 200.3 million tonnes or 40% of cargo volume, of which 63% is container transshipment
- Port Klang ranked number 12 in the world and Tanjung Pelepas Port (PTP) ranked 19
- Kuala Lumpur International Airport (KLIA) contributed 77% of cargo volume, followed by Penang Airport with 12%
- Padang Besar Terminal handled approximately 34% of rail cargo volume from South Thailand for export through Penang Port
- Number of goods vehicles on the road in the country exceeded one million. 65% were small commercial vehicles of less than 5 tonnes

### 1.3 Malaysia's Strengths

The key strengths of Malaysia that favour the country as a key logistics link to Asia can be grouped under the following:

- Strategic geographical location
- Economic growth
- Regional supply chain linkages
- Strength of transportation services

#### **Strategic geographical location**

Malaysia is situated amidst countries that account for 30 percent of total global GDP, which include ASEAN countries, China, India, Japan and Korea, all of which are within a six hour flight time. This creates an ideal proposition for Malaysia to increase the freight volume it handles by capturing regional freight for consolidation and distribution throughout ASEAN and beyond.

#### **Economic growth**

Malaysia recorded strong GDP growth of 5.3% with value added of RM830 billion in 2014. The growth was driven by strong domestic demand, substantial increase in private and public sector consumption, and sustained foreign investment inflows. The economy is projected to grow between 5.5% and 6.3% annually until 2020, with steady growth in all economic sectors. Trade was valued at approximately RM1.45 trillion in 2014 and is expected to grow 4.7% annually by 2020, backed by strong trade growth prospects in Asia.

## Regional supply chain linkages

Major multinational companies have regional offices and manufacturing plants located in Malaysia. Among them are Western Digital, Dell, Schlumberger, Seagate, Microsoft, IBM, Siemens, Toyota, BMW, Samsung, Keppel Corporation and Temasek Holdings. These companies, which are part of the global supply chain, can drive higher demand for efficient logistics services. Regional supply chain linkages are expected to grow stronger with Government's proactive efforts to attract investments through continuous bilateral and multilateral initiatives.

## Strength of transportation services

Malaysia was ranked 25<sup>th</sup> in the Global Enabling Trade Report 2015 in the transportation services category mainly due to its high rankings in the quality of transport infrastructure (ranked 14<sup>th</sup>) and quality of transport services (ranked 26<sup>th</sup>).

Between 2009 and 2013, Malaysia recorded an annual growth of:

- **6.9% for sea freight volume**

Malaysia has world class international seaports and container hubs, such as Port Klang, PTP and other regional ports.

- **6.8% for road freight volume**

Road freight played a pivotal role in the domestic distribution of freight and last-mile connectivity to seaports, airports and rail stations.

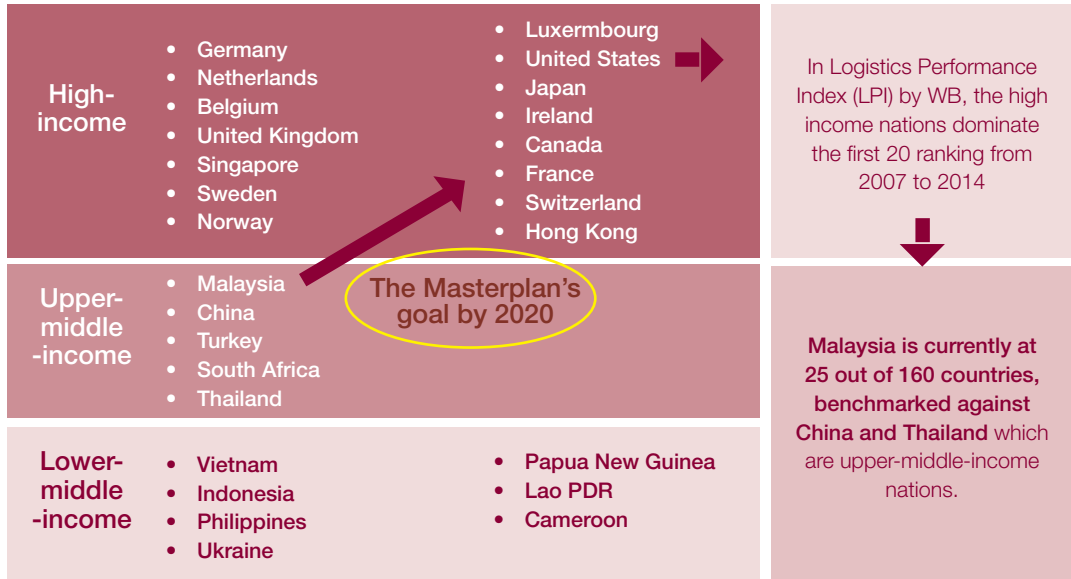
- **6.1% for rail freight volume**

Rail freight was mainly contributed by cargo volumes from Southern Thailand which are exported through Penang Port and Port Klang. The growth is expected to increase further with the full operation of the double track project between Ipoh and Padang Besar.

## 1.4 Malaysia's Regional Standing

In the Logistics Performance Index (LPI) 2014 by World Bank, Malaysia ranked 25 out of 160 countries, leading upper-middle-income nations, above China and Thailand. The high-income nations dominate the first 20 positions (Figure 6).

Figure 6 STANDING IN THE LOGISTICS PERFORMANCE INDEX, 2014



In the Trading Across Borders 2014, Malaysia ranked 11 out of 189 economies. Malaysia's logistics performance and trade facilities are benchmarked with countries such as Indonesia, Thailand, Singapore and Hong Kong (Figure 7).

Figure 7 REGIONAL STANDING OF MALAYSIA WITH SELECTED ASIAN COUNTRIES

Country	Malaysia	Indonesia	Thailand	Singapore	Hong Kong	Compared to the best-in-class*
<b>Air Transport</b> (million tonne-km)	1,990.9	959.1	2,644.4	6,512.2	9,439.9	<b>30%</b>
<b>Air Freight Vol.</b> (million tonne)	0.9	1.5	1.6	1.8	4.1	<b>50%</b>
<b>Container Traffic</b> (million tonne)	20.8	10.1	7.9	32.6	22.4	<b>64%</b>
<b>Sea Freight Vol.</b> (million tonne)	508.2	1,470.5	198.5	560.9	276.1	<b>34%</b>
<b>Trade Costs</b> (US\$ per container)						
Import	485	660	760	440	595	<b>1.03x</b>
Export	450	615	595	460	590	
<b>Building a warehouse</b>						
Procedures (no)	13	17	7	10	5	<b>2.60x</b>
Time (days)	74	211	113	26	66	
<b>Time Requirement (Days)</b>						
Import	8	23	13	4	5	<b>1.9x</b>
Export	11	17	14	6	6	

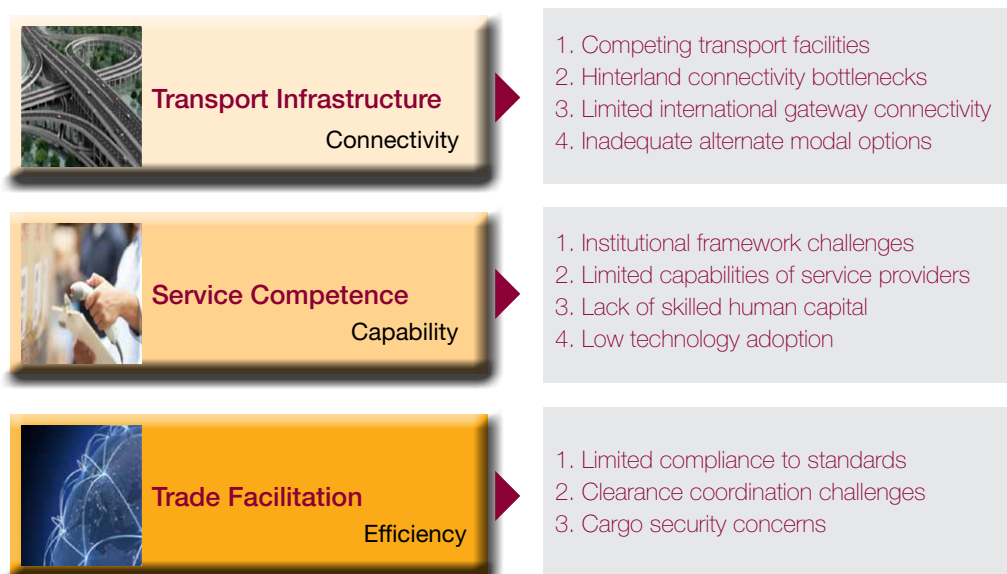
Malaysia's standing in the region can be summarised as follows:

- The average growth for air freight declined by 0.8% between 2005 and 2013. The freight volume in 2013 was 0.9 million tonnes which accounted for only 50% that of Singapore and 25% that of Hong Kong
- Malaysia was ranked third behind Hong Kong and Singapore for sea container volume. However for sea freight volume, Malaysia achieved only 34% that of Indonesia
- Malaysia's trade cost per container was much lower than the other selected countries except Singapore
- In terms of the number of procedures involved in building a warehouse, Malaysia had 2.6 times more procedures which took 1.2 times longer than Hong Kong
- Shippers in Malaysia needed 11 days for the completion of export procedures and eight days for the completion of import procedures. This is almost twice the time needed to complete import and export procedures in Singapore

## 1.5 Issues and Challenges

Despite Malaysia's strengths, several core issues have to be addressed to support the continuous growth of the logistics industry. These issues are summarised under three categories, as shown in Figure 8.

**Figure 8** ISSUES IN THE LOGISTICS INDUSTRY



## Transport Infrastructure

- **Competing transport facilities**

Malaysia's logistics capabilities are restricted by competing transport facilities, with individual transport modes competing rather than complementing each other.

- **Hinterland connectivity bottlenecks**

Limited accessibility and connectivity to hinterland areas and poor integration with other transport modes result in lower demand for rail freight.

Poor road connectivity to major ports causes delays and results in higher inland transportation and handling costs.

- **International gateway connectivity limitations**

KLIA lacks international air connectivity in terms of direct flights to Europe, resulting in the leakage of a high volume of air freight to neighbouring countries. Aircraft movements per day at KLIA stand at 892 while Changi Airport in Singapore has 941 per day. In terms of the number of direct destinations served, Changi connects to 160 countries while KLIA serves 111.

- **Inadequate alternate modal options**

Despite the numerous benefits of rail transport to haul large quantities of long distance freight, connectivity and access to rail freight services throughout Malaysia is still limited. The underutilisation of existing rail freight is also due to poor services and absence of last mile connectivity.



## Service Competence

- **Limited capabilities of service providers**

Currently, the majority of local logistics service providers offer only basic services, such as inbound and outbound transportation, warehouse storage and freight forwarding. Due to the changing business environment, there is a need to provide integrated services such as cross-docking, packing, labelling and on-site services. In addition, specialised logistics services to niche markets such as oil and gas, healthcare and high-end electrical and electronics industries are highly in demand.

Only a small number of domestic logistics service providers have regional expansion plans that include geographic expansion, business affiliations with overseas partners, and investments in foreign logistics facilities. The low number of providers with such plans raises concerns about the readiness of Malaysian operators to compete locally and regionally with the implementation of the Asean Economic Community (AEC).

- **Institutional challenges**

Currently, there is an absence of a champion for the logistics industry. Although MOT is the lead agency which oversees land transport, aviation and maritime subsectors, it has a limited role in planning, developing and overseeing these subsectors. In addition, the absence of lead agencies which promote other logistics activities such as container depot, freight forwarding and warehousing further hinders the orderly development of the logistics sector.

- **Lack of skilled human capital**

The transformation of logistics industry from a modal transport sector into an integrated transport and logistics services sector has widened the skills gap in the industry. The industry lacks expertise in the design of supply chain network, integrated warehouse management and information technology application. Majority of graduates do not see career opportunities in the industry.

The industry is also marked by the shortage of qualified goods vehicle drivers and experienced seafarers. Industry participants have highlighted low salary and minimal training as the main human capital issues.

- **Low technology adoption rate**

Malaysia is ranked 60<sup>th</sup> out of 144 economies in the category of Technological Readiness in the Global Competitiveness Index Report 2014-2015, highlighting the country's low technology adoption rate. Logistics service providers state that their adoption of advanced technology is minimal due to limited expertise and high upgrading costs.



## Trade Facilitation

- **Poor coordination in cargo clearance**

The cargo clearance process is hampered by lack of coordination between border management agencies. The Time Release Study by the Malaysia Productivity Corporation (MPC) highlighted that compliance with the requirements of Permit Issuance Agencies (PIAs) and Customs makes up almost 62% of the total time required to deal with import and export processes.

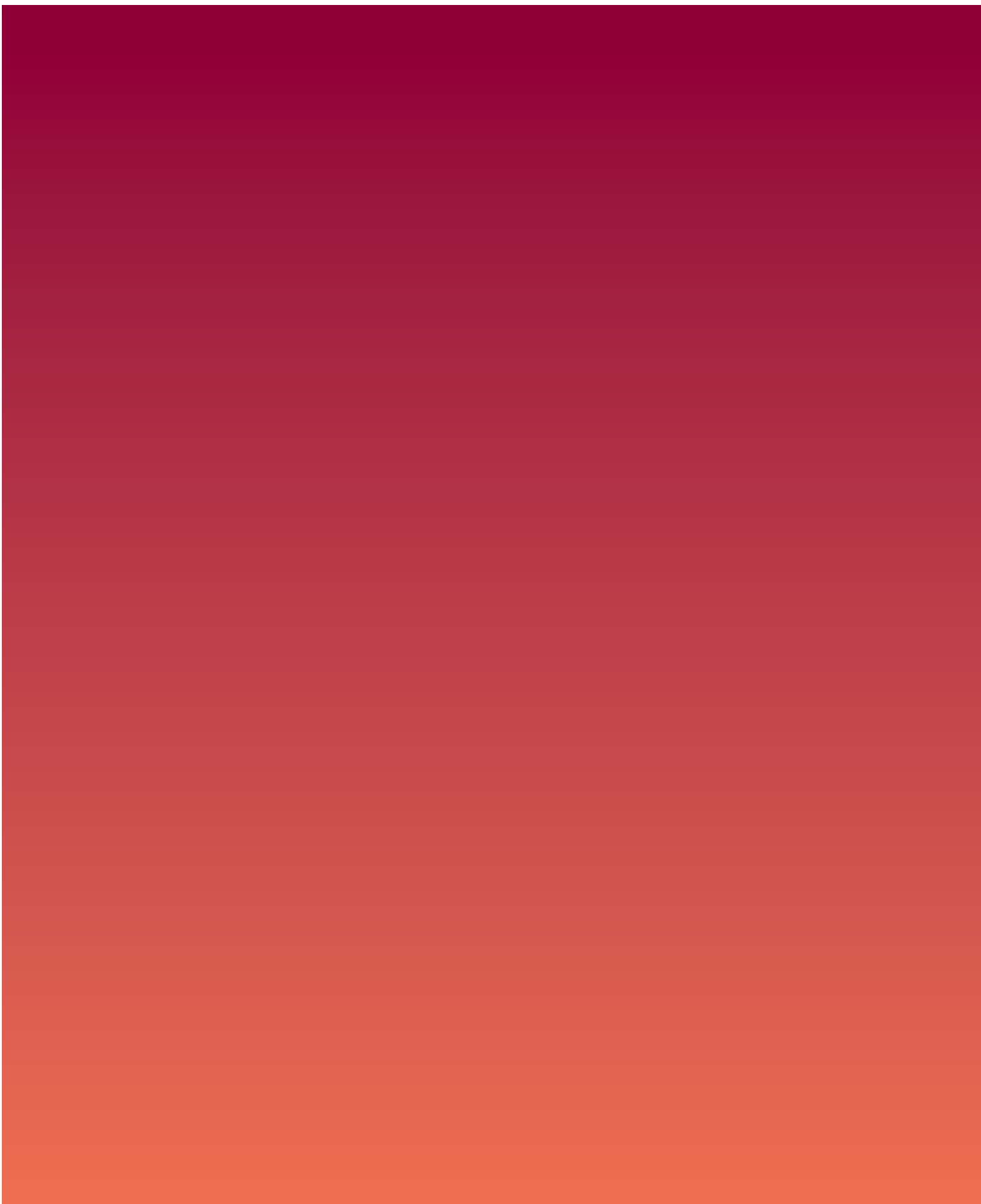
- **Low compliance to international standards**

The compliance of local producers and industry players in Malaysia with European Union requirements and other global standards is limited, especially for cut flowers, ornamental fish and perishables. Compliance to existing quality standards in Malaysia is only voluntary, not mandatory.

- **Cargo security concerns**

Investors have raised their concerns on goods security issues involving cargo theft and hijacking, smuggling and documentation fraud.







**MAKING IT HAPPEN: STRATEGIES AND  
ACTION PLAN**

## 2.0 Making It Happen: Strategies and Action Plan

The five Strategic Shifts and Action Plan laid out in the Masterplan will be implemented to develop an integrated logistics and efficient trade facilitation mechanisms (Figure 9).

**Figure 9** SUMMARY OF STRATEGIC SHIFTS AND ACTION PLAN

<b>I</b> <b>Strengthening the institutional and regulatory framework</b>	<ol style="list-style-type: none"> <li>1. MOT as champion</li> <li>2. Establish National Logistics Taskforce</li> <li>3. Regulate and monitor warehouse and off-dock depot development</li> </ol>
<b>II</b> <b>Enhancing trade facilitation mechanisms</b>	<ol style="list-style-type: none"> <li>4. Enhance efficiency of import/export process</li> <li>5. Streamline processes and procedures related to licensing and air freight</li> <li>6. Review and improve requirements of Malaysia Ship Registry</li> <li>7. Increase compliance levels with trade partner market regulations</li> </ol>
<b>III</b> <b>Developing infrastructure and freight demand</b>	<ol style="list-style-type: none"> <li>8. Improve last mile connectivity to Port Klang</li> <li>9. Address bottlenecks in Padang Besar</li> <li>10. Enhance road freight transport productivity</li> <li>11. Create an integrated hub and spoke model</li> <li>12. Develop freight hubs at strategic locations</li> <li>13. Establish Public Private Partnership for rail operations and infrastructure</li> </ol>
<b>IV</b> <b>Strengthening technology and human capital</b>	<ol style="list-style-type: none"> <li>14. Establish national freight data program</li> <li>15. Establish virtual selling platform and leverage on the potential of e-commerce</li> <li>16. Enhance capabilities of logistics service providers</li> <li>17. Increase quality of goods vehicles drivers</li> </ol>
<b>V</b> <b>Internationalising logistics services</b>	<ol style="list-style-type: none"> <li>18. Promote efficient urban logistics</li> <li>19. Undertake R&amp;D on supply chain innovation</li> <li>20. Provide green initiatives support</li> <li>21. Enhance convergence of global supply chain &amp; liberalisation of logistics sector</li> </ol>

## 2.1 Strategic Shift 1: Strengthening institutional and regulatory framework

The logistics industry falls under the purview of multiple agencies with an absence of a lead agency accountable for planning and development. There are also several key sectors in logistics which are poorly managed or monitored such as warehousing, container depots and freight forwarding activities that hinder the orderly development of the logistics sector. Hence, there is a pressing need to strengthen the existing governance structure and the regulatory framework to unlock the potentials and to drive the logistics industry to be more productive and competitive on par with the developed countries.

**Strategic Shift 1: Strengthening institutional and regulatory framework, focusses on the following areas:**

- Creating a champion for the logistics sector
- Improving coordination and collaboration among the stakeholders for optimum use of resources and eliminate overlaps
- Raising the overall standard of warehousing sector to increase the efficiency of distribution
- Ensuring orderly development of off-dock depots by promoting safety and security standards

### Summary of Action Items under Strategic Shift 1

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
1.1	Reposition MOT as the champion agency for logistics	MOT to lead the logistics sector through integrated planning and development  MOT to drive and improve the co-ordination of government initiatives through inter-agency collaboration	Systematic planning and development of the logistics sector	MOT
1.2	Establish National Logistics Taskforce (NLTF)	NLTF to drive and monitor implementation of the Logistics and Trade Facilitation Masterplan  NLTF to address issues raised by the industry players	Effective implementation of the Masterplan  NLTF will provide three times annual updates to the Special Committee on Services Sector (chaired by the Prime Minister) as a means of gaining top-down oversight to effectively address cross-cutting issues in the country	MOT  MITI  RMC  related ministries and agencies
1.3	Regulate and monitor warehouse and off-dock depots	SPAD to regulate off-dock depots  MOT and KPKT to manage and monitor the development of warehousing	Promotion of the warehouse industry at the national level  Improved freight flows, better conditions for market development and lower costs for overall distribution	MOT  KPKT  SPAD

### **Action items under Strategic Shift 1:**

- i. Reposition MOT as the champion for the logistics sector
- ii. Establish National Logistics Taskforce to drive the implementation of the Masterplan
- iii. Regulate and monitor warehouses and off-dock depots to reduce the cost of transportation, storage and improve freight flow

## **2.2 Strategic Shift 2: Enhancing Trade Facilitation Mechanisms**

As a small open economy, Malaysia's path to high income status is closely tied to its trade performance. Total trade in 2014 was RM1.45 trillion or 175% of GDP. Hence, it is imperative that trade procedures are business friendly, efficient and transparent to ensure safe and seamless flow of goods between nodes either domestically or across borders. In addition, the trade documents must be embedded with security features to reduce fraud and boost confidence of trading partners.

Malaysia was ranked 11<sup>th</sup> among 189 economies in Trading Across Borders, 2014, reflecting strong performance in trade facilitation. However, there is room for improvement particularly in addressing delays in cargo clearance which is associated with the number of documents, processing time and cost of inland transportation and handling. Manual documentation and poor coordination between the PIAs have been identified as one of the main reasons for the delays.

Besides cargo clearance, other pertinent issues are the lengthy processes involved in obtaining goods vehicles license and landing permits for charter flights. These issues have caused Malaysian exporters to prefer logistics services offered in neighbouring countries.

### **Strategic Shift 2: Enhancing trade facilitation mechanisms, focusses on the following areas:**

- Reducing delays in cargo clearance by reducing the need for manual documentation and improving coordination between the PIAs
- Improving regulations which impede the growth of freight volumes in sea, air and rail transport
- Assessing the need for better features and standards for existing trade documents
- Increasing compliance of our products to international standards particularly with the EU regulations.

### **Action items under Strategic Shift 2 are:**

- i. Enhance efficiency of import/export process by reducing time and costs
- ii. Streamline processes and procedures related to heavy vehicle licensing and landing permits for charter flights
- iii. Increase compliance levels with trading partner's market regulations
- iv. Review and improve requirements of Malaysia Ship Registry structure

### Summary of Action Items under Strategic Shift 2

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
2.1	Enhance efficiency of import /export process by reducing time and costs	<p>Strengthen joint control between customs and PIAs</p> <p>Drive paperless trading</p> <p>Review the elimination of packaging list</p>	<p>Enhancement of the use of resources by border agencies and efficiency in managing the border despite increases in the flow of goods</p> <p>Swift cargo clearance process</p>	<p>RMC</p> <p>PIAs</p> <p>MITI</p>
2.2	Streamline processes and procedures related to heavy vehicle licensing and landing permits for charter flights	<p>Review and shorten procedures and time taken to issue heavy vehicle license</p> <p>Shorten processing time for issuance of landing permits to charter flights</p>	<p>Increased productivity of road hauliers, and lower operating costs for the road haulage industry</p> <p>Improved airline connectivity</p>	<p>MOT</p> <p>SPAD</p> <p>CVLB</p> <p>RTD</p> <p>DCA</p> <p>MPC</p>
2.3	Increase compliance levels with trading partner market regulations	<p>Include optical watermark in health certificate</p> <p>Review the existing trade documents and assess the need for better features and standards to ensure that only genuine documents that comply with global standards are used</p>	<p>Increased compliance level of local producers and industry players to strengthen confidence of trading partners</p>	<p>MOT</p> <p>MOH</p> <p>MITI</p>
2.4	Review and improve requirements of Malaysia Ship Registry structure	<p>Improve the overall registry structure in order to increase the number of vessels registered under Malaysian flag</p> <ul style="list-style-type: none"> <li>Introduce fee structure based on tonnage and industry practices by major flag states</li> <li>Review the entry requirement for Malaysian ship managers and ship registration</li> </ul>	<p>Increased number of Malaysian-flagged vessels</p> <p>Rise in shipping-related activities such as dry docking, shipbuilding, maintenance and repair activities</p>	<p>MOT</p>

## 2.3 Strategic Shift 3: Developing Infrastructure and Freight Demand

Investment in transport infrastructure and development of transportation services are fundamental enablers to spur economic growth. Malaysia has continuously upgraded the transport network by developing the road and rail arteries and spur lines to support the mobility of people and goods. World class ports and airports have been built to support business and trade activities. Hence, Malaysia is known to have one of the best transport infrastructure in the region.

Public sector spending on transportation grew from RM14 billion in 2009 to RM18 billion in 2015, reflecting importance of the sector. However, several issues need to be addressed:

- The maritime ports, particularly Port Klang and PTP have attained a strong global market position through robust operational performance. However, the growing hinterland cargo volumes require domestic connectivity to be further improved
- The air freight sector has huge potential to be the preferred transport mode for perishables and high value, time sensitive cargo, provided that the cargo volumes are consolidated through a well-designed hub and spoke system. The focus should not be limited to consolidating domestic cargo and should also make an effort in attracting cargo from the ASEAN region
- Although Keretapi Tanah Melayu Berhad (KTMB) is providing important services to carry freight along key corridors, capturing more market share is hampered by the lack of capacity and unreliable services
- The truck haulage sub-sector is a critical facilitator of economic activities. Therefore, its performance has to be vastly improved through better regulations and enforcement

### **Strategic Shift 3: Developing infrastructure and freight demand, focusses on the following:**

- Developing hub and spoke model for efficient consolidation and distribution of cargo
- Enhancing road-rail intermodal connectivity to promote modal shift from road to rail freight
- Enhancing the efficiency of trucking sector by removing restrictions in the existing regulations
- Increasing capacity of key terminals and last-mile connectivity to key entry or exit points

### **Action items under Strategic Shift 3 are:**

- i. Improve last-mile connectivity to Port Klang
- ii. Address bottlenecks at Padang Besar Terminal
- iii. Enhance road freight transport productivity
- iv. Create an integrated hub and spoke model
- v. Develop freight hubs at strategic locations
- vi. Establish Public Private Partnership (PPP) for rail operations and infrastructure



### Summary of Action Items under Strategic Shift 3

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
3.1	Improve last-mile connectivity to Port Klang	<p>Upgrade critical roads connecting Port Klang</p> <p>Upgrade rail link between Westport and Northport</p> <p>Enhance usage of traffic management system</p>	Enhanced connectivity between Port Klang and logistics support zones and key activity areas	<p>MOT</p> <p>PKA</p>
3.2	Address bottlenecks at Padang Besar Terminal	<p>Improve yard capacity at the terminal</p> <p>Increase efficiency of cargo handling and number of train services</p>	<p>Additional yard capacity to attract additional container volume flow from southern Thailand and other ASEAN locations</p> <p>Additional revenue for Padang Besar Terminal and Penang Port</p>	<p>MOT</p> <p>KTMB</p>
3.3	Enhance road freight transport productivity	<p>Increase and standardise the axle-load limit for container hauliers and conventional trucks</p> <p>Review the interchangeability of prime movers for different trailers, focusing on non-container cargo</p>	<p>Improved the freight capacity of hauliers</p> <p>Reduced inefficiencies such as traffic congestion, waiting time and low asset utilisation</p>	<p>SPAD</p> <p>CVLB</p> <p>PWD</p> <p>MOW</p>
3.4	Create an integrated hub and spoke model	<p>Enhancing domestic connectivity from key airports to KLIA to generate volume and utilise KLIA cargo handling capacity</p> <p>Position Port Klang as a regional maritime centre</p> <p>Develop LCCT as cargo hub</p>	<p>Improved air freight volume and KLIA cargo capacity utilisation</p> <p>Reduced air cargo leakage to a neighbouring country</p> <p>Improved connectivity to key trade cities</p>	<p>MOT</p> <p>MAHB</p> <p>MIDA</p>

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
3.5	Establish freight hubs at strategic locations	Develop one-stop freight hubs with transport and logistics facilities such as cargo processing, freight redirection and storage utilising, intermodal transportation and enhanced value added activity, at strategic locations within the country	<p>Increased freight volume with reduced cargo handling costs and time</p> <p>Reduction of road congestion for container transportation, with improvements to intermodal services</p> <p>Improve value added service offerings</p>	<p>MOT</p> <p>KPKT</p> <p>Sabah State Economic Planning Unit</p> <p>Sarawak State Planning Unit</p>
3.6	Establish PPP for rail operations and infrastructure	<p>Review the need for multi-operator scheme in rail operations</p> <p>Explore the need for PPP model in upgrading and maintenance of rail assets and infrastructure</p>	Maximise revenue opportunities with efficient utilisation of asset and infrastructure	<p>MOT</p> <p>KTMB</p> <p>UKAS</p>

## 2.4 Strategic Shift 4: Strengthening Technology and Human Capital

In the logistics industry, extensive ICT usage is limited to the big players. The lack of ICT adoption in this industry has led to limited visibility in optimisation of transport movement, poor depot management and absence of online services in matching demand with supply particularly for Small and Medium-Sized Enterprises (SMEs). The growing trend of e-commerce and customised high value products will drive demand for fulfillment centres, just-in-time delivery, and tracking and tracing services. Pervasive ICT adoption will become more critical for the logistics service providers to move into integrated supply chain services.

With respect to human capital in logistics industry, it is faced with a shortage of skilled labour and mismatch between the available skills and those needed by the labour market. Issues related to the quality of courses offered in the higher education institutions, lack of on-the job training and unclear career opportunities in the logistics industry will need to be resolved.

**Strategic Shift 4: Strengthening technology and human capital focuses on the following:**

- Leveraging on ICT to provide seamless cargo movement, facilitate cargo clearance and enhance logistics services
- Reviewing the need for improved and continuous accreditation to raise the quality of logistics service providers in the country
- Improving Malaysia's ability to attract, nurture, and retain skilled talent within the logistics industry
- Strengthening professional capacity building to increase the ability of logistics service providers to compete at the global level

**Action items under Strategic Shift 4 are:**

- i. Establish national freight data programme
- ii. Establish virtual selling platform and leverage on the potential of e-commerce
- iii. Enhance capabilities of logistics service providers
- iv. Increase quality of goods vehicles drivers



### Summary of Action Items under Strategic Shift 4

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
4.1	Establish national freight data program	<p>Enforce quarterly data collection exercise to gather data such as origin-destination pairs from each transportation mode</p> <p>Direct consultation with transport and logistics stakeholders to assess current policies and regulations based on collected data</p>	<p>Availability of data to support evidence-based planning</p> <p>Encourage modal shift from road to rail</p>	<p>MOT</p> <p>DOSM</p> <p>Relevant agencies</p>
4.2	Establish virtual selling platform and leverage on the potential of e-commerce	<p>Establish a virtual selling platform</p> <p>Promote the use of online marketplace for logistics service providers to connect with shippers and publish real-time rates for small and medium-sized end users</p>	<p>Encourage fair competition and transparency on the services provided</p> <p>Freight operators to optimise assets with the highest yield while end-users can monitor and take advantage of the offered pricing</p>	<p>MATRADE</p> <p>SME Corp</p>
4.3	Enhance capabilities of logistics service providers	<p>Introduce accreditation for logistics service providers</p> <p>Intensify on-the-job training for the professionals in logistics</p> <p>Universities and training centers to offer upskilling programmes to the existing workforce</p>	<p>Raised standards of logistics service providers</p> <p>Improved productivity and capability of current workforce</p>	<p>MOHR</p> <p>Department of Standards</p>
4.4	Increase quality of goods vehicles drivers	<p>Review the requirements of vocational license such as age limit, application procedures, and renewal processes</p> <p>Implement basic and advanced training initiatives according to the drivers' skill levels</p>	Enhanced employment opportunities and the attractiveness of jobs in the haulage industry	<p>RTD</p> <p>SPAD</p> <p>CVLB</p>

## 2.5 Strategic Shift 5: Internationalising Logistics Services

The internationalisation of logistics service providers will be a key lever to take the logistics industry to the next level. Currently, the number of logistics services exporters is limited to a few large players. The low level of export orientation is attributed to two factors: limited internal capabilities and low external readiness. Limited internal capabilities refers to absence of unique products for export, low skilled and experienced employees, insufficient financing as well as limited R&D and ICT usage. Low external readiness, among others include poor networking to successfully internationalise and lack of understanding of export markets particularly for the small logistics players. These players are therefore unable to penetrate global market.

The AEC 2015 aspires ASEAN to become an integrated region with freer movement of goods, services, investments, skilled labour and capital. The logistics industry will benefit from the ASEAN integration which is expected to generate higher trade activities arising from the population of more than 600 million. With AEC, there will be higher demand for door-to-door multimodal transport and integrated logistics services to cater to bigger volumes, larger market and regional consumer demand. This will create a case for logistics players to merge, collaborate or coordinate their activities to achieve economies of scale and tap into larger regional trade.

**Strategic Shift 5: Internationalising logistics services takes into consideration the following scenario:**

- Opportunities in AEC and readiness of the logistics players
- Potential liberalisation of logistics services
- Prerequisites for creating an export oriented service sector economy

**Action items under Strategic Shift 5 are:**

- i. Promote efficient urban logistics
- ii. Undertake R&D on supply chain innovation
- iii. Provide green initiatives support
- iv. Enhance convergence of global supply chain

### Summary of Action Items under Strategic Shift 5

NO	ACTION ITEMS	RECOMMENDATIONS	OUTCOMES	STAKEHOLDERS
5.1	Promote efficient urban logistics	<p>Drive implementation of urban logistics solutions such as:</p> <ul style="list-style-type: none"> <li>• hub and spoke distribution</li> <li>• polarised fleet</li> <li>• expanded delivery windows</li> <li>• last-mile delivery</li> </ul>	<p>Efficient delivery in urban areas</p> <p>Support growth of e-commerce</p>	<p>MOT</p> <p>State authorities</p>
5.2	Undertake R&D on supply chain innovation	<p>Benchmarking with best practices and continuous improvement to enhance logistics performance</p> <p>Intensify R&amp;D research to enhance knowledge and innovate</p>	Enhanced excellence in capability and offerings of the logistics industry	<p>MOT</p> <p>MITI</p>
5.3	Provide green initiatives support	<p>Design incentives to encourage adoption of green practices</p> <p>Provide support to green supply chain initiatives such as:</p> <ul style="list-style-type: none"> <li>• green design and purchasing</li> <li>• reverse logistics</li> <li>• route optimisation</li> <li>• load optimisation</li> </ul>	<p>Raised standards of logistics service providers</p> <p>Improved productivity and capability of current workforce</p>	<p>MOHR</p> <p>Department of Standards</p>
5.4	Enhance convergence on global supply chain	<p>Promote global convergence of cross-border transportation, customs processes and regulation to enhance efficiency of trade</p> <p>Focus on security measures and enforcement to mitigate risk in the supply chain</p>	Enhanced agility, improved decision-making, increased collaboration which lead to higher competitive advantage	<p>MOT</p> <p>MITI</p> <p>RMC</p>

## 2.6 Masterplan Implementation

The National Logistics Taskforce chaired by the Minister of Transport will be set up primarily to spearhead and monitor the implementation of the Masterplan (Figure 10).

Among the functions of the Taskforce are as follows:

- To provide three times annual updates to the Special Committee on Services Sector chaired by the Prime Minister to provide top-down oversight to address cross-cutting issues
- To closely monitor the progress of the cluster groups which will be responsible to drive the specific action plans proposed in the Masterplan

Five cluster groups will be set up and led by the relevant agencies as follows:

- **Cluster 1: Institutional Mechanisms and Regulations**

Cluster leader: MOT

- **Cluster 2: Trade Facilitation Mechanisms**

Cluster leader: MITI & RMC

- **Cluster 3: Infrastructure and Freight Demand**

Cluster leader: MOT

- **Cluster 4: ICT-driven Innovation**

Cluster leader: MDEC

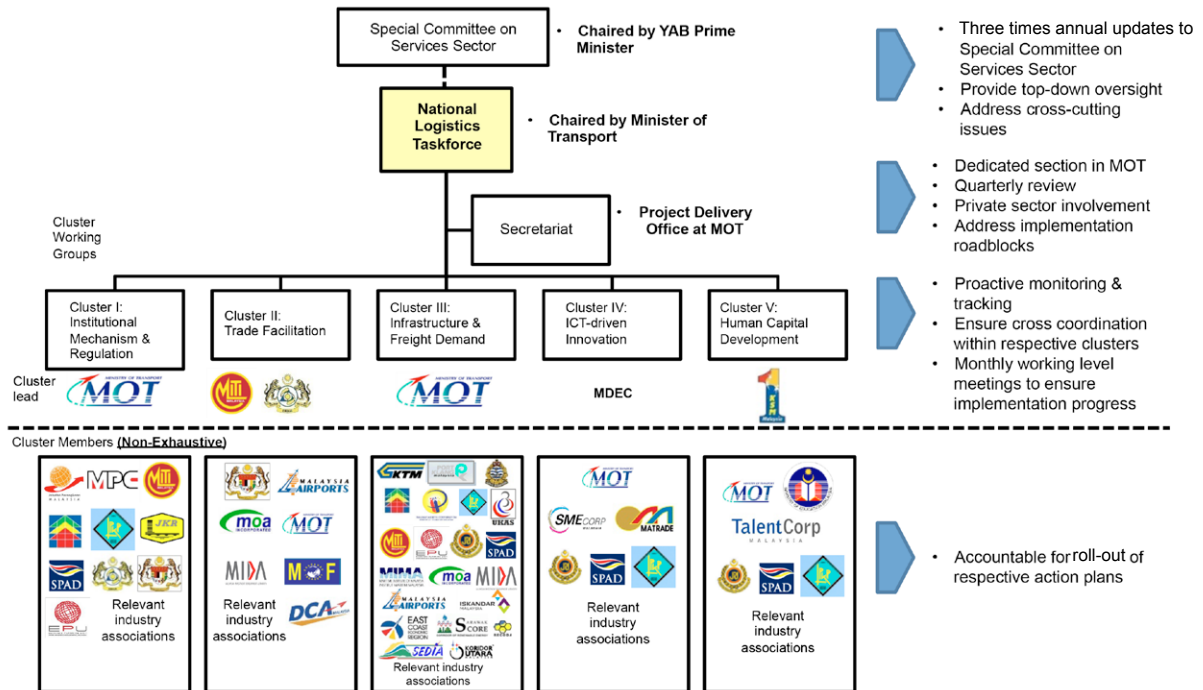
- **Cluster 5: Human Capital Development**

Cluster leader: MOHR

Cluster members will include representatives from government agencies, industry players and experts who will be responsible for the roll-out of the action plan items. Besides driving the implementation of the Masterplan, the cluster groups will be responsible to address the issues raised by industry

- To address implementation bottlenecks in executing the action plan
- To evaluate and assess the impact and success of the Masterplan in meeting the expected goals

**Figure 10** GOVERNANCE STRUCTURE FOR MASTERPLAN IMPLEMENTATION



The implementation of the 21 action items in the Masterplan is divided to three phases as shown in Figure 11:

- **Debottlenecking (2015-2016)**

Addressing the root causes that have held back the development of logistics industry in the past. This among others, include improving coordination, eliminating inefficient procedures and regulations, and addressing choke points in transportation network and limited capacity of transport terminals

- **Enhancing Domestic Growth (2016-2019)**

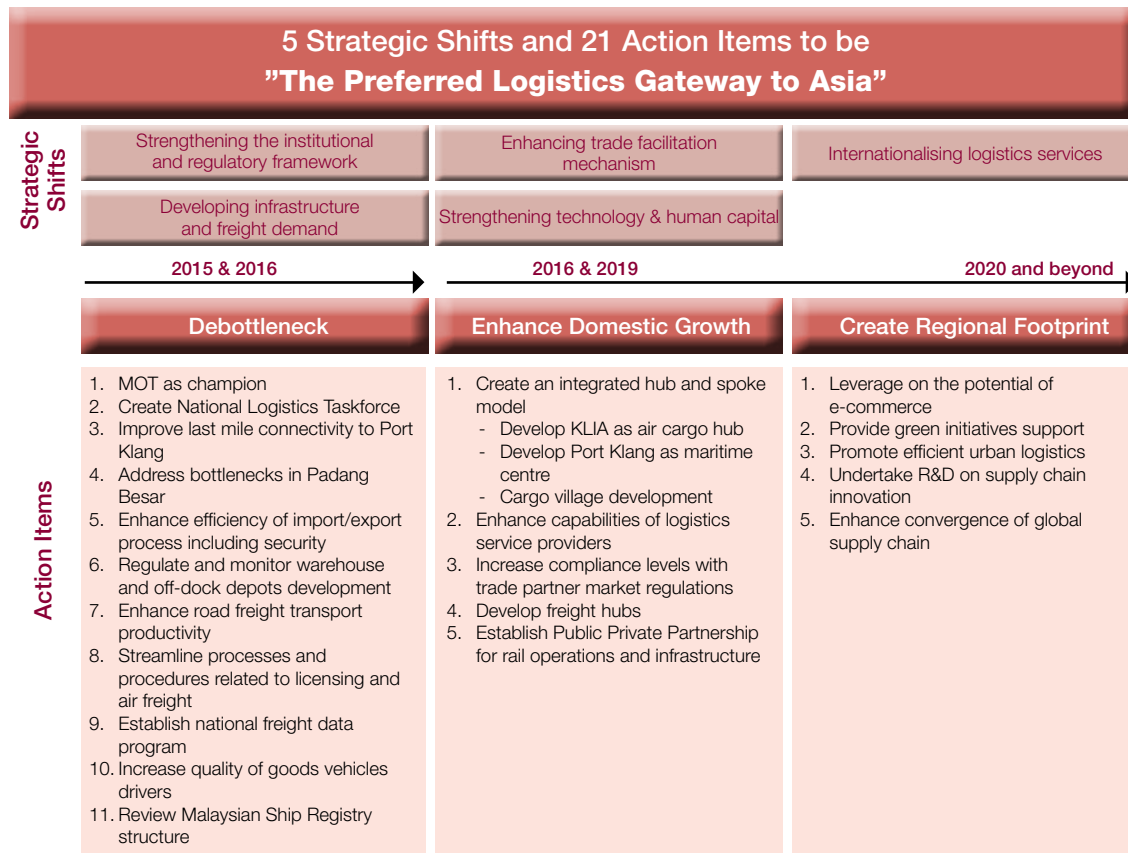
Strengthening connectivity and integration of transport services and the capability and competitiveness of logistics service providers. This will raise the bar on productivity and capability of the logistics service providers to succeed domestically

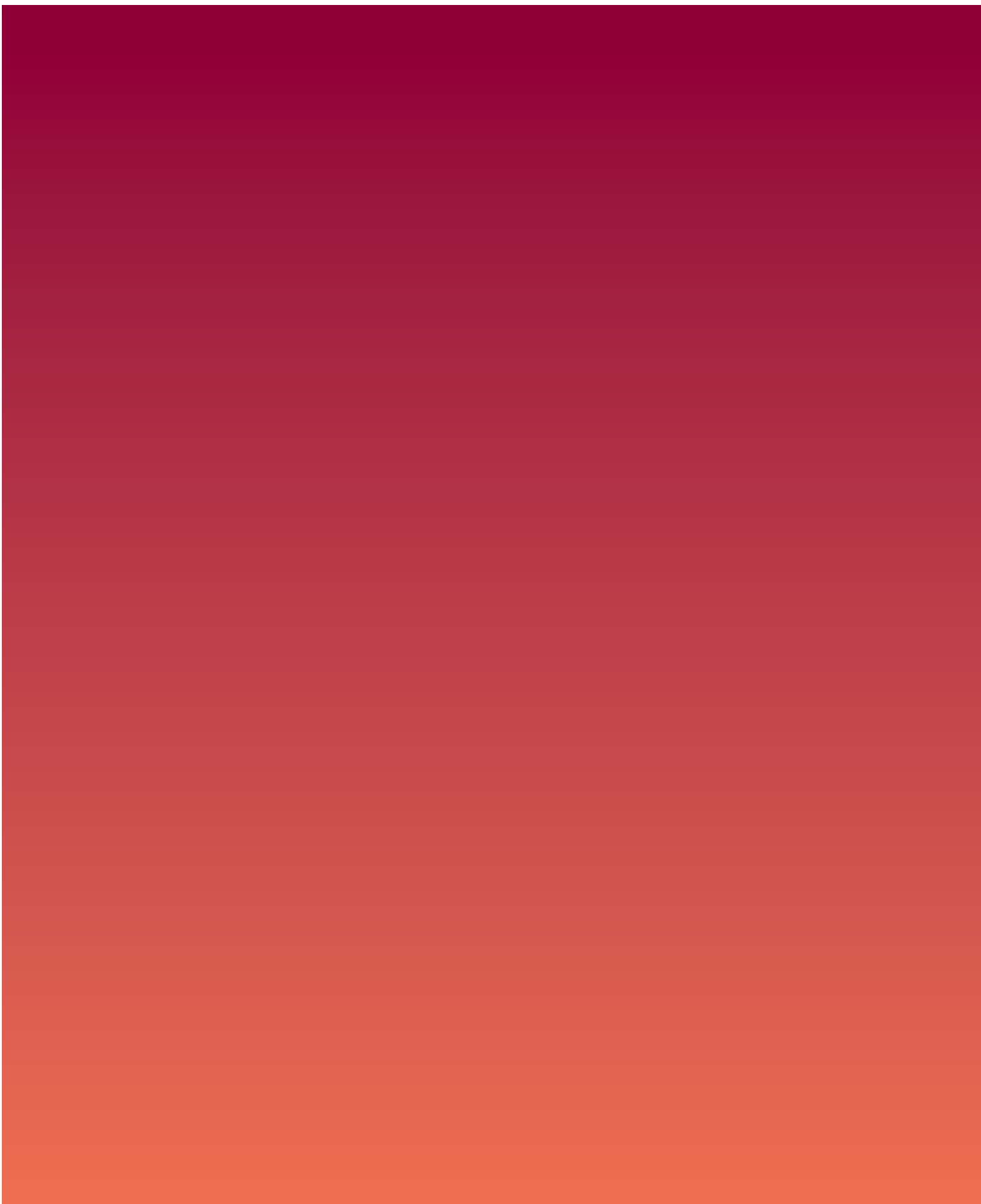
- **Creating Regional Footprint (2020 and beyond)**

Developing and promoting logistics service providers who can compete globally, taking advantage of the AEC and liberalisation of the logistics industry



Figure 11 ROADMAP OF STRATEGIC SHIFTS AND ACTION ITEMS







**CONCLUSION**



## 3.0 Conclusion

The Logistics and Trade Facilitation Masterplan sets the course for the development of the logistics industry. The Masterplan outlines five strategic shifts and 21 action items. The implementation will be in three phases: debottlenecking, enhancing domestic growth and creating regional footprint. The Masterplan will be a living plan which will take into account new developments and opportunities that may arise as well as address unanticipated challenges moving forward. The aspiration is to be the **'Preferred Logistics Gateway to Asia'** by 2020.

# Acknowledgement

The formulation of the Logistics and Trade Facilitation Masterplan benefitted substantially from the extensive deliberations, engagements and dialogues with all stakeholders including related government agencies and industry players. We would like to express our appreciation to the following individuals and organisations for their invaluable time in providing feedback and insight.

- Y.B. Datuk Seri Mustapa Mohamed
- Y.B. Dato' Sri Liow Tiong Lai
- YBhg. Datuk Dr Rebecca Fatima Sta Maria
- Bank Negara Malaysia (BNM)
- Department of Civil Aviation Malaysia (DCA)
- Department of Fisheries (DoF)
- Department of Statistics Malaysia (DOSM)
- East Coast Economic Region Development Council (ECERDC)
- Federal Agricultural Marketing Authority (FAMA)
- Federation of Malaysian Freight Forwarders (FMFF)
- Institute of Labour Market Information and Analysis (ILMIA)
- InvestKL
- Iskandar Regional Development Authority (IRDA)
- Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT)
- Keretapi Tanah Melayu Berhad (KTMB)
- KL Airport Services Sdn Bhd (KLAS)
- Malaysia Airport Holdings Berhad (MAHB)
- Malaysia External Trade Development Corporation (MATRADE)
- Malaysia Institute of Transport (MITRANS)
- Malaysia Institute for Supply Chain Innovation (MISI)
- Malaysian Investment Development Authority (MIDA)
- Malaysia Productivity Corporation (MPC)
- Malaysia Petroleum Resources Corporation (MPRC)
- Malaysia Shipowners Association (MASA)
- Maritime Institute of Malaysia (MIMA)
- MAS Kargo Sdn Bhd

- Ministry of Agriculture and Agro-based Industry (MOA)
- Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNKK)
- Ministry of Education (MOE)
- Ministry of Finance (MOF)
- Ministry of Health (MOH)
- Ministry of Human Resources (MOHR)
- Ministry of International Trade and Industry (MITI)
- Ministry of Transport (MOT)
- Ministry of Works (KKR)
- Multimedia Development Corporation Sdn Bhd (MDeC)
- Northern Corridor Economic Region (NCER)
- Northport Malaysia Sdn Bhd
- Performance Management and Delivery Unit (PEMANDU)
- Port Klang Authority (PKA)
- Public Works Department (PWD)
- Road Transport Department (RTD)
- Royal Malaysian Customs Department (RMC)
- Sabah Economic Development and Investment Authority (SEDIA)
- Sabah Shipping Agents Association
- Sabah State Economic Planning Unit
- Sarawak State Planning Unit
- Sarawak Forwarding Agencies Association
- Selangor Freight Forwarders & Logistics Association (SFFLA)
- SME Corporation Malaysia (SME Corp)
- State Economic Planning Unit Sarawak
- Suruhanjaya Pengangkutan Awam Darat (SPAD)
- The Regional Corridor Development Authority (RECODA)
- The World Bank
- The Frost and Sullivan Perunding Strategi Sdn Bhd
- Westport Malaysia Sdn Bhd

