4. Regulatory overview

This chapter describes the legislations governing the activities in the value chain of the oil and gas industry in Malaysia. It includes a discussion of the historical development of the existing framework and an overview of current legislative arrangements and regulators.

4.1 Historical development of the existing framework

Prior to 1974, the oil and gas industry in Malaysia was governed by the Petroleum Mining Act 1966 (Act 95), under which, it adopted the concessions system for its upstream activities. Concessionaires which were mainly multinational corporations (MNCs) such as Shell and Exxon enjoyed exclusive rights to explore and produce resources in return for payment of royalty and taxes to the government. Other acts relevant to the oil and gas industry were the Continental Shelf Act 1966 (Act 83), Petroleum (Income Tax) Act 1967 (Act 543) and Petroleum Mining Rules 1968.

Recognising the importance of having national control over the oil and gas industry, the Malaysian Government enacted the Petroleum Development Act in 1974, and established its national oil company, PETRONAS. The Act came into force on 1 October 1974.

The Petroleum Development Act 1974 gives PETRONAS exclusive ownership right to the oil and gas resources in Malaysia, and makes it the main regulatory body for upstream oil and gas activities. Under the Petroleum Development Act 1974, upstream activities, which are exploration, development and production of resources, are carried out through the production sharing contract (PSC). MNCs which were previously concessionaires have now become contractors of PETRONAS. PETRONAS dictates the terms of the PSC. Each contract obligates the PSC Contractor to provide all the financing and bear all the risk of exploration, development and production activities in exchange for a share of the total production. PSC gives the government a better advantage compared to the previous concessions system.
PETRONAS has also adopted the risk sharing contract (RSC) approach for the development of marginal oil fields. PETRONAS retains ownership of the oil. Exploration costs borne by RSC contractors will be reimbursed upon discovery of commercial fields. RSC contractors are also entitled to a share of the profit. [1, 2]

4.2 Current legislative arrangements

The main Acts governing the oil and gas industry in Malaysia are the Petroleum Development Act 1974 and the Gas Supply Act 1993 (Act 501). [1]

The purpose of the Petroleum Development Act 1974 is to regulate the oil and gas and petrochemical industries. The act applies to all activities in the value chain of the oil and gas industry in Malaysia, except for the supply of gas through the pipelines to consumers, which is regulated by the Gas Supply Act 1993.

4.2.1 Petroleum Development Act 1974

The Petroleum Development Act 1974 is an act to provide for the exploration and exploitation of oil and gas resources by PETRONAS. PETRONAS is vested with the entire ownership in and the exclusive rights, powers, liberties and privileges in respect of the said resources, and to control the carrying on of downstream activities and development relating to oil and gas and their products (sections 2(1), 3A(1), 6(1), and 6(3) as shown in Box 4.1).

The establishment of the Petroleum Regulations 1974 (amended in 1975, 1981, and 1991) divided the upstream, and downstream activities to different entities. While PETRONAS is responsible for the planning, investment and regulation of all up-stream activities, the Ministry of International Trade and Industry (MITI) and the Ministry of Domestic Trade, Co-Operatives and Consumerism (MDTCC) are vested with powers to regulate all downstream activities. [1]
Upstream licensing
As owner of the oil and gas resources in Malaysia, PETRONAS enters into Production Sharing Contracts with other petroleum companies, which explore, develop, and produce the resources.

PETRONAS is also the regulator of all upstream activities. Section 3 of the Petroleum Regulations 1974 requires that companies intending to participate in such activities to obtain approval from PETRONAS (Box 4.2). [3]

Downstream licensing
MITI is responsible for the issuance of permits for the refining of crude petroleum, the processing of natural gas and the manufacture of petroleum products and petrochemical products from petroleum under section 6(1) of the Petroleum Development Act 1974. Permission from MITI must be obtained in order to conduct any such business in accordance with section 3A(1) of the Petroleum Regulations 1974 (Box 4.2). [4, 5]

MDTCC issues licences for the marketing and distribution of petroleum and petrochemicals products under section 6(3) of the Petroleum Development Act 1974. Section 3A(2) of the Petroleum Regulations 1974 requires one to seek permission from MDTCC for such business activity (Box 4.2). [6]

Box 4.1 Petroleum Development Act 1974

Sections 2(1) AND 3A(1) state that PETRONAS has full ownership and exclusive rights to the oil and gas resource in Malaysia, as well as powers and privileges on upstream activities

2. (1) The entire ownership in, and the exclusive rights, powers, liberties and privileges of exploring, exploiting, winning and obtaining petroleum whether onshore or offshore of Malaysia shall be vested in a Corporation to be incorporated under the Companies Act 1965 or under the law relating to incorporation of companies.

3A. (1) In addition to all the powers of the Corporation as prescribed in its memorandum and Articles of Association, the Corporation shall have the power to take over or acquire by agreement, assignment, purchase or by any other means the whole or any part of any commercial undertaking, business or enterprise of whatever form of any person or body of persons (corporate or unincorporate) and
carry out or enter into any activity, whether mentioned in this Act or not, which prior to such taking over or acquisition was carried out by, and for the purpose of, that undertaking, business or enterprise.

Sections 6(1) and 6(3) state that the downstream activities are governed by the PDA 1974, except for supply of gas through the pipelines to consumers.

6. (1) Notwithstanding the provisions of any other written law, no business of processing or refining of petroleum or manufacturing of petro-chemical products from petroleum, may be carried out by any person other than PETRONAS unless there is in respect of any such business a permission given by the Prime Minister.

(3) Subsection (1) shall apply to any business of marketing or distributing of petroleum or petro-chemical products; and any person who on the commencement of this subsection is carrying on any such business may continue to do so but shall, not later than six months from the date of commencement of this subsection, apply in writing to the Prime Minister for his permission referred to in subsection (1).

*(3A) Subsection (3) shall not apply to any person who is licensed under the Gas Supply Act 1993 [Act 501] to supply gas to consumer through pipelines.

Box 4.2 Petroleum Regulation 1974

Section 3: Upstream licensing by PETRONAS

3. application made to PETRONAS

The following applications for a licence shall be made to the President of PETRONAS:

(a) a licence to commence or continue any business or service, onshore or offshore relating to the exploration, exploitation, winning and obtaining of petroleum and, in particular involving the supply and use of rigs, derricks, ocean tankers and barges;

(b) a licence to commence or continue any business or service involving the supply of equipment and facilities and services required in connection with the exploration, exploitation, winning and obtaining of petroleum including the following:

(i) survey and exploration services;

(ii) all engineering, technical and consultancy services involved in exploration, drilling and production of crude oil and natural gas;

(iii) all engineering, construction and maintenance works connected with upstream activities;
(iv) **rigs and drilling** services;

(v) **supplies of all exploration, drilling and production materials, equipments, platforms, derricks, tools and installations, pipe and pipe-laying services, barges and tankers;**

(iv) **supply of general services** connected with upstream operations.

**Section 3A: Downstream licensing by MITI and MDTCC**

3A. Applications permission to **process or refine, to manufacture, to market or distribute petroleum or petrochemical products.**

(1) Application for permission to commence or continue any business of **processing or refining of petroleum or manufacture** of petrochemical products from petroleum under section 6(1) of the Act shall be made to the Secretary-General, **Ministry of International Trade and Industry.**

(2) Application for permission to commence or continue any business of **marketing or distributing** of petroleum or petrochemical products under section 6(3) of the Act shall be made to the Secretary-General, **Ministry of Internal Trade and Consumer Affairs.**

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### 4.2.2 Gas Supply Act 1993

*The Gas Supply Act 1993* was gazetted on 4 February 1993 for the purpose of safeguarding the interest of consumers who receive the supply of gas through pipelines. Consumers are commercial and industrial outlets as well as residential.

The act provides for the licensing of the supply of gas to consumers through pipelines and related matters, the supply of gas at reasonable prices, the control of gas supply pipelines, installations and appliances with respect to matters relating to safety of persons and for purposes connected therewith (section 1(3) as shown in Box 4.3).

As such, the relevant sections in *the Petroleum Development Act 1974* pertaining to the supply of gas through pipelines have been amended to avoid duplications (section 6(3A) of the *Petroleum Development Act 1974*).

All activities related to supply of gas through pipelines are conducted in accordance with the Gas Supply Regulations 1997 which came into effect on 17 July 1997. The
Regulations describe procedures for the issuance of licences for such activities, certification and registration of competent persons to undertake relevant work, and safety measures to be observed.

The Department of Gas Supply which was formed in 1993 under the Prime Minister’s Department became the regulator for the gas distribution industry. In 2001, the Gas Supply Act 1993 was further amended to empower the Energy Commission to regulate activities related to the supply of gas through pipelines. The Department of Gas Supply had since been dissolved. [7]

<table>
<thead>
<tr>
<th>Box 4.3</th>
<th>Gas Supply Act 1993</th>
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<tr>
<td>1. (3) <strong>This Act shall apply to the supply of gas to consumers through pipelines—</strong> (a) downstream of the last flange of the city gate station; or (b) from the filling connection of a storage tank or cylinder specifically used for reticulation or delivery of gas to any apparatus in any premises.</td>
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### 4.2.3 Petroleum (Safety Measures) Act 1984

*The Petroleum (Safety Measures) Act 1984 (Act 302)* is applicable to the transportation, and storage and utilisation of petroleum with regard to safety matters. Modes of transportation of petroleum prescribed by the act are water, road, railway and pipelines. The enforcement of the act is carried out by several government agencies. Sections 16 and 17 under the act, which are provisions relating to transportation of petroleum using pipelines are enforced by the Department of Occupational Safety and Health (DOSH) of the Ministry of Human Resources (MOHR). Licences for transportation and storage of petroleum are issued by the Ministry of Domestic Trade, Co-operatives and Consumerism (MDTCC). However, safety matters in the transportation of gas by pipelines for the purpose of supplying it to consumers are governed by *the Gas Supply Act 1993*. [8, 9]
4.2.4 Petroleum Income Tax Act 1967

The Petroleum Income Tax Act 1967 (Act 543) is another act specific to the oil and gas industry in Malaysia. It is an act to impose a tax upon income derived from petroleum operation. The Inland Revenue Board is responsible for the enforcement of the act.

4.2.5 Other regulations

The oil and gas industry is also bound by other acts at the Federal, State and Local Government levels.

Federal regulations


The upstream segment of the oil and gas industry is also regulated through the Continental Shelf Act 1966 by the Ministry of Natural Resources and Environment (MNRE). It is an act relating to the continental shelf of Malaysia, the exploration thereof and the exploitation of its natural resources such as petroleum and related matters. Related matters include those concerning the environment namely marine pollution.

The Environmental Quality Act 1974 relates to the prevention, abatement, control of pollution and enhancement of the environment, and for purposes connected therewith. Licences are required from the Department of Environment (DOE), MNRE, for activities that give rise to pollutions, such as emission of noise, emission or disposal of wastes into the atmosphere, water, or land. It is compulsory to conduct
an Environmental Impact Assessment (EIA) for any proposed project to assess its potential impact on the environment, and subsequently propose measures to control such impact. A list of Environmental Quality regulations relevant to the oil and gas industry is available in Appendix A.

The Occupational Safety and Health Act 1994 is an act to make further provisions for securing the safety, health and welfare of persons at work, for protecting others against risks to safety or health in connection with the activities of persons at work, to establish the National Council for Occupational Safety and Health, and for matters connected therewith. The Act is enforced by the Department of Occupational Safety and Health (DOSH), under the Ministry of Human Resources (MOHR). The Act is applicable throughout Malaysia to the industries specified in the first schedule. The oil and gas industry which includes the petrochemical manufacturing falls under the category . Occupational Safety and Health regulations relevant to the industry are listed in Appendix B.

The oil and gas industry must abide by the Factories and Machinery Act 1967, which provides for the control of factories with respect to matters relating to the safety, health and welfare of person therein, the registration and inspection of machinery and for matters connected therewith. Refineries, gas processing plants and petrochemical manufacturing factories must be registered with DOSH. DOSH carries out inspection, certification and registration of all machinery prior to their installation. Regulations under the Factories and Machinery Act 1967 relevant to the oil and gas industry are listed in Appendix C.

The Marine Department of the Ministry of Transport (MOT) is responsible for matters relating to the shipping industry in Malaysia in accordance with the Merchant Shipping Ordinance 1952 which regulates the registration of Malaysian ships and provides for a Malaysian international ship registry. The shipment of petroleum and petrochemical products is bound by the Cabotage policy which reserves the transportation of goods in domestic trades to Malaysian registered ships. The Domestic Shipping Licensing Board (DSLB) regulates and controls the licensing of ships engaged in domestic shipping between any ports in Malaysia.
The Land Public Transport Commission (SPAD) enforces the Land Public Transport Act 2010 in regulating all land-based public transport such as buses, taxies and trains as well as road and rail-based freight transport. SPAD issues commercial vehicle licences to prime-movers which transport petroleum products.

The Road Transport Department (RTD) under MOT is in charge of the registration and licensing of drivers and all motor vehicles and trailers and the enforcement of the Road Transport Act 1987 which provides for the regulation of motor vehicles and of traffic on roads and other related matters.

Petroleum refining, gas processing and petrochemical manufacturing companies with shareholders' funds of RM2.5 million and above or engaging 75 or more full-time paid employees require a Manufacturing Licence from MITI under the Industrial Co-ordination Act 1975. The act provides for the co-ordination and orderly development of manufacturing activities in Malaysia, for the establishment of an Industrial Advisory Council and for other matters connected therewith or incidental thereto.

Petroleum products are dutiable goods which are subject to excise duty under the Excise Act 1976. Export or import of petroleum and petrochemical products are regulated through the Customs Act 1967. Both acts are enforced by the Customs Department.

Petroleum products such as petrol, diesel, kerosene and liquefied petroleum gas (LPG) are listed as controlled goods which require licensing from MDTCC for their sale under the Petroleum and Electricity (Control of Supplies) Act 1974. The act provides for the control and rationing of the supply, distribution and use of petroleum products.

The Employment Act 1955 is applicable to all employees in the Peninsular Malaysia and the Federal Territory of Labuan whose monthly wages do not exceed RM2,000 and all manual labourers irrespective of their wages. The Labour Ordinance (Sabah Cap. 67) and the Labour Ordinance (Sarawak Cap. 76) regulate the administration of labour Laws in their respective states. [8]

Under the Minimum Retirement Age Act 2012, the retirement age for oil palm plantation workers is 60. They also enjoy a minimum wage of RM900 a month in the Peninsular Malaysia and RM800 in Sabah and Sarawak under the Minimum Wages Order 2012.

Employment of foreign workers by petrol stations involves immigration procedures under the Immigration Act 1959/1963. Applications for foreign workers are submitted to the One Stop Centre, the Ministry of Home Affairs (MOHA).

The Workment’s Compensation Act 1952 provides for the payment of compensation for injuries in accidents during employment and imposes an obligation on the employers to insure workers. The Foreign Workers’ Compensation Scheme (Insurance) Order 2005 issued under the Act requires every employer employing foreign workers to insure with the panel of insurance companies appointed under this order and to effect payment of compensation for injuries sustained from accidents during and outside working hours. [8]

State regulations
Land matters in the Peninsular Malaysia are governed by Acts such as the National Land Code 1965, and Land Acquisition Act 1960 (Box 4.4). Although these are federal law, state authorities are empowered to make rules for carrying out the objects and purposes of the Act within their respective states.
Section 3 of the Land Acquisition Act 1960 provides that the State Authority may acquire any (privately owned) land which is needed:

a) For any public purpose;

b) By any person or corporation for any purpose which in the opinion of the State Authority is beneficial to the economic development of Malaysia or any part thereof or to the public generally or any class of the public; or

c) For the purpose of mining or for residential, agricultural, commercial, industrial or recreational purposes or any combination of such purposes.

In Sabah and Sarawak, the main legislations with regard to land matters are the Sabah Land Ordinance, and the Sarawak Land Code respectively.

Matters related to supply of water are also within the jurisdiction of each state government.

Local Government regulations

Local governments are generally within the administration of the respective state governments. However, the Ministry of Housing and Local Government plays a role in coordinating and standardising the practices of local governments across the country. There are currently three types of local governments; City Hall or City Council (e.g. Kuala Lumpur City Hall), Municipal Council (e.g. Batu Pahat Municipal Council), District Council (e.g. Hulu Selangor District Council). There are 149 local authorities, consisting of 12 City Halls/Councils, 39 Municipal Councils and 98 District Councils. There are other bodies empowered by state governments to execute the functions of local authority such as Kulim Hi-Tech Local Authority and Putrajaya Corporation. [10]

City Council or City Hall is a local authority which has been upgraded from municipal council status after having successfully achieved certain criteria which include the total population exceeding 500,000 people and an annual revenue exceeding RM100 million. Municipal Council is a local authority in urban or town centre which has a total population exceeding 150,000 people and an annual revenue exceeding RM20 million. District Council is a local authority in rural area. The criteria stipulated
for a District Council status is having a total population not exceeding 150,000 people and annual revenue less than RM20 million. [10]


### 4.3 Regulators and other relevant bodies

Table 4.1 shows the main regulatory bodies for oil and gas industry in Malaysia.

Table 4.1: The main regulatory bodies for oil and gas industry in Malaysia.

#### 4.3.1 PETRONAS

<table>
<thead>
<tr>
<th>VALUE CHAIN</th>
<th>UPSTREAM</th>
<th>DOWNSTREAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY</td>
<td>exploration, development, production</td>
<td>processing of natural gas, refining of crude petroleum, manufacture of petrochemical products</td>
</tr>
<tr>
<td>REGULATOR</td>
<td>PETRONAS</td>
<td>MITI</td>
</tr>
</tbody>
</table>
4.3.1 PETRONAS

PETRONAS, the national oil company has exclusive ownership right to the oil and gas resources in Malaysia under the *Petroleum Development Act 1974*, and is thus vested with the power to regulate all upstream activities. PETRONAS is responsible for all licensing procedures in the upstream segment. [12, 13, 14, 15]

Exploration and production of oil and gas in Malaysia are carried out through Production Sharing Contract (PSC), whereby local and international companies are granted exploration rights by PETRONAS. Its E&P subsidiary, PETRONAS Carigali Sdn Bhd participates in PSC with a number of petroleum multinational corporations such as Shell, ExxonMobil, Murphy Oil, Talisman, Petrofac, and Newfield. [13, 14, 15]

PETRONAS Carigali Sdn Bhd has incorporated a new wholly-owned subsidiary, VESTIGO Petroleum Sdn Bhd, to focus on marginal and oil fields through Risk Sharing Contract (RSC). [16, 17]

PETRONAS dominates the midstream and downstream segments of the oil and gas industry in Malaysia. It is involved in the oil sector from refining to marketing, trading and retail operations. Its subsidiaries, PETRONAS Penapisan (Terengganu) Sdn. Bhd., and PETRONAS Penapisan (Melaka) Sdn. Bhd. operate refineries in Kerteh, Terengganu, and Sungai Udang, Melaka, respectively. [12, 13, 14]

PETRONAS involvement in the gas industry covers the whole range of activities; processing and liquefaction, transmission pipeline operations, marketing and trading. PETRONAS Gas Berhad (PGB) is responsible for the gas processing and transmission operation and wholesale activities. It owns and operates the Peninsular gas Utilisation (PGU) system that delivers gas to the power and non-poser sectors in Peninsular Malaysia as well as the power industry in Singapore. PETRONAS LNG Complex in Bintulu, Sarawak, is one of the largest LNG production facilities at a single location with a combined capacity of about 23 million tonnes per annum. [1, 12, 13, 14, 15]
PETRONAS has also ventured into the petrochemical industry, partnering with foreign multinational companies, BASF, BP Chemicals, Eastman Chemical, Idemitsu Petrochemical, Mitsui, DSM and Dow Chemical Company. PETRONAS has contributed significantly to the development of support infrastructure, dedicated utilities and services to the petrochemical zones in Kerteh, Terengganu and Gebeng, Pahang, where there are ethylene-based and propylene-based petrochemical plants respectively. [18]

PETRONAS shipping subsidiary, MISC Berhad, provides transport and logistics support for its petroleum and LNG business in the international markets, while its wholly owned subsidiary, MISC Integrated Logistics Sdn Bhd (MILS) serves the upstream and downstream logistics requirements of PETRONAS and the global energy industry. [1, 14, 19]

The marketing of liquefied petroleum gas (LPG) and other petroleum products are undertaken by its subsidiary, PETRONAS Trading Corporation Sdn Bhd’s LPG & Petroleum Products Group. These activities include the trading of LPG and petroleum products, supplying LPG and petroleum products to meet domestic requirements and PETRONAS overseas marketing ventures, and marketing of LPG and petroleum products produced by PETRONAS gas-processing plants and refineries.[20]

PETRONAS Dagangan Bhd is the subsidiary responsible for PETRONAS domestic retailing business. Currently PETRONAS has over 1000 petrol stations in the country. PETRONAS operates the only Natural Gas for vehicles (NGV) service stations in Malaysia. [12, 21]

4.3.2 MITI

Established in April 1956, it was then known as the Ministry of Commerce. It was renamed the Ministry of Trade and Industry in February 1972. In October 1990, the ministry was separated into two ministries; the Ministry of International Trade and Industry (MITI), and the Ministry of Domestic Trade and Consumer Affairs (MDTCA). [22]
MITI's main functions include planning, formulating and implementing policies on industrial development, international trade and investments, encouraging foreign and domestic investment, as well as promoting exports of manufacturing products and services.

Agencies under MITI are the Malaysian Industrial Development Authority (MIDA), Malaysian Industrial Development Finance (MIDF), Malaysia External Trade Development Corporation (MATRADE), Malaysia Productivity Corporation (MPC) and Small and Medium Industries Development Corporation (SMIDEC).

MIDA is responsible for the evaluation of applications for permits for the refining of crude petroleum, processing of natural gas and the manufacture of petroleum products and petrochemical products from petroleum. Approval of licences for the manufacture of petroleum products and petrochemical products is also under the purview of MIDA. [5]

MIDA is the government's principal agency for the promotion of the manufacturing and services sectors in Malaysia. MIDA evaluates applications for licenses, tax incentives, expatriate posts, and duty exemptions on raw materials, components, machinery and equipment for projects in the manufacturing and related services sectors. MIDA assists companies which intend to invest in the manufacturing and services sectors, as well as facilitates the implementation of their projects. To further enhance MIDA's role in assisting investors, senior representatives from key government agencies are stationed at MIDA's headquarters in Kuala Lumpur to advise investors on government policies and procedures. These representatives include officials from the Department of Labour, Immigration Department, Royal Malaysian Customs, Department of Environment, Tenaga Nasional Berhad and Telekom Malaysia Berhad. [23]
4.3.3 MDTCC

The ministry was established in October 1990 as the Ministry of Domestic Trade, Cooperative and Consumer Affairs (MDTCA) with the purpose of promoting the growth of ethical domestic trade and protecting the interest of consumers. In 2009, the ministry was renamed the Ministry of Domestic Trade, Co-Operatives and Consumerism (MDTCC). The roles and functions of the ministry were expanded to cover the franchise and co-operatives sectors. MDTCC formulates policies, strategies and reviews matters related to the development of domestic trade and consumerism. [24]

In the petroleum and petrochemical industry, the ministry co-ordinates policies, regulations and activities related to the safety of the industry, and issues licenses for the sale and distribution of the products. [6, 25]

In domestic trade, the ministry is responsible for determining and monitoring the prices of essential goods and the issuance of licences for the sale and distribution of such goods. The ministry issues licenses for direct selling trade, and implements regulations on metric weight and measures, regulates matters pertaining to companies and businesses based on related acts. The ministry is also responsible for developing and administering the intellectual property protection system. It is the ministry’s role to encourage good corporate governance practices.

In matters concerning consumerism, the ministry carries out consumer education programmes, enhances programmes on consumer awareness and consumer protection, and encourages and assists consumer movements.

4.3.4 The Energy Commission

The Energy Commission of Malaysia (EC) was established in May 2001 under the Energy Commission Act 2001 as a new regulator for the energy industry particularly the electricity supply and piped gas supply industries in Peninsular Malaysia and Sabah. The Commission became fully operational in January 2002 and assumed all responsibilities of the Department of Electricity and Gas Supply that was dissolved at
the same time. The Commission was established to ensure that the energy industry is developed in an efficient manner so that Malaysia is ready to meet the new challenges of globalization and liberalization, particularly in the energy supply industry. [26]


The main roles and responsibilities of the Energy Commission are economic regulations, tariff, technical regulation, safety regulation and consumer protection. Economic regulation promotes efficiency and economy in the generation, production, transmission, distribution, supply and the use of electricity and in the supply and use of gas through pipelines; promotes and safeguards competition; enables fair and efficient market conduct or, in the absence of a competitive market, prevents the misuse of monopoly or market power in the electricity and piped gas industries. It also includes licensing, enforcement of license conditions for licensee and application providers and ensuring compliance to rules and performance/service quality.

The Commission ensures that the supply of electricity and piped gas to consumers is secure, reliable, safe and reflects fair pricing. The Commission serves to protect the public from dangers arising from the generation, transmission, distribution and supply and use of electricity and the supply and use of piped gas.

The Commission ensures that consumers are protected in areas such as dispute resolution, affordability of services as well as quality supply and services from electricity and piped gas utilities.

4.4 **Impact of regulations on value chain**

All activities across the value chain of the oil and gas industry are governed by various acts at federal, state and local government levels. Permissions and licences
must be obtained from relevant regulators for businesses related to the industry.

Regulations for activities across the value chain of the oil, gas and petrochemical industries are shown in Tables 4.2, 4.3, 4.4, 4.5 respectively.

Table 4.2: Regulations for upstream activities in oil and gas industry

<table>
<thead>
<tr>
<th>VALUE CHAIN</th>
<th>FEDERAL REGULATION</th>
<th>STATE REGULATION</th>
<th>LOCAL GOVERNMENT REGULATION</th>
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<tr>
<td>EXPLORATION</td>
<td>Petroleum Development Act 1974 (Act 144)</td>
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<td>survey and data collection</td>
<td><em>Petroleum Regulations 1974</em></td>
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<td>exploratory drilling</td>
<td>Petroleum Mining Act 1966 (Act 95)</td>
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<td>labour/workforce</td>
<td>Continental Shelf Act 1966 (Act 83)</td>
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<td><em>Petroleum (Safety Measures) (Transportation of Petroleum by Pipelines) Regulations 1985</em></td>
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Table 4.3: Regulations for downstream activities in oil industry

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**STORAGE**

- construction of storage facility
- utilization of equipment/appliances in connection with storage of petroleum
- storage and handling of refined petroleum products
- labour/workforce

| Petroleum (Safety Measures) Act 1984 (Utilization of Equipment/ Appliances) Regulations (Storage and Handling of Petroleum) Regulations |
| Environmental Quality Act 1974 (Act 127) |
| Occupational Safety and Health Act 1994 (Act 514) |
| Factories and Machinery Act 1967 (Act 139) |
| Fire Services Act 1988 |
| Customs Act 1967 (Act 235) |
| Immigration Act 1959 |
| Employment Act 1955 |

| National Land Code 1965 |
| Local Government Act 1976 (Act 171) |
| Town and Country Planning Act 1976 (Act 172) |
| The Street, Drainage and Building Act 1974 (Act 133) |
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| retail sale of refined petroleum products | (Storage and Handling of Petroleum) Regulations | Petroleum and Electricity (Control of Supplies) Act 1974 (Act 128) | The Street, Drainage and Building Act 1974 (Act 133) |
| petrol station | Fire Services Act 1988 | Immigration Act 1959 | |
| - Retail sale of subsidised diesel | Minimum Retirement Age Act 2012 | Minimum Retirement Age Act 2012 | |
| - Storage and handling of petrol and diesel | Minimum Wages Order 2012 | Minimum Wages Order 2012 | |
| labour/workforce | Workmen’s Compensation Act 1952 | Workmen’s Compensation Act 1952 | |
Table 4.4: Regulations for downstream activities in gas industry

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Environmental Quality Act (Scheduled Wastes) Regulations 2005  
*Immigration Act 1959*  
Employment Act 1955  
Minimum Retirement Age Act 2012  
Minimum Wages Order 2012  
Workmen’s Compensation Act 1952 |  |  |
| SUPPLY OF GAS TO CUSTOMERS THROUGH PIPELINES  
pipeline works  
installation/utilization of equipment/appliances  
delivery, transportation, distribution of gas by pipelines  
labour/workforce | Gas Supply Act 1993 (Act 501)  
*Environmental Quality Act 1974* (Act 127)  
*Immigration Act 1959*  
Employment Act 1955  
Minimum Retirement Age Act 2012  
Minimum Wages Order 2012  
Town and Country Planning Act 1976 (Act 172)  
The Street, Drainage and Building Act 1974 (Act 133) |
### MARKETING, TRADING, DISTRIBUTION

wholesale marketing of petroleum products

- Natural gas
- Liquid petroleum gas (LPG)
- Natural gas liquid
- Natural gas for vehicles (NGV)

retail sale of refined petroleum products

- Retail sale of LPG in cylinders
- Retail sale of natural gas for vehicles (NGV) at petrol stations

labour/workforce

- Petroleum Development Act 1974 (Act 144)
- Petroleum Regulations 1974
- Petroleum and Electricity (Control of Supplies) Act 1974 (Act 128)
- Immigration Act 1959
- Employment Act 1955
- Minimum Retirement Age Act 2012
- Minimum Wages Order 2012
- Workmen’s Compensation Act 1952

| Table 4.5: Regulations in petrochemicals industry |

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### Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000

- Factories and Machinery Act 1967 (Act 139)
  
  - Factories and Machinery (Noise Exposure) Regulations, 1989

- Atomic Energy Licensing Act 1984 (Act 304)

- Fire Services Act 1988

- Customs Act 1967 (Act 235)

- Excise Act 1967 (Act 176)

- Immigration Act 1959

- Employment Act 1955

- Minimum Retirement Age Act 2012

- Minimum Wages Order 2012

- Workmen’s Compensation Act 1952

### Petroleum (Safety Measures) Act 1984

- (Utilization of Equipment/ Appliances) Regulations (Storage and Handling of Petroleum) Regulations

- Environmental Quality Act 1974 (Act 127)

- Occupational Safety and Health Act 1993 (Act 514)

### National Land Code 1965

### Local Government Act 1976 (Act 171)

- Town and Country Planning Act 1976 (Act 172)

- The Street, Drainage and Building Act 1974 (Act 133)
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**STORAGE OF PETROCHEMICALS PRODUCTS**

- construction of storage facility
- utilization of equipment/appliances in connection with storage of petrochemicals products
- storage and handling of petrochemicals products
- labour/workforce

Petroleum (Safety Measures) Act 1984

(U utilization of Equipment/ Appliances) Regulations

(Storage and Handling of Petroleum) Regulations

Environmental Quality Act 1974 (Act 127)

Occupational Safety and Health Act 1993 (Act 514)

Factories and Machinery Act 1967 (Act 139)

Fire Services Act 1988

Customs Act 1967 (Act 235)

Immigration Act 1959

Employment Act 1955

Minimum Retirement Age Act 2012
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marketing and trading
- Domestic market
- International market

4.5 References


5. Unnecessary regulatory burdens on petrochemicals manufacturers

5.1 Certificate of Fitness

A petrochemicals manufacturer has to obtain Certificate of Fitness (CF) for their machinery and plants from DOSH. The Factories And Machinery (Notification, Certificate Of Fitness And Inspection) Regulations, 1970 states such requirements:

- Part I - Notification of operation of factory, use of machinery, accidents and industrial diseases
- Part II - Certificate of fitness
- Part III - Inspection
- Part IV - Inspection fees

The CF is valid for 15 months and must be renewed. Application for an extension of CF is a two stage approval process. DOSH guidelines require that petrochemicals manufacturers apply for an extension six months prior to the expiry of the existing CF. The application has to be made at the state DOSH office.

The state DOSH officers carry out inspection at the site to verify the current integrity of equipment as claimed in the report submitted by petrochemicals manufacturers as part of the justification for the application. Once the inspection report is prepared, the application is sent to DOSH headquarter in Putrajaya.

DOSH Putrajaya will review the report, and if necessary, carry out inspection at the site. The report is then submitted to the Director of Major Hazard Division for endorsement prior to approval by the Director General of DOSH. The state DOSH then issues the CF to the petrochemicals manufacturer.
Regulation 10. Machinery requiring certificate of fitness.

(1) The owner of every steam boiler, unfired pressure vessel or hoisting machine other than a hoisting machine driven by manual power shall hold a valid certificate of fitness in respect thereof so long as such machinery remains in service.

(2) A certificate of fitness for every steam boiler, unfired pressure vessel and hoisting machine shall be as Forms A, B and C in the Sixth Schedule to these regulations.

(3) The period of validity of every certificate of fitness shall ordinarily be fifteen calendar months from the date of inspection or such longer period not exceeding three years as the Chief Inspector in his discretion may consider appropriate:

Provided where any steam boiler, unfired pressure vessel or hoisting machine is out of service for a long period immediately subsequent to an inspection by reason of dismantling or repair of any defect the Inspector may issue a certificate effective from the date when such machinery is replaced in service.

(4) Where the components of any combination of unfired pressure vessel, hoisting machine are so interconnected that it would be unreasonable to issue certificates of fitness for each component the Chief Inspector may direct that one certificate of fitness be issued to cover the combination of components.

(5) The certificate shall be in the form prescribed for that component of the combination which, in the opinion of the Chief Inspector, is the most appropriate and the inspection fee shall be charged accordingly.

Regulation 25. Issue of certificate of fitness.

Following the inspection of every steam boiler, unfired pressure vessel and hoisting machine other than a hoisting machine driven by manual power and on payment of the prescribed fee the Inspector shall where he is satisfied that such machinery complies with the provisions of the Act and the regulations relating thereto, issue the appropriate certificate of fitness.

Provided that where any steam boiler, unfired pressure vessel or hoisting machine is out of service for a prolonged period immediately subsequent to an inspection by reason of dismantling or repair of any defect, the Inspector may issue a certificate operative from the date when such machinery is replaced in service.
Regulation 27. Machinery or factory not complying with the Regulations.

Pursuant to sub-section (3) of section 39 and sub-section (4) of section 40 of the Act, where the Inspector is of the opinion that such factory or machinery does not comply with any of the provisions of the Act or any regulations made thereunder, he shall issue to the occupier or owner a notice as Form A in the Eighth Schedule to these regulations requiring him to make good or remove any defect or otherwise cause the factory or machinery to comply with such requirements of the Act or any regulations made thereunder within such period as he shall specify therein:

Provided that where the defect is, in his opinion, likely to cause immediate danger to life or property he shall issue to the owner or occupier a notice to cease operation forthwith as Form A in the Eighth Schedule to these regulations.

Regulation 28. Machinery operated without certificate.

Where an Inspector finds that there is no current certificate of fitness in respect of any machinery for which a certificate of fitness is prescribed, he shall give a notice in pursuance to section 19 (2) of the Act prohibiting the use of such machinery to the owner. Such notice shall be in Form B in the Eighth Schedule to these regulations.

5.1.1 Issues

Poor administration of the regulations proved to be burdensome to business. There is sometimes delay in approving the application for an extension of CF even though they comply with the application requirements.

The overall process from the submission of application to the approval by the highest authority may sometimes take longer than 6 months.

5.1.2 The objective of Certificate of Fitness

The main objective of the regulation is to ensure that the workplace is safe for workers in accordance with the Factories and Machinery Act 1967.

5.1.3 What are the impacts of these regulatory arrangements?

The main implication of the delay in the issuance of CF to business is that there is a period when the petrochemicals manufacturing plant is forced to continue its
operation without a CF. This is a serious concern as it has a direct impact on insurance coverage especially in cases of fire or fatal accidents.

5.1.4 Options to resolve the issues

The following options are put forward to resolve the issue of delay in the issuance of CF

1. Maintain the current approval process

2. DOSH review and re-engineer its entire process in issuing Certificates of Fitness to speed up the process. The implementation of the Special Scheme of Inspection (SSI) will help address this issue. The provision for SSI is already incorporated into the Factories and Machinery Act 1967 (Section 40 (5)) (Box 5.2) and has been recently approved by the Ministry of Human resources (MOHR).

3. Smart collaboration between petrochemicals manufacturers and DOSH to simplify and speed up the process without sacrificing safety issues. Regular meetings between them could be held to solve issues related to both parties with regard to issuance of CF.

4. Designating a competent staff of the petrochemicals manufacturer as the representative of DOSH at the plant is another possibility that could be considered.

5. DOSH could establish a database on petrochemical manufacturers as reference material for its officers.

Box 5.2

The Factories and Machinery Act 1967 (Revised-1974)

"special scheme of inspection" means an inspection system approved by the Chief Inspector pertaining to periodical inspections for certain classes of machinery and its auxiliary;
Section 40. Periodical inspections

(5) Any factory owner or occupier may apply to the Chief Inspector for approval for a special scheme of inspection.

(6) The Chief Inspector may approve the application under subsection (5) if he is satisfied that the prescribed requirements in respect of the machinery in question in relation to the special scheme of inspection have been fulfilled.

(7) Upon the approval under subsection (6), the inspection of the machinery shall be conducted according to the special scheme of inspection.

5.1.5 Recommendations

Option 2 would result in shorter and less frequent shutdowns, reducing costs related to direct inspection as well as costs due to loss of production.
5.2 DOSH inspection

Part III of the Factories And Machinery (Notification, Certificate Of Fitness And Inspection) Regulations, 1970, requires inspections of petrochemicals manufacturing facilities by DOSH officers. DOSH carries out an initial inspection of the petrochemicals manufacturing facilities. This is followed by inspections at regular intervals so long as the plant remains in operation.

Box 5.3 The Factories And Machinery (Notification, Certificate of Fitness and Inspection) Regulations, 1970: Part III- Inspection

Regulation 13. Initial inspection.
An initial inspection of every factory or machinery shall be conducted by an Inspector.

Regulation 14. Regular inspection.
(1) After an initial inspection every factory and every machinery shall be inspected at regular intervals by an Inspector so long as such factory remains in operation or such machinery remains in use.

(2) The regular interval shall ordinarily be fifteen months subject to such extension not exceeding thirty-six months in any particular case as may be authorised by the Chief Inspector in his discretion, and the regular inspection shall ordinarily be carried out during the fifteen months following the month in which the last inspection was made or where the interval has been extended by the Chief Inspector during the month following the expiry of the extended interval.

Regulation 17. Preparation for regular inspection.
The occupier of any factory or owner of any machinery, if not the occupier, shall upon receipt of a notice of intended regular inspection ensure at the due date that such factory or machinery is prepared for inspection in accordance with the following:

(a) In respect of any steam boiler-

(i) that such steam boiler including any economiser and superheater connected thereto is empty, cool and dry and has been thoroughly cleaned inside and outside;

(ii) that all firebars and firebridges have been removed;

(iii) that all smoke-tubes, exterior of water-tubes, furnaces, smoke-boxes an external flues have been thoroughly cleaned;

(iv) that all manhole, handhole and sighthole doors and cleaning plugs have been removed;
(v) that all caps in the headers and mud-drums of water-tube steam boilers have been removed;

(vi) that all cocks and valves have been dismantled, cleaned and ground where necessary;

(vii) that the steam boiler has been effectively disconnected from any other steam boiler and source of steam or hot water in the manner prescribed therefor; and

(viii) that any special requirements which the Inspector may have specified, in writing on the notice of inspection have been complied with. Such special requirements may be in respect of the drilling of any plates, the removal of any lagging, brick-work or masonry, the preparations for a hydrostatic test of the steam boiler, or its mountings and associated piping, the withdrawal of tubes, the verification of the pressure gauge, and the dismantling for inspection of any part of any associated steam engine.

(b) In respect of any unfired pressure vessel, that the preparations as for steam boilers and contained in sub-paragraphs (i), (iv), (vi), (vii) and (viii) of paragraph (a) of this regulation are complied with so far as is appropriate.

(c) In respect of any hoisting machine, that arrangements have been made to enable such hoisting machine to be tested under conditions of maximum safe working load and so as to cause all safety devices to function.

(d) In respect of any other machinery, that arrangements have been made, so far as practicable, to operate any driven machinery under maximum load and to have all safety devices in proper working order.

(e) In respect of factory premises that arrangements have been made, so far as practicable, to have such premises clean and tidy, and have a readiness all such means and appliances for safe access, as requested by an Inspector, as to facilitate good and proper inspection in accordance with the provisions of the Act and the appropriate regulations made thereunder.

Regulation 19. Supplementary inspection—steam boilers and unfired pressure vessels.

(1) In addition to the initial and regular inspection prescribed an Inspector shall make a supplementary inspection of every steam boiler and unfired pressure vessel within a period of three months subsequent to the date of the initial and of every regular inspection, except that in the case of any unfired pressure vessel not under pressure of steam such supplementary inspection may be made as and when the Chief Inspector may direct.

(2) The owner of every steam boiler or unfired pressure vessel shall ensure, during any supplementary inspection, that conditions of maximum working pressure are maintained.

(3) An Inspector shall give reasonable notice to an owner, in writing, of his intention to make a supplementary inspection, in Form B set out in the Seventh Schedule to these regulations.
5.2.1 Issues

Manufacturers complain that there is poor enforcement and administration of regulations due to inadequate and inexperienced resources of regulators. There are only ten state DOSH officers who are certified to carry out inspection of manufacturing facilities. These same officers also carry out inspection of all manufacturing plants and industrial workplaces in the state.

Businesses also complain of high turnover of DOSH officers. New officers are usually inexperienced, which is a matter of concern.

5.2.2 The objective of DOSH inspection

The main objective of the regulation is to ensure that the workplace is safe for workers in accordance with the Factories and Machinery Act 1967.

5.2.3 What are the impacts of these regulatory arrangements?

Inexperienced officers and inadequate resources contribute to poor quality of inspection which may affect the safety of workplace and hence the safety of workers and others.

5.2.4 Options to resolve the issues

The following options are recommended as solutions for the issue of DOSH inspection
1. DOSH studies the needs and workloads of its workforce
2. DOSH adopts risk-based inspections, the Special Scheme of Inspection (SSI) so that only high risk business facilities and machinery receive the frequent and stringent inspections. The provision for SSI is already incorporated into the Factories and Machinery Act 1967 (Section 40 (5)) (Box 5.2) and has recently been approved by the Ministry of Human Resources (MOHR).
3. DOSH improves inspection and technical competencies of its workforce through qualifications, training and continuous learning programme.

5.2.5 Recommendations

Option 2 would provide the basis for allocating inspection resources by prioritising inspections so that potentially high risk areas undergo more effective and more comprehensive inspection, while low risk areas are inspected accordingly. The overall cost of inspection would also be reduced.

Option 3 would ensure that inspection resources are competent to carry out their duties.
5.3 Authorised Gas Tester

The Industry Code Of Practice For Safe Working In A Confined Space 2010 was issued by DOSH. The governing act is the *Occupational Safety and Health Act 1994*. The main objective of the industry code is to provide guidance for the safety and health of all persons who need to enter or work in confined spaces.

Box 5.4 **Industry Code of Practice**

“*This industry code of practice is intended to provide guidance for the safety and health of all persons who need to enter or work in confined spaces by preventing exposure to hazards which may otherwise be experienced when working in a confined space, and thereby prevent collapse, injury, illness or death arising from exposure to those hazards.*”

This industry code of practice shall apply to works in a confined space.

- This industry code of practice shall not apply to underground mining or works in a space at other than atmospheric pressure.
- For the purpose of this industry code of practice, a person whose head or upper body is within a confined space is considered to have entered the confined space.

‘Confined space’ is defined as an enclosed or partially enclosed space that is at atmospheric pressure during occupancy and is not intended or designed primarily as a place of work, and

  a) is liable at any time to –
(i) have an atmosphere which contains potentially harmful levels of contaminants;
(ii) have an oxygen deficiency or excess; or
(iii) cause engulfment; and
b) could have restricted means for entry and exit.

The following are some examples of confined spaces –

a) storage tanks, tankers, boilers, silos and other tank like compartment usually having a manhole for entry;
b) open-topped spaces such as pits or degreasers;
c) pipes, sewers, tunnels, shafts, ducts and similar structures; and
d) any shipboard spaces entered through a small manhole, cargo tanks, cellular double bottom tanks, duct keels, ballasts and oil tanks.

The following are some examples of the activities in a confined space –

a) cleaning of sludge and other waste materials;
b) inspection of the physical integrity of process equipment;
c) maintenance, including abrasive blasting and application of surface coatings;
d) repair, including welding, modification and adjustments to mechanical equipment;
e) rescue of workers who are injured or overcome inside the confined space; and
f) construction purposes;

According to the industry code of practice, workers working in a confined space need to undergo a training programme on “safe working in a confined space” and pass an examination before they are allowed to work in the area. Currently the training programme is provided either by the National Institute of Occupational Safety and Health (NIOSH) or approved training providers.

Authorised Gas Testers are competent persons who carry out atmosphere tests for confined space. As such, they have to attend the training programme and pass the examination. In addition, they must also be registered as a Competent Person with DOSH. Authorised Gas Testers have to undergo a refresher course every two years using the module approved by the Director General of DOSH.
Box 5.5  

**Training's objectives and admission requirements**

*Authorised Gas Tester And Entry Supervisor*

1. **Objectives**

The test is conducted to test the candidate’s level of understanding of working in a confined space, understand the methods of the correct use of breathing apparatus and be able to test gas.

2. **Admission.**

   a. Must be able to read and write in Malay or English language; and

   b. Has attended Authorised Entrant and Standby Person courses conducted by NIOSH or other training provider recognized by DOSH and passed the prescribed examination (conducted by NIOSH); and

   c. Has attended Authorised Gas Tester and Entry Supervisor courses conducted by NIOSH or other training provider recognized by DOSH; and

   d. Have at least SPM or equivalent qualifications and credits in science or at least a grade C in science subjects; and

   e. Have at least 5 years work experience related to the confined space

**5.3.1 Issues**

Prior to the introduction of the industry code of practice in 2010, experienced staff could be enrolled into the training programme conducted by NIOSH to become an Authorised Gas Tester. However the new requirement imposes a minimum grade C for science in Sijil Pelajaran Malaysia (SPM) on existing and potential Authorised Gas Testers.
5.3.2 The objective of these regulatory arrangements

It is likely that the requirement of grade C for science in SPM is to ensure that the personnel have the appropriate intelligence and sufficient basic knowledge to deal with gas works.

5.3.3 What are the impacts of these regulatory arrangements?

Experienced Authorised Gas Testers, who do not possess SPM grade C for science subject, are no longer allowed to carry out the job. It is not only a waste of resources but also a burden on businesses as they have to hire new staff and send them for training. In the meantime they have to redeploy the existing Gas Testers. This results in the increase in the operational cost of doing business.

5.3.4 Options to resolve the issues

The following options are suggested as means to resolve the issue of Authorised Gas Tester

1. DOSH studies on the new requirement of SPM grade C for Science existing Authorised Gas Testers. One suggestion is to incorporate a study on the correlation between the occurrence of accidents and Authorised Gas Testers without grade C in the science subject.
2. DOSH allows those without grade C in Science but have passed the examination to continue work as Authorised Gas Testers.
3. Maintain the current practice

5.3.5 Recommendations

Option 2 is recommended as it is more practical to implement and ensure fairness to those who have passed the examination prior to this new regulation.
5.4 Person in charge

The Factories And Machinery (Person-In-Charge) Regulation 1970 requires that a competent person be in charge of machinery.

Box 5.6 The Factories And Machinery (Person-In-Charge) Regulation 1970

Part I - machinery required to be in charge of persons holding certificates of competency

Regulation 3. Machinery requiring certificated person in charge.
Pursuant to section 29 (2) of the Act, a person in charge of any steam boiler, steam engine, internal combustion engine or dredge shall, except as provided hereafter, hold an appropriate certificate of competency prescribed by these Regulations.

Regulation 5. Steam boilers and engines not a dredge.
(1) This regulation shall apply to steam boilers and steam engines not installed on a dredge and in this regulation-
"driver" means the holder of a driver's certificate of competency for steam boilers and steam engines;
"engineer" means the holder of an engineer's certificate of competency for steam boilers and steam engines;
"heating surface" means, in respect of any steam boiler, the total surface of all plates and tubes exposed to heat on one side and in contact with water on the other, measured on the water or fire side, whichever is the greater, and excluding the heating surface of any economiser and super heater connected thereto;
"visiting engineer" means the holder of an engineer's certificate of competency for steam boilers and steam engines who is employed by an owner to make periodical visits to and inspections of, his machinery.
(2) (i) Where the heating surface of a steam boiler, or the aggregate heating surface of steam boilers connected to a common range, is **five hundred square feet or less**, a first or second grade driver shall be in charge of such boiler or boilers during each shift; and

(ii) Where **more than one steam boiler** is connected to a common range or there is more than one associated steam engine, **the driver in charge shall be assisted** during each shift by **other first or second grade drivers** sufficient to ensure that including **the driver in charge there shall not be more than two steam boilers or two steam engines or one combined steam boiler and steam engine to each driver**.

(3) Where the heating surface of a steam boiler, or the aggregate heating surface of steam boilers connected to a common range, is **greater than five hundred square feet but not greater than two thousand square feet**, a first grade driver shall be in charge of such boiler or boilers during each shift, and the provisions of paragraph (2) (ii) shall apply.

(4) Where the heating surface of a steam boiler, or the aggregate heating surface of steam boilers connected to a common range is **greater than two thousand square feet but not greater than five thousand square feet**, a first grade driver shall be in charge of such boiler or boilers during each shift, and the provisions of paragraph (2) (ii) shall apply. In addition the owner shall employ a first or second grade visiting engineer who shall comply with the provisions of regulations 10, 11 and 12.

(5) (i) Where the heating surface of a steam boiler or the aggregate heating surface of steam boilers connected to a common range, is **greater than five thousand square feet but not greater than ten thousand square feet**, a first or second grade engineer shall be in charge of such boiler or boilers; and

(ii) where more than one steam boiler is connected to a common range or there is more than one associated steam engine, the engineer in charge shall be
assisted during each shift by such first grade drivers as shall be sufficient to ensure that there shall not be more than two steam boilers or two steam engines or one combined steam boiler and steam engine to each driver.

5.4.1 Issues

The Factories And Machinery (Person-In-Charge) Regulation 1970 unnecessarily constrains how companies use their competent persons. For example, it specifically indicates that competent persons carry out specific roles based on specific heating surface of and quantity of steam boilers.

Some big companies have several petrochemicals manufacturing set ups. Instead of having a specific team of staff for each set up, they want to use the same people as a support services unit to a number of manufacturing set ups and thus reduce costs.

Furthermore, with the advance in technology, managing the performance of the petrochemical facilities and machinery can be conducted with fewer people.

5.4.2 The objective of person in charge

The main objective of the regulation is to guarantee a safe working environment by ensuring that business has adequate number of competent persons to manage the facilities and machinery, and thus ensure safety.

5.4.3 What are the impacts of these regulatory arrangements?

The regulatory arrangements constrain business from reducing the cost of business. Business wants to employ proven techniques in managing their facilities and machinery to both ensure safety and maintain their competitiveness.

5.4.4 Options to resolve the issues

The following options are recommended as means to resolve the issue of person in-charge
1. DOSH studies the regulation with regard to the requirement of specific competent persons for each manufacturing set-up by taking into consideration “performance-based” and/or “risk-based approach”.

2. DOSH carries out comparative studies with the objective of determining best practices.

3. DOSH allow companies to apply for an exemption from the requirement on a competent person.

5.4.5 Recommendations

DOSH has confirmed that there is already a provision for Option 3. It is suggested that DOSH communicate the option to companies and provide a clear guideline on how companies can qualify and apply for such exemption.
6. Unnecessary regulatory burdens on petrol service stations

6.1 Quota of foreign workers

There are about 3291 petrol stations operating throughout the country. Depending on the size, petrol stations employ between 10-30 workers. Working at petrol stations is not just about manning the gas pump. In fact, most petrol stations in Malaysia practise self-service policy where motorists refuel their own vehicles. Apart from dedicated personnel at the payment counter and the NGV station, there are merchandising, toilet and general cleaning duties and maintenance work. As petrol stations are open everyday for twenty-four hours, the workers work on three eight-hour shifts.

Petrol stations in Malaysia have problems with hiring staff and experience a very high turn over of employees. There are more temporary than permanent staff. Temporary staff are usually students waiting for their SPM results and those on semester break. They are only available at certain times and only for short periods of at most a few months. Even permanent staff regard working at petrol stations as a stepping stone to something better.

The high turn over of staff causes administrative problems especially with regard to the Employee Providence Funds (EPF), the Social Security (SOCSO), the Income Tax Department (LHDN). As part of the employment requirement, they must be notified of any new hiring or termination.

Petrol station operators have resorted to hiring foreign workers, as it is difficult to attract local job seekers. Foreign workers are hired on a five year contract which is renewable. This solves the issue of high staff turn over.
6.1.1 Issues

Petrol station operators are in the dark over the quota of foreign workers. They are unclear how many foreign workers they can hire at one time and why some stations can hire more than others. There is no clear statement or guideline from the Labour Department (JKTSM) on the number of foreign workers for petrol service stations.

Few locals consider working at petrol stations on permanent basis. They do not find the renumeration very attractive even with the recently implemented minimum wage of RM900 in Peninsular Malaysia and RM800 in Sabah and Sarawak. They find the jobs rather physically taxing as they must be on their feet at all times. They are also selective in their duties preferring to work indoor as cashiers or supervisors. Petrol station operators have to depend on foreign workers to take up cleaning and maintenance duties and outdoor jobs such as manning the NGV station.

6.1.2 The objective of quota on foreign worker intake

Petrol station operators are encouraged to employ local workers. Therefore, imposing a quota on hiring foreign workers means job opportunity for local workers.

6.1.3 What are the impacts of these regulatory arrangements?

Petrol stations experience shortage of workers and have to make do with temporary staff. This is a burden to business since they have to continuously train new employees. Furthermore, the situation does not provide operational stability for the business.

6.1.4 Options to resolve the issues

1. Petrol station operators propose that the number of foreign workers be increased to at least 50% of the total workforce in order to provide stability to their daily operation.

2. Petrol service station operators also require a clear guideline from JKTSM on hiring foreign workers.
6.1.5 Recommendations

It is recommended that the Labour Department (JKTSM) look into the matter and issue a guideline on hiring foreign workers for petrol stations.
6.2 Operational licence for controlled goods

Approval for operating a petrol station is under the purview of the Ministry of Domestic Trade, Co-operatives and Consumerism (MDTCC) as stated in section 3A (2) of the Petroleum Regulations 1974.

Petrol station operators must also apply for a retail licence of controlled goods from MDTCC for selling petrol fuel; RON 95, RON 97 and diesel fuel as these items are declared controlled goods under the Petroleum and Electricity (Control of Supplies) Act 1974.

Most petrol stations in Malaysia operate convenience stores that sell items which may include controlled goods declared under the Control of supplies Act 1961 and Supplies Control Rules & Regulations, such as sugar, all purpose flour, and cooking oil. A single composite licence obtained from MDTCC allows the sale of petrol fuel and diesel fuel and any or several of these goods.

6.2.1 Issues

Rice is another controlled item sold at petrol station convenience stores but the retail licence must be obtained from the Ministry of Agriculture (MOA) rather than MDTCC.

6.2.2 The objective of retail licence for rice

The main objective for requiring retailers to obtain a licence to sell rice is to enable MOA to regulate the marketing of rice in accordance with the Control of Padi and Rice Act 1994.

6.2.3 What are the impacts of these regulatory arrangements?

Applying for retail licences from two different ministries is considered duplication of regulations. This causes inconvenience and unnecessary paperwork to petrol station operators.
6.2.4 Options to resolve the issues

1. The sale of rice is included in the composite licence issued by MDTCC.

2. Since petrol station operators are managed by the principal oil companies such as Petronas and Shell, MOA could award licences to sell rice to the principal companies instead of individual petrol stations.

6.2.5 Recommendations

The second option is preferred as it reduces tremendously the effort of managing the licensing.
6.3 Subsidised diesel management

Diesel is a subsidised item for vehicle consumption. Currently consumers pay RM2.00 per litre of diesel, while the Government tops up the difference between the market price and the consumer paying price. The Government spends about RM24.8 billion in fuel subsidies annually. The majority of subsidies is for diesel rather than for RON 95. Currently the Government is subsidising RM0.80 for each litre of diesel.

6.3.1 Issues

MDTCC allocates a monthly quota of subsidised diesel to each oil company based on projected sales. The quota is divided among stations under the oil company based on their projected sale for that month. Each dealer must manage the sale of subsidised diesel to ensure that it is within the limit of the allocated quota. The dealer must also write an appeal to MDTCC via the oil company if the allocated quota is less than the projected sale of that month.

6.3.2 The objective of monthly quota of subsidised diesel

The reason for the quota allocation is to regulate and prevent abuse of subsidised diesel by consumers. Examples of such consumers are factories which are not eligible for subsidised diesel, those who buy diesel in unapproved containers and motorists who modified the fuel tanks of their vehicles to accommodate larger volume of diesel.

6.3.3 What are the impacts of these regulatory arrangements?

The current approach to regulating subsidised diesel is overzealous and not practical. Writing monthly appeals to MDTCC adds paperwork to petrol station dealers.
It must also be difficult for MDTCC to deal efficiently with the monthly written appeals from the many petrol stations as there are over 3000 petrol stations in Malaysia.

Petrol stations risk running out of subsidised diesel should MDTCC reject the appeal or give delayed response, as is often the case. This results in the affected dealer being heavily penalised by the principal oil company.

The logistics industry will be most affected in cases of diesel shortage (dry tank) at petrol stations. Trailers, and other logistics transports won’t be able to reach their destinations on schedule. This will lead to huge losses to the businesses that depend on the logistics industry. Ultimately, the country’s economy will suffer.

6.3.4 Options to resolve the issues

1. Maintain the current practice

2. MDTCC could allow appeals for additional subsidised diesel to be made through an online system and respond quickly to such requests.

6.3.5 Recommendations

To enable effective action, option 2 is preferred.
6.4 Health, safety and the environment

Petrol stations are hazardous places because they store and sell a highly flammable liquid. Safety rules must be observed when filling up fuel at petrol stations to prevent potentially fatal accidents. Notices on safety such as “No Smoking”, “Switch-off Engine,” “Turn-off Handphone” signs are clearly displayed.

6.4.1 Issues

Many customers tend to flout safety rules at petrol stations, such as by smoking or leaving the vehicle’s engine switched on when refueling. It may be due to ignorance in some cases, but poor enforcement of the regulations also encourages these customers not to adhere to safety rules. Some of them become aggressive when advised by employees. Sometimes employees suffer physical abuse by these customers when service is refused.

There is no standard of procedure (SOP) in dealing with customers who flout safety rules. Apart from giving them a warning and refusing to serve them, there is not much that can be done. Lack of enforcement emboldens these law breakers because they know they can get away with it.

6.4.2 The objective of safety rules

The main objective is to protect the health and safety of people at the petrol stations especially during refueling, and potentially those living or working nearby.

6.4.3 What are the impacts of these regulatory arrangements?

The health and safety of customers and employees are at risk. Employees face verbal and physical abuse when they attempt to uphold safety rules.

It is a difficult situation for petrol station dealers. The onus is on them when customers flout safety rules. However, the well-being of the employees are also uppermost.
6.4.4 Options to resolve the issues

The followings are options to resolve the issues:

1. SOP that enables immediate action on law breaking customers as well as protect the employees from harm.

2. Enforcement of the law by the police through random inspection.

3. Public awareness campaign through the media.

6.4.5 Recommendations

It is recommended that option 3 be carried out while formulating option 1.
6.5 Abuse of subsidised diesel

Subsidised diesel is generally meant for domestic vehicle consumption. Land transportation companies are eligible for further subsidy of diesel for their commercial vehicles. Motorists must bring their vehicles to the station to be filled up. Customers are not allowed to purchase diesel by filling up containers such as barrels or drums.

Commercial enterprises such as factories are not eligible for subsidised diesel and have to pay the full price. The significant difference between the commercial and subsidised prices can lead to abuse of subsidised diesel. Examples include some enterprises trying to buy diesel at the subsidised price from petrol stations. Smuggling of illegally purchased subsidised diesel to neighbouring countries where the prices are significantly higher have also been reported.

6.5.1 Issues

Poor enforcement of the regulations results in some customers purchasing large amount of diesel at the subsidised price and then selling it to commercial enterprises for a profit. There are several ways this is done:

1. The vehicle’s fuel tank is modified to accommodate larger volume of diesel
2. Additional container is used to purchase diesel

These customers can use intimidation to force petrol station employees into allowing them get away with the purchase.

6.5.2 The objective of these regulatory arrangements

The main objective of the policy is to minimise Government’s loss via subsidy of diesel to unauthorised recipients.
6.5.3 What are the impacts of these regulatory arrangements?

- There is a substantial loss of Government’s money because diesel is heavily subsidised.
- Employees fear for their safety if they refuse the customers’ demand.
- Petrol station dealers risk being penalised by their principal oil companies and facing criminal charges for not preventing such transaction.

6.5.4 Options to resolve the issues

The following options are suggested as means to resolve the issue:

1. SOP that enables immediate action on law breaking customers as well as protect the employees from harm.
2. Swift enforcement by MDTCC. MDTCC enforcement officers could be stationed at selected petrol stations which record suspiciously high consumption of diesel.
3. Swift enforcement by police.
4. Limit the amount of diesel per transaction.

6.5.5 Recommendations

Option 4 is recommended as it is most effective and could be immediately employed.

Note: Response from MDTCC

MDTCC has decided on four steps to be implemented in its effort to prevent the abuse of subsidised diesel and petrol (Utusan Malaysia dated 29th June 2014). The four steps are:
• A monthly sales quota of 600,000 litres of diesel and petrol will be imposed on all petrol stations in the East Coast of Sabah. This will affect 72 petrol stations in the area between Kudat and Tawau.

• As of 1st August 2014, approval for sales quota for each petrol station will be decided by the relevant state MDTCC instead of the principal oil company.

• Beginning 1st January 2015, it will be compulsory for oil tankers carrying subsidised diesel or petrol to be painted in standard blue and have a large written sign “Minyak Subsidi” on it. These requirements will be included in the approval letter for licence, PDA3 (approval for distribution of petroleum products). This is meant to prevent attempts to smuggle or make illegal sales of subsidised diesel and petrol.

• To prevent illegal sales of subsidised diesel and petrol, a limit of 500 litres will be imposed on the second application (additional quota) for “Fleet card” holders in the public transport category (school busses, express busses, mini busses, cars for hire, taxis). Applications for additional quota must be made to the relevant state MDTCC. Currently these “Fleet card” holders enjoy unlimited additional quota.
6.6 Unauthorised purchase of subsidised diesel by farmers

It is a regulatory requirement that subsidised diesel must be delivered to vehicles and not be collected in containers.

Smallholding paddy farmers use tractors to till their lands. As it is not possible to bring the tractors to the petrol stations, they want to purchase subsidised diesel in containers such as drums and barrels to take back to the farms.

6.6.1 Issues

Petrol stations make allowances for paddy farmers as they have no other means of getting their supply of diesel.

Preventing farmers from putting diesel in containers results in them not being able to obtain subsidised diesel for their tractors. On the other hand, allowing use of containers can result in abuse of the provision because the diesel may be sold to commercial enterprises.

Poor enforcement of the regulations is the main reason for the situation to continue.

6.6.2 The objective of these regulatory arrangements

The main objective in prohibiting the sale of fuel in containers is to prevent abuse of subsidised diesel.

6.6.3 What are the impact of these regulatory arrangements?

Petrol station dealers risk being penalised by their principal oil companies and facing criminal charges for allowing unauthorised purchase of subsidised diesel.

6.6.4 Options to resolve the issues

1. Maintain the current practice
2. MDTCC makes special allowances for farmers to make non-vehicle purchase of subsidised diesel based on their needs upon getting authorisation from MDTCC.

6.6.5 Recommendations

Adopting option 2 would be most practical. Farmers would not face any hardship and petrol stations operators would not be flouting the law.

Note:
MDTCC has verified that it has already implemented this option. However, it is likely that most farmers are not aware of such policy. Information on the policy should be accessible to the public in order for it to be effective. The followings are suggestions for the dissemination of information on the policy:

- MDTCC could make the relevant information on the policy available on its official website.
- MDTCC could seek the cooperation of relevant authorities such as the MOA and its agencies to ensure that farmers are well informed.
6.7 Time constraint in signing dealership agreement

The Fair Trade Practices Policy (FTPP) which was approved on 26 October 2005 contained elements to address unfair trade practices (box 6.1). The Fair Trade Practices Commission (FTPC) was set up to implement the policy. However, FTPP was modified in 2009 and became the *Competition Act 2010* which addresses only competition issues. FTPC is now known as the Malaysia Competition Commission (MyCC). The major change in the new policy is that there are no more provision to address unfair trade practices.[1]

Principal oil companies such as PETRONAS, Shell, and Petron appoint dealers to operate their respective petrol stations. Upon appointment, each dealer enters into a dealership agreement with the relevant principal oil company.

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**Box 6.1 The Fair Trade Practices Policy (FTPP), 2005**

Objectives:

1. promote and protect competition in the market;
2. create dynamic and competitive entrepreneurs;
3. provide fair and competitive market opportunities for businesses;
4. prohibit anti-competitive practices including those originating from outside the Malaysian territory and affecting the domestic territory;
5. prohibit unfair trade practices in the economy;
6. promote rights of SMEs to participate in the market place;
7. promote consumer welfare; and
8. encourage socio-economic growth, generate efficiency and equity.
6.7.1 Issues

The principal oil company dictates the terms of the dealership agreement. The dealership agreement is made available to the potential dealer prior to signing. However, the potential dealer is not given sufficient time to study and understand the terms of the agreement. There is no opportunity for the potential dealer to seek legal advice due to the time constraint put upon by the principal oil company.

6.7.2 The objective of the dealership agreement

The objective of the dealership agreement is to legally bind the business arrangement between the dealer and the principal oil company.

6.7.3 What are the impacts of these regulatory arrangement?

Entering into a dealership agreement without fully comprehending its legal consequences puts the dealer at a disadvantage. This is considered unfair trade practices.

6.7.4 Options to resolve the issues

The following options are put forward to resolve the issue

1. Principal oil company allows the potential dealer access to the dealership agreement at least 48 hours prior to signing.

2. A standardised dealership agreement should be made available on the website of the principal oil company.

3. The government could re establish the Fair Trade Practices Policy to address unfair trade practices.
6.7.5 Recommendations

Option 2 is preferred as it is only fair to allow potential dealers the opportunity to study and understand the terms of the dealership agreement.

In the longer term, the Government could consider establishing trade practices legislation which ensures fair trading.

6.8 References

7. Unnecessary regulatory burdens on LPG distribution business

There are two types of LPG products in Malaysia (Figure 7.1). Subsidised LPG is sold in smaller cylinders (10kg, 12kg, and 14kg) and is meant for domestic use as cooking gas. Industrial LPG is supplied in larger cylinders (50kg) and sold at market price. Domestic LPG can only be sold to households. Businesses are required to purchase industrial LPG.

Figure 7.1. Domestic and Industrial LPG cylinders

MDTCC regulates the marketing and distribution of LPG under the *Petroleum Development Act 1974*. As distribution of LPG involves transportation, it is also bound by regulations such as the *Land Public Transport Act 2010*, and the *Road Transport Act 1987*.

7.1 Commercial vehicle licence

Commercial vehicles such as lorries and trailers are the common transportations used in LPG distribution business. These vehicles require commercial vehicle licences issued by the Land Public Transport Commission (SPAD) in compliance with the *Land Public Transport Act 2010*. Commercial vehicle licences are issued to businesses and individuals subject to their proof of funds and business plan or contracts.
As shown in Figure 7.2, a number of other regulators are involved directly in the process of issuing a commercial vehicle license for a new vehicle:

- The local government (PBT) issues a support letter for parking facility.
- JPJ (The Road Transport Department (RTD)) approves new vehicle design, registers and issues road tax for the vehicle.
- PUSPAKOM, which is the vehicle inspection centre, carries out the initial road worthiness inspection on the vehicle.

Figure 7.2: The current process of commercial vehicle licensing

7.1.1 Issues

Two issues arise in getting a commercial vehicle license for a new vehicle:

1. Delays in issuing the licence
   One distributor had to wait six months for a commercial vehicle licence.

2. Restriction on the number of vehicles per company
   SPAD decides on the number of vehicles that a company can purchase during the evaluation of the application for a commercial vehicle licence.
7.1.2 The objective of commercial vehicle licence

The objective of the regulation is to ensure only vehicles which adhere to the standards and safety rules set by the regulators are used for commercial purposes.

7.1.3 What are the impacts of these regulatory arrangements?

Delay in getting the commercial vehicle licence means a loss of revenue opportunity and an increased cost of doing business.

Restricting the number of vehicles per company which impedes their business growth, implies that SPAD has direct control on distribution businesses.

7.1.4 Options to resolve the issues

1. Maintain the current practice

2. In issuing a commercial vehicle licence, it is recommended that all regulators re-engineer their respective processes with the objective of having faster, cheaper and fewer interactions between business and regulators.

3. SPAD lifts the restriction on the number of vehicles that a business can purchase. SPAD should not base its decision on the type of business entity. It should instead consider the capability of the company to finance the purchase of the vehicles and operate the business.
7.1.5 Recommendations

Option 2 would reduce the delay in issuing the commercial vehicle licence

Option 3 would remove the issue of restriction on the number of vehicles per company
7.2 Goods delivery licence for business owner

LPG distribution business owners have employees to drive their commercial vehicles. Drivers of commercial vehicles must possess Goods Delivery Licences (GDLs). A GDL is issued by the Road Transport Department (RTD) in accordance with the Road Transport Act 1987.

7.2.1 Issues

As a pre-requisite to issuing a commercial vehicle licence, SPAD requires that the business owner have a GDL. The requirement has no relevance as a GDL is meant for the driver of the commercial vehicle, who is often the employee of the business. Not all business owners are capable of driving commercial vehicles, as was the case of a sixty year old lady business owner interviewed in the study.

7.2.2 The objective of these regulatory arrangements

The objective of these regulatory arrangements is unclear as such requirement is not stated in the Road Transport Act 1987 for the application of a GDL or in the Land Public Transport Act 2010 for the application of a commercial vehicle licence (Box 7.1).

<table>
<thead>
<tr>
<th>Box 7.1</th>
<th>The Land Public Transport Act 2010</th>
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<td><strong>Requirement for operator’s licence</strong></td>
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51 (2) For the purposes of this Chapter, a person is deemed to be operating or providing a goods vehicle service if he—

(a) uses or drives a goods vehicle of a class of goods vehicles himself; or

(b) employs one or more persons to use or drive a goods vehicle of a class of goods vehicles,

to operate or provide a goods vehicle service, and—
(A) he owns the said goods vehicle; or

(B) he is responsible, under any form of arrangement with the owner or lessor of the said goods vehicle to manage, maintain or operate such goods vehicle.

7.2.3 What are the impacts of these regulatory arrangements?

The main impact of the regulation is that SPAD has a direct control of the distribution business set up. SPAD expects that in a small distribution business set-up, the business owner is also the driver of the commercial vehicle.

7.2.4 Options to resolve the issues

1. SPAD maintains the current practice

2. SPAD removes the requirement for a business owner to have a GDL in issuing a commercial vehicle licence.

7.2.5 Recommendations

Option 2 is preferred as being the most practical.
7.3 Routine inspection on commercial vehicles by PUSPAKOM

It is mandatory for all commercial vehicles to undergo a road worthiness inspections every six months. Currently, PUSPAKOM (Pusat Pemeriksaan Kendaraan Berkomputer) is the only vehicle inspection company appointed by the Government to carry out inspections for commercial vehicles in the country. PUSPAKOM has 55 inspection centres and 28 inspection sites around the country. There are more than 2000 vehicle examiners, accredited by RTD, to conduct the inspection of vehicles. PUSPAKOM carries out 3 million inspections annually. [1]

7.3.1 Issues

The main issue is that a routine vehicle inspection by PUSPAKOM is time consuming as there is usually a long queue. A single vehicle takes a few hours to process although the actual inspection does not require that long to complete. This is repeated every six months. Inadequate resourcing may be the reason for the delay.

7.3.2 The objective of a routine inspection on a commercial vehicle

The main objective of the routine inspection regulation is to ensure the road worthiness of a commercial vehicle.

7.3.3 What are the impacts of these regulatory arrangements?

The delay caused by PUSPAKOM inspection translates to a loss of revenue to business. A day’s loss for a trailer could be worth RM1,000.

7.3.4 Options to resolve the issues

The followings are measures that could be considered to resolve the issue of delay in routine inspection on commercial vehicles:
1. PUSPAKOM maintains the current practice
2. PUSPAKOM conducts an empirical study on its inspection capacity and whether it should be increased.

3. PUSPAKOM carries out a qualitative and quantitative studies on the experiences of business owners and individuals going through the process of inspection.

4. PUSPAKOM could plan its resources to match its workload.

5. PUSPAKOM provides alternative inspection mechanisms.

6. PUSPAKOM reduces the required frequency of inspections if this would not decrease safety.

7.3.5 Recommendations

Option 4 would be easier to adopt

7.4 References