The Republic of the Philippines
Department of Transportation and Communication (DOTC)

In the Republic of the Philippines
The Project for Developing Motor Vehicle Regulations and Certification
Final Report

March 2012

Japan International Cooperation Agency
Japan Automobile Standards Internationalization Center
Katahira & Engineers International
CHAPTER I  OUTLINE OF THE PROJECT ................................................................................. 1

1.1 Background of the Project ......................................................................................................... 1
1.2 Outline of the Project ................................................................................................................. 2
  1.2.1 Purpose ................................................................................................................................ .....................2
  1.2.2 Tasks and benefits ......................................................................................................................................2
  1.2.3 Subject area ................................................................................................................................ ...............3
  1.2.4 Executive organ of the other country ................................................................................................ ........3
  1.2.5 Scope of the Project ...................................................................................................................................3
  1.2.6 Points to take into account while executing the operation ...............................................................3
  1.2.7 Working procedure and period ................................................................................................ ..................4
  1.2.8 Study Team ................................................................................................................................ ...............5

CHAPTER II CURRENT SITUATION OF THE PHILIPPINES ................................................... 7

2.1 Current Situation of the Philippines ........................................................................................... 7
  2.1.1 Economic Situation in the Philippines ......................................................................................................7
  2.1.2 Philippine Automotive Industry ................................................................................................ .............. 11
  2.1.3 National Motor Vehicle Development Program ...................................................................................... 20
  2.1.4 Issues and Problems facing the Industry ................................................................................................ 29

2.2 Motor Vehicle Inspection and Registration System in the Philippines ............................................. 32
  2.2.1 Classification system of vehicle registration .......................................................................................... 32
  2.2.2 Existing Vehicle Registration Process in LTO District Offices and PETCs ............................................ 36
  2.2.3 LTO- Motor Vehicle Inspection Center ................................................................................................... 41
  2.2.4 Issues and Problems in the current system of MVIS, LTO Districts, and PETC ..................................... 47
  2.2.5 LTO Motor Vehicle Statistics ................................................................................................ .................. 49
  2.2.6 Custom Local Road Vehicles ................................................................................................ ................... 51

2.3 Analyzing Social Impacts of Motor Vehicles ........................................................................... 53
  2.3.1 Motor Vehicle Accidents ......................................................................................................................... 54
  2.3.2 Air Pollution levels/ Emission Data................................................................................................ ........ 57

2.4 Review of Institutional and Policy Regulations Governing MV .............................................. 58
  2.4.1 Institutions and Regulations in Motor Vehicle Regulations and Certification ..................................... 58
  2.4.2 Description of Roles and Functions of Various Agencies ................................................................. 60
  2.4.3 Review of Existing Policies, Laws on Motor Vehicle Regulations .................................................. 68
  2.4.4 Formation of the Committee on Harmonization of Vehicle Standards and Regulations ................... 74
2.4.5 Objectives of the CHVSR ................................................................................................................. 75
2.4.6 Organizational Structure of the CHVSR (Sub-committees) ................................................................. 76
2.4.7 CHVSR Sub-committee Activities and Outputs ..................................................................................... 79

CHAPTER III  PROJECT ACTIVITIES AND RESULTS ................................................................. 87

3.1 Organizing CHVSR Meetings .................................................................................................................... 87
3.1.1 Discussions at CHVSR and major agreements ....................................................................................... 87
3.1.2 Presentations at the CHVSR meetings ..................................................................................................... 87
3.2 Establishing a Road Map to Accession to the 1958 Agreement ................................................................. 89
3.2.1 Building a consensus about the benefits of accession to the 1958 Agreement ...................................... 89
3.2.2 Road map for accession to the 1958 Agreement .................................................................................... 100
3.2.3 Making arrangements with UNECE/WP29 secretariat for accession to the 1958 Agreement .................. 107
3.3 Establishing a Framework for Vehicle Regulation and Certification System ........................................... 108
3.3.1 Policy for making a framework for Vehicle Regulation and Certification System ................................. 108
3.3.2 Policy for concept of introduction of regulation and certification system .............................................. 109
3.3.3 How to develop a working system for the development of the regulation and certification system .......... 110
3.3.4 Developing a regulation and certification system .................................................................................... 111
3.3.5 Developing the concept of the vehicle regulation and certification system and its benefits ..................... 113
3.3.6 Working system for introducing a vehicle regulation and certification system ...................................... 119
3.3.7 Drafting a vehicle regulation and certification system based on the 1958 Agreement ............................ 120
3.4 Provision of Related Information .......................................................................................................... 131
3.4.1 Information on vehicle-related international treaties ............................................................................. 131
3.4.2 Information on electric vehicles ............................................................................................................ 131
3.4.3 1958 Agreement Seminar .................................................................................................................... 131
3.4.4 ECE Regulations Seminar ................................................................................................................... 132

CHAPTER IV  SUMMARY AND TASKS AHEAD ........................................................................ 133

4.1 Summary of Activities ............................................................................................................................... 133
4.2 Tasks Ahead ............................................................................................................................................. 134

List of Annexes
- Minutes of the 1st / 2011 3rd Quarter CHVSR Meeting
- Minutes of the 2nd / 2011 4th Quarter CHVSR Meeting
- Minutes of the 3rd / 2011 Special CHVSR Meeting
- Minutes of the 4th / 2012 1st Quarter CHVSR Meeting (Draft)
- Presentation materials at the 2nd Meeting of the CHVSR
- Presentation materials at the 3rd Meeting of the CHVSR
- Presentation materials at the 4th Meeting of the CHVSR
- Draft Road map (agreed upon at 4th meeting of the CHVSR)
- Presentation materials at the 1958 Agreement Seminar on Feb. 16, 2012
- Presentation materials at ECE Regulations Seminar on Feb. 9, 2012
- Whole Vehicle Type Approval Regulation Draft Text
Map of Subject area
<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>AAF</td>
<td>ASEAN Automotive Federation</td>
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<td>AAP</td>
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<td>ACCSQ</td>
<td>ASEAN Consultative Committee on Standards and Quality</td>
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<td>Automotive Export Program</td>
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<td>Association of Vehicle Importers and Distributors</td>
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<td>Complete Built Up</td>
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<td>DENR Administrative Order</td>
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<td>Department of Environment and Natural Resources</td>
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<td>Full Form</td>
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<td>ECE</td>
<td>Economic Commission for Europe</td>
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<td>Environment Management Bureau</td>
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<td>Electric Vehicle</td>
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<td>Global Technical Regulations</td>
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<td>HB</td>
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<td>MIRDC</td>
<td>DOST Metal Industry Research and Development Center</td>
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<td>National Motor Vehicle Manufacturing Development Plan</td>
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<td>Original Equipment Manufacturer</td>
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<td>PCIERD</td>
<td>Philippine Council for Industry and Energy Research and Development</td>
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<td>Progressive Car Manufacturing Program</td>
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<td>PCP</td>
<td>People’s Car Program</td>
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<td>PETC</td>
<td>Private Emission Testing Center</td>
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<td>PNP</td>
<td>Philippine National Police</td>
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<td>Philippine Standard Mark</td>
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<td>Progressive Truck Manufacturing Program</td>
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<td>Safety Organization of the Philippines</td>
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<td>TESDA</td>
<td>Technical Education and Skills Development Authority</td>
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<td>Truck Manufacturers Association, Inc.</td>
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<td>VTA</td>
<td>Vehicle Type Approval</td>
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<td>WVTAS</td>
<td>Whole Vehicle Type Approval System</td>
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CHAPTER I  OUTLINE OF THE PROJECT

1.1 Background of the Project

The Association of Southeast Asian Nations (ASEAN) aims at establishing an ASEAN Economic Community by 2015. As a concrete move to make this vision a reality, it promotes the integration of individual industries in the member countries focusing on 12 fields of priority. The automobile industry is one of these priority fields. It intends to harmonize vehicle regulations and certification systems among the member countries by 2015, so that they can respond to regional tasks such as control of greenhouse gas and build up a safe and secure motorized society.

In the Philippines, under the Presidential Order No. 628 issued in 2007, the Committee on Harmonization of Vehicle Standards and Regulations (CHVSR) presided by the Department of Transportation and Communications (DOTC) and comprised of the representatives of ministries concerned, industry, and academia was set up. Responding to the harmonization and integration of the region in the above field is a policy of the Philippines government, who intends to provide effective, safe, reliable, and sustainable traffic services, and leads to the improvement of safety performance, environment protection, improvement of energy efficiency, exclusion of defective products, etc., and thus contributes to the improvement of quality of life of residents.

However, in the international framework, the Philippines has not joined yet the Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions (the 1958 Agreement)(hereinafter referred to as “58 Agreement”), which prescribes mutual recognition of type approval, although it attends the World Forum for Harmonization of Vehicle Regulations (UN/ECE/WP.29) as an observer. Among the ASEAN countries, Malaysia and Thailand have already joined the Agreement. Indonesia is preparing for accession. The Philippines faces many issues relating to the establishment of a domestic system.

Japan has been encouraging ASEAN to integrate a vehicle regulation and certification system to ensure safety and security according to the New Growth Strategy and strategically expand markets for the Japanese automotive industry. To build up a system common to all the member countries of ASEAN, Japan needs to give technical support to such countries as the Philippines and Viet Nam, which are behind their schedules domestically.

In response to an official request from the Philippine government, Japan decided to carry out a Philippine Vehicle Type Approval Project.
The Japan International Cooperation Agency (JICA), a governmental agency mandated to implement technical cooperation programs extended by Japan, is commissioned to undertake this project.

1.2 Outline of the Project

1.2.1 Purpose

The purpose of the project is to:

1) Develop the framework of a new vehicle regulation and certification system in Philippines based on the 1958 Agreement, which is the world standard of vehicle regulation and certification systems, and

2) Establish a road map for the country to follow in preparing its accession to the 1958 Agreement and operations thereafter.

1.2.2 Tasks and benefits

1) Develop the framework of a vehicle regulation and certification system

In addition to a system to certify individual parts and systems, we have to create a whole vehicle type approval system (WVTA) to establish an international, unified vehicle regulation and certification system. This project aims at creating the framework of such a system. We expect that the creation of a whole vehicle type approval system will help the government to:

- Streamline and improve the efficiency of the existing regulation and certification systems currently supervised by various agencies, by having DOTC supervise WVTA and thereby aggregate all information on existing part and system certification systems.
- Ensure the compliance of the vehicle as a whole, in addition to the compliance of individual parts and systems.
- Ensure a uniform product quality of the vehicle as a whole, because the system requires the examination of quality control.
- Improve the efficiency of examination process, because the system consists of the technical compliance examination and quality control examination (uniformity) of a representative vehicle, thereby omitting the examination of actual vehicles when examining new vehicles of the same type.

2) Establish a road map toward the accession to the 1958 Agreement

Aiming at joining the 1958 Agreement and adopting the 19 ECE regulations recommended by ASEAN as domestic regulations by 2015, a road map will be drawn up that foresees all activities necessary for the country to (i) join 1958 Agreement (domestic examination and procedures); (ii) introduce the ECE technical regulations; and (iii) introduce a vehicle regulation and certification system; and that is consistent as a whole between tasks,
milestones and responsibilities clearly indicated.

The accession to the 1958 Agreement, the adoption of ECE regulations, and resulting mutual recognition arrangements (MRA) will allow the Philippines to:

- Increase the number of vehicles and introduce a high level of traffic safety and environmental standards into the country, for which the improvement of traffic safety and environment is an urgent task, and thus decrease social loss.
- Introduce the system efficiently in terms of time and money, without need of translation.
- Have a certain freedom in the process, introducing regulations as and when it pleases and taking the country’s situation into account.
- Develop the automobile industry as the government plans, by promoting exports capitalizing on MRA.

1.2.3 Subject area
Entire territory of the Philippines

1.2.4 Executive organ of the other country
Supervising agency: Department of Transport and Communications (DOTC)

1.2.5 Scope of the Project
The operation is to be conducted according to a Scope of Work (S/W) signed between JICA and DOTC in April 2011. To achieve “Purpose of the project”, it carried out the operation described in the “Tasks of the operation” taking into account “Policy of execution”. The procedure of execution is as shown in 1.2.7 below.

1.2.6 Points to take into account while executing the operation
(1) Operational system on the Philippines side

For consultation with the Philippines side, we used the existing CHVSR as organ of discussion and DOTC as our contact, without setting up any new organization. We made sure, however, to inform also other departments than DOTC of all developments relating to the 58 Agreement so that they could deepen their understanding of the importance of the 58 Agreement and that they had greater consensus when time came to examine the accession.

(2) Points taken into account while conducting the survey

Due to time constraints, it was difficult for us to complete all the process of drafting regulations by the end of the fiscal year. We hence first made a model, drafted trial
regulations on the model and left the rest of the regulations to the Philippines to complete on its own. With the cooperation of experts from Japanese auto and components industry well familiarized with the ECE regulations, we gave Philippine counterparts lectures on major ECE regulations.

1.2.7 Working procedure and period

(1) Preparation at home

We started preparatory work at home in August 2011. We sorted out, reviewed, and analyzed existing information and materials relating to this project, including those loaned by JICA, compiled an Inception Report, and submitted and presented it to JICA.

(2) First field work (August 31 to December 14)

We started the first field work on August 31, 2011. First, we presented the Inception Report to the DOTC, discussed it, and had their basic understanding (the 1st meeting of the CHVSR). We confirmed that the sharing of responsibility with the agency would be as agreed upon in the minutes of the meeting between JICA and the DOTC. Then, we met with people from agencies and industries concerned, presented the inception report, surveyed where they stood, and collected relevant materials.

In parallel, we made studies on the framework for a vehicle regulation and certification system and a road map for accession to the 1958 Agreement, presented and discussed them at the 2nd CHVSR meeting. We reached a basic agreement on the framework and the road map at the 3rd CHVSR meeting. Therefore, we agreed with Chairman Esguella to consolidate the planned 4th and 5th CHVSR meetings into one and hold the final 4th meeting in February 2012 to present a final summary of activities. (See 3.1).

(3) First work at home.

Based on the results of the first field work, we drafted a progress report, presented it to JICA, retouched it reflecting its comments and then submitted a final progress report to JICA in late December.

We sorted out and analyzed the results of the first field work, and planned the tasks and schedule of the second field work. We compiled all of these results into a draft final report and presented it to JICA, retouched it to reflect its comments, and submitted a draft final report to JICA in January 2012.
(4) Second field work (January 30 to February 29)

We conducted the second field work from January 30 to the end of February 29, 2012. We presented the draft final report to DOTC and then distributed it to relative agencies and industry in CD-R to request for comments at the 4th CHVSR meeting on February 15. At the 4th CHVSR meeting, we explained outline of the draft final report and asked to send comments by February 29. As for introduction of ECE regulations, we held ECE Seminar on February 9, 2012. At the seminar, we took up regulations regarding emission and tires which are high priority for the Philippines. We presented difference between the latest ECE regulations and the existing Philippine laws. As to the drafting and reviewing of regulations, we conducted a trial draft and review of regulations on tires on the model of ECE regulation (R30), paving the way for the Philippines to draft the rest of the regulations on its own. Regarding the road map for accession to the 1958 Agreement (which was basically agreed upon at the 3rd meeting of the CHVSR), we made some concrete proposals for implementing activities in the road map.

(5) Second work at home

Taking into account the comments of DOTC on the draft final report, we drafted a final report, retouched it reflecting the comments of JICA, and submitted it to JICA in March 21, 2012.

1.2.8 Study Team

The Japan Automobile Standards Internationalization Center (JASIC) was established in 1987 by joint efforts of the Japanese government and automotive industry for the purpose of supporting activities to promote internationalization of governmental standards and certification system for motor vehicles.

To this operation, we have assigned, as listed below, those of the members of JASIC who have worked for the harmonization of regulations in Asia and the harmonization of ECE regulations as well as experts who have worked for the harmonization of ECE regulations at WP.29 and for affairs relating to overseas laws and regulations. Part of current situation analysis and impact study will be taken in charge by Katahira & Engineers International (KEI).
## Study Team Composition

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<tr>
<th>Study Team Designation</th>
<th>Personnel</th>
<th>Affiliation</th>
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<tr>
<td>Team Leader</td>
<td>Ushio Ueno</td>
<td>Executive Director, Research Division, JASIC</td>
</tr>
<tr>
<td>Deputy Team Leader</td>
<td>Hiroshi Morita</td>
<td>Director, Research Department, JASIC</td>
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<tr>
<td>Draft Road Map for the accession to the 58 Agreement</td>
<td>Osamu Yamana</td>
<td>Senior Adviser, JASIC</td>
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<tr>
<td>Draft framework for vehicle regulations and certification system</td>
<td>Hiroyuki Nonaka</td>
<td>Senior Adviser, JASIC</td>
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<tr>
<td>Market Survey Specialist</td>
<td>Katsukaya Ishikawa</td>
<td>Manager, Project Development Department, Katahira &amp; Engineers International</td>
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<tr>
<td>Transport Industry Specialist</td>
<td>Mark Richmund de Leon</td>
<td>Associate Consultant, Katahira &amp; Engineers International</td>
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<tr>
<td>Researcher (1)</td>
<td>Grace Bulawan</td>
<td>Researcher, Katahira &amp; Engineers International</td>
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<td>Researcher (2)</td>
<td>Mia Majilan</td>
<td>Researcher, Katahira &amp; Engineers International</td>
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CHAPTER II  Current Situation of the Philippines

2.1  Current Situation of the Philippines

2.1.1  Economic Situation in the Philippines

2.1.1.1  Population Growth

A predominantly Catholic nation, as of 2011, the Philippines has become the world's 12th most populous nation, with a population of over 94 million. It is estimated that half of the population resides on the island of Luzon. The population's median age is 22.7 years with 60.9% aged from 15 to 64 years old showing a very young population. Debate over population control has been continuing in Congress to respond to the growing population but it has been receiving strong opposition from the highly conservative Catholic Church.

The population growth rate between 1995 to 2000 of 3.21% decreased to an estimated 1.95% for the 2005 to 2010 period Figure 2.2 shows this slowdown in growth rate. However, it must be noted that some areas in the Philippines especially urban areas at the periphery of Metro Manila experience high population growth because of in-migration from rural areas and urban sprawl spreading from the core of old city centers. Albeit this slowdown in growth, the Philippines has a population growth rate that is one of the highest in Asia.

2.1.1.2  Population Distribution

The Philippines is an archipelago comprising 7,107 islands with a total land area of 300,000 km². The 11 largest islands contain 94% of the total land area. The largest of these islands is Luzon at about 105,000 km². The next largest island is Mindanao at about 95,000 km². Topographically, the Philippines is broken up by the sea, which gives it one of the longest coastlines of any nation in the world. Some of these islands are not connected by bridges, thus
can only be reached through airplane or by sea. As an archipelago, inter-island travel via watercraft is often necessary. The busiest seaports are Manila, Cebu, Iloilo, Davao, Cagayan de Oro, and Zamboanga. Because of this geographic make-up, it poses as a challenge to administration and governance. As such, most government offices established regional offices to serve the constituent provinces and continue some of its governance functions. Furthermore, the Philippines is divided into a hierarchy of local government units (LGUs) with the 81 provinces as the primary unit. Provinces are further subdivided into cities and municipalities, which are in turn composed of barangays. The barangay is the smallest local government unit.

Among the 17 regions in the Philippines, Region IV-A (CALABARZON) had the biggest population size in 2007. It had a total population of 11,757,755 persons comprising 13.3 % of the country's total population. It was followed by the National Capital Region (NCR) with 11,547,959 persons (13.0 %) and Region III (Central Luzon) with 9,709,177 persons (11.0 %). When combined, these three regions comprised 37.3 % of the total population of the Philippines. The least populated region was the Cordillera Administrative Region (CAR) with 1,520,847 persons or 1.7 %

2.1.1.3 Economic Conditions and Growth Rate
A newly industrialized country, the Philippine economy has been transitioning from one based on agriculture to one based more on services and manufacturing. Of the country's total labour force of around 38.1 million,[4] the agricultural sector employs close to 32% but contributes to only about 13.8% of GDP. The industrial sector employs around 13.7% of the workforce and accounts for 30% of GDP. Meanwhile the 46.5% of workers involved in the services sector are responsible for 56.2% of GDP.

The Philippines, compared to its neighbour countries is a newly industrialized country in Southeast Asia. Following a slowdown during the global financial crisis in 2009, the Philippine economyroared back in 2010, with GDP growth rates not seen in over 30 years. On the demand side, private consumption, investment, and net exports were the main drivers of growth. On the supply side, industry and services propelled the economy. The nation's most important industries are food processing, textiles and garments, electronics and automobile parts.

The external position continued to strengthen, thanks to a consistently strong current account and, more recently, by improvements in the capital and financial account. Dollar remittances grew progressively, with the Philppinians economy relying heavily on remittances as a source of foreign currency primarily from the Filipino overseas contract workers deployment.
While its ASEAN neighbours have consistently posted high levels of economic growth in the last three decades, the Philippines continues to post modest and inconsistent growth. The country has its share of debilitating factors, such as political instability and corruption. One distinguishing problem though is the continued rapid population growth with its growing populace requiring necessary infrastructure and services. Indonesia and Thailand, for instance, reduced their population growth rates to 1.6% and 1.4%, respectively, in the 1990s. The effect is noticeable: Thailand, which had almost the same population in 1965, had about 14 million fewer people around 2000. Another factor that has been said to be influencing economic growth are national elections where, perceived political instability and new administrations as a result of the elections can easily shift investor confidence and thus affect economic growths. The Figure below shows this relationship.

**Figure 2-4 Annual GDP and GNP Growth Rate Change**

*Source: NSCB, 2011.*
The GDP per capita (US dollar) in Philippines was last reported at 2,140.12 in 2010, according to a World Bank report released in 2011. GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

### Table 2-1 GDP per Capita (Constant Prices, US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Per Capita (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>

Source: NSCB, 2011.

At present, the increasing purchasing capabilities of Filipinos has been said to have a high relation to increase in motorization in the Philippines where the private car has become an essentiality especially with the absence of an integrated and convenient public transportation.

#### 2.1.1.4 Future Macro-Economic Forecast of the Philippines

The World Bank retained its previous forecast of a 5% gross domestic growth rate for the Philippines for 2011. It likewise kept the 5.4% economic expansion forecast for next year. The World Bank, in its reports, explained its outlook to strengthening of investments, private consumption and services sector. Besides services, the bank identified the outsourcing, manufacturing, construction, mining, agriculture and merchandise sectors are growth drivers for the Philippine economy. Despite projections of growth rate patterns for the country, the bank warned of structural weaknesses in the Philippine economy, particularly widespread poverty and joblessness. The report recommended a steady focus on reforms and for additional resources to bring the Philippines onto a more inclusive growth path. The World Bank’s forecasts are lower than the Philippine government’s projection of 7% to 8% yearly GDP growth rate for the country from 2011 through 2016.

According to analysts, the major factor that helped the Philippine Economy survive the global financial crisis in 2008 is its low foreign bank participation, making the Philippines less exposed to ailing global financial institutions and structured products. Overall, the Philippine
financial system has so far remained resilient to the spillovers from the global financial crisis.

Thus it is projected that the Philippine economy, in terms of GNP and GCP will continue to show healthy growth in the succeeding years. There are three (3) scenarios that are projected: low growth, medium growth, and high growth. For the high growth scenario, the estimate of the Philippine Government of seven percent (7%) per annum shall be used. The World Bank estimate of five percent (5%) per annum shall be used for the medium growth scenario and three and a half percent (3.5%) per annum for the low growth scenario.

The figures below show the GNP and GDP projections for 2011 to 2030 based on low, medium and high estimates given the above-mentioned forecasts.

![Figure 2-5 Projected GNP of the Philippines](image1)

![Figure 2-6 Projected GDP of the Philippines](image2)

*Source: Projected from NSCB Statistics, (values in (in Philippine Peso)*

### 2.1.2 Philippine Automotive Industry

#### 2.1.2.1 Motor Vehicle Assembly Industries

The Philippine motor vehicle industry is principally dominated by Japanese automobile manufacturers such as Toyota Motor Phils. Corp. (TMPC), Mitsubishi Motor Phils. Corp. (MMPC), Honda Cars Phils., Inc. (HCPI), Nissan Motor Phils., Inc. (NMPI) and Isuzu Phils., Inc. (IPC). Same mentioned companies including Universal Motors Corp. (UMC) and Ford Motor Company Philippines, Inc. (FMCP) dominate the passenger cars and light commercial vehicles category, while Pilipinas Hino, Inc (Hino) and Columbian Motors Corp. (Nissan Diesel) dominate the trucks and buses category. Other Vehicle assemblers carry German and Chinese brands: Man Automotive Concessionaires Corp. (MAN buses-rear engine), Dreamco Automobile Co., Inc. (JMC light trucks), Transport Equipment Automotive Components, Inc. (KAMA and Dongfeng light trucks) and IKK Ichigan, Inc. (Jinbei light trucks).
At present, there are 5 passenger cars assemblers, 19 commercial vehicle assemblers and 28 motorcycle assemblers registered participants under the program with a total plant capacity of 2,937,480 units/year.

In terms of production and sale, the motorcycle industry is likewise dominated by Japanese manufacturers: Honda Phils., Inc. (HPI), Kawasaki Motor Phils. Corp., Suzuki Phils., Inc. and Yamaha Motor Phils., Inc. (YMPI). Most of the other motorcycle assemblers' are carrying Chinese brands such as Sinski, Lifan, Skygo, Shineray, Loncin, Zongshen and others. Others participating motorcycle brands are Taiwanese (SYM and Kymco), Thai (Tiger), Malaysian (Demak) and Indian (Granstar). This sector is the main market for original equipment manufacturer (OEM) parts produced by the local manufacturers.

2.1.2.2 Parts Manufacturing Industries

There are 256 companies that supply automotive parts producing over 300 parts and components made of metals, plastic, rubber and composite materials for both the original equipment manufacturer (OEM) and replacement market. Almost forty percent (40%) of all parts manufacturers produce OEM parts while the remaining sixty percent (60%) caters the aftermarket. The principal parts and components manufacturers such as Yazaki Torres
Manufacturing Corp., International Wiring Systems Phils., Inc., Asian Transmission Corp., Toyota Autoparts Phils., Philippine Auto Components, Inc., are also serving the export market.

Figure 2.8 below maps out the location of these auto-parts industries throughout the Philippines. Majority of them are based in Laguna and in Manila.

Figure 2-8 Location inventory of Auto Parts Manufacturing Industries

2.1.2.3 MV Production in the Philippines

The decline in domestic assembly operations is also evident in Table below. The share of domestically assembled vehicles sold dropped from 92% of total sales in 2003 to 49% in 2009 and to 44% in 2010. The share of CBU imports rose from 8% of total industry sales in 2003 to 51% in 2009. Given the shrinking scale of domestic production, completely knocked down (CKD) operations have become very costly. With the reduction of tariffs to 5% under the AFTA Common Effective Preferential Tariff (AFTACEPT), domestic assemblers have shifted their operations away from assembly or CKD operations toward CBU imports. This is indicated by the large increase of the latter in the proportion of imports to total industry sales from 4% in 2000 to 51% in 2009 and to 56% in 2010.
Looking closely at the previous figure above, domestically assembled vehicles (CKD) decreased since after 1997. Production picked up towards 2003 with 92% of total sales, but again declined to 49% towards 2009. Meanwhile, importation by domestic firms increased from 4% to 51% of total sales in the recent decade. According to interviews with BOI, this volume of importation was facilitated by the implementation of tariff schemes in the ASEAN, such as the Common Effective Preferential Treatment (CEPT) under the ASEAN Free Trade Agreements (AFTA).
Table 2-2 Total 4-Wheel Vehicle Sales

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 4 wheel</td>
<td>85,519</td>
<td>92,286</td>
<td>88,061</td>
<td>96,992</td>
<td>99,541</td>
<td>117,903</td>
<td>124,449</td>
<td>132,444</td>
<td>168,490</td>
</tr>
<tr>
<td>Vehicle Sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Car</td>
<td>21,669</td>
<td>24,217</td>
<td>33,021</td>
<td>35,399</td>
<td>38,235</td>
<td>40,950</td>
<td>44,313</td>
<td>46,111</td>
<td>58,615</td>
</tr>
<tr>
<td>Commercial Vehicles</td>
<td>63,850</td>
<td>68,069</td>
<td>55,040</td>
<td>61,593</td>
<td>61,306</td>
<td>76,953</td>
<td>80,136</td>
<td>86,333</td>
<td>109,875</td>
</tr>
<tr>
<td>• LCV</td>
<td>24,642</td>
<td>27,371</td>
<td>30,906</td>
<td>33,321</td>
<td>34,510</td>
<td>43,287</td>
<td>47,326</td>
<td>54,294</td>
<td>71,202</td>
</tr>
<tr>
<td>• AUV</td>
<td>37,151</td>
<td>38,673</td>
<td>22,345</td>
<td>26,239</td>
<td>24,439</td>
<td>31,047</td>
<td>30,159</td>
<td>29,100</td>
<td>35,953</td>
</tr>
<tr>
<td>• Trucks</td>
<td>1,476</td>
<td>1,497</td>
<td>1,264</td>
<td>1,426</td>
<td>1,759</td>
<td>1,991</td>
<td>1,853</td>
<td>2,117</td>
<td>2,296</td>
</tr>
<tr>
<td>• Bus</td>
<td>581</td>
<td>528</td>
<td>525</td>
<td>607</td>
<td>598</td>
<td>628</td>
<td>798</td>
<td>822</td>
<td>424</td>
</tr>
</tbody>
</table>

*Source: Chamber of Automotive Manufacturers of the Philippines, Inc. and Truck Manufacturers Association*

The Philippine automotive industry experienced its highest vehicle sales in 1996, with over 160,000 units sold, 55% of which were passenger cars while the remaining 45% were commercial vehicles. Sales declined during the 1997 Asian crisis, but have been showing gradual improvement in recent years. From 1998 to 2010, sales increased by 76%. Units sold reached over 100,000 in 2007 and has since been increasing annually by 6% on average. Sales increased by 27% from 132,444 units in 2009 to 168,490 units in 2010. In addition, sales in 2010 increased 6000 units compared with the 162,087 high sales in 1996. Statistics also indicate that commercial vehicle sales dominated over passenger car sales starting 1998. Aldaba (2007) recounts that preference for commercial vehicles, such as AUVs, is due to their affordability, sturdy built and capacity to accommodate members of large Filipino households. Moreover, with its make, utility vehicles can withstand the poor condition of some road networks in the Philippines.

The continuous increase in fuel cost and worsening effect of road congestion has influenced the increase in motorcycle registration. Furthermore, rising income levels of the Filipinos, made the private motor vehicle a very attractive choice for transport. This is aggravated by the fact that the public transport system in the Philippines is being operated at low levels of service making it unattractive to the commuting public. In addition, the affordable financing schemes offered by cars and motorcycle dealers allowing consumers to purchase vehicles at low down payment and low monthly payment options has produced a rising trend in motor
vehicle usage.

2.1.2.4 Exports

Currently, Ford Philippines is the lone exporter and participant in the government’s Automotive Export Program (AEP). It has so far exported 75,000 vehicles since 2002 valued at more than $860 million. Ford Philippines reported that exports of locally assembled cars rose 7% in the first quarter of the 2011. Exports of their car models’ Ford Focus, Ford Escape and Mazda 3 during the period went up to 1,816 units from 1,704 units in the same period in 2010. The growth rate for the period is slightly slower than the 35% growth chalked up for the entire 2010, a record year for exports, where a total export of vehicles stood at 9,858 units last year. According to news clips, Ford has no plans to increase the current 36,000 units of annual production at its Sta. Rosa plant, and that Ford is set to produce the next-generation Focus in its Thailand hub by 2012 and is still studying other products that it may produce from the Laguna plant. However, this strategy of Ford may have changed with the flooding experienced in Thailand during the last quarter of 2011. In the same news clip, a representative of BOI was quoted as saying that the industry must produce 200,000 to 250,000 units a year – for exports to succeed and to achieve economies of scale. The same representative mentioned that the industry sold 168,000 (units in 2010), in which he added that the economies of scale are reachable in the next few years.

Figure 2-11 Motor Vehicle Exports (1995-2010)

Likewise, the export revenues of the motor vehicle parts industry have constantly been increasing and maintain its competitiveness. The bulk of total exports were accounted for by wiring harness, lead-acid storage batteries, road wheels, intake air filters, brakes and clutch pedals, steel-belted automobile tires, other gear boxes, body parts and accessories, and other
motor vehicle parts (excluding rubber tires, engine and electric parts). The current top five (5) markets of motor vehicle parts include Japan, Germany, United States of America, Thailand and Indonesia.

When the Philippines access to the 1958 Agreement, they will be able to utilize MRA by introducing WVTA system and adopting ECE regulations. To export automotive parts and components, the exporter is required to get certification from the government of the importing country and it leads to the increase of costs. While ECE-certified products can be exported without certification from the importing country, thus save time and cost. Therefore, accessing to the 1958 Agreement and introducing WVTA system is essential to expand exports and promote the government’s Automotive Export Program (AEP).

2.1.2.5 Economic Share of Motor Vehicle Industry

The total value added contribution of the assembly industry declined substantially to PHP 19 billion in 2008 from about PHP 72 billion in 2006. This represented a huge drop in its share from 8% of total manufacturing value added in 2006 to 2% in 2008. In terms of employment contribution, however, its share remained at almost 0.6% during the same years. The manufacture of bodies for motor vehicles followed the same downward trend in the assembly sector as it experienced reduction in employment and value added. However, the production of parts and accessories experienced rising employment, value added, and number of establishments, with its share to total manufacturing value added registering an increase to 1.7% and its share of employment to total manufacturing rising to 2.6% in 2008.
Likewise, investments in the auto-industry sector peaked in 2008 with an accumulated investment of at least 6 Billion pesos. However, investments started to decline in 2009. Issues and problems relating to the decline of investments will be discussed in the subsequent section.

**Figure 2-13 Investments in the Automotive Manufacturing Industry Sector**

Source: BOI  
Note: BOI registered investments only

### 2.1.2.6 Composition of the Motor Vehicle Industry Association

The Philippine Automotive Federation Inc. (PAFI) is the umbrella organization of automotive assemblers and parts and components manufacturers association; these includes The Chamber of Automotive Manufacturers of the Philippines, Inc. (CAMPI), Motorcycle Development Program Participants Association (MDPPA) for motorcycles, Truck Manufacturers
Association (TMA) for trucks and other commercial vehicles and the Motor Vehicle Parts Manufacturers Association of the Philippines (MVPMAP). MVPMAP has a total number of 101 active members. Other parts manufacturing companies were from Motorcycle Parts Producers and Exporters Association (MCPPEA) composed of 76 members and 49 represents second and third tier suppliers.

CAMPI was formed in 1995. There were eleven (11) founding member-companies composed of motor vehicle manufacturers who were participants to the Motor Vehicle Development Program (MVDP) of the government. Currently, CAMPI has twelve (12) active members who represent global automotive brands.

As of January 2011, the active members of CAMPI are the following:

1) Asian Carmakers Corp.
2) CATS Motors, Inc.
3) Columbian Autocar Corp.
4) CMANC
5) Honda Cars Philippines, Inc.
6) Isuzu Philippines Corp.
7) Mitsubishi Motors Philippines Corp.
8) Nissan Motor Philippines Corp.
9) PGA Cars, Inc.
10) Suzuki Philippines, Inc.
11) Toyota Motor Philippines Corp.
12) Universal Motors Corp.

Until recently, The local automotive industry has created the Philippine Automotive Competitiveness Council Inc. (PACCI) to promote domestic manufacturing as well as ensure overall future competitiveness and to preserve jobs. PACCI is composed of major Japanese-car assemblers (Toyota, Mitsubishi, Honda and Ford) and the MVPMAP. In late 2010, a new group was formed which is the Association of Vehicle Importers and Distributors (AVID) composed mainly of non-Japanese CAMPI members (led by Hyundai Asia Resources Inc, Chevrolet, Volvo).

While all of these are members of the same umbrella group CAMPI, there is said to be a brewing factionalism inside the association that threaten to break up the 15-year-old organization. In the broadest sense, the CAMPI-AVID-PACCI grouping is a competition for market dominance between automakers from longtime industry leaders like Japanese manufacturers versus the upstart and aggressive Korean brands. Furthermore, it was said that
the factionalism was brought about by the dispute over Executive Order No. 877-A, where AVID members where said to oppose the EO due to its alleged adverse impact on vehicle importers where the EO is said to favour local assemblers undermining the importers role in the economy.
And because of dispute, DTI shelved the EO and is said to be supporting the crafting of a new vehicle development program.

2.1.3 National Motor Vehicle Development Program
In its effort to develop the domestic manufacture of automotive parts and components, the Philippine government adopted different government policies and legislations to help shape and revitalize the Philippine automotive industry.

The country consequently saw an expansion in the automotive manufacturing industry with the implementation of these programs, and the government recognized the industry’s potential to stimulate growth. The table below highlights the menu of policies which the Government implemented and its main provisions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Program/Policy</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>Progressive Car Manufacturing Program (PCMP)</td>
<td>increase local assemblers domestic content from 10 percent in 1973 to 60 percent in 1976</td>
</tr>
<tr>
<td></td>
<td>Progressive Truck Manufacturing Program (PTMP)</td>
<td>- promote horizontal integration in the industry by the creation of new manufacturing activities among small and medium scale enterprises through subcontracting and transfer of technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- build up exports of manufactured products in a regional (ASEAN) automotive complementation program</td>
</tr>
<tr>
<td>1987</td>
<td>Car Development Program (CDP)</td>
<td>- increase local assemblers domestic content from 32.26 percent in 1988 to 40 percent in 1990</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- develop a viable automotive parts manufacturing industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- facilitate technology transfer and development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- generate employment, make available reasonably</td>
</tr>
</tbody>
</table>

Table 2-4 History of the Philippine Motor Vehicle Development Program
<table>
<thead>
<tr>
<th>Year</th>
<th>Programs</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>People’s Car Program (PCP)</td>
<td>include the assembly of smaller cars, named as people’s car, or passenger cars with gasoline engine displacement of not more than 1200 cc. Meet the minimum local content usage from 35% in 1991 to 51% in 1993.</td>
</tr>
<tr>
<td>1992</td>
<td>Luxury Car Program</td>
<td>Allow the entry of high end passenger cars defined as passenger cars with engine displacement greater than 2800 cc.</td>
</tr>
<tr>
<td>1994</td>
<td>ASEAN Industrial Joint Venture (AIJV) Scheme</td>
<td>Allow the entry of new assemblers under the ASEAN Industrial Joint Venture (AIJV) Scheme.</td>
</tr>
<tr>
<td>1996</td>
<td>Memorandum Order Number 346 Car Development Program Commercial Vehicle Development Program</td>
<td>Open up the closed vehicle categories to new participants and removed restrictions on the number of models and variants. Terminate the foreign exchange and local content.</td>
</tr>
<tr>
<td>2002</td>
<td>New Motor Vehicle Development Program (EO 156)</td>
<td>Ban the importation of all types of used motor vehicles and parts and components, except those that may be allowed under certain conditions. Restructure the Most Favored Nation (MFN) tariff rates for motor vehicles and their raw materials and parts and components at such rates that will encourage the development of the Philippine motor vehicle industry. Restructure the current excise tax system for motor vehicles with the end view.</td>
</tr>
</tbody>
</table>
Since 1973, the country’s motor vehicle manufacturing program centered on the promotion of local content in the assembly of cars, trucks, and motorcycles. The program aimed to promote the domestic manufacture of automotive components by requiring assemblers to increase their domestic content from 10% in 1973 to 60% at the end of 1976. It also aimed to promote horizontal integration in the industry by the creation of new manufacturing activities among small and medium scale enterprises through subcontracting and transfer of technology.

However, in the mid 1980s, political crisis hit the country and eventually affected the economy. To revitalize the industry, the government replaced the PCMP program with the Car Development Program (CDP) and the PTMP with the Commercial Vehicle Development Program (CVDP) in 1987. The government had more pronouncedly aimed to increase local content of assembled vehicles, earn and save foreign exchange, generate employment, and develop a viable automotive parts manufacturing industry. The programs that followed were basically amendments that provided for inclusion of new car categories, as well entry of new
assemblers which allowed Malaysia’s Proton to come in with a joint-venture with a Filipino firm (Autocorp Group), under the ASEAN Industrial Joint Venture (AIJV) Scheme.

In 1996, MO 346 was issued and this liberated the motor vehicle development programs. This memorandum order removed restrictions on the number of models and variants. In addition, with the Philippines’ commitment to the Trade-related Investment Measures (TRIMs) in the WTO, the government terminated the foreign exchange and local content requirement in 2003.

In 2002, the government legislated EO 156 or the Motor Vehicle Development Program (MVDP) to provide the automotive industry with a comprehensive industrial policy and development direction. Under this executive order, the production and/or assembly of motor vehicles and other vehicle assemblies covered under the MVDP shall be in knocked down condition only. And, only brand-new Original Equipment Manufacturer (OEM) of knocked down parts and components for assembly purposes shall be eligible for importation under the program. The EO likewise expounded on requirements for new participants and declared relaxing of limitations on the number of models and variants.

And in year 2010, recognizing the continuing trade liberalization and intensifying competitive environment, the government enhanced EO 156 with the issuance of EO 877-A of 2010 or the Comprehensive Motor Vehicle Development Program. This Program aims to address the need to strengthen the used vehicle importation prohibition under EO 156; to take advantage of tariff reduction schemes in ASEAN; to promote maximum scale integration of the production of motor vehicles, parts and components; and enhance privileges and benefits for the industry, among others.

Furthermore, EO-877a aimed to enhance Philippine’s industry policy framework by establishing a Motor Vehicle Industry Council under the supervision of the Department of Trade and Industry (DTI). Said council will act as the central body to coordinate policy for the development of the motor vehicle industry. To provide support and improve the competitiveness of the industry, an Industry Development Fund would be created for research and development, acquisition and upgrading of equipment, human resource development, and market access support for exporters. Like the previous plan, the new MVDP also indicated that tariffs and excise taxes would be restructured to promote the development of the industry.

However, the implementation of the EO-877a did not take-off, with its implementing rules and regulations (IRR) not being published. According to news reports, much of this can be attributed to the ongoing rift war between factions in the motor vehicle manufacturing associations with some of its members wanting to have a stake at the Motor Vehicle Development Council.
With the collapse of the EO-877a, the DTI in a meeting with the Study Team relayed that the government is still implementing the rules and regulations as stated in previous issuances such as those in EO 156. On the other hand, DTI-BOI is optimistic that the proposed bills in Congress will pave the way for the creation of a more vibrant motor vehicle industry, where the bills’ structural foundation is said to have been based on the concept of EO 877a.

**2.1.3.1 Executive Order 877-A**

Despite Executive Order No. 226 and Executive Order No. 156 which empowered the Board of Investments (BOI) to formulate and implement rationalization programs for certain industries and provided for a comprehensive industrial policy and directions for the Motor Vehicle Development Program to accelerate the sound development of the Philippine Motor Vehicle Industry, problems still plagued the motor vehicle manufacturing industry. Thus in June 2010, EO 877-A was signed by President Arroyo which created the Comprehensive Motor Vehicle Development Program.

EO 877-A’s summary of objectives and issues that plagued it are the following:

- **Called for the creation of a Motor Vehicle Industry Council** that will have four private sector representatives from industry associations to give inputs in crafting policies.
  - Issue: DTI officials find it unnecessary why their job, being the agency directly handling the automotive sector, is relegating its job to a council, which is at the same time placed directly under the DTI-BOI also.
  - There is a struggle between auto-manufacturing associations to get influential positions as representatives of the council. CAMPI → Pacci → MDPPA→ Motorcycle Parts Producers and Exporters Association (MCPPEA) → Truck Manufacturers Association (TMA)

- **Prohibition of used Vehicles Importation:** The importation into the customs territory or the Philippine territory outside the secured fenced-in Freeport zones of all types of used motor vehicles is prohibited

- **Restructuring of Tariff rates and Excise Tax:**
  - the tariffs for motor vehicle products shall be restructured at such rates comparable to neighbouring countries with similar motor vehicle development programs.
  - the excise taxation system for motor vehicles shall be restructured to create a fair, simple, transparent and stable taxation system and promote the development of the motor vehicle industry.
  - ISSUE: Motor Vehicle Importers group Association of Vehicle Importers and Distributors (AVID) are complaining of this provision. They said they “would
firmly and vigorously oppose any policy that will enhance the CMVDP incentive complement at the expense of fair competition, [including] any upward restructuring of import tariffs or excise tax on CBU [completely built unit] imports, that would wittingly or unwittingly stifle local market competition to the latter’s undue disadvantage and prejudice.” They are recommending to temper the subsidy for vehicle and parts makers because of the country’s tight fiscal situation and the local auto sector’s lack of competitiveness.

- **Export Incentives:** An incentive package shall be granted on the exports of motor vehicles, other vehicle assemblies and its parts and components, in order to encourage greater participation and diversification in automotive exports.

- **Standards and Technical Regulations:**
  - Standards and Technical Regulations shall be established, Efforts shall be made towards the adoption of Mutual Recognition Agreement (MRA), and MVDP shall aggressively continue to take advantage of the free trade agreements and programs of the ASEAN.

- **Industry Development Fund.** - shall be established to provide for research and development, acquisition, development and upgrading of equipment and facilities, for exporter, which fund shall be administered by the Council through the BOI.

### 2.1.3.2 Proposed Bills on the National Motor Vehicle Development Program

**House Bill 4499: The Philippine Motor Vehicle Manufacturing Industry Act**

Congress is crafting a comprehensive motor vehicle bill that will address all issues of the industry such as competitiveness, development and tax incentives that could replace Executive Order 877-A or the new Motor Vehicle Development Program (MVDP), which has been left hanging for over a year already. This is the bill being proposed by Congressmen Rufus B. Rodriguez and Maximo B. Rodriguez Jr.

Its pertinent points are the following:

- **Creation of a Development Plan:** Creation, upon approval of the President, of a three (3) year National Motor Vehicle Manufacturing Development Plan which would identify priority development products and would grant incentives to those with high manufacturing value-added and with high potential for economic efficiency.
  - the NMVMD plan be integrated into the Philippine Export Development Plan and the Medium-Term Philippine Development Plan which define the industry’s annual and medium-term manufacturing and export targets, and programs and strategies to support manufacturing and export thrusts.
• **Provision of incentives:** the HB plans to grant incentives to both manufacturers of motor vehicles if they are duly registered with the Board of Investments under the MVDP, and to manufacturers of motor vehicle parts and accessories. The incentives include the ff:
  - income tax holiday, For five (5) years
    - new model will be granted fresh income tax holiday (5 more years).
  - net operating loss carryover,
  - double deduction on expenses for training, research and development,
  - tax and duty-free importation of capital and training equipment, among other things.

• **Creation of a COUNCIL:** Creation of the inter-agency public-private sector Motor Vehicle Manufacturing Development Council as the central policy coordinating body and national advisory committee. It shall be composed of the ff:
  1) Department of Trade and Industry (DTI) Undersecretary for Industry and Investments as chairman;
  2) National Economic Development Authority (NEDA), Deputy Director-General;
  3) Department of Finance (DOF), Undersecretary;
  4) Department of Environment and Natural Resources (DENR), undersecretary;
  5) Department of Energy (DOE) undersecretary;
  6) Department of Transportation and Communications (DOTC), undersecretary;
  7) Department of Labor and Employment (DOLE), undersecretary; and
  8) Private sector, four representatives, one of whom shall be appointed as vice chairman.

  • Harmonization Measures. – The Government shall formulate and implement harmonization measures with the end view of promoting effective regulation and transparency in rules.

(2) **House Bill 5279: Proposed Comprehensive Motor Vehicle Development Act,**
This house bill is almost the same as HB4499, but provides for an explicit prohibition on the importation of second-hand vehicles, engines, parts, and components. Deputy Speaker Lorenzo R. Tañada III who is the author of this bill was quoted as saying that "as proven by the local automotive industry’s performance when Executive Order 156 was still in effect, the prohibition of such used items had a positive effect – from a 43% local industry sales figure in 2002 to 73% in 2009." Likewise, in accordance with the Flag Law, government offices shall be enjoined to procure brand-new locally manufactured vehicles, thus allowing for a steady market.

Furthermore, it was Congressman Tanada’s belief that Government should formulate
measures to lower the cost of doing business such as the reduction or removal of regulatory cost and process improvement among others as well as promote the development of new technologies in the motor vehicle industry and its support infrastructure including research and development and identify a niche model to be developed and be manufactured in the country both for domestic and international distribution.

The HB’s other main policy concerns are the following:

a) re-vision the Philippine Auto Industry Development Program in the context of the ASEAN region and globalizing market integration… to be a hub for auto parts manufacturing;

b) address smuggling concerns to prevent the decline of the local motor vehicle industry;

c) enhance the privileges and benefits for the motor vehicle industry to achieve economies of scale;

d) lower the cost of doing business such as the reduction or removal, as the case maybe, of regulatory cost and process improvement among others; and

e) identify a niche model to be developed and be manufactured in the Philippines both for domestic and international distribution.

f) niche model: refers to a model that is conceptualized, designed and manufactured locally.

Other pertinent provisions of the house bill are the following:

- **Motor Vehicle Development Program (MVDP)**
  - The production and/or assembly of motor vehicles and other vehicle assemblies covered under the MVDP shall be in KD condition only to promote high value added in motor vehicle manufacturing and high degree of vehicle production operations.
  - Only brand-new OEM KD parts and components for assembly purposes shall be eligible for importation under the MVDP subject to such limitations as may be imposed by BOI.

- **Incentives for Auto / Auto-parts manufacturers.**
  - Low tariff rates for KD parts and components
  - Assembly and/or manufacture of motor vehicle and parts and components shall be listed in the annual Investment Priorities Plan for five (5) years
  - Exemption from all regulatory fees
o Special incentive scheme to those who will invest in the development and manufacture of alternative-fueled land transport and green technologies

o special incentive scheme to those who will invest in the development and manufacture of niches

o Income Tax Holiday. – For five (5) years

o net Operating Loss Carry-Over

o Accelerated Depreciation

o Deduction on Training Expenses and Research and Development

o Tax and Duty Free Importation of Capital Equipment.

o Tax and Duty Free Importation of Training Equipment

• **Prohibition of Used Vehicles Importation**

  o importation into the customs territory or the Philippine territory outside the secured fenced-in Freeport zones of all types of used motor vehicles is prohibited, except for the following:

  o Importation of used engines and parts and components for all motor vehicles shall be strictly prohibited.

• **Restructuring of Tariff rates and Excise Tax**

• **Export Incentives**

  o Commitment to export annually a total of at least: 5,000 units or US$50 million (Freight on Board (FOB) value) per year for passenger car and commercial vehicle models (except trucks and buses); and 18,000 units or US$10 million (FOB Value) for motorcycles. No minimum volume or value of export is required for trucks and buses.

  o Participant in parts and components shall commit to export annually at least: US$ 5 million (FOB value) of parts and components for cars and commercial vehicle models (including trucks and buses); and US$ 1 million (FOB Value) of parts and components for motorcycles.

• **Creation of the Motor Vehicle Industry Development Office**

  o under the Office of the Secretary of the DTI and headed by a director general,
2.1.4 Issues and Problems facing the Industry

The Philippines industry has some advantages. Some major global players in the auto industry, including Toyota, Honda, Ford, Mitsubishi and Isuzu, have established operations in the Philippines. Sections of the components industry are internationally competitive and export focused. The labour force is well-trained and relatively efficient.

Despite all of this, a PACCI commissioned report in 2008 has identified several challenges facing the industry in the Philippines, including:

1) small and slow growing domestic market
2) small scale vehicle assembly plants
3) high rate of growth of CBU imports
4) high level of second hand imports in last decade
5) weak local components supply base due to lack of scale
6) high logistics and energy costs
7) significant cost competitiveness disadvantage

To highlight some of these disadvantages, first, is lack of economies of scale. The industry requires large economies of scale in order to be competitive. In the Philippines’ case, domestic demand has remained weak as its domestic market is relatively small compared with the other ASEAN countries. At the same time, the presence of smuggled vehicles has continued to put tremendous pressure on the industry; hence, production volume has remained low. According to the PACCI commissioned report, the Philippines industry currently faces a cost disadvantage, on average, of at least US$1,000 per car relative to Thailand. It is lack of economies of scale which is believed to make the cost expensive. The report concluded that in order for the Philippines to succeed in the auto industry, it will need to achieve an efficient scale of production, become more export oriented and increase local content.

Second, is the issue of smuggling. Over the last decade the government has failed to protect the domestic automotive manufacturing industry and was for years unable to prevent large volumes of used car imports despite their prohibition in 2002. The industry in 2009 produced only 48% of total new car sales in the country, while in 2002, 87% were produced domestically. Imports of new cars have been liberalized, and some 200,000 “illegal” used cars have been imported through the Subic and Cagayan economic zones in less than a decade. Although former president Macapagal-Arroyo issued EO 156 in 2002, which prohibited almost all used car imports, small used car importers at the Subic Bay Freeport Zone and later the Cagayan Special Economic Zone and Freeport obtained injunctions from local courts in Olongapo and Aparri that blocked implementation of national government policy. Despite
Supreme Court rulings affirming the validity of the prohibition against importing used cars, they continue to enter the country.

In the Cagayan Freeport, some 600 cars each month are reportedly sold to buyers outside the freeport. Vendors there were previously located at Subic Freeport and relocated in anticipation of the Supreme Court decision that closed their business at Subic. The national government has rationalized that it can do nothing to stop imports at CEZA so long as the local judge who issued an injunction delays his ruling on whether the imports are legal. Smuggling not only of second hand vehicles are so rampant that even expensive SUVs and luxury cars have gain entry into our ports and exclusive car parks. Imported used vehicles are brought to the Philippines in bulk since they are cheaper by the dozen. A brand new cargo van that would cost ₱700,000 to ₱800,000 can be bought at half the price or even cheaper.

The figure below compares two sets of data: one from the Land Transportation Office (LTO) and the other from the Chamber of Automotive Manufacturers of the Philippines, Inc. (CAMPI). The LTO data refer to newly registered vehicles while the CAMPI data cover sales of domestically assembled vehicles and imported CBUs. As the numbers reveal, there is a large discrepancy between the two datasets, with the difference between the two indicating a rough estimate of the volume of smuggled vehicles.

Figure 2-14 Comparison of LTO new registration and industry sales of cars, utility vehicles SUVs
Third is the high cost of power. The cost of power is a serious competitive disadvantage for the Philippines, especially for manufacturers. For example, over 10% of the expense of manufacturing an automobile in the Philippines is for electricity. A car assembly plant in the Philippines pays 50% more than its counterpart in Thailand and 100% more than in Vietnam, where power is government-subsidized. This is the case even with discounted power rates for firms in PEZA zones.

Lastly, according to BOI, is the reluctance of multinational companies to outsource components manufacturing to local Filipino firms. These technologies were a product of long years of experience and entailed substantial R&D costs. Moreover, the production of some of these main components have been treated as trade secrets of the foreign assembler, because they were considered the primary source of their competitive advantage (e.g. gear boxes and engine designs). Thus, the assemblers chose to produce them initially in house and, later on, by majority-owned subsidiaries (such as Toyota Auto parts Philippines, Honda Engine Manufacturing Philippines, Honda Parts Manufacturing Corporation, and Isuzu Auto parts Manufacturing Corporation) or by their first-tier suppliers, often though not always a part of the tightly-knit keiretsu. This, in turn, reduced the need to transfer technology to local Filipino firms. Purportedly, some say the lack of domestic firms that could meet the standards of the contractor-assembler in the short term. Local supplier firms, particularly during the initial stages of the program, were almost absent and those that existed could not meet the cost quality-delivery (CQD) requirements of the Japanese assemblers.
2.2 Motor Vehicle Inspection and Registration System in the Philippines

The two most common motor-vehicle transactions are the registration of a new vehicle and the renewal of a previously registered vehicle. Both transactions involve an inspection process and registration process, but differ in their expected outputs. A new vehicle registration transaction results in a Certificate of Registration or Certificate of Registration with Encumbrance (CR or CRE), a Motor Vehicle Original Receipt of Payment (OR), Miscellaneous Receipt, license plates, and stickers. A renewal transaction often results to the issuance of a new Motor Vehicle Original Receipt of Payment (OR) and stickers. In addition, there are various types of registration transactions, which involve the same process of inspection and registration but substantially differ on the input documents. There are special types of registration, which aside from the outputs abovementioned produce a form of action resulting to changes in the Certificate of Registration/Original Receipt of Payment.

2.2.1 Classification system of vehicle registration

Based on the Operation Manual of the Land Transportation Office (LTO), there are four classification systems of vehicle registration. These are as follows;

1. Private Vehicles
2. For Hire or Public Utility Vehicle
3. Government Vehicles
4. Diplomatic Vehicles

2.2.1.1 Private Vehicles

Private vehicles are those which are registered not to be used for hire under any circumstances. The denominations of private motor vehicle are as follows:

Table 2-5 Denominations of Private Vehicles

<table>
<thead>
<tr>
<th>Type/ Denomination</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Cars</td>
<td>Shall mean all pneumatic-tire vehicles of types similar to those usually known under the following terms: touring car, command car, speedster, sports car, roadster, jeep, cycle car (except motor wheel and similar small outfits which are classified with motorcycles), coupe, landaulet, closed car, limousine, cabriolet, and sedan (R.A. No. 4136, 20 June 1964).</td>
</tr>
<tr>
<td>Type/ Denomination</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| Utility Vehicles   | - has three (3) types based on R.A. No. 8750 dated October 1999 and defined as follows:  
  I. Local Pick-ups (UV) – locally manufactured utility vehicles with cut-and-weld type of body, backyard assembled or rebuilt (w/ or w/o crew cab) such as Ford Fiera, Owner-type jeep, ANFRA, Sarao Type Jeepney, Toyota Tamaraw AUV, Mitsubishi AUV, Pinoy and other vehicles with similar design and configuration;  
  II. Imported Pick-ups (UV) – an imported CBU, SKD, CKD light automotive vehicle w/ or w/o crew cab/double cab used to carry passengers and/or transport goods include but are not limited to the following: Mitsubishi Strada P/up, Toyota Hilux, Mazda P/up, Isuzu P/up, Kia Ceres P/up, Dodge Ram P/up, Pathfinder and the like.;  
  III. Imported Passenger Van/Wagon (UV) – an imported CBU, SKD, CKD commuter vehicle having rear or side doors and side panels designed for transporting people, and is not used to carry cargo, include but not limited to the following: Toyota Lite Ace, Hi-ace, Revo, Mitsubishi L300, Mazda E2000, Kia Besta, Pregio, Nissan Urvan, Vanette, MB-100 Van, Hyundai-100, Tamaraw FX Wagon, Mitsubishi Adventure, Kia Advantage, Isuzu Highlander, and the like.  
| Sports Utility Vehicles | Shall include but not limited to any imported [Completely Built Unit (CBU), Semi-knocked-down (SKD), Completely-knocked-down (CKD)] utility vehicle, Model 1991 or later with imported machine-cash body shall, specially designed to transport persons and not used primarily for the carriage of freight, merchandise, or cargo, and having characteristics, features and amenities similar to those of a car or automobile such as the following: Mitsubishi Pajero/Montero, Nissan Patrol, Nissan Terrano, Toyota Land Cruiser, Toyota RAV 4, Range Rover, Land Rover, Ford Expedition, Jeep Cherokee, Daihatsu Feroza, Suzuki Vitara, Honda CR-V, Mercedes Benz Musso, Kia Sportage, Opel Vectra and the like; PROVIDED THAT, all 1990 models or earlier shall be taken as ordinary UV. (R.A. 8794, 16 August 2000 and LTO-MC-BGCMC-01320, 26 January 2001  
| Motorcyc  
<p>| with | motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, except that four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar. However, in cases of non-conventional motorcycles engines, the same |</p>
<table>
<thead>
<tr>
<th>Type/ Denomination</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>sidecar, without sidecar, with light electric vehicle (LEV)</td>
<td>shall be sub-classified as &quot;MC&quot; but the registration fees of which shall be based on piston or cubic-cm displacement (DOTC-AO-03, 24 September 1980). While LEV is a two-wheeled or three-wheeled vehicle that is powered by battery-powered motor with no more than 36 voltage output and with amps per hour ranging from 10 to maximum of 60 (DOTC-AO-2006-01).</td>
</tr>
<tr>
<td>Trucks</td>
<td>Such as stake, platforms, pick-up, trucks for gravel and sand, and others of the same configuration, including van and tanker types, provided that the gross vehicle weight exceed 4500 kilograms. (LTO Circular 71, 01 January 1981)</td>
</tr>
<tr>
<td>Buses</td>
<td>refers to private buses coaches whose passenger capacity ranges from eighteen (18) and above. (LTO Circular 71, 01 January 1981)</td>
</tr>
<tr>
<td>Trailers</td>
<td>large transport vehicle designed to be hauled by a truck or tractor (taken from Free Dictionary)</td>
</tr>
</tbody>
</table>
2.2.1.2 For Hire or Public Utility Vehicles

For hire or public utility vehicles are those authorized to be operated as public utility by virtue of certificates of public convenience or provisional authority or special permit issued by the Land Transportation Franchising Regulatory Board. The denominations of for hire or public utility motor vehicle are as follows:

1) Passenger Cars (TX, Tourist Car)
2) Utility Vehicles (Taxi, PUJ, Vehicles-for hire, Garage, Tourist, School Service)
3) Sports Utility Vehicles
4) Tricycle (a motorcycle fitted with a single-wheel side car or a motorcycle with two-wheel operated as for hire - DOTC Guidelines on the Devolution of Tricycle Franchising).
5) Trucks (Advertising Trucks)
6) Truck Buses (Public Utility Bus Shuttle Bus, School Bus, Tourist Bus)
7) Trailer

Table 2-6 For Hire or Public Utility Vehicles

<table>
<thead>
<tr>
<th>Jeepney</th>
<th>Taxi</th>
<th>Tricycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garage-Terminal (GT)/ UV Express</td>
<td>School Service</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>Advertising Truck</td>
<td>Multicab</td>
</tr>
</tbody>
</table>
2.2.1.3 Government Vehicles

Government vehicles are motor vehicles owned by the government of the Philippines or any of its political subdivisions including government owned or controlled corporations. The denominations of for hire or public utility motor vehicle are as follows:

1) Passenger Cars
2) Utility Vehicles
3) Sports Utility Vehicles
4) Motorcycle – with sidecar, without sidecar, or with light electric vehicle (LEV)
5) Trucks
6) Truck Buses
7) Trailers

2.2.1.4 Diplomatic Vehicles

Diplomatic vehicle refers to motor vehicles owned by foreign governments or by their duly accredited diplomatic officials in the Philippines and used in the discharge of their official duties. This classification refers exclusively to officials and personnel who enjoy diplomatic status. The denominations of for hire or public utility motor vehicle are as follows:

1) Diplomatic Car
2) Chief of Mission
3) Consular Corporation
4) Other Exempt Vehicles
5) Other Exempt Vehicle from SBMA (Subic), CDC (Clark), CEZA (Cagayan)

2.2.2 Existing Vehicle Registration Process in LTO District Offices and PETCs

2.2.2.1 LTO District Office Inspection Process

All Motor Vehicle shall be subjected to mandatory inspection prior to registration as per M.O. No. 86-003 dated June 3, 1986. No Motor Vehicle of all classification shall be accepted for registration unless fully inspected in accordance with the standards and procedure of Motor Vehicle inspection.

The three venues of inspection are LTO District Office, Motor Vehicle Inspection Stations (MVIS) and Private Emission Testing Centers (PETC). The first two inspect the vehicle based on the standards set and conduct tests as enumerated below. PETC is the private firm service center accredited by LTO and DTI to perform tests, servicing, repair and the required adjustment to the vehicle emission tests.

The Standard and Methods of Inspection followed by LTO District Office, MVIS, and PETC for the following vehicle classifications are shown below:
Table 2-7 LTO Standard and Methods of Inspection

<table>
<thead>
<tr>
<th>Standard and Method of Inspection</th>
<th>Venue of Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Private</strong></td>
<td></td>
</tr>
<tr>
<td>a. Above Carriage Inspection</td>
<td>- Visual inspection either LTO or MVIS</td>
</tr>
<tr>
<td>- Identity / Construction</td>
<td></td>
</tr>
<tr>
<td>- Lighting System and Reflectors</td>
<td></td>
</tr>
<tr>
<td>- Windshield / Window glass</td>
<td></td>
</tr>
<tr>
<td>- Wiper/Washer</td>
<td></td>
</tr>
<tr>
<td>- Chassis /Motor Number Authenticity</td>
<td></td>
</tr>
<tr>
<td>- Horn</td>
<td></td>
</tr>
<tr>
<td>- Number Plates</td>
<td></td>
</tr>
<tr>
<td>- Floor Board</td>
<td></td>
</tr>
<tr>
<td>- Body Appearance</td>
<td></td>
</tr>
<tr>
<td>- Seat Belts</td>
<td></td>
</tr>
<tr>
<td>- Door /Hinge</td>
<td></td>
</tr>
<tr>
<td>- Rear View /Side Mirror</td>
<td></td>
</tr>
<tr>
<td>- Brake System /Parking Brake</td>
<td></td>
</tr>
<tr>
<td>- Clutch System</td>
<td></td>
</tr>
<tr>
<td>- Steering</td>
<td></td>
</tr>
<tr>
<td>- Driver’s /Passenger’s Seat</td>
<td></td>
</tr>
<tr>
<td>- Tires/Wheels</td>
<td></td>
</tr>
<tr>
<td>- Wheel Bolts/Nuts</td>
<td></td>
</tr>
<tr>
<td>- Fuel Tank /Fuel Tank Cap</td>
<td></td>
</tr>
<tr>
<td>- Mobile Air Conditioning (MACs)</td>
<td></td>
</tr>
<tr>
<td>- EWD</td>
<td></td>
</tr>
<tr>
<td>b. Side Slip Test (Automatic Test Equipment)</td>
<td>- MVIS</td>
</tr>
<tr>
<td>c. Brake Test (Automatic Test Equipment)</td>
<td>- MVIS</td>
</tr>
<tr>
<td>d. Speedometer Test (Automatic Test Equipment)</td>
<td>- MVIS</td>
</tr>
<tr>
<td>e. Headlight Test (Automatic Test Equipment)</td>
<td>- MVIS</td>
</tr>
<tr>
<td>f. Exhaust Emission Test (private vehicles)</td>
<td>- MVIS</td>
</tr>
<tr>
<td>g. Under Carriage Inspection</td>
<td>- PETC</td>
</tr>
<tr>
<td>- Brake hose and pipes, for any brake fluid leakage or damage</td>
<td>- Visual inspection either LTO or MVIS</td>
</tr>
<tr>
<td>- Steering System, for any looseness and damage</td>
<td></td>
</tr>
<tr>
<td>- Radiator, for water leakage</td>
<td></td>
</tr>
<tr>
<td>- Propeller shaft, for play and distribution</td>
<td></td>
</tr>
<tr>
<td>- Shock absorber, for oil leakage and deformation</td>
<td></td>
</tr>
<tr>
<td>- Exhaust pipe, for any damage</td>
<td></td>
</tr>
<tr>
<td>- Catalyzers and heat shielding plates, for proper attachment and damage</td>
<td></td>
</tr>
<tr>
<td>- Leakage from engine and transmission</td>
<td></td>
</tr>
<tr>
<td><strong>2. For Hire</strong></td>
<td>All tests including exhaust emission test shall be conducted at MVIS</td>
</tr>
<tr>
<td>a.) Same standards and methods of inspection except that all tests and inspections including exhaust emission test shall be conducted at MVIS</td>
<td>-</td>
</tr>
<tr>
<td><strong>3. Government</strong></td>
<td>All tests including exhaust emission test shall be conducted at MVIS</td>
</tr>
<tr>
<td>a.) Same standards and methods of inspection with For Hire</td>
<td>-</td>
</tr>
<tr>
<td><strong>4. Diplomatic</strong></td>
<td>All tests including exhaust emission test shall be conducted at MVIS</td>
</tr>
<tr>
<td>a.) Same standards and methods of inspection with For Hire</td>
<td>-</td>
</tr>
</tbody>
</table>
The standards and methods of inspection for private, for hire, government and diplomatic are almost the same except for the venue of inspection. Private vehicles can be visually inspected (above and under carriage inspections) at either LTO District Office or MVIS. All testings such as Side Slip Test, Brake Test, Speedometer, Headlight Test shall be done at MVIS except exhaust emission test, which should be conducted at PETC. For for-hire, government and diplomatic vehicles, all visual inspections, tests including exhaust emission tests shall be conducted at MVIS.

2.2.2 LTO District Office Inspection Process

The table below shows the process flow of motor vehicle inspection as followed by LTO District Office and Motor Vehicle Inspection Center.

The owner of vehicle (client) will submit to the evaluator all documentary requirements in the motor vehicle inspection procedure. The evaluator will then verify the authenticity and completeness of the documents. If the documents are complete and valid, the client will pay to the cashier corresponding amount of the vehicle under inspection. After payment, the inspector will inspect the motor vehicle for road worthiness and gross vehicle weight (GVW) in accordance with the LTO MVIS procedure. After passing all the tests and inspection, the approving officer will furnish the duly accomplished and approved motor vehicle inspection report.

**Figure 2-16 Motor Vehicle Inspection Process Flow**

- Motor Vehicle Applicant
- Emission Test Private Emission Testing Center
- Motor Vehicle Insurance Private Insurance Provider
- LTO Evaluator
- LTO Cashier
- LTO MV Inspector
- LTO Approving Officer

- Verifies authenticity and completeness of the received supporting documents
- Receives payment
- Inspects the motor vehicle for road worthiness and GVW
- Approves motor vehicle road worthiness and GVW

**Process Output**
1. Actual MV Inspection
2. Duly accomplished and approved Motor Vehicle Inspection Report (MVIR)
2.2.2.3 Private Emission Testing Centers

Private Emission Testing Centers (PETC) are privately owned facilities are accredited and authorized by government to determine the level of opacity and testing the gaseous content of motor vehicle emissions prior to its registration. Its job is to determine if the vehicle emissions conform to the standards set by the DENR under the CAA.

2.2.2.4 Regulation and Monitoring of PETCs

The DTI and DOTC issued a Joint Administrative Order (JAO) setting the guidelines for the accreditation of PETCs for motor vehicles. There are currently 745 PETCs nationwide. Compliance with emission standards of all motor vehicles has been started in January 2003 in a nationwide scope through the operationalization of PETCs.

The DOTC through the LTO authorizes PETCs that have been previously accredited with the DTI. The DENR, on the other hand, is responsible for regulating the specifications of the emission testing equipment by PETCs. Renewal of vehicle registration as well as retrieval of confiscated licensed plates due to smoke belching requires the presentation of Certificate of Emission Compliance (CEC) to LTO. Activities involved in this program are the interconnectivity between the LTO and the PETCs for real time monitoring and validation of data prior to motor registration; and strict monitoring of PETC operations via decentralized setup with the LTO regional offices directly responsible for PETCs operating within their respective areas of responsibility.

The Technical Education and Skills Development Authority (TESDA) is in charge of implementing the assessment and certification program for the Motor Vehicle Emission Control Technician (MVECT). All certificates relating to the national trade skills testing and certification system shall be issued by the authority through the TESDA Secretariat.

Private industry groups and trade associations are likewise accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in accordance with the guidelines to be set by the Authority. Accreditation of technicians that is provided by MVECT is a requirement of the PETC program.

With the issuance of the DENR-DTI-DOTC Joint Administrative Order No.1 series of 2007 or the Amended Guidelines and Procedures for the Monitoring of Accredited and Authorized Private Emission Testing Centers (PETC) and LTO emission testing activities, the compliance with the provisions of the Philippine Clean Air Act is monitored and ensured.

2.2.2.5 Standards for Emission measurement

The standard emission measurement for for-hire vehicles are shown below. For gasoline-fed
vehicles except motorcycles with registration date before January 1, 1997 should not exceed 4.5% CO and 800ppm HC. Vehicles with registration date falling from January 1, 1997 up to present should not exceed 3.5% CO and 600ppm HC. Motorcycles with registration on or before December 31, 2002 should not exceed 6.0% CO while those registered after December 31, 2002 should not exceed 4.5% CO. All vehicles in Metro Manila, Metro Cebu and Metro Davao should not exceed 7,500 ppm HC while those in other areas of the Philippines should not exceed 10,000 ppm HC. Lastly, all diesel-fed motor vehicles should not exceed 2.5K CO.

Table 2-8 Emission Measurement for For-Hire Vehicles

<table>
<thead>
<tr>
<th>Category (Registration Date)</th>
<th>CO% (V)</th>
<th>HC (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Jan 1, 1997</td>
<td>4.5</td>
<td>800</td>
</tr>
<tr>
<td>&gt;= Jan 1, 1997, Jan 1, 2003</td>
<td>3.5</td>
<td>600</td>
</tr>
<tr>
<td>&gt;= Jan 1, 2003</td>
<td>3.5</td>
<td>600</td>
</tr>
<tr>
<td>Motorcycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= Dec 31, 2002</td>
<td>6.0</td>
<td>-</td>
</tr>
<tr>
<td>&gt; Dec 31, 2002</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td>Metro Manila, Metro Cebu and Metro Davao</td>
<td></td>
<td>7,500</td>
</tr>
<tr>
<td>All Others</td>
<td></td>
<td>10,000</td>
</tr>
</tbody>
</table>

*Diesel-Fed Motor Vehicle*

Standard for Diesel –Fed Engine 2.5 K

Table 2-9 Number of DTI Accredited PETCs per Region

<table>
<thead>
<tr>
<th>Region</th>
<th>LTO District Offices</th>
<th>DTI Accredited PETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCR</td>
<td>Metro Manila</td>
<td>17</td>
</tr>
<tr>
<td>CAR</td>
<td>Cordillera Administrative Region</td>
<td>6</td>
</tr>
<tr>
<td>Region I</td>
<td>Ilocos Region</td>
<td>10</td>
</tr>
<tr>
<td>Region II</td>
<td>Cagayan Valley</td>
<td>8</td>
</tr>
<tr>
<td>Region III</td>
<td>Central Luzon</td>
<td>15</td>
</tr>
<tr>
<td>Region IV-A</td>
<td>Southern Tagalog</td>
<td>14</td>
</tr>
<tr>
<td>Region V</td>
<td>Bicol</td>
<td>9</td>
</tr>
<tr>
<td>Region VI</td>
<td>Western Visayas (Iloilo City)</td>
<td>9</td>
</tr>
<tr>
<td>Region VII</td>
<td>Central Visayas (Cebu)</td>
<td>9</td>
</tr>
<tr>
<td>Region VIII</td>
<td>Eastern Visayas (Tacloban, Leyte)</td>
<td>11</td>
</tr>
<tr>
<td>Region IX</td>
<td>Zamboanga</td>
<td>6</td>
</tr>
<tr>
<td>Region X</td>
<td>Northern Mindanao (Cagayan De Oro)</td>
<td>7</td>
</tr>
<tr>
<td>Region XI</td>
<td>Davao</td>
<td>4</td>
</tr>
<tr>
<td>Region XII</td>
<td>SOCCSKSARGEN (Koronadal, Cotabato)</td>
<td>9</td>
</tr>
<tr>
<td>Region XIII</td>
<td>CARAGA (Butuan City)</td>
<td>5</td>
</tr>
<tr>
<td>ARMM</td>
<td>Autonomous Region in Muslim Mindanao</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>142</td>
</tr>
</tbody>
</table>

*Source: Land transportation Office*
2.2.3 LTO-Motor Vehicle Inspection Center

In 1983, DOTC and LTO conducted the study on the establishment of motor vehicle inspection station all over the country, in collaboration with JICA (Japan International Cooperation Agency) the objective of which is to provide a systematic, reliable and effective testing of motor vehicles through computerization and automation for compliance to safety and emission requirements. In addition, it was envisioned that through the establishment of an Motor Vehicle Inspection System (MVIS), existing motor vehicle standards, provision of national laws and international agreements will be complied, which will ensure compliance to safety and emission standards. Furthermore, the MVIS was intended to integrate all motor vehicle inspection reports into a central motor vehicle database.

2.2.3.1 Location of MVIC

After that study, a pilot motor vehicle inspection center (MVIC) was established in LTO, East Avenue, Quezon City, which initially inspected taxis in Metro Manila. And in 1992, the Government of Japan through JICA donated the 12-lane MVIS to the LTO, as follows:

a) North MVIS (Quezon City) = 4 lanes
b) South MVIS (Pasay) = 4 lanes
c) San Fernando MVIS (Pampanga) = 2 lanes
d) Lipa MVIS (Batangas) = 2 lanes

The figure below shows the location of these existing facilities.

**Figure 2-17 LTO District/Regional Offices with MVIC (Phase 1)**
2.2.3.2 Facilities and Inspection Process at MVIC

Each lane of the MVIC has fully computerized and automotive inspection/testing equipment which can perform the following tests:

e) Above carriage items (visual inspection)
f) Under carriage items (visual inspection)
g) Side Slip Test (Automatic Test Equipment)
h) Suspension test (Automatic Test Equipment)
i) Brake Test (Automatic Test Equipment)
j) Speedometer Test (Automatic Test Equipment)
k) Headlight Test (Automatic Test Equipment)
l) Exhaust and Noise Emission Test (private vehicles)

The figure below enumerates the process of vehicle inspection in the MVIS.

![Figure 2-18 Overview of the Testing lanes of the North MVIS](image)

![Figure 2-19 MVIC System Inspection Process](image)
The above carriage inspection is conducted to check the vehicle for the presence of standard equipment and parts such as seatbelts and turn lights, among others. The slide slip test meanwhile measures the vehicle’s front wheel’ toe-in and toe-out alignment. The shock absorber test measures the effectiveness of the shock absorbers on each wheel of the vehicle, checking the absolute damping levels and comparing the relative damping balance between the left and right side of each axle.

**Figure 2-20 Side Slip Test Equipment**

To check the vehicle safety control when braking, a brake test is conducted. This test measures the braking forces of the left and right wheels for both front and rear axle of the vehicle.

**Figure 2-22 Beak test Equipment**

The test measures the actual speed of the vehicle and checks the accuracy of vehicle’s speedometer reading, a speedometer test is also conducted.
The MVICs meanwhile also has its own emission testing facilities to check if vehicle exhaust emission complies with the standards set out in Philippine Clean Air Act. The center has an opacimeter for diesel-fed Compression Ignition Engine vehicles. This test is a smoke opacity measurement for in-use motor vehicle equipped with compression-ignition (diesel) engine using the free-acceleration method. The test shall ensure that the exhaust system shall not have any leaks. Then, the motor vehicle-gear will be changed in the neutral position with the hand brake engaged.

Meanwhile Spark Ignition Engine gasoline-fed vehicles, a gas analyzer is used. In this test, the procedure is for the determination of the concentration of Carbon Monoxide (CO) and Hydrocarbon (HC) emission from in-use motor running at idle speed. At this stage, the motor vehicle gear-change control is in the neutral position with the hand brake engaged.

The headlight test meanwhile uses an automated headlight tester that measures the luminous intensity and the photometric axis of optical axis deviation of the vehicle’s headlight. The next test is the sound level measurement of the motor vehicle for horn and muffler, which shall not exceed 115 dB.
Lastly is the under carriage test where the inspector checks the vehicle safety from defective under carriage components e.g. leakage, ball joints, etc.

Figure 2-27 Under Carriage Test

On completion of all stages of inspection, the results are transferred to main system control computer database. All computer systems are equipped with a communication interface for transfer of test results in all stages of inspection to main system control computer, for on-line and real-time authentication and validation of test results with LTO-IT System. A Certificate of MVIS Compliance (CMVISC) shall be issued to all motor vehicles that passed the inspection process. A Motor Vehicle Inspection System Report (MVISR) shall be issued to all vehicles that failed the inspection process.

2.2.3.3 LTO MVIS Expansion Proposal
The MVIS System is envisioned to be conducted in three phases, where the existing four (4) MVICs are in Phase 1. Below is a map showing the location of the succeeding phases of the MVIS project.
All phase 2 regions declared 100% completion of Stage 1 MVIC building construction.

Table 2-10 Status Update of Phase 2 MVIS Project

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region I</td>
<td>San Juan, La Union</td>
<td>● Problem in Lot Title,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Lot located in slope/ Soil protection issue,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Engineering structure for surface water runoff issue</td>
</tr>
<tr>
<td>Region II</td>
<td>Solana, Cagayan</td>
<td>● Stage 1 building construction 100% completed &amp; validated but for compliance of punch list</td>
</tr>
<tr>
<td>Region VI</td>
<td>San Miguel, Iloilo</td>
<td>● Lot title is already in the name of LTO,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Large portions around the lot needs to be backfilled</td>
</tr>
<tr>
<td>Region X</td>
<td>Iponan, Cagayan de Oro</td>
<td>● Lot title is already in the name of LTO,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Extra rectangular lot (lot 2) at the back of MVIS needs to be backfilled</td>
</tr>
<tr>
<td>Region XII</td>
<td>Polomolok, South Cotabato</td>
<td>● Stage 1 building construction 100% completed &amp; validated but for compliance of punch list</td>
</tr>
</tbody>
</table>

Source: LTO, Status Report on MVIC Project Implementation Monitoring, Sept. 2010
2.2.4 Issues and Problems in the current system of MVIS, LTO Districts, and PETC

2.2.4.1 MVIS

In an interview with a LTO-NMVIC official, it was identified that the main issue in MVIS implementation are lack of funds to build building facilities and maintain its equipment. He mentioned that at least PhP 50 Million is needed to construct one building. Phase 2 to 3 of the MVIS project is put on hold primarily because of lack of funds. As such, plans to put up the remaining phases are prioritized according to number of motor vehicles registered per region. And because of these lack of funds, a proposal to privatize the operations of the MVIS has been raised. Where the implementation of the MVIS will be made through a private sector participation arrangement, where a private entity will operate the project, with government oversight through lease and authorize scheme.

Under the said scheme the DOTC/LTO will conduct a bidding for the leasing of the government MVIS facilities on an “as is, where is” basis to qualified private entities. The project commences with the privatization of the government-owned MVIS facilities and thereafter takes off with the provision of additional mobile inspection lanes that shall satisfy the inspection demand.

Under the “lease and authorize” privatization scheme, the country will be divided into seven initial service areas. These are:
An official also revealed that some motor vehicle owners have the impression that their old vehicles might fail the “strict” test in the MVIS, so they have their vehicles registered in other LTO district offices. These district offices rely to private emission testing centers for the conduct of emission testing. The motor vehicle owners prefer to be tested here even when private enterprises charge PhP450 for a single emission test. While on the other hand, the MVIS facility of LTO only charges PhP 90 per transaction (PhP 115 for heavy duty vehicles). These already include emission testing and road worthiness tests.

When asked whether we can make MVIS mandatory in NCR for example, an official replied that their facility including the one in Pasay cannot accommodate the volume of vehicles in Metro Manila. Metro Manila would need two additional facilities to accommodate the demand.

Another issue that was raised during the meeting is the pending interfacing of the MVIS and the Motor vehicle registration system. In this proposal, vehicle registration will be linked with maintenance records and inspection results of the vehicle in the MVIS. This will ensure that all vehicles undergo rigid inspection process.

**Figure 2-30 Study team meeting with LTO LTO-NMVIC Chief**

### 2.2.4.2 Issues in LTO Districts and PETCs

On an average, an LTO District Office is said to renew the registration of at least 500 motor vehicles per day. They are given a target of 116,000 per year. The target is computed as a sum of the existing annual registration and an additional 3% growth. Asked why they have a target
since targets are often associated for private firms, a DOTC official answered that they have targets because the LTO districts are treated as revenue generating units of the government. An LTO District chief said the LTO MV registration process takes only 10-15 minutes from evaluation until the release of stickers of registration. He also said they only have 20 employees. Among the 20, only 13 are regular employees. There are only three (3) MV inspectors. Ideally, the motor vehicle inspector accomplishes the motor vehicle inspection report (MVIR) while inspection is being done. If the motor vehicle fails the inspection, the inspector directs the applicant to perform corrective actions on the motor vehicle. However, it was noticed that the inspector did not follow this procedure. Instead, the inspector only asked to open the hood, then checked if the signal lights and brake lights are working. MV Inspector did not check under-carriage and above carriage items.

Figure 2-31 Study Team observes the MV inspection process

Figure 2-32 Study Team observes emission testing procedure

Inspector aides are the ones who did the stenciling of the engine and body serial number. With a minimum of 500 vehicles per day being inspected, LTO utilizes inspector aides to help LTO MV inspectors in the motor vehicle registration process.

DOTC official observed some lapses and non-conformities in the testing procedures of the Private Emission Testing Centre. For example, the temperature of the engine was not checked before the emission test procedure. He also observed that the probe (stick) of the emission test equipment were not inserted fully which may lead to the equipment providing un-accurate test results. Not fully inserting the test-probe will make the device measure the ambient air and not the air coming from the exhaust, thus “improving” the test result.

2.2.5 LTO Motor Vehicle Statistics

The following motor vehicle (MV) statistics are taken from the office of the LTO Central Office.

Figure 2-33 shows that the total number of motor vehicle registered in year 2010 is about 6.634 Million, which are classified into Private, For Hire or Public, Government, Diplomatic
and Tax Exempt. Out of the total number of MV registered in year 2010, private vehicle highly dominates other classifications, which is 84.87% or 5.631 Million of the total registered vehicles. Next in rank is For Hire or Public vehicles with 14.08% or 0.934 Million. The other classifications such as Government, Diplomatic and Tax Exempt eat up only about 1 percent of the total MV registered.

In 5-year span (2006 – 2010) the total number of MV registered rose by 24.44% from 5.331 Million to 6.634 Million. On the average, the rate increased per year is 4.89%. All vehicular classifications steadily increased in number of MV registered from year 2006 to year 2010 except Government and Tax Exempt classifications.

2.2.5.1 Motor Vehicle Registered By Classification and By Mode of Registration
Figure shows the total number of vehicle registered for year 2006 to 2010 by mode of registration, which is either new or renewal. For year 2010, 17.01% or 1.1298 Million are newly registered motor vehicles while 82.99% or 5.506 Million are renewal of registration. On the average for the 5-year period (2006 – 2010), 15.57% are newly registered vehicles.
2.2.6 Custom Local Road Vehicles

2.2.6.1 Jeepney

The Jeepney is the most popular means of transportation in the Philippines. Its tremendous popularity is attributed to the following: (1) local availability - manufacturing technology is locally available and parts such as second-hand engines and imported chassis are readily available; (2) intermediate size or capacity – compatible to most Metro Manila road network and configuration, enabling it to easily move, stop, load and unload passengers as well as penetrate even the smallest interior areas; and (3) accessibility - providing a door-to-door service at practically any time and place (Bayan, 1995 and Ebata, et al., 1996). In fact, it is widely hailed as a “symbol of Filipino ingenuity”.

2.2.6.2 History of the Jeepney

Jeepneys were originally made from US military jeeps left over from World War II. As American troops began to leave the Philippines at the end of World War II, hundreds of surplus jeeps were sold or given to local Filipinos. Locals stripped down the jeeps to accommodate several passengers, added metal roofs for shade, and decorated the vehicles with vibrant colors and bright chrome hood ornaments. Although the original jeepneys were simply refurbished military jeeps, modern jeepneys are now produced by independently owned factories within the Philippines (Coros, 2005). In 1950’s, the first generation of jeepneys was pioneered by Conrado David (David Motors) and Francisco Motors Corporation converting American Willy’s Jeep into public utility vehicle. The converted public utility jeepneys provided temporary relief to post-Liberation Manila’s transport crisis. From thereon, jeepneys became the primary mode of transport in the Philippines. In 1960s, there were attempts by some lawmakers and critics to phase out the jeepney due to it being pollutive, but still, jeepneys outnumbers any other passenger-type vehicles in the Philippines.
### 2.2.6.3 Production & Manufacturing Process of the Jeepney

The production process of jeepneys is purely made of Filipino ingenuity except for its engine and chassis, which are usually “surplus” from Japan. There are several jeepney manufacturers in the Philippines who are old and new in the business industry (see Table 2.11).

#### Table 2-11 Existing Jeepney Manufacturers in the Philippines

<table>
<thead>
<tr>
<th>Company</th>
<th>Year Started</th>
<th>No. of yrs. in operation</th>
<th>Ave. production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armak Motors</td>
<td>1979</td>
<td>32</td>
<td>8 units/ month</td>
</tr>
<tr>
<td>Benemar Motors</td>
<td>1990</td>
<td>21</td>
<td>4 units/ month</td>
</tr>
<tr>
<td>David Motors &amp; Marketing Corp</td>
<td>1950</td>
<td>61</td>
<td>4 units/ month</td>
</tr>
<tr>
<td>FG Motors</td>
<td>1992</td>
<td>19</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>Geordan Commercial</td>
<td>1994</td>
<td>17</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>Hayag Motorwork and Machine Shop</td>
<td>1977</td>
<td>34</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>LCS Motors Corporation</td>
<td>1992</td>
<td>19</td>
<td>4 units/ month</td>
</tr>
<tr>
<td>Melford Credit Facilities and lending</td>
<td>1979</td>
<td>32</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>Milwaukee Motorworks</td>
<td>2001</td>
<td>10</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>Morales Motors Corporation</td>
<td>1978</td>
<td>33</td>
<td>2 units/ month</td>
</tr>
<tr>
<td>Rizalero Motors</td>
<td>1998</td>
<td>13</td>
<td>1 units/ month</td>
</tr>
<tr>
<td>Sarao Motors Corporation</td>
<td>1953</td>
<td>58</td>
<td>n/a</td>
</tr>
<tr>
<td>Tolentino Motors Corporation</td>
<td>1995</td>
<td>16</td>
<td>2 units/ month</td>
</tr>
</tbody>
</table>

However, due to financial crisis in the 90s and 2000s and the proliferation of other Asian Utility Vehicles (AUVs) such as vans, filcabs, and mulitcabs), production of jeepneys over the years were greatly affected. It even led to temporary or permanent closure of some prominent jeepney manufacturers such as Sarao Motors and Francisco Motors Corporation (FMC). Figure 2-35 shows the production history of Sarao Motors Corporation from 1983 to 2003. Sarao Motors Corporation is well-known of manufacturing jeepney vehicles since 1953 but it was also disturbed by the declining trend of jeepney manufacturing industry.

![Production of Sarao Motors Corporation](chart.png)

*Source: Corona, Assessment of Jeepney’s Components, Systems and Separate Technical Units for the Development of Standards, DSP, 2005*
2.2.6.4 Jeepney Standards

As of the latest, there is no specific or particular standard for the manufacture or assembly of jeepneys to ensure safety of the driver, passenger and other road users. Because of lack of proper policy, local assemblers are able to construct vehicles using low-cost materials and even non-matching vehicle parts. The materials usually used are second-hand or popularly known as ‘surplus’. Also, power-to-weight ratios of jeepneys are not taken into consideration. As of the moment, jeepneys’ design can be customized based on the specifications and directions of the costumer. And though the product outcome is not high-end in technology, it is cheap but useful to many people.

Because of the lack (or absence) of proper policies, many academic papers or studies have been prepared to provide recommendation or lay down all the information of jeepney production or assembly for future studies and standard formulation and. One of which is the “Characterization of Jeepney Vehicle in Metro Manila Study (Colos, UP 2005)”. It defined the important aspects of a jeepneys vehicle to establish standards in its assembly methods. These aspects include the specifications of the jeepneys used, frame materials and construction methods, and the overall dimension of the jeepneys vehicle.

The Department of Transportation and Communication (DOTC) together with the Philippine Council for Industry, Energy, and Emerging Technology Research - Department of Science and Technology (PCIEERD-DOST) has embarked on the project entitled Development of Customized Local Road Vehicle (CLRV) Standards. The primary objective of the project is to modernize the CLRV fleet with focus on the utility vehicle category through the development and implementation of standards on vehicles and parts to ensure an environment-friendly and roadworthy motor vehicle fleet.

2.3 Analyzing Social Impacts of Motor Vehicles

The issue of motor vehicle and the environment is paradoxical in nature. From one side, motor vehicles support increasing mobility demands for passengers and freight transport. On the other side, the activities of the people have resulted in growing levels of motorization and congestion. As a result, the transportation sector, particularly motor vehicles, are becoming increasingly linked to social and environmental problems. With a technology relying heavily on the combustion of hydrocarbons, notably with the internal combustion engine, the impacts of transportation over environmental systems has increased with motorization. This has reached a point where transportation activities are a dominant factor behind the emission of most pollutants and thus their impacts on the environment. On the one side, high motorization levels have led to congested roads and increased motor vehicle accident rates. In a developing country like the Philippines, vehicle maintenance are often given less
priority and as such resulting to widespread parts failure of the vehicle resulting to accidents. It would be common to hear drivers with excuses such as “break failure” resulting to their mishap.

2.3.1 Motor Vehicle Accidents

2.3.1.1 Health Records

Accidents consistently remain one of the leading causes of mortality in the Philippines. The top five leading causes of death due to injury are assault, transport accidents, accidental drowning and submersion, intentional self-harm and accidental falls. Accidents ranked 8th in 1975, 7th in 1985, 6th in 1995, 5th in 2002, and 4th in 2003 among the 10 leading causes of death. Road traffic accidents constitute the majority of transport accidents.

The top five leading causes of death due to injury are assault, transport accidents, accidental drowning and submersion, intentional self-harm and accidental falls. Among the 10 leading causes of death, accidents ranked 8th in 1975, 7th in 1985, 6th in 1995, 5th in 2002, and 4th in 2003. Road traffic accidents constitute the majority of transport accidents.

A nationwide injury survey in 2003 among children 0-17 years old revealed the following top five causes of mortality: drowning, road traffic accidents, falling, violence, and suicide. Injuries accounted for 11% of deaths. Mortality data primarily come from the Philippine Health Statistics, consolidated annually by the Department of Health. Morbidity data on injury is lacking. Except for some injury-focused reports from the transport, police, and non-government sector, there is a paucity of national surveillance data from non-fatal injury cases. Injury data from hospitals are likewise not currently consolidated nationally.

2.3.1.2 PNP Reports

For the first three months of 2009 alone, the Philippine National Police has recorded more than 9,000 vehicular accidents compared to the historical average of less than 4,000 and a record-high of 14,794 for the whole of 2008. This amounts to 100 traffic accidents per day. In terms of fatalities, this is the second highest average recorded during the period 2001 to 2006, after the 45 traffic accidents per day in 2003.

PNP reports also reveal that traffic accidents from 2001 to 2006 were caused mainly by driver’s errors. In 2006 alone, a total of 4,182 (27.8%) accidents caused by driver’s error were recorded. This figure, however, was lower by 21.7% compared to the 5,338 cases reported in 2001.

The other main causes of traffic accidents in 2006 were vehicle’s mechanical defects (2,388 or 15.8%), over speeding (1,956 or 13.0%) and self accident (1,115 or 7.4%). Meanwhile, traffic accidents caused by using cellular phones while driving increased more than five times from 2001 to 2006 – the highest increase among the causes of traffic accidents.
In 2006, traffic accidents resulted to 674 fatalities, 3,767 injuries and 10,623 reported cases of damage to properties. After showing an increasing trend from 2001 to 2004, the number of fatalities decreased by 45.2% to 578 in 2005 but showed an increase of 16.7% to 674 in 2006. On the other hand, non-fatal accidents have been declining since 2003. After peaking at 11,627 in 2003, damage to properties had decreased until 2006 when it increased by 50.3%.

Meanwhile, traffic accidents in 2006 mostly involved automobiles with 4,549 (27.0%) reported cases. This was followed by motorcycles (20.7%), jeepneys (19.2%) and trucks (11.1%).
2.3.1.3 Road Safety Programs

To address the above situation, the Department of Health developed in 2006 a national policy and strategic framework on child injury prevention to guide stakeholders in planning interventions for injury prevention. In 2007, a more comprehensive national violence and injury prevention program was developed and sought to establish collaborative work among various agencies and sectors to prevent morbidity, mortality, and disability from violence and injuries in all ages.

Road traffic crashes are the second leading cause of injury and death for all ages (mortality rate of 7.8/100,000). This is the case even among children 0-17 years (mortality rate of 5.85/100,000). The most vulnerable road user group is the pedestrian followed by the motorcyclists.

To address the alarming number of road traffic crashes, the 2004 Philippine Road Safety Action Plan (RSAP) was developed by the inter-agency Road Safety Committee headed by the Department of Transportation and Communication (DOTC). The plan aims to save more than 10,000 lives by halving the anticipated increase in deaths per year and to reduce the death rate (deaths per ten thousand vehicles) by 20 per cent over a five-year period. The Department of Health (DOH) is a member of the National Road Safety Committee. As part of its public advocacy and education efforts, it developed and distributed a drivers’ health manual which contained advisory messages for the prevention of common diseases and road safety among drivers. “Road Safety is No Accident” is the theme commonly used in media campaigns. Collaboration with government and nongovernment agencies for various road safety activities was also done. In 2004, it conducted a media launch of the World Report on Road Traffic Prevention and emphasized the need for a systems approach to road safety – one that addresses the road, the vehicle, and the user. In April 2007, it spearheaded efforts for the conduct of a massive media campaign to celebrate the first United Nations Global Road Safety Week in collaboration with partner organizations and stakeholders. In September 2007, it organized a motorcycle safety forum to promote road safety among bikers. In December 2007, it conducted training for regional health coordinators on violence and injury prevention.

Casualties from traffic accidents have generally remained high over the years. Nevertheless, the number of fatalities has been going down and this may be attributable to several factors, such as the enactment of Republic Act 8750 in 1999 requiring the mandatory use of seatbelts among motorists and the improvement of the capability of health facilities to respond to traffic injuries. A national electronic injury surveillance system (NEISS) is being developed to generate injury-related data from health facilities (primarily hospitals). DOH and partners also continue to advocate for mandatory helmet use among motorcycle riders and to develop policies against drunk driving.
2.3.2 Air Pollution levels/ Emission Data

For much of the early history of the car, no consideration was given to various environmental effects caused by the automobile. Automobiles are a major source of air pollution and noise pollution. The automobile contributes significantly to noise pollution worldwide.

A World Bank study reported that health costs in 2001 of exposure to particulate matter (PM10) in four urban centers, namely: Metro Manila, Baguio City, Cebu City and Davao City, are estimated to be over US $ 430 million. This amount is equivalent to 0.6% of the country’s national gross domestic product.

PM 10 or fine particles can penetrate the upper defenses of the respiratory tract and deposit deep in the lungs. Children, the elderly, and people with heart and lung diseases are most at risk to exposure to this pollutant.

Over 2,000 people die prematurely. This loss is valued at about US $ 140 million. Over 9,000 people suffer from chronic bronchitis, which is valued at about US $ 120 million. Nearly 51 million cases of respiratory symptom days in Metro Manila (averaging twice a year in Davao and Cebu, and five to six times in Metro Manila and Baguio), cost about US $ 170 million.

Poor air quality threatens not only the well-being of city-dwellers but our long-term productivity, as well, especially in terms of the quality of life, material and vegetation damage, reduced tourism to the country, discouraged foreign investments, among others. Further, loss of productivity due to pollution-related illnesses becomes a direct economic cost also. Jeepney drivers and commuters face the greatest health risk due to prolonged exposure to vehicular pollution inevitable in their livelihood.

The DENR conducted a national emissions inventory of air pollution sources in 2006, with the Clean Air Act requiring emissions inventory every three years. Based on the inventory, the transport sector is the major source of air pollution in many regions in the country. The figure below shows the sources of air pollution based on the inventory.
2.4 Review of Institutional and Policy Regulations Governing MV

2.4.1 Institutions and Regulations in Motor Vehicle Regulations and Certification

This section will show the various organizations which concerns with motor vehicle regulations and certification in the Philippines. The succeeding section will also show the roles and functions of these agencies and how these agencies interact with each other. The existing institutional framework on certification and regulation of motor vehicles can be illustrated in the figure below.
The existing process of certification and regulation in the country is shown in Figure 2-41.

Vehicle regulations in the Philippines are currently under the jurisdiction of various agencies as seen in the previous figure. For example, emissions and noise are under the jurisdiction of DENR/EMB; parts such as seat belts, glazing and tires are governed by standards called PNS.
under the jurisdiction of DTI/BPS; fuel properties are under the jurisdiction of DOE/OIMB; theft prevention is governed by the PNP, and vehicle as a whole is under the jurisdiction of DOTC/LTO. The certification systems lack consistency, too: DTI/BPS has jurisdiction over PNS certification, but, for imported parts, it is ICC certification that is required, and, for emissions, it is DENR that requires vehicles to have Certificates of Compliance (COC) labels stuck on. Currently, DOTC/LTO conducts vehicle inspection (MVIS) and issues certificates.

2.4.2 Description of Roles and Functions of Various Agencies

2.4.2.1 Department of Transportation and Communications (DOTC)

The DOTC is the executive department of the Philippine government responsible for the maintenance and expansion of viable, efficient, and dependable transportation and communications systems as effective instruments for national recovery and economic progress. The department is responsible for the country's land, air, sea and communications infrastructure. As such, being the primary agency in charge of land transport which includes motor vehicles, the DOTC also has been given the following functions with relevance to motor vehicle regulations, by Executive Order No. 125-A, which established the DOTC:

(a) Formulate and recommend national policies and guidelines for the preparation and implementation of integrated and comprehensive transportation and communications systems at the national, regional and local levels;

(b) Establish and administer comprehensive and integrated programs for transportation and communications, and for this purpose, may call on any agency, corporation, or organization, whether public or private, whose development programs include transportation and communications as an integral part thereof, to participate and assist in the preparation and implementation of such program;

(c) Assess, review and provide direction to transportation and communication research and development programs of the government in coordination with other institutions concerned;

(d) Administer and enforce all laws, rules and regulations in the field of transportation and communications;

(e) Issue certificates of public convenience for the operation of public land and rail transportation utilities and services;
(f) Establish and prescribe rules and regulations for issuance of certificates of public convenience for public land transportation utilities, such as motor vehicles, trimobiles and railways;

(g) Establish and prescribe rules and regulations for the inspection and registration of air and land transportation facilities, such as motor vehicles, trimobiles, railways and aircrafts;

(h) Establish and prescribe rules and regulations for the issuance of licenses to qualified motor vehicle drivers, conductors, and airmen;

(i) Establish and prescribe the corresponding rules and regulations for the enforcement of laws governing land transportation, air transportation and postal services, including the penalties for violations thereof, and for the deputation of appropriate law enforcement agencies in pursuance thereof;

Furthermore, under the Clean Air Act, the DOTC, in coordination with the DENR, shall, based on environmental techniques, design, impose on and collect regular emission fees from all dischargers as part of vehicle registration renewal system, and implement the emission standards for motor vehicles. In addition, also under the Clean Air Act, it is the responsibility of DOTC (along with DTI and DENR) to establish the procedures for the inspection of motor vehicles and the testing of their emissions for the purpose of determining the concentration and/or rate of emission of pollutants discharged by the said sources.

In the Motor Vehicle User’s Charge [MVUC] Law the DOTC is tasked to provide for the implementing rules and regulations pertaining to the collection of MVUC and on the disposition of monies accruing to the Special Vehicle Pollution Control Fund (SVPDF). Then, DOTC is also responsible for the enforcement and implementation of the Seatbelt Act.

2.4.2.2 Land Transportation Office (LTO)

The Land Transportation Office (LTO) is an agency of the Philippine government under the DOTC responsible for optimizing the land transportation service and facilities and to effectively implement the various transportation laws, rules and regulations. Furthermore, under the Republic Act 4136, which created the Land Transportation Commission, from where LTO acquire its functions, LTO’s task is to prescribe the minimum standards and specifications including allowable gross vehicle weight, allowable length, width, and height of motor vehicles, distribution of loads, allowable loads on tires, change of tire sizes, body design, or its carrying capacity. LTO is also granted authority to refuse registration if on
inspection any motor vehicle is found to be unsightly, unsafe, overloaded, improperly marked or equipped, or otherwise unfit to be operated, or capable of causing excessive damage to the highways and not conforming to minimum standards and specification.

Under Republic Act No. 8794 (The Motor Vehicle User’s Charge [MVUC] Law), LTO has been tasked to be the agency to prescribe the schedule of fees on motor vehicle user’s charge based on corresponding motor vehicle classification. LTO is also tasked to enforce the Seatbelt Law and inspect motor vehicles as part of the requirement for registration.

2.4.2.3 Department of Environment and Natural Resources (DENR)

The Department of Environment and Natural Resources (DENR) is tasked to formulate and implement policies, guidelines, rules and regulations relating to environmental management and pollution prevention and control. And because of this main thrust, the DENR was appointed in the Clean Air Act to act as overall of the lead agency to implement the Act. With its role, the DENR is tasked to prepare a National Air Quality Status Report which shall be used as a basis in formulating the Integrated Air Quality Improvement Framework. Specifically, it is DENR’s role to set the emission standards or standards of performance and the procedures for testing emission for motor vehicles and for enforcement of said standards.

One of the functions of the DENR is the issuance of certificates of Conformity for new motor vehicles. Table 2-12 is the process for its application.
Table 2-12 Certificate of Conformity Requirements and Application Process

COC Requirements*

- Complete and detailed description of motor vehicle and the engine;
- Description of the emission control system installed in the motor vehicle;
- Details of the fuel feed system;
- Vehicle Type Approval System test result by DOTC/LTO (while the DOTC/LTO is developing inspection capability of the motor type approval system test, the previous emission test results of pre-production engine vehicle type duly authenticated by the Philippine Embassy/Consulate of the country of origin or manufacture of subject motor vehicle shall be valid sufficient); and
- Other particulars which may be required by the Department

*as per Part IX Rule XXXI Section VII of DAO 2000-81

EQD – Environmental Quality Division
AQMS – Air Quality Management Section
2.4.2.4 DENR – EMB

Executive Order No. 192 (June 10, 1987) reorganized the Department of Environment, Energy and Natural Resources (DEENR) and renamed it as the Department of Environment and Natural Resources (DENR), with the Environmental Management Bureau (EMB) created as a staff bureau under the DENR, absorbing the powers and functions of the abolished National Environmental Protection Council (NEPC), the National Pollution Control Commission (NPCC), and the Environmental Center of the Philippines (ECP).

Subsequently, Republic Act No. 8749 (June 23, 1999), otherwise known as the Philippine Clean Air Act of 1999, converted EMB from a staff to a line bureau. As a line bureau of the DENR, it is mandated to implement five environmental laws, namely, Presidential Decree 1586 (June 11, 1978) – Establishing an Environmental Impact Assessment System; Republic Act No. 6969 (October 26, 1990) – Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990; Republic Act No. 8749 (June 23, 1999) - Philippine Clean Air Act of 1999; Republic Act No. 9003 (January 26, 2001) – Ecological Solid Waste Management Act; and Republic Act No. 9275 (March 22, 2004) – Philippine Clean Water Act.

Within the Clean Air Act, DENR-EMB is mandated to establish, review and revise emission standards for all types of motor vehicles including motorcycles and tricycles. These standards, according to the law, is required to be reviewed, and revised by the EMB for every two (2) years, or as the need arises to further improve the emission standards.

In the review and revision of emission standards, the DENR endeavours to achieve harmonization of national emission standards with internationally accepted standards.

2.4.2.5 Department of Trade and Industry (DTI)

Under the Clean Air Act, the DTI also is tasked to ensure the compliance of private emission testing centers for motor vehicles of quality standards (e.g. quality services, expertise and facilities are consistent with international standards of testing laboratories). DTI is also tasked to formulate and implement a national motor vehicle inspection and maintenance program. Executive Order No. 156, meanwhile, tasks DTI to monitor all importations of used motor vehicles. The DTI Secretary may, upon review when necessary, issue an order suspending or restricting the entry of certain types of motor vehicles without prior approval of the President.

2.4.2.6 DTI – Bureau of product Standards (BPS)

The Bureau of Product Standards (BPS) is the sole government authority of the Philippines which is tasked to certify products that affect life and safety of consumers, which includes among others, motor vehicles, and motor vehicle parts. The mandate of the DTI BPS originates from the passage of Republic act 4109, which is the Standardization Law of the Philippines, which assigned BPS as the national standards body of the Philippines.
Among the functions of the DTI BPS are the following:

a. Standards development and harmonization

b. Standards promotion and information dissemination

c. Standards and conformance technical infrastructure (product inspection, testing & certification and accreditation programs)

d. DTI-BPS as part of its functions, is also responsible to establish the standards and specifications of seatbelt devices to be installed in all motor vehicles in consultation with the LTO of the DOTC. The DTI is also in charge of promulgating necessary regulations prescribing the useful life of vehicles and engines

Products under mandatory product certification are subjected to testing and certification of the BPS prior to distribution in the market and selling. A manufacturer or importer whose product is under mandatory product certification cannot sell or distribute without the license and clearance from BPS authorities to use the PS Mark or the ICC Mark.

DAO 1: 1997 meanwhile tasked BPS to issue PS (Philippine Standard) Marks license to a manufacturer whose product has successfully passed the requirements of a Philippine National Standards (PNS). With the license, the manufacturer affixes the PS Mark on his product or product package.

Figure 2-42  PS (Philippine Standard) Marks

Under DAO 5: 2001, BPS issues the ICC (Import Commodity Clearance) Mark to an importer whose product has successfully passed the requirements of a Philippine National Standards (PNS). With the clearance, the importer affixes the ICC Mark on his product or product package.
2.4.2.7 DTI- Board of Investments (BOI)

The Philippine Board of Investments (BOI), an attached agency of Department of Trade and Industry (DTI), is the lead government agency responsible for the promotion of investments in the Philippines. Taking the lead in the promotion of investments, BOI assists Filipino and foreign investors to venture and prosper in desirable areas of economic activities.

2.4.2.8 DTI- BUREAU OF IMPORT SERVICES

Under the IRR of R.A. 8749 (Clean Air Act Law) – Rule XXXII, DTI through the Bureau of Import Services (BIS) shall formulate regulations and guidelines that will ensure rebuilt and imported second hand motor vehicles and engines will satisfy the emission standards for rebuilt and imported second hand motor vehicles as provided in this Implementing Rules and Regulations.

DTI BIS is also tasked to accredit prospective truck rebuilding centers to ensure that they are competent enough to carry out truck rebuilding activities.

2.4.2.9 DOE-Oil Industry Management Bureau (OIMB)

DOE is responsible in formulating policies, plans and programs and regulations on the oil industry, including the refining, processing, marketing and distribution of petroleum crude oils, products and by products. Specifically, the Oil Industry Standards and Monitoring Division is responsible for the following:

a. Formulates policy recommendations and implements policies, plans and programs relating to standards for petroleum fuels and petroleum related products

b. Evaluates applications for fuel additive registration for endorsement to DENR, and issues recommendation for registration of fuel additives

c. Conducts research and studies relating to fuel quality and its impact on the environment
d. Undertakes product sampling and monitoring to ensure compliance to national fuel quality standards

e. Coordinates with various DOE Units and concerned government agencies and other entities, (e.g. DENR, DOST, BPS, Oil companies, vehicle manufacturers, etc.) relative to fuel quality and standards.

f. Provides secretariat support to the technical Committee on Petroleum Products and Additives

2.4.2.10 Technical Education and Skills Development Authority (TESDA)

The TESDA's Core Business is to provide national leadership in developing a skilled workforce in the country. Primarily, this involves ensuring sufficient provision of skilled workers and technicians to meet international work standards as well as the needs of local enterprises. It also includes ensuring access to technical education for the greater majority of the Filipinos.

2.4.2.11 Department of Science and Technology (DOST)

Under the Clean Air Act, with the DENR, other agencies, private sector, the academe, non-government organizations and people’s organization, shall establish a National Research Development Program for the prevention and control of air pollution.

2.4.2.12 LTFRB

The Land Transportation Franchising and Regulatory Board (LTFRB), is an agency of the Philippine government under the DOTC responsible for promulgating, administering, enforcing, and monitoring compliance of policies, laws, and regulations of public land transportation services. The LTFRB was created by virtue of an Executive order issued on June 19, 1987, with the goal of simplifying the land transportation industry’s franchising system. Since the creation of the LTFRB, the issuance of franchises for land transport operators has become more stringent, resulting in higher safety standards for land travel. Technical evaluation staff ensure that operating and safety standards of commercial and private vehicles are observed, prior to the issuance of operating franchises.

Specifically, the LTFRB prescribes and regulates the routes of service, economically viable capacities and zones or areas of operation of public land transportation services provided by motorized vehicles in accordance with the public land transportation development plans and programs approved by the DOTC.
It is also under LTFRB’s functions to determine, prescribe and approve and periodically review and adjust, reasonable fares, rates and other related charges, relative to the operation of public land transportation services provided by motorized vehicles.

2.4.3 Review of Existing Policies, Laws on Motor Vehicle Regulations

2.4.3.1 Existing Laws and Regulations Vehicle Regulations/Certification

Upon the start of the CHVSR, an inventory of related land transportation laws and issuances on motor vehicle standards and regulations have been made and reported by the Sub-committee on Legislative Agenda. The report listed fifty three (53) related land transportation laws and issuances on motor vehicle standards and regulations: ten (10) Republic Acts, fourteen (14) Executive Orders, ten (10) Presidential Decrees, seventeen (17) Department Orders, two (2) Administrative Orders (issued by LTO) and two (2) Memorandum Circulars (also issued by LTO). Some of these laws and policies are discussed hereunder.

2.4.3.2 Legal Framework for Motor Vehicle Harmonization

1) Republic Act No. 4136 (The Land Transportation and Traffic Code of the Philippines)


- Prohibits the registration of motor vehicles that are unfit, unsightly, unsafe or not conforming to the prescribed minimum standards and specifications.

- Prescribes the minimum standards and specifications including (i) allowable gross vehicle weight, (ii) allowable length, (iii) allowable width and height of the motor vehicles, (iv) distribution of loads, (v) allowable loads on tires, (vi) change of tire size, (vii) body design or carrying capacity subsequent to registration and (viii) all other special cases which may arise for which no specific provision is otherwise made in the Act.

- Provides that, for uniformity of registration fees and classification, all manufacturers and/or assemblers of motor vehicle, prior to introduction of the new model, shall submit the specifications of the said model to the LTO, which shall determine under what schedule of registration fees the said model should fall.

- Traffic Rules

- Commonwealth Act No. 146 (The Public Service Act)
This Act provides regulations for the operation of public utility vehicles whereby the Land Transportation Franchising and Regulatory Board (LTFRB) is mandated as follows:

- To prescribe and regulate routes for transportation companies; and,
- To issue / amend or cancel Certificates of Public Convenience (CPC).

2) Republic Act No. 4109 (The Philippine Standardization Law)

Republic Act No. 4109, “An Act to Convert the Division of Standards under the Bureau of Commerce into a Bureau of Standards, to Provide for the Standardization and/or Inspection of Products and Imports of the Philippines and for Other Purposes”, was approved on 20 June 1964. It mandates the review, revision and publication of standards every two years or as the need arises.

3) Republic Act No. 8749 (The Philippine Clean Air Act of 1999)

Republic Act No. 8749, known as “An Act Providing for a Comprehensive Air Pollution Control Policy and for Other Purposes”, provides for the harmonization of national emission standards with international standards, and mandates the following agencies, as indicated:

i. DENR

- Prepare a detailed action plan settling the emission standards or standards of performance and the procedures for testing emission and for enforcement of said standards.

ii. DOTC

- Enforce compliance with emission standards for motor vehicles set by the DENR; and,
- Implement the emission standards for motor vehicles pursuant to and as provided under the Clean Air Act as evidenced by the Certificate of Conformity issued by the Department (DENR).

iii. DTI

- Formulate and implement a national motor vehicle inspection and maintenance program.

iv. DOE

- In consultation with the Bureau of Product Standards (BPS) of the DTI, the DOST, representatives from the fuel and automotive industries, the academe and the consumers, set specifications for all types of fuel and fuel related products, to improve efficiency and reduced emissions.

4) Republic Act No. 8794 (The Motor Vehicle User’s Charge [MVUC] Law)
Also known as “An Act Imposing a Motor Vehicle User’s Charge on Owners of All Types of Motor Vehicles and for Other Purposes”, Republic Act 8794 provides for and ensures the adequate maintenance of national and provincial roads through sufficient funding for the purpose.

Under the law, all manufacturers and/or assemblers of motor vehicles shall, not later than 3 months prior to the introduction of any new model of motor vehicle in the market, submit the specifications of such new model to the LTO which shall recommend for approval by the Secretary, proper classification of the new model and the rate of MVUC under which the new model shall fall.

The Act gives the following agencies their respective mandates:

- **LTO**
  - Prescribe the schedule of fees on motor vehicle user’s charge based on corresponding motor vehicle classification.
- **DBM**
  - Promulgate the procedure for the manner of payments of the MVUC on government vehicles.
- **DPWH**
  - With DOTC, jointly promulgate rules and regulations to implement and carry out the intent, objectives, purpose and provisions of the Act.
- **DOTC**
  - Provide for the implementing rules and regulations pertaining to the collection of MVUC and on the disposition of monies accruing to the Special Vehicle Pollution Control Fund (SVPCF).

5) Executive Order No. 397

Executive Order No. 397, entitled “Reducing the Rates of Import Duty on Completely-Knocked-Down Parts and Components for Assembly of Low Engine Displacement and Hybrid Vehicles”, was executed to promote the judicious conservation and efficient utilization of energy resources thereby adopting the most cost-effective options toward the wiser and efficient use of energy.

6) Executive Order No. 156

Entitled “Providing for a Comprehensive Industrial Policy and Directions for the Motor Vehicle Development Program and Its Implementing Guidelines”, Executive Order No. 397 mandates the various agencies involved as follows:
• DTI
  • Monitor all importations of used motor vehicles. The DTI Secretary may, upon review when necessary, issue an order suspending or restricting the entry of certain types of motor vehicles without prior approval of the President.
• BOC
  • Submit to the DTI information pertaining to the importation of motor vehicles.
• LTO
  • Submit to the DTI information pertaining to the registration of imported motor vehicles.

2.4.3.3 Laws Governing Motor Vehicles Dealing with Safety Requirements

1) Letter of Instruction No. 229

Letter of Instruction 229 directs the use of early warning devices on motor vehicles. It was approved on December 1974 after one of the major causes of fatal or serious accidents in land transportation is the presence of disabled, stalled, or parked motor vehicles along streets or highways without any appropriate early warning device to signal approaching motorists of their presence.

2) Republic Act No. 8750 (Seatbelt Law)

Known as “An Act Requiring the Mandatory Compliance by Motorist of Private and Public Vehicles to Use Seatbelt Devices in All Their Manufactured Vehicles”, and has the following implementing agencies:

• DOTC
  o Responsible for enforcement and implementation of the Seatbelt Act.
• DTI
  o Establish the standards and specifications of seatbelt devices to be installed in all motor vehicles in consultation with the LTO of the DOTC.
• LTO
  o Enforce the Seatbelt Law and inspect motor vehicles as part of the requirement for registration.

3) Presidential Decree No. 96

Presidential Decree No. 96 has declared unlawful the use or attachment of sirens, polls, horns whistles or similar gadgets that emit exceptionally loud or startling sounds. It was approved

4) Republic Act No. 8506

“An act banning the registration and operation of vehicles with Right Hand Steering Wheel in any private or public street, road or highway”. The act made it unlawful for any person to import, cause the importation of, register, cause the registration of, use, or operate any vehicle with its steering wheel right-hand side thereof in any highway, street or road, whether private or public or of the national or local government.

5) Executive Order No. 628

Executive Order No. 628 dated 20 June 2007 created the Committee on Harmonization of Vehicle Standards and Regulations (CHVSR) with DOTC as Chairman, DTI as Vice-Chairman, DOE, DOST, DENR, DILG, representatives from the academe and private sectors as members.

The objectives of the Committee are as follows:

- Provide measures to ensure that motor vehicles are conforming to or compliant with the standards set under Republic Act No. 4136 otherwise known as the Land Transportation and Traffic Code of the Philippines, as amended and other related laws;
- Initiate the development, review, revision and publication of vehicle standards every two years, or as the need arises, pursuant to the provisions of Republic Act 4109 otherwise known as the Philippine Standardization Law, to ensure substantial improvement in air quality for the health, safety and welfare of the general public;
- Provide for the harmonization of national vehicle emission standards with the international standards as well as setting of fuel quality standards pursuant to the provisions of Republic Act No. 8749 or the “Philippine Clean Air Act”; and
- Establish uniform and simplified standards, procedures and regulations for worldwide recognition pursuant to the objectives of the 1958, 1997 and 1998 WP29 Agreements.

2.4.3.4 Proposed Laws and Regulations

Initial codification of laws has been made by the Legal Service of DOTC. Their initial concern then was the formulation of a law in order to accede to WP 29, in compliance with the requirements for accession. However, the supposed codification project has been suspended after they have not been able to decide on the mode of procurement of consultant
to do the task.
With accession to the 1958 and 1998 Agreements and whole type vehicle approval as the goal of the Study, proposed laws and regulations are directed thereto.

1) Administrative Order on Establishing the Upgraded Motor Vehicle Inspection System (MVIS)
The upgraded MVIS will be established in order to provide a systematic, reliable and effective testing of motor vehicles. The order prescribes the rules and regulations in the inspection of all motor vehicles as a requirement in the registration with the Land Transportation Office. All motor vehicles (MV) shall be subjected to mandatory inspection for compliance to safety, roadworthiness and emission standards prior to registration. The Land Transportation Office shall issue corresponding circulars on the phased implementation of MVIS.

Furthermore, the following have been filed under the Fifteenth Congress:
2) House Bill No. 955 and 1517: “An Act Requiring Car Companies to Put Up Sub-assembly Plants for the Local Manufactures of Certain Car or Auto Parts”
Introduced by Rep. Augusto Syjuco, which seeks to require big car companies to put up sub-assembly plants for the local manufacture of certain car or auto parts to significantly lower the local price of cars or automotive which are largely imported abroad and assembled in the Philippines.

An Act to Strengthen the Competitiveness of the Philippine Motor Vehicle Manufacturing Industry”, introduced by Representatives Rufus B. Rodriguez and Maximo B. Rodriguez, Jr., and shall be known as “The Philippine Motor Vehicle Manufacturing Industry Act”. The Department of Trade and Industry through the Board of Investments shall be the lead agency mandated to implement provisions of the Act.

Under the Act, a National Motor Vehicle Manufacturing Development Plan which shall define the industry’s annual and medium-term manufacturing and export targets and programs and strategies to support manufacturing and export thrusts and also identify priority development products, shall be prepared. Said plan shall be integrated into the PEDP and MTPDP.
Motor Vehicle Manufacturing Development Council that shall serve as the central policy coordinating body and national advisory committee shall also be created under the Act and this shall be comprised of representatives from the (i) Department of Trade and Industry, (ii) National Economic Development Authority, (iii) Department of Finance, (iv) Department of Environment and Natural Resources, (v) Department of Energy, (vi) Department of Transportation and Communications, (viii) Department of Labor and Employment and (ix) the private sector.

The Act also provides entitlement of enterprises engaged in the manufacture of motor vehicles and of motor vehicle parts and accessories to different incentives.


Introduced by Representative Lorenzo R. Tañada III and shall be known as “The Comprehensive Motor Vehicle Development Act”. The Motor Vehicle Development Program (MVDP) under the Act shall cover the manufacture and assembly of motor vehicles under Classifications I to IV. The Act also provides for incentives to enterprises engaged in the manufacture of motor vehicles duly registered with the BOI as participant under the MVDP as well as manufacturers of motor vehicle parts and accessories.

2.4.4 Formation of the Committee on Harmonization of Vehicle Standards and Regulations

In December 1997, the Association of South East Asian Nations (ASEAN) adopted Vision 2020, which envisaged “a stable, prosperous and highly competitive ASEAN economic region in which there is a free flow of goods, services, investment and freer flow of capital, equitable economic development and reduced poverty and socioeconomic disparities” by the year 2020. Toward the realization of the vision, the ASEAN leaders signed the Bali Concord II in October 2003 aiming at an ASEAN Economic Community (AEC) as an end goal of its regional economic integration.

After the discussion on accelerating implementation of the AEC from 2020 to 2015 at the 11th ASEAN Summit in December 2005, a blueprint which identifies the characteristics of the AEC by 2015, with clear target and timelines for implementation of the various measures as well as pre-agreed flexibilities to accommodate the interests of all ASEAN Member Countries and consistent with the Bali Concord II was developed.

The AEC blueprint requires the integration of 11 priority sectors, which includes automotive products. To facilitate and liberalize trade and investment in the region, the ASEAN Member
Countries will have to harmonize their respective national standards with international standards and implement Mutual Recognition Agreements (MRAs) on conformity assessment to achieve the end-goal of “one standard, one test, accepted everywhere”, with focus on harmonization of ASEAN automotive safety and emission standards based on the UNECE regulations.

WP29 (Working Party 29) initiates and pursues the harmonization of technical regulations or amendments to the regulations for worldwide acceptance and are directed at (1) improving vehicle safety; (2) protecting the environment; (3) promoting energy efficiency; and (4) anti-theft performance. WP29 provides uniform conditions for periodical technical inspections and strengthening economic relations worldwide.

Cognizant of the need of the Government of the Philippines to coordinate efforts by various agencies, international organizations and the stakeholders toward the abovementioned purpose, Executive Order No. 628 (EO 628) “Creating a Committee on Harmonization of Vehicle Standards and Regulations” (CHVSR) was issued on 20 June 2007.

As mandated, the Committee shall primarily be responsible for effective coordination of all efforts and initiatives by various government agencies, international organizations and the private sector pertaining to the harmonization of vehicle standards, regulations and participations to WP29 and accession to its agreements, including all activities related thereto.

It is chaired by the Department of Transportation and Communications (DOTC), with the Department of Trade and Industry (DTI) as Vice-Chairman, while the Department of Energy (DOE), Department of Science and Technology (DOST), Department of Environment and Natural Resources (DENR), Department of the Interior and Local Government (DILG), representatives from the academe and private sectors as members.

### 2.4.5 Objectives of the CHVSR

The CHVSR has the following objectives:

1) Ensure that motor vehicles are conforming to or compliant with the standards set by law;

2) Initiate the development, review, revision and publication of vehicle standards every two years, or as the need arises, to ensure substantial improvement in air quality for the health, safety and welfare of the general public;

3) Provide for the harmonization of national vehicle emission standards with international standards as well as setting of fuel quality standards; and,
4) Establish uniform and simplified standards, procedures and regulations for worldwide recognition pursuant to the objectives of the 1958, 1997 and 1998 WP29 Agreements.

2.4.6 Organizational Structure of the CHVSR (Sub-committees)

The Committee is composed of four sub-committees. These sub-committees, their composition and respective mandates are as follows:

- **Sub-committee on Standards Development**
  1) Composition
     - Chair : Bureau of Product Standards (BPS)
     - Co-chair : OIMB
     - Vice Chair: PAFI
     - Members : DOTC, LTO, EMB, MIRDC, ITDI, PCIERD, PNP-TMG, SOPI, UP-NCTS, CAMPI, MVPMAP, MDPPA, TMA, PAMIA, MCPPEA
  2) Functions
     - Oversee and coordinate all standardization activities of all government member agencies through the Committee which will be used as basis for regulations;
     - Recommend policy thrusts for all road vehicle related standards development organizations based on established road map of standardization and harmonization in accordance with regional and international agreements;
     - Develop, implement and maintain processes for setting priorities for motor vehicle standards through the Committee;
Formulate and Review Philippine National Standards for the following:

- Motor vehicles and Parts (4-wheeled vehicles)
- Motorcycles and Parts (2-wheeled vehicles)
- Customized Local Road Vehicles (CLRV) (4-wheeled MV)
- CLRV (2-3 wheeled MV)
- Fuel Quality
- Emissions (Exhaust and Noise)

Identify and recommend to the Committee the institutional and technical infrastructure requirements relative to the implementation of standards and regulations;

Conduct IEC, public information campaign, public hearings and consultations related to development of MV standards to all stakeholders.

### 2.4.6.2 Sub-committee on Certification and Regulation

1) Composition

- Chair : Land Transportation Office (LTO)
- Co-chair : DENR
- Vice chair : PAFI
- Members : DOTC, BPS, BIS, EUMB, OIMB, LTFRB, PNP–TMG, UP–NCTS, AAP, COLTAP

2) Functions

- Establish and recommend to the Committee a motor vehicle type approval system for whole vehicle and component parts that is in conformance with international standards;
- Formulate and recommend to the Committee a matrix of technical requirements, relative to the harmonization of motor vehicle standards and regulations;
- Develop and recommend to the Committee standards and procedures for the accreditation of training institutions, instructors and their facilities and the licensing of qualified private service centers and their technicians as a prerequisite for conducting the testing, servicing, repair and the required adjustment of vehicle emission system and component parts and testing certification system;
- Identify and recommend to the Committee the institutional and technical infrastructure requirements relative to the implementation of whole vehicle type approval system and component parts and testing certification system;
• Conduct public information campaign, public hearings and consultation to all stakeholders.

2.4.6.3 Sub-committee on Participation to Regional and International Agreements

1) Composition

• Chair : DOTC
• Co-chair : LTO
• Vice chair: PAFI
• Members : BPS, BOI, EMB, OIMB, PNP–TMG, Senate Committee on Public Services and Congress Committee on Transport

2) Functions

• Plan and organize the administrative activities of the Committee for the participation to the regional and international agreements;
• Recommend administrative measures to the Committee that will ensure implementation of the objectives set in the regional and international agreements;
• Coordinate with government bodies concerned as regards accession and participation to WP 29 Agreements.

2.4.6.4 Sub-committee on Legislative Agenda

1) Composition

• Chair : DOTC
• Co-chair : LTO
• Vice chair: PAFI
• Members : BPS, BOI, EUMB, OIMB, EMB, PNP–TMG, UP–NCTS, COLTAP, Senate Committee on Public Services and Congress Committee on Transport

2) Functions

• Review the current jurisprudence, laws, rules, regulations and issuances relative to motor vehicle standards and regulations;
• Recommend to the Committee legislative measures towards the attainment of the motor vehicle standards, regulations and other related laws;
Prepare the draft and conduct consultation on the proposed legislations and submit such to the Committee for endorsement to the House of Representatives and the Senate.

2.4.7 CHVSR Sub-committee Activities and Outputs

2.4.7.1 Sub-committee on Standards Development

The Sub-committee on Standards Development has been conducting an inventory of the standards related to motor vehicles. Currently, standards are being developed by the following agencies:

- Bureau of Product Standards (DTI-BPS) : Road Vehicles and Component Parts
- Environmental Management Bureau (DENR-EMB): Emission Standards
- Oil Industry Management Bureau (DOE-OIMB) : Fuel Quality

Specifically, Figure 2-45 shows some of the activities and outputs of the following agencies which have been reported to the CHVSR:

**Figure 2-45 The Motor Vehicle Standards Development Program**

- Promulgation of 425 PNS on Road Vehicles which includes Auto LPG/ CNG conversion standards for use for M and N category vehicles, hybrid vehicles standards, 96 fuel quality and others; 8 are mandatory product certification while 10 are recommended for mandatory implementation
- Promulgation of 11 PNS on electric, hybrid and fuel cell road vehicles
- Development of PNS for Auto LPG Fuel systems for 2-3 wheels (category L) vehicles harmonized with UNECE 115 (BPS TC44)
- Harmonization of PNS for autoglass (PNS 130, UNECE R43) (BPS TC 12)
- Harmonization PNS for tires (PNS 25)
- Motor vehicle emission standards: emission limits (type approval), white smoke standards for MC/TC adoption of Euro II for MC/TC, develop LPG emission standards for NOX
To date, a total of 425 road vehicles engineering standards and 96 fuel quality standards have been promulgated where 8 standards are for mandatory product certification and 10 standards are recommended for mandatory implementation. Eleven (11) Philippine National Standards (PNS) on electric, hybrid and fuel cell road vehicles were promulgated on 24 October 2008. There are other on-going projects on road vehicles and component parts, program for motor vehicle emission standards and program for fuel quality, as follows:

1) Road Vehicles and Component Parts

The following are on-going projects on road vehicles and component parts:

1) Development of PNS for AutoLPG Fuel systems for 2-3 wheels (L) vehicles harmonized with UNECE 115 (TC44)

2) Harmonization of PNS for Autoglass PNS 130, UNECE 43 (TC12)

3) Harmonization of PNS for tyres (PNS 25)
   - R30, pneumatic tires for mv and trailers is for circulation
   - R54, pneumatic tires for commercial vehicles is on-going deliberation
   - R64, temporary use spare wheels/tires
   - R88, reflective tires for 2-wheeled motor vehicles
   - R106, pneumatic tires for agricultural vehicles
   - R108, retreaded pneumatic tires for motor vehicles
   - R109, retreaded pneumatic tires for commercial vehicles
   - R117, uniform provisions concerning the approval of tires with regard to rolling sound emissions and to adhesion on wet surfaces

2) Program for Motor Vehicle Emission Standards

Table 2-13 shows the schedule of implementation of various emission standards related to motor vehicles. Euro II for motorcycles was implemented in 2009 while Euro IV is scheduled to be implemented in 2012.

<table>
<thead>
<tr>
<th>Motor Vehicle Emission Standard</th>
<th>Time Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission limits (type approval)</td>
<td>2012 (Euro IV)</td>
</tr>
<tr>
<td>Review of emission standards for in-use vehicles</td>
<td>2009</td>
</tr>
<tr>
<td>Emission standards for in-use vehicles</td>
<td>2009</td>
</tr>
<tr>
<td>White smoke standards for in-use vehicles</td>
<td>2009</td>
</tr>
<tr>
<td>Adoption of Euro II for Motorcycles/Tricycles</td>
<td>2010</td>
</tr>
<tr>
<td>Develop LPG emission standards for NOx</td>
<td>2010</td>
</tr>
</tbody>
</table>
3) Program for Fuel Quality

The following are the activities related to fuel quality standards development:

1. Revision of PNS DOE QS 004 Fame Blended – Diesel Oils – specification
   - 2% biodiesel blend (Biofuels Act)
   - reduction of sulfur from 0.3% to 0.05 %

2. Revision of PNS DOE QS 008 E-gasoline – specifications
   - Two (2) grades for E10
     - RON 93 – premium
     - RON 95 – premium plus

2.4.7.2 Sub-committee on Certification and Regulation Activities

The following have been accomplished to date:

1) Conducted review and inventory of existing laws, rules and regulations related to MV certification and regulations
2) Gathered certification and regulation processes in Thailand, Malaysia, Singapore and Indonesia
3) Conducted benchmarking of the vehicle type approval process in Singapore and Japan
4) Alignment of 11 priority MV regulations in the ASEAN with 31 December as the target date of alignment; status: 6 EQV and 5 NEQ
5) Conducted inventory of testing laboratories and manufacturers

Alignment of the 11 Priority Regulations of ASEAN APWG with UNECE Regulations

The Automotive Product Working Group (APWG) of the ASEAN Consultative Committee on Standards and Quality (ACCSQ) has identified 11 priority regulations of motor vehicles that will be aligned with UNECE regulations. Three out of 8 regulations are equivalent, shown as follows:

(a) Equivalent (EQV)
   - R16 – Seatbelt
   - R14 – Seatbelt Anchorage
   - R51 – Noise

(b) Not Equivalent (NEQ)
   - R43 – Safety Glass
   - R30 – Tire
   - R54 – Tire
   - R83 – Exhaust Emission (Light Duty Vehicles)
- **R49 – Exhaust Emission (Heavy Duty Vehicles)**

As to the country’s alignment of 3 priority regulations for 2-wheeled vehicles with UNECE regulations, all regulations are equivalent, with details shown below.

**Equivalent (EQV)**
- R22 – Helmet
- R40 – Exhaust Emission
- R41 – Noise

**Table 2-14 Proposed UNECE Regulations for Motorcycles by AAF TC5**

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Timetable by AAF</th>
<th>Per Public Hearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) R60 – Control Telltale</td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>2) R81 – Rear view mirror</td>
<td>2012</td>
<td>2011</td>
</tr>
<tr>
<td>3) R75 – Tire</td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>4) R28 – Horn</td>
<td>2010</td>
<td>2013</td>
</tr>
<tr>
<td>5) R37 – Bulb</td>
<td>2012</td>
<td>2011</td>
</tr>
<tr>
<td>6) R3 – Reflector</td>
<td>2012</td>
<td>2011</td>
</tr>
<tr>
<td>7) R78 – Brake</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>8) R10 – EMC</td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>9) R39 – Speedometer</td>
<td>2011</td>
<td>2011</td>
</tr>
<tr>
<td>10) R62 – Anti Theft</td>
<td>on-going discussion</td>
<td>2012</td>
</tr>
<tr>
<td>11) R53 – Light installation</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>12) R50 – Light</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>13) R113 – headlamp (symmetrical)</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>14) R40 – Ex Emission</td>
<td>enforced</td>
<td>2012</td>
</tr>
<tr>
<td>15) R41 – Noise</td>
<td>2010</td>
<td>2010</td>
</tr>
</tbody>
</table>

Comparison of the ASEAN Automotive Federation (AAF) TC5 proposed timetable for adoption of UNECE regulations for motorcycles and the corresponding timetable of adoption as a result of public hearing conducted by the government is shown in Table 2-14.

Table 2-15 shows the ASEAN Automotive Federation (AAF) TC5 proposed timetable for adoption of UNECE regulations for 4-wheeled vehicles in the M1 and N1 categories.
<table>
<thead>
<tr>
<th>By Year 2010</th>
<th>By Year 2012</th>
<th>By Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) R14 – Belt Anchorage</td>
<td>1) R13 – Braking</td>
<td>1) R3 – Reflex Reflections</td>
</tr>
<tr>
<td>2) R16 – Safety Belts</td>
<td>2) R13H – Braking (M1)</td>
<td>2) R4 – Rear Registration Plate Lamps</td>
</tr>
<tr>
<td>3) R30 – Pneumatic Tires (Passenger Vehicles)</td>
<td>3) R17 – Seats</td>
<td>3) R6 – Direction Indicators</td>
</tr>
<tr>
<td>4) R43 – Safety Glazing Materials</td>
<td>4) R28 – Audible Warning Devices</td>
<td>4) R7 – Front and Rear Position Lamps, Stop Lamps, End Outline Marker Lamps</td>
</tr>
<tr>
<td>5) R54 – Pneumatic Tires (Commercial Vehicles)</td>
<td>5) R39 – Speedometer</td>
<td>5) R19 – Front Fog Lamps</td>
</tr>
<tr>
<td>6) R46 – Rear View Mirror</td>
<td>6) R23 – Reversing Lamps</td>
<td></td>
</tr>
<tr>
<td>7) R79 – Steering Equipment</td>
<td>7) R37 – Filament Lamps</td>
<td></td>
</tr>
<tr>
<td>8) R38 – Rear Fog Lamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) R45 – Headlamp Cleaner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) R48 – Installation of Lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) R77 – Parking Lamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) R91 – Side-Marker Lamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) R98 – Gas Discharge Headlamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) R99 – Gas Discharge Light Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) R112 – Headlamps with Asymmetrical Passing Beam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16) R119 – Cornering Lamps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.4.7.3 Sub-committee on Participation to Regional and International Agreements Activities
The Philippine government, through the DOTC and LTO has been participating in the ASEAN Automotive Product Working Group meetings twice a year where the following subjects are being discussed:
1) Exchange of info on fuel properties and emission regulations, procedures and mandatory requirements;
2) Exchange of info on existing standards, mandatory requirements and technical regulation;
3) Profile of automotive regulatory regime in ASEAN member states;
4) Alignment with UNECE Regulations;
5) ASEAN harmonized regulatory scheme for automotive;
6) Conformity of production (COP) procedures;
7) Vehicle type approval (VTA) system; and
8) Proposed harmonization of UNECE by AAF TC 5 and TC3.

The DOTC/LTO also has been participating in the yearly JASIC meetings where the following topics are being discussed:
1) Latest situation on WP29 Participation and the 1958 Agreement; and,
2) Issues, tasks, solutions and progress of the establishment of vehicle type approval (VTA) system.

In 2006 and 2007, the DOTC/LTO participated as Observer to the WP29. There has been a plan to accede to the 1958 Agreement in 2008 but later on decided to have a study conducted first and have a policy framework developed prior to accession. The study would deal on the following aspects: (i) international trade cooperation; (ii) domestic industry; (iii) environment and safety; and, (iv) policy formulation, administration and implementation.

2.4.7.4 Sub-committee on Legislative Agenda Activities

In 2008, the Subcommittee on Legislative Agenda has made initial codification of related land transportation laws and issuances on motor vehicle standards and regulations. They have prepared Terms of Reference (TOR) for the Project on Harmonization and Modernization of Land Transportation Laws, Rules and Regulations, which was supposed to be implemented in three phases:

1) Codification of Land Transportation Laws
2) Legislation of Reform Proposals by Drafting Recommended House Bills
3) Education and Information Campaign on the Proposed and Legislated New Code of Land Transportation Laws that includes shepherding and lobbying for their passage

To date, the following have been accomplished:
1) Initial codification of transportation laws, rules and regulations to come up with a new Road Vehicles Act
2) Road Safety Bill
3) Amendment to the Clean Air Act
4) Amendments to the Anti-Carnapping Law
CHAPTER III  PROJECT ACTIVITIES AND RESULTS

3.1 Organizing CHVSR Meetings

We supported DOTC in its efforts to hold CHVSR meetings regularly as an official forum of discussion on this project, and thus establish and vitalize activities for the establishment of vehicle regulation and certification system. We also took these opportunities to give lectures on the basics of a vehicle regulation and certification system and provide information by the counterparts.

3.1.1 Discussions at CHVSR and major agreements

   - Presentation of the Inception Report and agreement.

(2) October 27, 2011: Second meeting of the CHVSR (See Annex: Minutes of the 2nd/ 2011 4th Quater of CHVSR Meeting).
   - Presentation of the JASIC proposal for the concept of a new vehicle regulation and certification system, followed by discussion
   - Presentation of the JASIC proposal for the road map to accession to the 1958 Agreement

(3) December 8, 2011: Third meeting of the CHVSR (See Annex: Minutes of the 3rd/2011 Special Meeting of the CHVSR).
   - Agreement on the concept of a new vehicle regulation and certification system, followed by discussion
   - Agreement on the road map to accession to the 1958 Agreement

(4) February 15, 2012: Fourth meeting of the CHVSR (See Annex: Minutes of the 1st / 2012 1st quarter of CHVSR Meeting)
   - Presentation of the Draft Final Report and requesting for comments by February 29.
   - Follow-ups

3.1.2 Presentations at the CHVSR meetings

(1) **First meeting of the CHVSR (Subjects presented by JICA/JASIC)**
   - Presentation of the Inception Report

(2) **Second meeting of the CHVSR (Subjects presented by JICA/JASIC)**
   - Presentation: “Vehicle Regulation and Certification System in Japan”
   - Lecture on the purpose, current status, and benefits of IWVTA systems: “International Whole Vehicle Type Approval (IWTA)”
Presentation on accession to the 1958 Agreement, proposal of a road map, and discussion: “Accession to the 1958 Agreement”

Presentation on WVTAS framework and discussion “Draft Proposal on Vehicle Type Approval System and Certification for the Philippines”

3rd CHVSR meeting reached a basic agreement on the framework and the road map. Therefore, we agreed with Chairman Esguella to consolidate the planned 4th and 5th meetings into one and hold the final 4th meeting on February 2012 for the presentation of the draft final report and a final summary of activities.

4th CHVSR meeting (Subjects presented by JICA/JASIC)

- Presentation of the Draft Final Report and requesting for comments by February 29
- Follow-ups
  - Report of the latest situation of introducing WVTAS and the result of a case study of drafting regulations on tires (ECE R30)
  - Proposals for implementation of activities in the road map for accession to the 1958 Agreement.
3.2 Establishing a Road Map to Accession to the 1958 Agreement

3.2.1 Building a consensus about the benefits of accession to the 1958 Agreement

3.2.1.1 Drafting policy timetable for accession to the 58 Agreement

Accession to the 1958 Agreement by the Philippines is part of the efforts ASEAN as a whole is making. It is also an important task for the Philippines, one of the automobile manufacturers competing in the rapidly developing Asian auto market, to prepare itself for future internationalization.

While addressing greenhouse gas reduction and other global issues and working to develop a safe and secure automobile society, ASEAN countries aim at developing vehicle regulation and certification systems that can be mutually approved and thus develop a unified ASEAN market by 2015. To do so, they are examining various issues in the framework of ASEAN ACCSQ-APWG (such as mutual approval; harmonizing regulations; improving abilities in test result evaluation, inspection, and certification; enhancing transparency of rulemaking process; enhancing COP and market surveys; training programs).

For the ASEAN countries, it is important that type approval and mutual approval systems in ASEAN be developed in consistency with the 58 Agreement, which is an international convention. We hope that the Philippines’ accession to the 58 Agreement will trigger the rush of other ASEAN countries toward the Agreement and thus take the ASEAN closer to its goal, which is to have all of the member countries join the agreement.

In joining the 58 Agreement, the Philippines will face several issues. To help it to make political judgment more easily, we will analyze the effects of the accession to the 58 Agreement on economy, environment, and safety. We will give lectures on the terms of the 58 Agreement and share our experiences and findings we garnered while joining the 58 Agreement and successively adopting ECE regulations. We will discuss with the Philippine government and industry what are the tasks ahead and what is necessary for the Philippines to join the agreement by 2015 and help them draft an action plan.

From the experiences of Japan and other countries that have already joined the agreement, we expect that the Philippines, too, will take some time accessing the 58 Agreement, because it is an international convention and joining it is a process that requires diplomatic and political judgment. Therefore, while providing the Philippines with information on accession procedure and lobbying relevant parties at high-levels, we will pave the way toward the accession to the Agreement by starting type approval based on ECE regulations in advance to the accession

Outline of the 58 Agreement

The 58 Agreement, a multilateral convention under the United Nations Economic
Commission for Europe (ECE), aims at promoting the harmonization of regulations on vehicle safety and pollution by vehicle part and system and mutual recognition of type approval. The terms of the Agreement are roughly divided into three areas:

1. Establishment of regulations: Prescribes steps and procedures to follow in creating or amending a UN/ECE regulation. A draft regulation is approved by a two-thirds vote at a meeting attended by the majority of the contracting parties and sent to the UN secretary-general, who notifies all the contracting parties of the result, and, unless one third or more of the contracting parties express objection within six months following the notification, the regulation comes into effect and issued as part of the Agreement. To amend a regulation, only the contracting parties who have adopted such a regulation have voting rights, differently from the approval of a new regulation.

   (i) Delivery of approval mark (Article 2, Annex 2)
   (ii) Acceptance of approval (Article 3, Annex 2)
   (iii) Refusal to accept approval (Article 1, paragraph 6, Article 4, Article 5, Annex 2)
   (iv) Freedom of mutual recognition (Article 1, paragraph 5)

3. Other provisions: Provisions relating to the Agreement
   (i) Eligibility for accession (Article 6)
   (ii) Provisions on amendment of the 58 Agreement (Article 7, Article 13)
   (iii) Denunciation of the Agreement (Article 8)

In principle, it is the member countries of the ECE who are eligible for accession to the 58 Agreement. Based on Article 11 of the Articles of Incorporation of ECE, however, a country who is not a member of the ECE may join the Agreement on the condition that such country is a member of the United Nations. While ECE regulations are adopted by majority vote, the amendment of the 58 Agreement itself requires the unanimous approval of the contracting parties.

Contracting parties to the 1958 Agreement
Germany, France, Italy, Netherland, Sweden, Belgium, Hungary, Czech, Spain, Serbia and Montenegro, UK, Austria, Luxemburg, Switzerland, Norway, Finland, Denmark, Romania, Poland, Portugal, Russia, Greek, Ireland, Croatia, Slovenia, Slovakia, Belarus, Estonia, Bosnia Herzegovina, Latvia, Bulgaria, Lithuania, Turkey, Azerbaijan, Macedonia, EU, Japan, Australia, Ukraine, South Africa, New Zealand, Cyprus, Malta, Korea, Malaysia, Thailand, Montenegro, Tunisia
Participation in the World Forum for Harmonization of Vehicle Regulations (WP.29)

Any member of the United Nations or any organ set up by UN members for unification of regional economy is eligible to officially participate in activities at WP.29 and join agreements operated by WP.29.

The formal procedure for participation is started when an authorized representative of the member country (or organ for regional unification of economy) first sends a letter with his/her signature to the secretariat of the WP.29 and then sends the secretariat a representative and notifies it of the country’s intention of participation.

The 1998 Agreement being another important convention for the international harmonization of regulations, the following explanation of the 1998 Agreement will be given in comparison with the 1958 Agreement. For the Philippines, however, its priority for study will be lower than the 1958 Agreement, because it is more urgent for the country to establish a system of mutual recognition of approvals based on the 58 Agreement, of which introduction by 2015 has been agreed upon by the ASEAN countries.

Outline of the 98 Agreement

The 98 Agreement aims at the establishment of global technical regulations on vehicle safety, environment, fuel saving, and theft prevention (hereinafter referred to as “gtr”) while ensuring consistency with the UN/ECE regulations. Although the 98 Agreement does not include any certification system by which governments evaluate and guarantee performance, mutual recognition of approvals under the 58 Agreement becomes operational when member countries reflect the gtr established above on UN/ECE regulations.

Candidates for new gtr are made of (i) UN/ECE regulations; (ii) those of existing domestic regulations which were approved by a one-third vote of the contracting parties including any of Japan, US, and Europe; and (iii) regulations studied and drafted as new items. When one of the contracting parties offers to be the technical sponsor and the council agrees upon the creation of the gtr, UN/ECE/ WP.29 starts discussion. The gtr thus drafted is adopted when it is approved unanimously by the council.

Contracting parties to the 1998 Agreement

US, Canada, Japan, EU, France, UK, Germany, Italy, Russia, South Africa, Hungary, Turkey, Malaysia, Finland, China, Korea, Slovakia, New Zealand, Netherlands, Azerbaijan, Romania, Spain, Sweden, Norway, Cyprus, Luxemburg, India, Lithuania, Moldova, Tunisia, Australia.
3.2.1.2 Results of activities

The ASEAN countries had already discussed what the 1958 Agreement was. In the Philippines also, they had discussed the significance of accession to the agreement and improved general understanding. There was not yet, however, a good consensus formed among the government agencies and trade associations concerned about what the benefits and effects of accession to the agreement would be.

In this context, we first focused our efforts on helping, through meetings with government agencies and trade associations concerned and activities at CHVSR, deepen their understanding of the 1958 Agreement, in particular of the benefits they could expect from the introduction of ECE technical regulations and the mutual recognition of approved parts and systems (MRA) under the type approval system, which was the biggest feature of the 1958 Agreement.

The ECE technical regulations are established as world standards under UN WP29 (World Forum for Harmonization of Vehicle Regulations). We emphasized the benefits of the introduction of these standards into the Philippines, which would allow the country to (i) efficiently address safety and environmental issues caused by rapidly increasing vehicles and thereby mitigate social losses; (ii) time-and-cost-efficiently introduce world standards, without, in addition for the Philippines, any need for translation; (iii) introduce regulations as and when it pleases, taking the country's situation into account; and (iv) boost the country's exports based on the MRA system and thereby develop its automotive industry. Those were generally understood.

Some worried that the introduction of ECE regulations might lead to increase in vehicle prices due to increased investment costs and specification changes and eventually to declining market
size or that competition with other countries might jeopardize the future of the country's industries. We pointed out that that was the task they had to face not because of the 1958 Agreement but to survive international competition, in particular the ASEAN market to be unified by 2015 and that, with ECE regulations already introduced in many countries and other ASEAN countries planning to do so to prepare themselves for the unified market, they were on the same footing as other countries. The audience generally understood.

As to MRA, general perception was that they did not really feel much benefit in MRA, because the Philippines currently exported only few finished vehicles, and they did not know what definite stand to take on international competition, in particular competition among the ASEAN countries. We pointed out that: (i) The Philippine's exports of automotive parts had steadily increased in the previous 10 years (See CAMPI data below); (ii) For the Philippine automotive industry to develop in synch with the country's GDP (See 2.1.1.4) building on the growth of the emerging ASEAN markets and make itself one of the country's core industries comparable to those of other ASEAN countries, it was demanded that the automotive industry promote its international trade, in particular its exports; (iii) The government has already made it a national policy to support the automotive industry (See Motor Vehicle Development Plan in 2.1.3). To effectively develop the automotive industry as a strong and prosperous core industry of the country under this national policy, it is vital for the country to join the 1958 Agreement that mandates MRA as international treaty; (iv) What if the Philippines would not join? It might not look like a big problem if one looked at only domestic situation, but, in international trade, the country would risk being overtaken by other ASEAN countries that had already joined it and left way behind in the future.

There was a question as to which of the 1998 Agreement and the 1958 Agreement was more beneficial to the Philippines and hence should be given greater priority. We explained firstly it is essential to establish its own Whole Vehicle Type Approval System (WVTAS) for the linkage of ECE adaption, legal basis for MRA and the legal bindings of Philippine’s Automobile regulations. Secondly the major differences in terms of WVTAS for parts and components between the two agreements are that: (i) For whole vehicle type approval purpose, it is difficult
to develop a system under the 1998 Agreement, because it includes much fewer regulations (12) than the 1958 Agreement (127); (ii) The 1998 Agreement is comprised of technical regulations only and does not have mutual recognition part; and that hence the 1958 Agreement should be given priority.

The following summarizes major benefits the Philippines will enjoy joining the 1958 Agreement and tasks awaiting it in the years to come:

**Benefits of joining the 1958 Agreement**

- Helps the country respond to social issues (keep traffic safe despite increasing vehicles; keep air quality clean) **by adopting ECE regulations**
  - Allows automakers to build safe and eco-friendly vehicles based on internationally harmonized technical regulations and circulate them in the domestic market.
  - Allows the government to introduce ECE regulations in any order of priority it chooses (in phases) without penalties for doing so.

- Helps developing international trade **by taking advantage of MRA**
  - Exporting parts, systems, or vehicles to another country normally requires the exporter to get the type approval of the other country's government. If these products are certified under ECE regulations in his own country, however, the exporter no longer needs to have such an approval. Upon simple application, he can export them freely at any time.
  - By accepting the other country’s granted ECE type approval document, it is unnecessary to make certification test in the Philippines. Hence no need to have own test facility, resulting the priority of establishment of test facilities in relation with the domestic parts and components.

- Helps the country respond to needs for developing vehicle regulations **by adopting ECE regulations**
  - Introducing ECE regulations makes most of laborious discussion for the development of domestic technical requirements unnecessary. Since ECE regulations are written in English, they can be introduced efficiently in terms of time and money.
  - At WP.29, the Philippines can join work for the development of ECE regulations to reflect its needs by voicing its opinions or making proposals.

- Helps the automotive industry transfer technology and reduce development workload **by adopting ECE regulations and taking advantage of MRA**
  - Allows manufacturers to transfer development and manufacturing technologies based on ECE-compliant specifications.
  - Allows manufacturers to improve product quality based on ECE technical
- Allows manufacturers to cut down development and parts costs, since need for customized specifications of parts and systems for different destinations lowers.
- Allows manufacturers to cut down certification-related costs (development of test vehicles and parts, drawings, man-hours for tests...)

- Respond to users' needs
  - Allows users to buy safe and secure vehicles at more reasonable prices

**Tasks ahead**
- Newly develop vehicle regulations and improve existing ones (develop Philippine’s WVTAS compatible with ECE regulations and a framework for mutual recognition of approval)
- Confirm role and responsibility sharing among agencies concerning the type approval system and restructure organizations to meet demands
- Harmonize the Philippine’s own technical requirements with ECE regulations
- Develop and draft requirements for approval (procedure including facilities for certification tests and personnel training)
- Secure necessary budget

The Philippines' accession to the 1958 Agreement will hold a major significance for its automotive industry in establishing a firm position among the ASEAN countries. True, the accession may not have immediate positive effects on the country (nor will it have negative effects, either, to that matter), but what’s important there for the country will be to do everything to try to find ways to maximize its advantages, capitalizing on the benefits of the accession. Then, there is a large chance that it would come to be able to circulate safe and secure vehicles based on ECE regulations and develop its exports building on the government’s prioritized policies, such as motor vehicle development program (MVDP) and the mutual recognition system.

Since 2000, the Philippines have been steadily increasing its exports of automotive parts, tires coming in the second place in 2010 (wire harness being in the first). The results of our interviews with local manufacturers revealed that, preempting the 1958 Agreement systems, tire manufacturers have already gained ECE type approval for parts outside the Philippines for export purposes and now exports account for a large part of their sales. At the same time, the effects of the governmental tax incentives to local investment have been important, they said. If manufacturers of other parts could get type approval inside the country, it might greatly help them promote exports under national support. The question of which of those parts to prioritize and strategically promote the export of, and how to develop industry in general, would essentially depend on national policies, such as MVDP. To address such issues specifically, the
government and businesses will have to further develop their cooperation and concentrate resources, laying out a national vision of their own.

3.2.1.3 Tasks ahead

What the Philippines has to do from now on will be to systematically introduce ECE regulations in its order of priority and integrate them into domestic legislation under an effective national policy that guides the future of its automotive industry, and develop the part and system industries building on the mutual recognition system. Although the country has not many mandates on vehicles yet, it does have various agencies and regulations governing them. It will need to sort out and harmonize their roles and functions so that they can function efficiently as a whole. The greatest challenge for the Philippines in the years to come will be, in addition to successfully achieving the above tasks, to make the most of the benefits of the 1958 Agreement in coordination with the automotive industry.

To do so, the Philippines will need first to define a clear goal of its own by well reflecting its situation, and then work really hard to achieve the goal, following national policies and using the expertise and assistance of other countries. The road map shown below sketches such a framework, but to make it a workable action plan, the country will have to keep working on it all the way, including at the level of the CHVSR subcommittees.

3.2.1.4 Process of discussion

- Through the CHVSR activities in the past two years, the Philippines had somewhat paved the way to the country's accession to the 1958 Agreement, including awareness raising, but interviews with government agencies and trade associations concerned revealed that there had not yet formed a consensus about the benefits of accession. Accordingly, we focused our efforts on trying to answer all questions asked by the parties concerned and deepening their understanding of importance of acceding 1958 Agreement, and thus helping them reach a consensus on the benefits of accession as follows.

- First, to review their understanding of the 1958 Agreement, we explained the features of the agreement (provisions on approval, regulations, and mutual recognition), obligations and responsibilities of signatory countries, and expected benefits from accession (allowing governments to efficiently introduce international technical regulations; manufacturers to reduce development costs by adopting harmonized technical specifications; and users to buy high-value-added vehicles with certified safety and environmental performance at lower prices) (Presentation of the features of the 1958 Agreement at the 2nd meeting of CHVSR). Meanwhile, it was desirable for the Philippines to address social demands for higher vehicle safety and environmental performance by introducing the latest international technical
regulations. International community or ASEAN wished mutual recognition of approval of parts, systems, and vehicles based on an international framework to promote free trade and remove non-tariff barriers. ASEAN also discussed these issues in detail based on the 1958 Agreement. Accession to the 1958 Agreement had a tremendous significance for the Philippines.

- However, participants from the automotive industry worried about the future of the Philippine automotive industry, anticipating increased investment costs, increased costs due to specification changes, and competition with other countries. We pointed out that those are tasks they had to face inevitably, not because of accession to the 1958 Agreement but to survive future international competition; in particular in the ASEAN market to be unified by 2015 and that they are social investment that would contribute to the improvement of the country's road safety. We added that, that being said, one of the advantages of the 1958 Agreement is that it left each country great freedom as to when and how they introduce individual regulations so that they could introduce them in their order of priority and in timed phases, reflecting the intention of the government and industries.

- We also explained that ECE regulations could be introduced very efficiently, because they are international standards and hence would save the country a considerable part of domestic technical discussion and thus save it time and cost, even without need for translation, and that there was no penalty or other restrictions as to adoption of regulations other than reporting obligation of which ECE regulations are adopted in the Philippines to UN secretariat.

- The provisions on mutual recognition have the advantage of permitting a country to commission its certification tests to testing facilities of other countries (including manufacturers' facility certified by governments) and thus allowing the country to introduce their own testing facilities in a planned way, considering priorities among parts in its industry development policy. This is because the certification tests can be conducted not only by governmental facilities but also by government-certified manufacturers' facilities as well, whether they are national or foreign, and government's certificates are issued based on the test reports of these facilities.

- We explained further that, when exporting ECE-certified products, the exporter can save himself certification formalities in the importing country because the certification test report of his own country is valid also in the other country and that thus MRA would save time and costs for certification formalities and contributes to the development of exportation.

(Note) Mutual Recognition Agreement (MRA)
To accept the other country’s granted approval documents as your certificates and ask other
countries to accept your own approval documents as their certificates. In case of the 1958 Agreement, it is called Mutual Recognition Approval since it means accepting the other country’s granted parts or components type approval documents. In case of ASEAN, what should be accepted is under discussion by ACCSQ member countries including Philippine government and one of idea would be test report. Thus, it is called Mutual Recognition Arrangement.

- The MLIT presented Japan's experiences and insights gained as a predecessor in accession to the 1958 Agreement. At the 2nd meeting of the CHVSR, the presentation focused on "Vehicle Regulation and Certification System in Japan", in particular the integration of ECE regulations, which are regulations of the 1958 Agreement, into domestic legislation, and, at the 3nd meeting of the CHVSR, it focused on "Japan’s Accession to the 1958 Agreement and Application of UN Regulations" and achievements in regulation drafting activities.

Integration of ECE regulations into domestic legislation (Japan case)
Japan joined the 1958 Agreement in 1998 and had a vote on the adoption and amendment of UN/ECE regulations at the World Forum for the Harmonization of Vehicle Regulations (WP.29). For UN/ECE regulations it has introduced as domestic regulations, Japan can check compliance of the vehicle with such regulations and issue certificates of compliance. Thus, mutual recognition of approval between contracting parties is now a reality. As of February 2012, Japan has introduced 42 UN/ECE regulations, enabling mutual recognition under such regulations. To keep introducing other regulations successively, Japan Automobile Standards Internationalization Center (JASIC) draws an annual plan every year with the government.

- In response to questions as to difference between the 1958 Agreement and the 1998 Agreement and which to be given priority, we emphasized the advantages of the 1958 Agreement as follows: The largest difference of the 1998 Agreement from the 1958 Agreement is that the former omits provisions on type approval system to allow the participation of countries adopting self-certification systems, such as US, and consequently omits provisions on mutual recognition, too. Other differences are that the 1998 Agreement has only 12 regulations compared to 127 regulations of ECE and that the 1998 Agreement rather focuses on future-oriented technologies and standards. Thus, to develop a vehicle type approval system, the 1958 Agreement should be given priority.

- However, some still wondered, from the national point of view, how much advantages or disadvantages accession to the 1958 Agreement could really bring to the Philippines. We explained that there would be no direct burden to be born in accession to the Agreement, i.e.
expenses to be incurred in accession or introduction of regulations, and that; on the contrary, they could introduce the latest international standards at a low cost, without spending much time drafting domestic regulations. Only, to make most of the accession, the country should develop its international trade building on MAR provisions, i.e. promote exportation. Accordingly, to know the current situation of the Philippine automotive industry, we surveyed the country’s national development plans and related information.

- As a vehicle promotion measure currently in force, there is the Executive Order EO877-A (effective June 2010, see 2.1.3.1). Following the EO156 issued in 2002 and in response to the current situation of the national automotive industry and international trends toward free trade, the order aims at developing motor vehicles, banning importation of used vehicles, changing the taxation system, promoting exportation, and setting up a committee. However, its conclusion on the details of implementation could not be reached so IRR (Implementing rules and regulations) has not issued and is expected to abandon them soon. Meanwhile, two bills for new acts have been submitted to Congress (House Bills 4499 and 5279, see 2.1.3.2) that replace and enhance the to-be-scrapped IRR, and there seems to be another bill being prepared that consolidates the above two bills.

- There was an opinion that timely legislation as discussed above is expected, but, as it stands now, the Philippine automotive industry is smaller than those of other countries, and could not expect much economy of scale. However, exports of automotive parts have steadily increased in the past ten years, tripled as a matter of fact, and three of the top five exported parts (tires, air bags, ABS) are covered by ECE regulations (See 2.1.2.4). As a world growth center, the ASEAN countries look set to increase the amount of mutual trade in the future. It is hoped that the Philippines, too, will catch the momentum and make a leap forward in synch with its growing GDP (See 2.1.1.4). This is made possible by, while promoting the development policy of its own, joining the 1958 Agreement and making most of its benefits, producing products meeting international standards and exporting taking advantage of the mutual recognition system.

- As part of this session of field survey, we visited a local plant of a Japanese manufacturer and received a briefing on its production activities. Located in a government-developed industrial park and with young, diligent, and cheap labor, the plant has steadily increased its production. Compared to plants in other ASEAN countries, however, it has the disadvantage of suffering higher part costs and high indirect costs, which makes it less competitive among the ASEAN countries. Although they were not very sure whether it was true for other plants, but this was partly because the Philippines was made of islands and distribution cost high and partly because, in the absence of vehicle type approval system, every vehicle produced underwent an initial registration procedure, which took time and money, they said.
- At the 2nd meeting of CHVSR held on October 27, 2011, we presented the 1958 Agreement and emphasized that accession is beneficial to all of the government, industry, and users, without forgetting adding that, to make most of the benefits of accession, the country would have to develop competitive parts industries (export promotion programs).

- At the 3rd meeting of CHVSR held on December 8, 2011, we presented Japan's efforts for accession to the 1958 Agreement, sharing our experiences and confirming benefits. In particular, we focused on benefits that the Philippines can expect from its accession to the 1958 Agreement and enhanced our explanation.

[Related information]
- Motor Vehicle Development Program (MVDP)
  Executive Order EO877-A                   … See 2.1.3.1
  House Bills 4999 and 5279              … See 2.1.3.2
- Statistics (in the presentations at the 2nd and 3rd CHVSR meetings)
  CHVSR data (Automotive Industry as Core Industry: Today and Tomorrow, vs. other ASEAN countries)
  DTI/BOI data (motor vehicle exports data)              … See Figure 2-11
  CHVSR presentation materials              … See Annex
  2nd CHVSR meeting: Accession to 1958 Agreement
  3rd CHVSR meeting: Accession to 1958 Agreement Character and its advantage

[Research material]
- PIDS (Philippine Institute for Development Studies) Report …
  Assessing the Competitiveness of the Philippine Auto Parts Industry (2007 Nov)
  Policy note (2011 June)
  Innovation in the Automotive Sector of the Philippines (2011 Sep)

3.2.2 Road map for accession to the 1958 Agreement
3.2.2.1 Agreements

In line with the 1958 Agreement timetabling policy, we set the deadline of the Philippines' accession in 2015, in synch with its timetable for the unification of the ASEAN markets, another great task for the country. We draw up a draft road map that included tasks indicated below and reached basic agreement with the counterparts at the 3rd meeting of the CHVSR held on December 8, 2011.

First, as domestic discussion for accession, government agencies and trade associations must discuss the significance and impact of accession and form a consensus. The Department of Foreign Affairs (DFA) presides over the discussion because this concerns an international treaty.
Thereafter, the accession must be discussed and ratified by Congress. The whole process will take a considerable time (See 3.3.3.2). In the ratification process, success will depend also on briefing to government officials and congresspersons. Accession to the 1958 Agreement will be an important step for the country to express its commitment. Tasks ahead to be achieved include the introduction of ECE regulations into domestic legislation and the establishment of a whole vehicle type approval system (WVTAS).

The question of when to introduce which individual ECE regulations (currently there are 127 in total) is left to the discretion of each country, so that they can introduce them taking into account the domestic situation and their priorities. This would allow the Philippines to draw up an introduction plan that meets its priorities and timetable and reflects developments at home and abroad and then introduce them one by one. On the other hand, ASEAN recommends 19 ECE regulations as requirements for MRA and unification of markets including the Philippines. The Philippines, too, regards these regulations as first priorities. Since the country has already planned phased introduction of the 19 ECE regulations, we decided to develop our plan on this model.

Currently, the Philippines has Philippine National Standards (PNS) as its own automotive standards, but few of them are mandatory and some of them differ from ECE regulations. For PNS to work for MRA, they need to comply 100% with ECE regulations. Specific compliance work will be done mainly by subcommittees (SCs) under the CHVSR, but, in introducing them as domestic regulations, we will need to review the roles, responsibilities, and obligations of agencies concerned and take actions to make them consistent, including the amendment of current legislation. Next, subjects of certification will be parts and systems covered by the ECE regulations, but compliance check will be required not only for such parts and systems but also for their relationships with vehicles they are installed in, i.e., for installation requirements, and further, for general provisions on vehicle categories, weights, etc. This requires the certification of the whole vehicle including all those, i.e. a whole vehicle type approval system (WVTAS) as a governmental certification. We included also this task in the
Currently, the Philippines has a vehicle inspection system for in-service vehicles. The system is used also for new vehicles, but does not necessarily meet the purposes of whole vehicle type approval. In other words, even if a part or system in a vehicle complies with ECE regulations when regarded alone, it may not comply with installation requirements when combined with the vehicle (e.g. wrong tire sizes, installation outside loading conditions). Some compliance tests differ from those of the vehicle inspection test (e.g. difference in emission amount between mode test by WVTAS and idling test by vehicle inspection). Thus, WVTAS is indispensable to ensure compliance with ECE technical regulations.

We drew up a road map with specific milestone for the achievement of the above two tasks and presented it at the 2nd meeting of CHVSR held on October 27, 2011.

3.2.2.2 Road map and agreed basic steps

In drawing up the road map, we laid out concretized tasks and milestones along a timeline, without omission in individual activities, making them consistent as a whole and converging on the goal. We also linked them with the activities (action plans) of the SCs, with responsibilities and deadlines of each task clarified, and the progress as a whole known at a glance. The details of the activities at the SCs will be compiled separately as their action plans.

Initially, we charted a draft road map based on Japan's knowledge and experience. We defined the three activities discussed in 3.2.2.1 above as goals to be achieved, which were: (i) Accession to the 1958 Agreement; (ii) Introduction of ECE regulations into domestic legislation; and (iii) Development of whole vehicle type approval system. Each goal was broken down to the lowest-level details, including purpose, expected results, issues to be addressed to achieve them, detailed tasks, responsibilities, deadlines, etc., each mutually linked to others organically.

First, for (i) Accession to the 1958 Agreement, we broke it down to the following tasks: (a) arrange for the visit to the UN secretariat; (b) organize domestic discussion among partiers concerned by forming a consensus on the accession, deepening their understanding of what was the 1958 Agreement, expected benefits, and its relationship with industry development policies, which would be indispensable to materialize such benefits; (c) clarify the roles and obligations of agencies concerned with oncoming WVTAS in mind by reorganizing related legislation.; securing necessary budget, including testing facilities; working on legislation at the DFA and Congress; and creating this road map.

Next, for (ii) Introduction of ECE technical regulations, we broke it down to the following tasks: (a) draft an introduction plan; (b) make subject PNS consistent with ECE regulations; (c)
and integrate them into the domestic legislation. And thirdly, for (iii) Development of whole vehicle type approval system, we broke it down to the following tasks: (a) develop a conceptual plan; (b) materialize the plan into a concrete system; and (c) draft necessary legislation; and develop regulations necessary for certification.

The DOTC and CHVSRSR participants examined the above draft. The DOTC proposed 9 basic steps reflecting the results of the examination on the Philippine side (CHVSRSR pre-meeting on Dec.8, 2011). Continued discussion between DOTC and JASIC agreed final version of Roadmap to segregate “ECE-introduction” and “WVTAS” of step 8 into two steps: step 8 and 9, since tasks are different. (CHVSRSR pre-meeting with DOTC on Feb. 10, 2012)

**Agreed Basic Steps**

- **STEP 1:** Information and Education on the advantages and disadvantages of Accession to WP29 (1958 Agreement)
- **STEP 2:** RP Delegation meeting with UN Secretariat
- **STEP 3:** Preparation of Road Map for Accession
- **STEP 4:** Commencement of documentations and activities that related to accession
- **STEP 5:** Official declaration for accession to 1958 Agreement by the President
- **STEP 6:** Prepare accession bill
- **STEP 7:** Ratification by Congress
- **STEP 8:** Introduction of ECE Regulations
- **STEP 9:** Introduction of WVTAS system <finalized in February>
- **STEP 10:** Follow-ups

Based on these basic steps, both parties discussed and harmonized the items with each other in reference to JASIC draft, charted a road map, submitted it to the 3rd meeting of the CHVSRSR held on December 8, 2011 together with comments from the CHVSRSR SCs, and obtained its agreement on the basic concept and steps. Now, activities for accession kicked off.

The CHVSRSR meeting of December 8 was also attended by members of the DFA, who presented how domestic discussion would follow, including the DFA and the Senate.

Presumably it would take long period and big volume of man-power to achieve three tasks (Acceding 1958 Agreement, ECE introduction and Establishing WVTAS). Any tasks could be tackled first, however from the view point of the project; we proposed to tackle these tasks simultaneously by each SC. Thus, it is quite important to plan, proceed and review each SC’s action in parallel under well-coordinated effort, and review the road map, if necessary.
Meantime, we discussed in details with the DOTC and retouched the road map, gained agreement of the final version with DOTC and presented it to the CHVSR meeting held on February 15, 2012. Further, to ensure a steady going of activities on the road map, we proposed to create a progress control group (Road map WG) under the CHVSR that would check and coordinate the progress of various activities among four SCs. Also we proposed to make Action plan of each SC. We believe that action plans make each activity effectively progress and Road map WG support coordinating entire activities continuously so that scheduled goal would be secured. We hope that this road map will support the CHVSR and the SCs’ actions and will help entire activities work well-coordinated as a whole towards realizing the goal.

3.2.2.3 Tasks Ahead

The CHVSR meeting of February agreed to keep the current organization, not adding functions of the road map working group and leave the subcommittees to draw up their action plans as necessary and as things go on.

However, while conducting its overall activities, the CHVSR will inevitably face many issues to solve, and such a situation will come up again during a long time, so it will have to retouch its road maps when necessary along the way for total optimization. This will be true also of the subcommittees. To conduct activities in synch with the road maps, they will need to clearly show their activities, and address new issues and tasks that will arise along the way. So, progress control and action plans seem indispensable. We hope that the CHVSR will show strong initiative in helping and supervising the overall progress of activities and addressing issues and tasks that will arise, with each SC performing individual activities and all parties converging and cooperating for total optimization.

3.2.2.4 Process of discussion

- Aiming at reaching an agreement at the 3rd meeting of the CHVSR to be held on December 8, 2011, JASIC first charted a draft road map including forms. Initially, scope of work included only activities for accession and introduction of ECE regulations, but we added the development of a part and system certification system and a WVTA system, which were deemed indispensable, too. As to the question of how we should introduce the 19 ECE regulations, we postponed the decision pending the conclusion of the ASEAN, which is currently discussing whether these regulations should be mandatory or only accepted. We designed the forms so that the user can specify the person in charge and deadline for each the purpose and task so that the forms can be used as checklists.
- We submitted this first draft to the 2nd meeting of the CHVSR held October 27, 2011 and asked for their comments, hoping to reach an agreement at the following meeting on December 8, 2011. After the meeting, on November 3, 2011, we gave the chairman and other staff of the CHVSR a detailed explanation as a follow-up.

- In discussion with the DOTC, we explained how it was important for the Philippines to develop a WVTAS of its own. Although the 1958 Agreement lacked detailed provisions for vehicle certification, the ECE regulations assumes the presence of a WVTAS (Currently, each country has their own system, but a world-standard IWVTA system is under discussion at the UN for future introduction). To link part and system certification and individual vehicles with such products as a whole, WVTAS is indispensable. Currently, the Philippines has a vehicle inspection system, but it is insufficient as a WVTAS to check the compliance of new vehicles with the certification system and resulting certification of identity with mass-production vehicles. It is also indispensable to develop vehicle-related provisions (definition of vehicle categories, weight, etc.), which is important in harmonization of regulations, and make it part of the road map.

**Outline of International Whole Vehicle Type Approval**

The 1958 Agreement prescribes a performance standard for each part or system and allows countries to mutually recognize approvals. Under the 1958 Agreement, signatory countries can freely select UN/ECE regulations annexed to the agreement, adopt them as domestic legislation, and mutually recognize approvals of parts and systems with other countries that adopt the same UN/ECE regulations. The more they adopt UN/ECE regulations, the more they can expect the effects the mutual recognition of approval of parts and systems to be.

It has been proposed to revise the current 1958 Agreement and further develop the current framework of mutual recognition of parts and systems into that of vehicle as a whole, called International Whole Vehicle Type Approval (IWVTA). The creation of an IWVTA system will allow us to ensure safety and environmental performance and increase benefits of harmonization. It will also allow us to further develop activities for harmonization of regulations on vehicle structures and parts in countries and create model type approval systems, and this in turn promote unification of whole vehicle type approval systems among countries, including those who have not yet type approval systems.
We hope that the IWVTA to be created will be designed to accept the diversity of technologies, allow different levels of severity of regulations, and adopt new regulations on a consensus basis so that it will be accessible to all countries, including those who have not yet joined the 1958 agreement. We hope also that discussion for IWVTA will cover also subjects other than technical requirements, such as definition of vehicle type and unification of application forms, so that the system will be acceptable also to emerging countries.

Discussed on IWVTA is currently under way at informal meetings of governments and international automotive associations under UN/ECE/WP29.

- In response to this draft road map of JASIC, the DOTC drafted its own road map of basic steps, which adopted most of the detailed activities proposed by JASIC but reflected also comments from SCs under the CHVSR and the actual conditions of the Philippines. On December 6, 2011, both parties held a discussion to confirm common understanding, dissipate doubts, and propose improvements and, at the meeting of the CHVSR of December 8, 2011, agreed to further improve and finalize the road map based on the DOTC-retouched draft, including the basic steps proposed by DOTC, by the following CHVSR meeting.

- Discussion with DOTC for the final version by adding step of WVTAS as well as other detailed revision was agreed and it was presented to the CHVSR meeting of February 15, 2012. DOTC also presented the final version during 1958 Agreement seminar held on February 16, 2012.

[Annex]
- Road map: 4th meeting of CHVSR (February 15, 2012), Approved version.
- Presentation materials at the 4th CHVSR meeting.
3.2.3 Making arrangements with UN/ECE/WP29 secretariat for accession to the 1958 Agreement

3.2.3.1 Results of arrangements

- The initially proposed plan of attending WP29 held in November 2011 as an observer and receiving a briefing of the UN secretariat on accession procedure and WP29 activities was abandoned due to the unavailability of the WP29 chairman throughout the meeting session and postponed to January 2012. This meant that we would have to visit two places, Paris (January 18) to see the chairman and Geneva (January 20) to attend the UN meeting, but the date of interview was fixed relatively early. We decided to attend also GRPE (a meeting for harmonization of regulations relating emissions and energy under WP29) to be held in the same period (January 19) and gained the consent of the Philippine side. We had planned to visit Thailand, the first ASEAN country to join the 1958 Agreement, in the same period to learn from their experience and knowledge of a neighbor country, but abandoned the plan for scheduling reasons.

The visit to the UN being an important step toward the accession to the agreement, we had asked the Philippine side to appoint high-ranked officials early, but, partly because of uncertainty about travel budget, they took much time to appoint the delegates. Meanwhile, we made best efforts to get things moving, arranging for DOTC letters for budget from JICA and WP29 secretariat on delegation, drafting an invitation letter, and so on, but took much time to learn what was exactly happening in the Philippine side. In terms of schedule, we had to get members’ names at least one month before departure to get visas and arrange on the European side, but it was only in early January that we were informed that they would send only one working-level official. We started specific arrangements immediately, but eventually the visit was canceled for reasons of the Philippine side.

3.2.3.2 Accession procedures

**Procedures at the UN**

- As long as a country is a member of the United Nations, it can join the 1958 Agreement and join discussion and vote on a decision at WP29.

- As an official document, the application for accession must bear the title of the 1958 Agreement, declare the country’s intention to join the Agreement and abide by its provisions, signed by the representative (or the minister of foreign affairs) of the country and dated, addressed to the General Secretary, the United Nations, and sent to the Legal Office, the United Nations, New York. There will be no cost to be paid for accession.

- Upon accession to the agreement, the country must declare which ECE regulations it will not introduce into the country, specifying their numbers.

**Domestic discussion (as explained by the Philippine DFA)**

- Based on EO459, the DFA shall convene all parties concerned, and have them discuss the
legal, economic, technical advantages and disadvantages of the accession to the treaty and seek a consensus. The agreement reached shall be certified as an official Fact Sheet, with (a) Justification of accession (advantages and disadvantages); (b) Date; (c) List of participants; (d) Names of member ASEAN countries; (e) Opinions on obligations after ratification (funding, etc.); and (f) Existing legislation concerned and list of bills. The Fact Sheet shall bear the signatures of all the participants (Certificate of Concurrence).

- Once the head of the DAF has approved the agreement, the President may sign the treaty whether the Senate Foreign Relations Committees agrees or not.
- The Senate Foreign Relations Committee will hold a few of sessions of hearing and discussion, express an agreement or make a proposal to the treaty signed by the President above, and have it pass the Senate.
- The agreement will be submitted to the President, then to the DAF, which will follow procedure at the UN.
- If a new domestic legislation is deemed necessary for accession, the competent authority must justify or give grounds for such legislation.

### 3.2.3.3 Tasks ahead

The whole process leading to accession in 2015 taking much time, it is better to make an early start by first visiting the UN. With the initial plan for January aborted, we need to make the visit to the UN to be planned next without fail, and as early as possible.

For this purpose, we propose that the DOTC, organ responsible for these activities, review and clarify its policy for CHVSR activities, including top officials. This will allow them to confirm the significance of the delegation for the entire activities, approve the dispatch, secure budget, choose members and apply for visas two or three months before departure, and complete the mission successfully.

The dispatch was already behind the initial schedule, but the CHVSR has given its approval to accession activities and what we have to do is to get moving step by step, following the road map for the horizon 2015.

### 3.3. Establishing a Framework for Vehicle Regulation and Certification System

#### 3.3.1 Policy for making a framework for Vehicle Regulation and Certification System

We will survey how Japan and other ASEAN countries introduced vehicle regulation and certification systems, what are their achievements, etc., so that we can make reference to them in developing the Philippines's own system. In developing the vehicle regulation and certification system for the Philippines, we will discuss not only with authorities, but also with
an advisory committee set up for this purpose and comprised of JASIC members and experts in legislation and systems of other countries to develop a system best adapted to the Philippines.

Fig. 3-3 Accession to the 1958 Agreement planned and vehicle regulation and certification systems by Asian countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Accession to the 1958 Agreement planned</th>
<th>Number of ECE regulations adopted ( ) : modeled on ECE</th>
<th>Vehicle type approval system (VTA) available or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei</td>
<td>No</td>
<td>(3)</td>
<td>? /Vehicle inspection basis</td>
</tr>
<tr>
<td>Cambodia</td>
<td>No</td>
<td>(0)</td>
<td>?</td>
</tr>
<tr>
<td>China</td>
<td>No</td>
<td>(97)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>No</td>
<td>(16)</td>
<td>Yes</td>
</tr>
<tr>
<td>India</td>
<td>No</td>
<td>(109)</td>
<td>Yes</td>
</tr>
<tr>
<td>Indonesia</td>
<td>No (until 2012)</td>
<td>(11)</td>
<td>Yes /To be reviewed in 2012-2013</td>
</tr>
<tr>
<td>Japan</td>
<td>Yes (1998)</td>
<td>42</td>
<td>Yes</td>
</tr>
<tr>
<td>Lao</td>
<td>No (2013)</td>
<td>(47)</td>
<td>No</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Yes (2006)</td>
<td>3 (Environment) + 16 (Others)</td>
<td>Yes /To be reviewed in 2015</td>
</tr>
<tr>
<td>Myanmar</td>
<td>No (after 2011)</td>
<td>(0)</td>
<td>Yes /Vehicle inspection basis</td>
</tr>
<tr>
<td>Philippines</td>
<td>No</td>
<td>(41)</td>
<td>Yes?</td>
</tr>
<tr>
<td>Singapore</td>
<td>No (2011/2012)</td>
<td>(16)</td>
<td>Yes</td>
</tr>
<tr>
<td>Thailand</td>
<td>Yes (2006)</td>
<td>(2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Vietnam</td>
<td>No (2013)</td>
<td>(23)</td>
<td>Yes /To be reviewed in 2015</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>No</td>
<td>(50)</td>
<td>Yes</td>
</tr>
</tbody>
</table>


Further, as basic concepts, we will sort out difference and relationship between vehicle inspection systems where every vehicle is inspected and type approval systems where once a vehicle type is certified as type, all subsequent vehicles of the same type are exempt of inspection upon new vehicle registration; and difference and relationship between regulations which are minimum requirements for certain vehicles and standards which are optional standards.

3.3.2 Policy for concept of introduction of regulation and certification system

In addition to the part and system type approval system, we will develop a whole vehicle type approval system to make them an international, unified vehicle regulation and certification system as a whole. This will allow us to regulate the complex relationship among ministries and agencies and ensure compliance with vehicle regulations as a whole.

In developing the WVTA, a realistic approach will be to start with minimum requirements and gradually extend them. As in other countries, the best way will be to have DOTC supervises WVTA and integrate the existing part and system type approval into VTA, thereby consolidating and improving various certification systems currently involving many authorities.
On the other hand, as to vehicle regulation and certification systems around the world, the UN WP29, which has discussed and drafted ECE regulations based on the 1958 Agreement, is seeking to develop an International Whole Vehicle Type Approval (IWVTA), as we have seen in 3.2.2.4 above. Considering the future internationalization of the Philippines, it is preferable, if the country is to develop a unified vehicle type approval system at all, that it be something in line with the concept of the IWVTA.

ECE regulations are subject to frequent revisions. Accordingly, even after joining the 1958 Agreement, the country will have not only to accept ECE regulations but to keep revising and adapting domestic legislation to such revisions.

We therefore will keep supporting the Philippines so that it not only accept ECE regulations but if necessary can request WP29 for their amendments. In developing a regulation and certification system in line with the 1958 Agreement, we will take into account such issues that might arise after accession.

In internationalizing its regulation and certification system by introducing ECE regulations, the Philippine should consider resulting impact on local industries such as jeepneys and other converted vehicles. To internationalize the system while protecting local industries, it will have to consider designing the system so that it exempts vehicles converted by local industries, and proposing such a system to the other ASEAN countries to make it a common rule in the region.

3.3.3 How to develop a working system for the development of the regulation and certification system

The DOTC, leader of CHVSR activities, will take initiative in promoting the whole project. The main session of the CHVSR will discuss such policy-related subjects as review of responsibility sharing among ministries and agencies, whether to join the 1958 Agreement, and so on. The SCs (four groups) under the CHVSR will develop a new regulation and certification system and submit the proposal to the CHVSR.

We will also identify mutual relationships between the part and system approval system and the whole vehicle type approval system; between fuel and emission; among type approval, inspection, and registration; between environment and safety policies and vehicle regulations, etc., and movements therein. We will sort them out and make adjustments with authorities concerned, and restructure the CHVSR as necessary.
3.3.4 Developing of a regulation and certification system

We will sort out and analyze all vehicle-related regulations currently operated by Philippine agencies and identify problems to be addressed. In creating and amending regulations, they have to be drafted in such a way that they improve vehicle safety and environment and bear results that are socially and economically desirable for the Philippines. In harmonizing them with international developments, we will discuss with members of WP29 and ACCSQ APWG and make necessary adjustments.

For the Philippine auto industry to develop internationally in the future, it is preferable that the country adopt ECE regulations, only world vehicle standards, as technical regulations. We therefore develop the adoption plan based on the country's plan for introduction of ECE regulations.

| Figure 3-5 Planned introduction of ECE regulations into the Philippines |
|----------------|----------------|----------------|
| Four-wheelers  | ECE14, 16, 43, 30, 54, | ECE13, 13H, 17, 28, | ECE3, 4, 6, 7, 19, 23, |
|                |                | 39, 46, 79, 81,  | 37, 38, 45, 48, 77, 91, |
| Two-wheelers   | ECE22          | ECE3, 60, 39, 75, 40, | ECE62, 10, 41, 78 |
| JASIC comments | Parts except for lamps | Mainly systems | Lamps |

Source: DOTC CHVSR Strategic Planning Conference and Action Plan Finalization Conference
Furthermore, we need to study also the 19 ECE regulations that are now under study at ASEAN.

To do so, first and at least, we need to identify parts of the ECE regulations that the Philippines currently plans to adopt which overlap with the 19 regulations that ASEAN currently plans to adopt, compare them with Philippine domestic regulations according to the Philippines’ ECE adoption plan, and replace domestic regulations with ECE regulations. Basically, it is desirable for the Philippines to adopt the latest ECE regulations as they are not only for the mutual recognition purposes, but also in view of future official adoption of ECE regulations after accession to the 58 Agreement. However, if it is difficult to adopt the latest revision for reasons specific to the Philippines, we will be ready to consider accepting to adopt an earlier suitable version instead, although that is not yet accepted by the 58 Agreement.

What is currently being discussed by ASEAN ACCSQ APWG is as shown below. We will make sure also that the regulations are consistent with the results of future discussion and decision at APWG.

**Figure 3-6 19 regulations to be adopted by APWG**

<table>
<thead>
<tr>
<th>UN/ECE Regulation Number</th>
<th>19 regulations to be adopted by APWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Vehicles of Categories M, N, and O with regard to brakes</td>
</tr>
<tr>
<td>13H</td>
<td>Passenger cars with regard to brakes</td>
</tr>
<tr>
<td>14</td>
<td>Belt anchorage, ISOFIX (child seat fitting device), and ISOFIX (fixing device in the upper part of a child seat) top tether anchorage</td>
</tr>
<tr>
<td>16</td>
<td>I. Safety belt, restraints, child restraints, and ISOFIX child restraints II. Vehicles equipped with the above devices</td>
</tr>
<tr>
<td>17</td>
<td>Vehicles with regard to seats, seat anchorage, and headrests</td>
</tr>
<tr>
<td>25</td>
<td>Head restraints (headrests) whether or not they are integrated in vehicle’ seats</td>
</tr>
<tr>
<td>30</td>
<td>Pneumatic tires for motor vehicles and their trailers</td>
</tr>
<tr>
<td>39</td>
<td>Speedometers and mounting</td>
</tr>
<tr>
<td>40</td>
<td>Gaseous pollutants from engine (Motorcycles with positive ignition engines)</td>
</tr>
<tr>
<td>41</td>
<td>Motorcycle noise</td>
</tr>
<tr>
<td>43</td>
<td>Safety glazing materials and their mounting on vehicles</td>
</tr>
<tr>
<td>46</td>
<td>Device for indirect vision and their mounting on vehicles</td>
</tr>
<tr>
<td>49</td>
<td>Measures to be taken against emissions from compression ignition engines (gaseous and particulate pollutants) and emissions from positive ignition engines using natural gas and LPG (gaseous pollutants)</td>
</tr>
<tr>
<td>51</td>
<td>Motor vehicle noise</td>
</tr>
<tr>
<td>54</td>
<td>Pneumatic tires for commercial vehicles and trailers</td>
</tr>
<tr>
<td>60</td>
<td>Approval of two-wheeled motor cycles and mopeds with regard to driver-operated controls including the identification of controls, tell-tales and indicators.</td>
</tr>
<tr>
<td>75</td>
<td>Pneumatic tires for motor cycles and mopeds</td>
</tr>
<tr>
<td>79</td>
<td>Approval of vehicles with regard to steering device</td>
</tr>
<tr>
<td>83</td>
<td>Pollutants based on engine fuel requirements</td>
</tr>
</tbody>
</table>
### 3.3.5 Developing the concept of the vehicle regulation and certification system and its benefits

Based on the above policies, we conducted the first field survey in the Philippines from September 2011. Based on the results of the survey, we proposed the framework for the vehicle regulation and certification system.

- **Survey of the current status of vehicle-related legislation**
  As to vehicle-related legislation in the Philippines, the survey for the development of a detailed plan conducted by JICA in April 2011 clarified the names of major laws and regulations currently in force. In our first field survey, we widened the area of survey and collected data on laws, executive orders, ministerial orders, notices, etc., governed by agencies concerned (DTI-BPS, DENR, DOE, DOTC, etc.) and analyzed their contents.
  In view of time constraints, we worked in cooperation with agencies concerned and used also information acquired in past surveys.
  The outline of major vehicle-related legislation is as shown in Fig. 3-7.

#### Figure 3-7 Outline of vehicle-related legislation currently in force in the Philippines

<table>
<thead>
<tr>
<th>Main Act/Law/D.A.O No.</th>
<th>Title</th>
<th>Technical Standards</th>
<th>Enforcement</th>
<th>Responsibility</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.A. 4136</td>
<td>Land Transport and Traffic Code</td>
<td>Minimum standards and specifications, inc. allowable GVW, MV dimensions, Loads, &amp; others</td>
<td>LTO</td>
<td>DOTC</td>
<td></td>
</tr>
<tr>
<td>LTO AO No. ACL-2009-018</td>
<td>MV Inspection System &amp; IRR</td>
<td>Schedule, Frequency, System, Standards and Methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.A. 8750</td>
<td>Seatbelt Law</td>
<td>Installation and Use of Seat Belt Devices and Belt Anchorage</td>
<td>DOTC LTO</td>
<td>DTI-BPS</td>
<td></td>
</tr>
<tr>
<td>LTO AO No. ACL-2009-018</td>
<td>MV Inspection System &amp; IRR</td>
<td>Schedule, Frequency, System, Standards and Methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.A. 8749</td>
<td>Clean Air Act of 1999</td>
<td>Emission limits and test procedures</td>
<td>DOTC/LTO (Compliance with std for MV)</td>
<td>DENR (MV emission std)</td>
<td></td>
</tr>
<tr>
<td>DENR DAO No. 2000-81</td>
<td>Emission Standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DENR DAO No. 2010-23</td>
<td>Emission Standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DENR DAO No. 2010-24</td>
<td>MV Inspection System &amp; IRR</td>
<td>Schedule, Frequency, System, Standards and Methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTO AO No. ACL-2009-018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.A. 8794</td>
<td>Motor Vehicle User's Charge Act</td>
<td>Vehicle Type and charges, Max. allowable GVW and axle load</td>
<td>LTO DOTC DBM DPWH</td>
<td>DOTC LTO</td>
<td>DTI-BPS</td>
</tr>
<tr>
<td>R.A. 4109</td>
<td>Standardization Law</td>
<td>PNS Standards related to Motor Vehicles: PNS and PNS UNECE Stds</td>
<td>DTI</td>
<td>DTI-BPS</td>
<td></td>
</tr>
<tr>
<td>DTI DAO's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the Philippines, vehicle-related laws and regulations currently in force are supervised by various ministries and agencies: Those on emission standards are supervised by the Department
of Environment and Natural Resources and the Environmental Management Bureau (DENR - EMB), seatbelts, glasses, and tires and other parts under PNS (national standards) by the Department of Trade and Industry and the Bureau of Product Standards (DTI-BPS); fuel quality by the Department of Energy and the Oil Industry Management Bureau (DOE-OIMB); theft prevention by the Philippine National Police (PNP); and whole vehicles by the Department of Transport and Communications and the Land Transportation Office (DOTC-LTO). Further, as to relevant certificates, DTI-BPS issues PNS certificates and ICC certificates on imported parts; DENR issues certificates of compliances (COC) for emissions; DOTC-LTO implement the motor vehicle inspection system (MVIS) and issue certificates of motor vehicle inspection system compliance (CMVISC), each being issued according to legal requirements at the time of new vehicle registration. On the other hand, there is no legislation or system on whole vehicle type approval that checks compliance as whole vehicles.

In studying the whole vehicle type approval system in the future, we will need to review the roles of supervisory agencies and their relationship with the legislation they supervise, and redefine them as necessary. These issues will be proposed to the CHVSR SCs as subjects of study in the future.

### Figure 3-8 Current status of major vehicle-related legislation

**WVTAS and its benefits**

In a whole vehicle type approval system (WVTAS), the compliance of the vehicle as a whole as assembled is required, in addition to the compliance of parts and systems. With quality control additionally required, they ensure the safety and environmental compliance and uniform product quality of the vehicle as a whole.
In a whole vehicle type approval system, once a representative vehicle of a type is approved in compliance with regulations after technical compliance and quality control (uniformity) tests, all vehicles of the same type are exempt from the same tests at the time of new vehicle inspection. WVTA is thus beneficial to vehicles of same model of mass production such as passenger cars.

Figure 3-10 Advantage of whole vehicle type approval
This is largely different from the compliance systems and vehicle inspection systems currently in place in the Philippines, where test is done on every vehicle at the time of new vehicle registration or on every requirement before inspection certificates or certificates of compliance are issued.

In international trends in vehicle regulation and certification systems, we find that, in addition to the discussion currently under way at the UN WP29 for the development of an IWVTA system seen above, ASEAN seeks to introduce 19 ECE regulations by 2015 in sync with the unification of the regional markets and thereby kick off a certification system based on mutual recognition of approvals (MRA).

In introducing an international system into the Philippines, we should, considering trends in the ASEAN region seeking to unify regional markets by 2015, opt for a whole vehicle type approval system, based on the MRA of parts and systems, that ensures the safety and environmental compliance of the whole vehicle, to be kicked off by 2015 at the latest.

Further, considering that, in countries that have already introduced whole vehicle type approval systems such as Japan, Australia, Taiwan, Malaysia, and Viet Nam, agencies supervising relevant legislation and systems are transport and traffic-related authorities, we proposed that, in the Philippines, too, the DOTC exclusively supervise the regulations and certification system.

- **Survey of vehicle-related legislation**
  Currently, the creation and supervision of vehicle-related legislation is done by the following agencies:
  - DTI-BPS (Department of Trade and Industry - Bureau of Product Standards): motor vehicle and part-related standards (PNS)
  - DENR-EMB (Department of Environment and Natural Resources – Environmental Management Bureau): Emission standards
  - DOE-OIMB (Department of Energy – Oil Industry Management Bureau): Fuel quality standards

  In particular, vehicle parts and systems are standardized as PNS. Currently, there are 425 relevant PNS and 42 PNS UNECE standards, which are modeled on ECE regulations.

  [Research material]
  - List of PNS on motor vehicles and automotive parts and components
  - List of PNS UNECE Regulations on motor vehicles and automotive parts and components

  On their own, these standards have no binding power. They are technical standards that serve only as reference. To make them legally enforceable requirements, we need to take them into
laws or ministerial orders. Currently, in the Philippines, there are two ways to make a technical standard a law or regulation. One is to convert a PNS to a ministerial order under a DTI ministerial order (which is used for product safety-related standards) and the other is for relevant agencies such as DENR to make it mandatory under a law or regulation they supervise.

- **Results of survey**
  The results of the detailed survey of vehicle-related legislation showed that: (i) Existing legislation has no provision that endorses the development of a vehicle type approval system. We will need to amend existing legislation or create a new law or ministerial order; (ii) Currently in the Philippines, for each matter to be regulated, the agency that supervises that matter enacts an act or executive order, develops necessary technical regulations, enacts implementing rules and regulations (IRR), and operates inspection and product certification systems based on such IRRs and technical regulations. This is a reason why there are too many agencies involved in inspections and certification-related formalities. We therefore proposed a framework that consolidates relevant laws and regulations as in other countries and supervises them under the exclusive jurisdiction of the DOTC.

- **First proposal: Framework for type approval system**
  Considering the above, we proposed at the 2nd meeting of the CHVSR held on October 27, 2011 to revise existing vehicle-related legislation (RA4136) or, on the legal ground of joint DAO, to develop a whole vehicle type approval system (WVTAS) as the country’s vehicle regulation and certification system and supervise it under the exclusive jurisdiction of the DOTC (See below).

  **Figure 3-11 Proposed WVTAS framework (1st)**
Based on the above, we discussed with the legal section of the DOTC. We learned, however, that the RA4136, one of the existing three vehicle-related acts (RA4136: Land Transportation and Traffic Codes, RA 8794: Motor Vehicle User’s Charge, RA 8749: Clean Air Act) that seemed to provide legal grounds for the creation of a WVTAS lacked provisions on vehicle inspection and hence did not provide such grounds. We learned also that the issuance of a joint DAO we referred to in our proposal required an existing act or executive order that endorsed such issuance and that, as things stood, there was no way we could expect the issuance of a joint DAO that would endorse the development of a WVTA. The opinion of the legal section was that the first solution to be studied would be to get a presidential executive order issued that would endorse the creation of a WVTAS, order to review and revise the current roles and functions of agencies, and invalidate current regulations. Based on this EO, the DOTC would issue a DAO that would formulate basic regulations of WVTAS and provisions on technical standards, and so on. The question of whether to include detailed IRR in the DAO or leave them to separate regulations (separate DAO) would be left to later examination.

It should be noted that the legal section of the DTCO plans, as the activities of the CHVSR SC No.4 in charge of legislative agenda in the longer term, to study and draft a bill for WVTAS and submit it to Congress as a new act.

2nd proposal: Framework for type approval system

Based on the above, we proposed either to draft a house bill for a new act endorsing the development of a WVTAS or to get a new EO issued and, based on the EO, have the DOTC issue a DAO that would enact a WVTAS. The WVTAS regulations would be comprised of general requirements, requirements for approval, technical regulations, and procedures for certification systems. As to technical regulations, they would be designed, to facilitate modifications, so that main body of the regulation refers to subject technical standards. Further, we will start with a small number of regulations and gradually increase the number of regulations adopted (step-by-step approach). We will also start with requirements for passenger cars to draft model requirements and thereafter gradually add requirements for business vehicles and two-wheelers.

Jeepneys will not be subject to this study, because they are converted vehicles and their specification differs from vehicle to vehicle, and are not fit to the purpose of the type approval system. However, in the future, when technical standards relating to jeepneys that the DOST (Department of Science and Technology) and other parties are currently studying, are currently studying, are completed, we will study regulating them with other acts.
We submitted this proposal at the 3rd meeting of the CHVSR held on December 8, 2011 as framework for WVTAS and, after discussion, gained their consent.

As tasks ahead, the DOTC and CHVSR SCs will have to implement a basic act endorsing the development of a WVTAS (drafting and passing a house bill, or drafting and issuing an EO), and CHVSR SCs will have to draft regulations of WVTAS including general requirements. As to technical requirements, the JICA study team (JASIC) drafted model technical regulations for high-priority regulations to be covered by ASEAN’s MRA.

### 3.3.6 Working system for introducing a vehicle regulation and certification system

We found it appropriate to carry out the tasks by activating the four SCs under the CHVSR confirmed in our current status survey as working groups and defining our work sharing and schedule in line with the road map for accession to the 1958 Agreement, made a proposal to that effect at the 3rd meeting of the CHVSR held on December 8, 2011 and gained the consent of the participants. We hope that, from now onward, the project will be carried out with the SCs discussing the road map anew, drawing up their own action plans, and achieving their tasks as executing part the CHVSR as supervisor and authorizer of the whole operation.

In relation with the vehicle regulation and certification system issue, major tasks to be urgently addressed by the SCs will be as follows:

- **SC No. 1: Standards Development**
  - Develop technical regulations for WVTAS and determine priorities
- Develop a plan for the introduction of all the 19 regulations agreed upon at ASEAN and their harmonization with domestic legislation

**SC No.2: Certification and Regulation**
- Draft regulations for the vehicle type approval system
- Develop a type approval system (procedure, document formats ...)
- Examine, designate, and place the testing facility in charge of type approval testing and examination (DOTC, DENR, DTI-BPS, CHVSR SC)

**SC No.3: Participation in Regional and International Agreement**
- At the ASEAN APWG, promote activities for harmonization of ECE regulations to be introduced in those countries

**SC No. 4: Legislative Agenda**
- Study the possibilities of a house bill or a new executive order giving legal grounds for the vehicle type approval system
- Review the roles of the related agencies, revise them and make adjustments among agencies, study amendment of related laws and regulations.

Since the Japan Automobile Standards Internationalization Center (JASIC) was established, it has actively supported the Japanese Government and private sector cooperation for internationalization of automobile regulations at UN/ECE WP29 and has been involved with reflecting the establishment and amendment of the UN Regulations to the Japanese legislation. At the 2nd meeting of CHVSR on October 27 2011, we have suggested that in the future the Philippines set up a similar organization that has the function to support its activities after its accessing to the 1958 Agreement.

**3.3.7 Drafting a vehicle regulation and certification system based on the 1958 Agreement**

Based on the proposal we made at the 3rd meeting of the CHVSR, we drafted part of the regulations for the whole vehicle type approval system based on the 1958 Agreement including general requirements ("Administrative Prescriptions" part in Fig. 3-13).
Further, we designed technical regulation part (including test methods) in such a way that technical standards to be adopted are indicated in the form of references from the main text and lists of technical regulations. As technical regulations to be adopted in the certification system, the 19 ECE regulations agreed upon at ASEAN will be given first priority. As to other regulations, the CHVSR SCs will examine which ones to adopt in view of to the laws and regulations currently in force and the future industrial and trade strategy of the Philippine government to promote exports of competitive automotive parts and systems to be covered by ASEAN's MRA. In this project, we selected some high-priority regulations to be covered by ASEAN's MRA and drafted sample technical regulations.

As technical regulations to be referred to in the WVTA regulations, we will need to introduce ECE regulations or to make existing regulations consistent with ECE regulations.

About the 19 ECE regulations that ASEAN APWG has agreed to introduce by 2015 and to be covered by MRA, we surveyed whether there were corresponding domestic standards, to what extent they were made mandatory, and to what extent they were consistent with ECE regulations. The results of the survey are as shown below.
Figure 3-14 Adoption of the 19 ECE regulations agreed upon at ASEAN

REGULATIONS TO BE ADOPTED (AGREED IN APWG)

<table>
<thead>
<tr>
<th>ECE No. to be adopted</th>
<th>Automotive Product</th>
<th>PNS UNECE Standards</th>
<th>PNS or other standard version</th>
<th>The Latest UNECE Version</th>
<th>Mandatory or Adopted</th>
<th>Status Harmonization with ECE</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Braking System</td>
<td>PNS UNECE 13: 2005</td>
<td>09 Series Suppl.9</td>
<td>11 Series Suppl.5</td>
<td>Adopted</td>
<td>Partly</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>13H</td>
<td>Braking System</td>
<td>PNS UNECE 13H: 2005</td>
<td>00 Series</td>
<td>00 Series Suppl.11</td>
<td>Adopted</td>
<td>Partly</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>14</td>
<td>Seat belt anchorage</td>
<td>PNS 1893: 2000</td>
<td>Based on ECE R14: 1993</td>
<td>07 Series Suppl.1</td>
<td>Mandatory</td>
<td>R.A.No. 8750</td>
<td>Partly DTI BPS TC44</td>
</tr>
<tr>
<td>16</td>
<td>Seat belt</td>
<td>PNS 1892: 2000</td>
<td>Based on ECE R14: 1993</td>
<td>06 Series Suppl.1</td>
<td>Mandatory</td>
<td>R.A.No. 8750</td>
<td>Partly DTI BPS TC44</td>
</tr>
<tr>
<td>17</td>
<td>Seats</td>
<td>NA</td>
<td>08 Series</td>
<td>NA</td>
<td>Not yet</td>
<td></td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>25</td>
<td>Head Restraints</td>
<td>PNS UNECE 25: 2005</td>
<td>04 Series</td>
<td>04 Series</td>
<td>Adopted</td>
<td>Fully</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>30</td>
<td>Pneumatic tires passenger car tire</td>
<td>PNS UNECE 30: 2010</td>
<td>02 Series Suppl.15</td>
<td>02 Series Suppl.16</td>
<td>Mandatory</td>
<td>DAO 2011-03</td>
<td>Partly DTI BPS TC16</td>
</tr>
<tr>
<td>39</td>
<td>Speedometer</td>
<td>PNS UNECE 39: 2006</td>
<td>00 Series Suppl.5</td>
<td>00 Series Suppl.5</td>
<td>Adopted</td>
<td>Fully</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>40</td>
<td>Exhaust Emission (L category)</td>
<td>PNS UNECE 40-3006 D.A.O. No.2010-24</td>
<td>01 Series Suppl.1</td>
<td>Mandatory DAO 2010-24</td>
<td>Partly</td>
<td>DENR</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Noise (L category)</td>
<td>PNS UNECE 41-3006 D.A.O. No.2010-24</td>
<td>03 Series Suppl.1</td>
<td>NA</td>
<td>Not yet</td>
<td>DENR</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Safety glass</td>
<td>PNS UNECE 43: 2009</td>
<td>00 Series Suppl.10</td>
<td>00 Series Suppl.13</td>
<td>Mandatory</td>
<td>DAO 2011-03</td>
<td>Partly DTI BPS TC28</td>
</tr>
<tr>
<td>46</td>
<td>Rear view mirror</td>
<td>PNS UNECE 46: 2005</td>
<td>01 Series Suppl.4</td>
<td>02 Series Suppl.4</td>
<td>Adopted</td>
<td>Partly</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>49 *1)</td>
<td>Exhaust emission NA D.A.O. No.2010-23</td>
<td>05 Series Suppl.4</td>
<td>Mandatory DAO 2010-23</td>
<td>Partly</td>
<td>DENR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Noise emission</td>
<td>PNS UNECE 61-2006</td>
<td>02 Series Suppl.2</td>
<td>NA</td>
<td>Not yet</td>
<td>DENR</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Pneumatic tires Commercial</td>
<td>PNS UNECE 54: 2010</td>
<td>00 Series Suppl.16</td>
<td>00 Series Suppl.17</td>
<td>Mandatory</td>
<td>DAO 2011-03</td>
<td>Partly DTI BPS TC16</td>
</tr>
<tr>
<td>60</td>
<td>Driver operated control</td>
<td>PNS UNECE 60: 2006</td>
<td>00 Series Suppl.2</td>
<td>00 Series Suppl.3</td>
<td>Adopted</td>
<td>Partly</td>
<td>DTI BPS TC44</td>
</tr>
<tr>
<td>75</td>
<td>Tire (L category)</td>
<td>PNS UNECE 75: 2006</td>
<td>00 Series Suppl.11</td>
<td>00 Series Suppl.13</td>
<td>Adopted</td>
<td>Partly</td>
<td>DTI BPS TC16</td>
</tr>
<tr>
<td>79</td>
<td>Steering equipment</td>
<td>PNS UNECE 79: 2005</td>
<td>01 Series Suppl.3</td>
<td>01 Series Suppl.3</td>
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<td>DTI BPS TC44</td>
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<td>83 *2)</td>
<td>Exhaust Emission NA D.A.O. No.2010-23</td>
<td>06 Series Suppl.1</td>
<td>Mandatory DAO 2010-23</td>
<td>Partly</td>
<td>DENR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1) R49 shall apply to M1, M2, N1, and N2 with a reference mass exceeding 2,610kg and to all motor vehicles of M3 and N3.
2) R83 shall apply to M1, M2 N1 and N2 with a reference mass not exceeding 2,610kg.

The results of the survey showed that there were still 3 regulations that had not been introduced (ECE R17: Seats; R41: two-wheelers noise emission; R51: Motor vehicle noise emission), 11 regulations that had not been made mandatory, and 16 regulations that had not been made consistent with the latest ECE regulations.

For those that have not been introduced, it is urgent that the CHVSR SC No. 1 in charge of standards development draw up an introduction plan, and that the TC44 and DENR TC in charge draft relevant standards.
As to regulations on emissions, tires, and glass that are already mandatory, the Philippine supervisory agencies (DTI-BPS, DENR-EMB) claim that those regulations have already been made consistent with ECE regulations, but we have found inconsistency (e.g. tire standards PNS UNECE 30). This requires that the CHVSR SCs conduct further survey and analysis of each regulation adopted and that APWG activate its activities harmonization among ASEAN countries.

To activate future activities for harmonization of regulations in the Philippines and ASEAN, we held a seminar on ECE regulations in February 2012 and studied difference between the latest ECE regulations and PNS, taking representative regulations as example.

As subject of the seminar, we chose the regulation on emissions, which was being converted into mandatory requirements by DENR and the regulation on tires, 2nd largest exports of the automotive parts, which was already made mandatory by DTI-BPS. We also proposed to choose tires (ECE R30) as subject of our trial drafting and study for technical regulations and had the participants' consent.

- **Seminar on ECE Regulations and Study Meeting on Harmonization of technical regulations**
  
  Toward the establishment of a WVTAS, the Seminar on UN Regulations and Study Meeting on Harmonization of Technical Regulations were held at DOTC Conference Room on February 9, 2012 for the purpose of activating works on the harmonization of domestic technical regulations (PNS, DENR, D.A.O., etc.) with ECE regulations, the introduction of ECE regulations, and the promotion of ASEAN APWG activities aimed at introducing by 2015 the 19 ECE regulations into the member countries and harmonizing them with domestic regulations.

  On two of those 19 ECE regulations to which the country gives the greatest priority, namely ECE R83 (emissions) and R30 and 54 (tires), we held a seminar, inviting relevant government agencies and industrial sectors, by experts providing a detailed briefing on the trends among countries in the adoption of regulations, the latest requirements, test methods, certification procedures, and the like. The seminar was followed by a session of Q&A and discussion where, taking tires for example, the participants studied and discussed on points to focus on in studying harmonization between domestic and ECE regulations, issues to be addressed, steps to follow in studying harmonization.

  The attendance at the study session included agencies concerned (such as to DTI-BPS, DENR, DOST), PNS Standard Development Subcommittee TC16, automotive industrial associations, and tire manufacturers.
For tires, the PNS UN ECE 30:2010 has already adopted the technical requirements of UN Regulation R30 (including test procedures). The harmonization of the PNS with ECE regulations has not been completed, because the PNS includes additional unique technical requirements for the Philippines. Moreover, the provisions on tire certification included in UN Regulation R30 are not adopted by PNS UN ECE 30.

Fig. 3-15 Difference between PNS UNECE 30 and UN Regulation 30

[Diagram showing differences between PNS UNECE 30 and UN Regulation R30]

Basically, the PNS have been used in the PS and ICC certification systems run by DTI-BPS. Compliance to some of the PNS is made mandatory by law. This makes it necessary for the agencies concerned, in harmonizing the PNS and the ECE regulations to be introduced and in introducing ECE regulations in the years to come, to study how they should treat the existing PS and ICC certification systems in relation to the certification system to be created under the ECE regulations.

We reported the results of the study meeting on harmonization at the 4th meeting of CHVSR held on February 15, 2012, so that the same approach (ways as to what to look at, steps to follow in studying harmonization) can be used in studying harmonization of other regulations.
Note: When the Philippine standards (technical regulations) have more requirements than UN Regulations, we will have to study not only how to harmonize the contents of the two regulations, but also how to handle the regulations the Philippines has developed on its own.

Note: When the Philippine standards (technical regulations) have less requirements than UN Regulations, we will have to study not only how to harmonize the contents of the two regulations, but also how to address issues arising from the introduction of new requirements into the Philippine regulations.

Fig. 3-17: Steps to follow in studying harmonization of regulations

- Select current Philippine standards for the use of WVTA Regulations
- Prioritize the standards for harmonization work
- Study the standards and compare with a UN Regulation relative to the standard
- Confirm the differences between the two regulations.
- Study how to treat the differences:
  - Adopt new and/or stringent requirements into Philippine Standards, or
  - Adopt a UN regulation and replace the current standard to the regulation, or
  - Relax the current Philippine Standards, adopting looser limit value.
Developing and Drafting WVTA Regulations and Certification System (Including Technical Regulations)

Based on the proposed configuration of WVTA Regulations and Certification System agreed upon with the Philippine counterparts at the 3rd meeting of CHVSR held December 8, 2011 (Fig. 3-13), we studied and prepared draft regulations.

**Fig. 3-18: Contents of Whole Vehicle Type Approval regulation**

![Diagram of Proposed WVTA: (Agreed) Contents of Whole Vehicle Type Approval Regulations]

The draft was drawn up in reference to laws and regulations of Japan and EU where WVTA systems are currently in place, those of Taiwan and Australia which developed their systems in reference to those of the above countries, and major documents related to the 1958 Agreement.

**References**
- Japan: Regulation on Type Designation for Road Vehicles, Implementation Guideline on Motor Vehicle Type Approval Procedures, Implementation Guideline on Type Designation Procedures for Devices
- EU: EU Directive 2007/46/EC
- Taiwan: Vehicle Safety Type Approval Management Regulations 2007
- Australia: Motor Vehicle Standards Act 1989, Road Vehicle Certification System
- Documents related to the 1958 Agreement:
  - ECE/TRANS/WP.29/78/Rev.2
    - Resolution on the Construction of Vehicles (R.E.3) Revision 2
  - TRANS/WP.29/1044
    - General Guidelines for UNECE Regulatory Procedures and Transitional Provisions in
UNECE Regulations
◆ ECE/TRANS/WP.29/1059

Resolving Interpretation Issues and Requirements for The Technical Services In the Framework of the 1958 Agreement

The draft regulation is comprised of a main body part of general provisions and annexes of specific requirements, to which the general provisions make reference to. The general provisions include such provisions as scope of application, definitions, general requirements, and the annexes cover technical regulations, provisions on vehicle type approval, requirements for technical services, etc.

The following is the outline of the draft regulation under study:

**Fig. 3-19**

Article 1: Subject; Article 2: Scope of Application

Eventually, the scope of application of the WVTA regulations will cover new passenger cars, commercial vehicles, and motorcycles. In the first stage, however, we will develop model WVTA regulations focused on passenger cars only and then gradually expand the scope of application and adopt applicable ECE regulations.

Modified cars, such as jeepneys, and used cars will be out of the scope of this approval system and kept subject to the vehicle inspection system under existing regulations.

Article 3: Definitions and Classification of Vehicle Categories

This part was developed in reference to ECE/TRANS/WP.29/78/Rev.2: Resolution on the Construction of Vehicles (R.E.3) Revision 2.
Article 4: General Requirements

The article makes it mandatory for automakers and importers to put their vehicles, systems, and parts to compliance tests under technical regulations of the WVTA regulation and apply for type approval based on the results of the tests. It also requires DOTC to manage and supervise the WVTA system as the supervisory agency. As to the requirements for technical services that will conduct compliance tests, they are prescribed in Annex 4, with reference made thereto from the main text.

Article 5: Motor Vehicle Type Approval Procedures

Article 6: Verification, Certification of Conformity and Administration

For those subjects, reference will be made to Annex 2 and Annex 3, respectively.

Article 7: Penalties

As to penalties, they will have implications with other Philippine laws and regulations, so we didn’t propose anything, leaving them to future study.

[List of Annexes (Whole Vehicle Type Approval Regulation Draft Text)]

ANNEX 1: LIST OF TECHNICAL REGULATIONS SETTING THE REQUIREMENTS FOR THE PURPOSE OF TYPE APPROVAL OF VEHICLES

ANNEX 2: VEHICLE TYPE APPROVAL PROCEDURES

ANNEX 3: VERIFICATION, CONFORMITY OF PRODUCTION AND ADMINISTRATION

ANNEX 4: REQUIREMENTS FOR THE TECHNICAL SERVICES
### TECHNICAL REGULATIONS SETTING THE REQUIREMENTS FOR THE PURPOSE OF TYPE APPROVAL OF VEHICLES IN THE PHILIPPINES

<table>
<thead>
<tr>
<th>Item</th>
<th>Subject</th>
<th>UN Regulation No. Reference</th>
<th>Technical requirement for Type Approval</th>
<th>NOTES</th>
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<tr>
<td>1</td>
<td>Braking System</td>
<td>PNS UNECE 13: 2005</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Braking System; Passenger car</td>
<td>PNS UNECE 13H: 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Seat belt anchorage</td>
<td>PNS 1893: 2000</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Seat belt</td>
<td>PNS 1892: 2000</td>
<td></td>
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<tr>
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<td>Seats</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Head Restraints</td>
<td>PNS UNECE 25: 2000</td>
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<td>7</td>
<td>Pneumatic tires; passenger car tire</td>
<td>PNS UNECE 30: 2010</td>
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<td>8</td>
<td>Speedometer</td>
<td>PNS UNECE 38: 2006</td>
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<td>9</td>
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<td>12</td>
<td>Rear view mirror</td>
<td>PNS UNECE 46: 2005</td>
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<td>13</td>
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<td>14</td>
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<td>PNS UNECE 44: 2009</td>
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<td>15</td>
<td>Pneumatic tires; Commercial</td>
<td>PNS UNECE 54: 2010</td>
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<td>16</td>
<td>Driver operated control</td>
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<td>17</td>
<td>Tire (L category)</td>
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<td>18</td>
<td>Steering equipment</td>
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<tr>
<td>19</td>
<td>Exhaust Emission</td>
<td>D.A.O. No. 2010-23</td>
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</table>

The structure of the above WVTA regulation will be further studied for refinement at the CHVSR SC in charge of drafting the regulation.

Assuming that the Philippine’s accession to the 1958 Agreement is an established policy, tasks to be addressed in the future in developing a WVTA regulation may include:

1. Drafting and promulgating a domestic legislation (an act or executive order) that will give legal grounds for introducing and establishing a WVTA system
2. Prioritizing UN Regulations to be introduced first as technical regulations; promoting their harmonization with domestic regulations
3. Introducing MRA (Mutual Recognition of Approval) system based on the 1958 Agreement; studying how to treat existing domestic certification systems and regulations
4. Developing an agency that will conduct vehicle examination and technical services that will conduct compliance tests; training their personnel
5. Harmonizing terms and definitions used in existing legislation with those used in UN Regulations
As for technical regulations, we took those for tires as an example to study drafting related issues.

An detailed examination of the current regulations (PNS UNECE 30:2010) revealed that the current PNS incorporate the whole of UN Regulation 30, but hold the part of R30 on tire type approval not applicable and instead maintain domestic (PS and ICC) certification systems as applicable, and, moreover, adds some regulations of its own (Fig. 3-15).

In other words, in the figure above, the PNS has four requirements perfectly matching with those of the UN regulations (marked with dots in the yellow boxes), but leaves out the part of R30 on type approval and certification (the green box), and, further, has additional unique requirements of its own (marked with squares in the blue box).

Accordingly, as to tire-related drafting issues, we confirmed with the counterparts where PNS UNECE 30 and UN Regulation R30 remain not harmonized and explained issues to be addressed as follows:

Issues to be addressed:
- How should the part of the PNS UN ECE 30 that the Philippines has developed on its own be treated (kept or deleted)?
- How should the existing (PS and ICC) certification systems be treated?

We presented the above results of our activities at the 4th meeting of the CHVSR held on February 15, 2012, and proposed immediate tasks for each CHVSR SC as indicated in 3.3.6 Designing a working system toward the establishment of a WVTA.
3.4 Provision of Related Information

3.4.1 Information on vehicle-related international treaties
At the 2nd meeting of the CHVSR, we presented the 1998 Agreement, including comparison with the 1958 Agreement.

3.4.2 Information on electric vehicles
The Philippine participants wanted information on safety legislation on electric vehicles, in particular converted EVs.
At the 3rd meeting of the CHVSR held on December 8, 2011, we presented (i) Technical Regulation for Electric Safety (ECE R100) and (ii) For the Safety of Converted Electric Vehicles (Guideline on converted EVs).

3.4.3 1958 Agreement Seminar
JICA requested to hold a seminar on the 1958 Agreement for parties concerned in the government and industry, after submitting the draft final report to DOTC. Therefore, we held
the 1958 Agreement Seminar on February 16, 2012 at the Discovery Suites. We gave the following presentations (Annex: Presentation materials at the 1958 Agreement Seminar on Feb. 16, 2012)

- Japan’s Accession to the 1958 Agreement and Application of UN Regulations
- Mutual Recognition of Approval under the 1958 Agreement & To Become Contracting Party
- Current and Future Issues Related to be Establishment of WVTA Regulation for the Philippines
- Activities for Establishment of the System of Mutual Recognition of International Whole Vehicle Type Approval (IWVTA)
- Road map of 1958 Agreement including ECE Introduction and WVTA

3.4.4 ECE Regulations Seminar
We held ECE regulations Seminar on February 9, 2012. Seminar was constructed with 2 sessions. In the 1st session, we gave lectures on emission (ECE R83) and tire (ECE R30 & 54). We presented the latest contents of regulations and difference with existing Philippine laws. In the second session, we took up tire related regulations (ECE R30) as a model case and presented a case study of how to harmonize ECE regulations with the Philippine laws.

[Session 1] (Annex: Presentation materials at ECE Regulation Seminar on Feb. 9, 2012)
- Light-duty Exhaust Emission Regulations (UN Regulation R83)
- Introduction of UN/ECE Regulations for Tires (R30 & R50)

[Session 2]
- Study of Harmonization on Tire Standard
CHAPTER IV  SUMMARY AND TASKS AHEAD

4.1 Summary of Activities

In the beginning of our field survey, we found that local awareness of the importance of accession to the 1958 Agreement and benefits of vehicle type approval systems very insufficient and activities sluggish.

We hence decided to help the CHVSR to hold regular meetings (quarterly) and activate Philippine activities for harmonization of regulations by meeting four times in half a year, and patiently explained what the 1958 Agreement was and benefits expected from accession to the agreement. These efforts helped to deepen the understanding of Philippine participants and motivated them to take the initiative in tackling tasks. For example, in the development of the road map to accession to the 1958 Agreement, the Philippine side proposed a detailed draft road map. This is one of the achievements of this project.

To promote the activities, we decided to use the existing framework of CHVSR (with the DOTC secretariat) and the SCs as executive organ. To ensure the success of future activities, however, we find it essential to set up a progress control group and develop action plan of each SC. Cooperation between the government and industry is vital to invigorate activities. In this respect, we found it encouraging that the CAMPI showed a positive reaction, commenting that we should address these issues, including technical issues and industries, and make it a feasible project while we drafted the road map to accession to the 1958 Agreement.

We started activities for the Philippines accession to the 1958 with a rough consensus on the road map, leaving details to later review and possible revision in the course of work. As to the final consensus on this project, we made a briefing (final report) on the concept and necessity of regulations so that we can refer to when reviewing later.

On the other hand, in developing a framework for the vehicle type approval system, we proposed that DOTC be the supervisory agency that enforces the compliance of whole vehicles and administers related regulation. In accordance to this proposal, the legal service division of DOTC is making preparations for specific amendments of laws and regulations for the establishment and implementation of WVTAS. Since legal amendments take a long time, we left this part to the Philippine side in this project, and hope that they will get it done successfully because it is a vital part of the introduction of a whole vehicle type approval system.

As to drafting Whole Vehicle Type Approval System, on the assumption that the above legal amendments will have been successfully completed, we have studied drafts of laws and regulations in accordance to the framework of WVTAS, which was proposed to the Philippines and agreed at the 3rd
CHVSR meeting. For drafting technical regulations, we have selected technical regulation on tires (UN Regulation R30) as a representative example because it has high priority for the Philippines. Tire product is one of the top five largest exports of automotive parts from the Philippines and the regulations on tires are among the 19 priority ECE regulations for ASEAN, and already mandatory in the Philippines.

As the result of examining the current PNS (UNECE 30:2010), we have found that though the current tire related PNS has adopted UN Regulation R30, it contains unique requirements by the Philippines and it is also implemented under the Philippine own certification system, such as PS Scheme and ICC Scheme. Therefore, we have explained to the Philippine side that they need further examination on how to harmonize PNS and other standards with ECE regulations.

We summarized study result of how to harmonize Philippine standards (PNS and others) with ECE regulations in order that the same kind of method can be used when they have to examine the introduction of other UN Regulations in the future. In addition, we designed draft proposal of WVTA regulations in accordance with agreed framework and the result of draft study, and then presented it at the 4th CHVSR meeting on Feb. 15, 2012.

4.2 Tasks Ahead

Accession to the 1958 Agreement, an international treaty, requires a diplomatic and political judgment for stakeholders and tends to take much time for them to reach a conclusion. The accession to the agreement is a big milestone for the Philippine, but it is not a final goal on its own: The goal is to be able to make most of MRA based on ECE certification under the 1958 Agreement. To avoid facing a situation like Thailand which is having difficulty enjoining benefits of accession due to delayed adoption of ECE regulations, the Philippines is required to work diligently on tasks outlined in the road map to the 1958 Agreement, clearing milestones one by one. It should be reminded once again that, in adopting ECE regulations, the Philippines has a great advantage over other ASEAN countries of using English as an official language and needs no translation. Longer-term tasks to be addressed will include creation of testing organs, method for successively updating regulations, development of a system enabling the country to respond to discussion on amendments of ECE regulations at the UN.

Summarized below are tasks which seem particularly important in promoting the future activities (in the coming two years or so). The CHVSR and SCs should work on each of these activities in parallel to the extent possible to achieve the country's accession on horizon 2015.

**Major tasks ahead**

- Hold the CHVSR meeting regularly (quarterly)
- Hold SC meeting regularly (monthly or so), report the results to the CHVSR, and make necessary adjustments
- Upgrade and regularly review the road map (considering possible changes in external factors), develop action plan of each SC

For accession to the 1958 Agreement
- Visit the UN (meet with the UN secretariat)
- Form a consensus among the agencies concerned and ask DFA convene meetings (for obtaining presidential signature on EO)

For introduction of ECE regulations
- Draw up a plan for introduction of priority ECE regulations
- Make PNS contents consistent with ECE regulations

For creation of a whole vehicle type approval system
- Draft a new act or presidential executive order giving legal grounds for the creation of a whole vehicle type approval system and, for the draft bill, submit it to Congress
- Review the roles of related agencies, draft a reshuffling plan, and coordinate different interests
- Draft regulations relating to the vehicle type approval system
- Develop a certification system (procedures, document formats…)
- Designate or put in place organs to conduct certification tests and examination
- Develop a training plan for testers and operators