

Status of final answers received:

APEC member economies that gave a formal answer;

Australia, Brunei, Canada, Chile, Hong Kong, Indonesia, Japan, Korea, New Zealand, Papua New Guinea, Philippines, Singapore, Chinese Taipei, Thailand, United States

APEC member economies that have not given a formal answer;

China, Malaysia, Mexico

2.2 Update of Information on Comparisons of Technical Regulations in Phase 3

July to September 1998: Analysis of submitted technical regulations and revision of past analysis results were conducted. Concerning ECE, revisions were made with information on hand.

October to November 1998: Data was organized for submission on CD with the draft final report of analysis results. At the same time, invalid parts of the CD submitted last year were also revised.

Acquisition of information on technical regulations:

APEC member economies that gave a formal answer;

Australia, Canada, Hong Kong, Japan, New Zealand, Singapore, Chinese Taipei, Thailand

APEC member economies that have not given a formal answer;

Brunei, Chile, China, Indonesia, Korea, Malaysia, Mexico, Papua New Guinea, Philippines, United States

3. Consultant Results

3.1 Investigation and Analysis of Certification Systems including the Recall System

In the investigation and analysis of approval systems, questionnaires were distributed in order to gather relevant information and there were a conspicuously large number of enthusiastic, detailed answers.

There are many cases in which more than one government agency in each APEC member economy plays roles in the certification system for motor vehicles. In Thailand, the environment agency and the transportation agency each provided requisite data. A composite answer from 4 relevant government agencies was received from Chinese Taipei. Korea provided detailed documents as necessary on certification systems, as well as approval test conditions, mass

production control methods and other information. These data materials were extremely helpful later in summarizing matters.

We are grateful for the active and effective support from RTHP members, which played such a vital role in getting the latest report completed, even for cases in which it was difficult for someone outside the government to determine relevant offices or grasp conditions considered necessary.

There were also cases in which the APEC member economy has only just begun to prepare an certification system and it was not able to answer the questionnaire confidently. For analyzing current conditions in these APEC member economies, JASIC has drawn upon information obtained thus far, and compiled this latest summary. If it is found that errors have been made in judgments, they will be amended accordingly.

The results of analysis have been compiled from the following: An Outline of APEC Member Economies in General, The Certification Systems of APEC Member Economies, A Summary of Precautionary Points in the Maintenance of Certification Systems, and Detailed Reference Materials Summarizing Answers From Each APEC Member Economy.

3.1.1 Outline of APEC Member Economy Certification Systems

3.1.1.1 Certification system classification

Certification systems have been compiled for the purpose of assessing compliance with regulations by motor vehicles and guaranteeing such compliance, but they can be grouped into a number of categories according to content.

The most common type is the government certification system. In this case, each relevant government office assesses compliance with respect to documents and actual vehicles and gives its approval if compliance has been confirmed.

In other cases, vehicle manufacturers are obligated to guarantee compliance with regulations, and the government oversees them. A manufacturer self-certification system is also used in the United States for safety regulation, as well as in Canada.

In conjunction with government certification, there are various types of assessment formats and approval systems, which match unique conditions in each APEC member economy. Examples of such formats or systems include the following: 1) the government itself tests and assesses vehicles and gives its approval; 2) actual tests and assessments are entrusted to experts at authorized testing centers, and the government examines the results therefrom, and 3) the

manufacturer submits its own test report and the government examines the results noted therein.

These formats or systems can be organized and presented as follows.

- A) Governmental Type Approval (Certification) Systems
 - a) Government's Own Control
 - b) Government's Control at Manufacturer's Laboratory
 - c) Acceptance of Authorized 3rd Testing Facility's Reports
 - d) Acceptance of Manufacturer's Reports
 - e) Acceptance of Another Country's Certificates
- B) Self Certification System

In addition, there are certification systems by evaluation target. There is vehicle-type approval for which the vehicle undergoes comprehensive evaluation; system-type approval covering separate systems, and component-type approval for vehicle components. Each APEC member economy uses these approval systems individually or in combination.

- A) Vehicle-type Approval
 - a) Comprehensive Evaluated Type Approval
 - b) Basic Items Inspection
- B) System-type Approval (e.g. Exhaust Emissions, Noise, Brake)
- C) Component-type Approval (e.g. Lamps)

3.1.1.2 APEC member economies certification systems

APEC member economies exist under all types of conditions. Some, for instance, are vehicle-producing economies and others are not; some are implementing advanced certification systems and others are still developing such systems. Administration of these systems spans a very diverse range, but classifications can be made into the following groups.

- 1st Group: APEC member economies using self certification system
Canada and the United States (safety)

These economies are motor vehicle producers with a long history. The technical regulations of evaluation applied by the manufacturers are genuine and reliable. Thus the government concentrates on monitoring vehicle performance in the market. If necessary, it will take vehicles or components directly from the market and test them to determine compliance with vehicle technical regulations. In this way, the burden of inspecting and evaluating each vehicle or each vehicle model is lightened both for the government and for the manufacturers.

Information is gathered on such things as consumer complaints about vehicle safety and environmental performance or on the causative factors behind accidents. Through its own sample checks, the government inspects vehicle safety and environmental performance on a regular or irregular basis so as to guarantee performance and evaluate compliance with laws and technical regulations. While it is true that manufacturers can put vehicles on the market after simply conducting their own tests at the time of vehicle development, if it is ever suspected that these vehicles do not comply with technical regulations, strong pressure is put on the manufacturer to verify compliance with the technical regulations.

2nd Group: This group consists of APEC member economies in which the government itself inspects typical vehicles and assesses their structure and their compliance in performance with technical regulations, giving component-type approval, system-type approval and/or vehicle-type approval.

- a) APEC member economies that include nearly all vehicle structures and performance technical regulations (Vehicle Type Approval) ;
China, Japan and Korea
- b) APEC member economies that target only a limited number of vehicle structures and performance technical regulations (Components- & System-type Approval);
Chinese Taipei (emissions), Thailand (emissions) and USA (emissions)

In these APEC member economies, it is the government's duty to evaluate overall performance through typical vehicles and to guarantee compliance with technical regulations. Compliance with laws and regulations by mass-produced vehicles is guaranteed by means of surveillance of vehicle manufacturer quality-control systems. Respecting vehicle structure and performance, detailed compliance with technical regulations is required, and inspections and evaluations are carried out by the government. In giving approvals, there are huge volumes of vehicle test data and documents to be submitted, putting a huge burden not only on the manufacturer but also on the inspecting institution. The governments have facilities where overall compliance with standards can be assessed and inspectors with adequate skills for properly judging compliance with technical regulations. It is assumed that a system has been established whereby vehicle performance can be completely controlled. If government facilities have not been made available, government inspectors can make direct assessments using the manufacturer's laboratory facilities.

3rd Group: These are APEC member economies in which testing and assessment of vehicle

structure and of compliance in performance with technical regulations are entrusted to third-party testing institutions authorized by the government, which then gives approval based on data from these institutions.

Chile, Chinese Taipei, Malaysia (option) and Thailand (option)

In this group, the government gives approval in the same manner as in the second group above. The only difference is that testing and assessments are entrusted to independent testing facilities. This involves less of a burden than if the government itself were to assume responsibility for introducing and fully servicing facilities and for training inspectors. For vehicle manufacturers, there is no difference between this group and the second group.

4th Group: In this group of APEC member economies, testing and assessment of vehicle structure and of compliance in performance with technical regulations is carried out by the manufacturers. The government gives approval after examining data supplied by the manufacturers.

a) Emissions tests only;

Malaysia, Mexico, Philippines and Singapore

b) Safety Glasses, Lamps, etc.;

Australia, Brunei and Singapore

In these countries, inspections and assessments of basic vehicle structures and of compliance with technical regulations are carried out, but if complex and high-priced facilities are required for testing, warranty by the manufacturer is requested. It appears that in these countries there is either no national motor vehicle industry or not enough reason for the government or third-party testing institutions to invest in equipment.

5th Group: These are APEC member economies that give approval upon receipt of approval from another country.

a) ECE type approval;

Australia

b) USA type approval;

Canada (emissions, etc.) and Chinese Taipei

In these economies, the burdens involved in making assessments have been drastically reduced by using ECE certifications or approvals from other countries as judgment materials. It is assumed that the vehicle complies with technical regulations in a country which issues certifications based on judgment criteria that

are the same or even stricter than those applied in the target economies. The APEC member economies in this group unilaterally accept approvals from other countries, but in the future, as uniform standards and judgment criteria are established worldwide, it is hoped that corresponding certification systems will also be established in these economies.

6th Group: These are APEC member economies that do not go so far as to assess overall vehicle performance for compliance with technical regulations, but they do give vehicle-type approval after examining vehicles through naked-eye inspections or by using simple equipment.

Indonesia and Papua New Guinea

These APEC member economies are in the process of preparing technical regulations, and when technical regulations on vehicle structure, safety and environmental performance are established in them in the future, they should be able to fit into one of the aforementioned groups.

However, some of these APEC member economies claimed that they have a vehicle type approval system even though they examine the vehicles one by one at the time of vehicle registration. It is necessary to make a common understanding among APEC member that definition of vehicle type approval system is " a system to confirm and demonstrate the compliance of vehicles whose fundamental construction and performance are identical".

Table -1 presents a list of government approval systems in APEC member economies.

Note: 2w-Motorcycle, 4w-Automobile

	GOVERNMENT'S OWN CONTROL	GOVERNMENT'S CONTROL AT MANUFACTURER'S LABORATORY	ACCEPTANCE OF AUTHORIZED 3RD TESTING FACILITY'S REPORT	ACCEPTANCE OF MANUFACTURER'S REPORT	ACCEPTANCE OF ANOTHER COUNTRY'S CERTIFICATE
COMPONENT TYPE APPROVAL	<ul style="list-style-type: none"> • CHINA - Glass, Tyre, Seatbelt • JAPAN (option) - Lamps, Horn, etc. • KOREA - Glass, Seatbelt, Lamp, etc. • THAILAND - Glass, Seatbelt 	<ul style="list-style-type: none"> • CHINA – Glass • JAPAN (option) - Lamps, Horn, etc. • KOREA (option) 	<ul style="list-style-type: none"> • CHINESE TAIPEI - Tyre, Seatbelt, etc. 	<ul style="list-style-type: none"> • AUSTRALIA - Brake Hose, Lamp, etc • BRUNEI - Safety Glass • KOREA (option) • SINGAPORE - Glass, etc. 	<ul style="list-style-type: none"> • AUSTRALIA - ECE Certificates
SYSTEM TYPE APPROVAL	<ul style="list-style-type: none"> • JAPAN (option) • KOREA - Exhaust Em, Noise, Occupant Protect. Brake, etc. • USA -Exhaust Em. • THAILAND -Exhaust Em. 	<ul style="list-style-type: none"> • JAPAN (option) • KOREA (option) • THAILAND (option) - Exhaust Em. 	<ul style="list-style-type: none"> • CHILE - Exhaust Em. • MALAYSIA (4w) - Exhaust Em. • CHINESE TAIPEI - Exhaust Em., Fuel Consumption, Noise, etc. • THAILAND (option) - Exhaust Em. 	<ul style="list-style-type: none"> • AUSTRALIA - Brake, Noise, Exhaust Em., Seatbelt, Child Seat, etc • HONG KONG - Exhaust Em., Noise • KOREA (option) • MALAYSIA (4w) - Exhaust Em. • MEXICO - Exhaust Em., Noise • PHILIPPINES (4W) - Exhaust Em. • SINGAPORE - Exhaust Em. 	<ul style="list-style-type: none"> • AUSTRALIA (4w) - ECE Certificates
VEHICLE TYPE APPROVAL					
BASIC ITEMS INSPECTION	AUSTRALIA(4w) BRUNEI CHILE INDONESIA KOREA MEXICO NEW ZEALAND(4W) PAPUA NEW GUINEA SINGAPORE CHINESE TAIPEI (Heavy Duty V.) THAILAND(4w)				INDONESIA
COMPREHENSIVE EVALUATION	CHINA JAPAN				

Table-1 Governmental Type Approval Systems in APEC Member Economies

3.1.1.3 Audit and control of compliance with mass production vehicles and components

In APEC member economies that use the type approval system, inspections must be conducted to determine that there are no differences between sample vehicles and the vehicles actually mass produced. In other words, quality control methods for mass produced vehicles are subject to inspection under Vehicle & System Type Approval Systems. At the time of approval, documents on the quality system for compliance with the technical regulations must also be inspected. Normally, auditing takes place at the relevant mass production factory on a routine basis or after mass production has begun, following issue of approval upon completion of vehicle type approval inspection.

Only in Australia has the idea of unilateral or mutual approval by agreement between governments been introduced. Plant auditing is entrusted to an inspection institution authorized by the government of the exporting nation. It has been reported that steps are being taken to adopt this system also in Thailand.

Responses given by each APEC member economy are presented in Table-2.

Among the APEC member economies not represented here, some have expressed full trust in plant control by the government of the exporting nation, because they are vehicle importing countries like Singapore and Hong Kong.

	Government's Own Control	Authorized 3rd Party Control
Visiting Audit	Australia China Japan Korea Philippines Thailand	Australia China
Document Evaluation	Indonesia Chinese Taipei	Indonesia

Table-2 Manufacturer's Audit (including Initial Assessment)

3.1.1.4 Audit of technical regulation compliance by vehicles in the market in terms of quality and performance

There have been instances in which vehicle defects in safety or in environmental performance, or inconsistencies with vehicle and component technical regulations, first became apparent in a vehicle only after it was used in the market, even though these

deficiencies were not discovered at the time of vehicle inspection and certification. Such cases are covered by consumer protection provisions and by vehicle recall programs. Answers to the questionnaire indicate that in the majority of APEC member economies, such provisions and programs have been established. In such instances, rational countermeasures must be worked out in good faith between the government and the manufacturer.

A summary of answers from each APEC member economy is given in Table -3.

Recall Program	Australia Canada Chili Hong Kong Japan Korea Mexico New Zealand Papua New Guinea Chinese Taipei USA
Consumer Protection Provision	Indonesia Singapore Chinese Taipei

Table-3 Administration in Market

3.1.2 Certification System of Each APEC Member Economy

A general chart of certification systems in each APEC member economy is appended as ATTACHMENT 1.

Summaries of answers to the questionnaire from each APEC member economy are given in ATTACHMENT 2 and ATTACHMENT 3.

A general summary of the certification system in each APEC member economy is given in the following pages.

3.1.2.1 Australia

- 1 Government certification:
Transport and Regional Department

- 2 Approval-related laws and regulations :
Motor Vehicle Safety Act 1989
ADR (Australian Design Rule)
Circulars

- 3 No distinctions between imported and domestically produced vehicles
Approvals given for import of used vehicles

- 4 Full approval by number of vehicles produced and simplified approval for small-volume vehicle production (including used vehicles)
? Full approval: 100 vehicles or more per year
? Simplified approval: Less than 100 vehicles per year

- 5 Approval granting institution:
FORS (Federal Office of Road Safety)

- 6 Approval procedure
No distinctions between imported and domestically produced vehicles
? Type approval application (submitted to FORS)
 - a) Compliance Plate Approval (CA form)
 - b) New Vehicle Specification (NVS form)
 - c) Requisite Summary of Evidence Reports (SERs)? Type approval
 - a) 90 days required for document inspection. This period is scheduled to be reduced to 32 days when the shift to computerized applications has been completed.
 - b) Requisite tests to confirm compliance with laws and regulations must be performed by the vehicle manufacturer.
 - c) An outline of the results of the aforesaid tests must be included in the standard application form, Summary of Evidence Report.
 - d) For most items, ECE Regulations are recognized as substitutes and tests can be omitted.

? Single Uniform Type Inspection (SUTI)

Concurrent with document inspection, inspection of actual vehicle (SUTI) also takes place. Inspections include visual examinations and function checks as stipulated in the standard procedures form (SUTI manual).

? TFI (Test Facility Inspection)

TFI is conducted once every 18 to 24 months to check that the manufacturer is conducting compliance confirmation tests properly.

? COP (Conformity of Production)

COP is conducted once every 18 to 24 months to confirm that a vehicle production quality control system has been established.

- 7 Recall system present
The Trade Practices Act

3.1.2.2 Brunei Darussalam

- 1 Government certification:
Brunei Darussalam MOC (Ministry of Communication)
- 2 Approval-related laws and regulations :
Road Traffic Act Chapter 68
- 3 Imported vehicles only. No domestic vehicle production.
Approvals given to import used vehicles (vehicles manufactured within the last five years)
- 4 Approval granting institution: LTD (Land Transport Dept.)
- 5 Approval procedure
Document inspections and examination of random samples under the technical regulations certification system.
A) The time required for document inspections (submitted to LTD) is within two weeks.
 - a) Documents required for application to import new vehicle
 - ? Custom Import Declaration (Import Formalities)
 - ? Manufacture Technical Specification and Manual Book

- ? Catalogue of Vehicle from Manufacture
- ? Safety Glass Certificate
- ? Factory Packing List
- ? Photo/Technical Drawing of Vehicle
- b) Documents required for application to import used vehicle
 - ? Custom Import Approval Permit
 - ? Custom Import Declaration (Custom formalities)
 - ? Registration card (Log Book) Export Certificate or Cancellation Certificate
 - ? Manufacture Technical Specification and Manual Book
 - ? Detail of Technical Drawing /Plan (Commercial and Heavy Vehicle)
 - ? Approval Permit Letter from Land Transport Department
 - ? Photo of Vehicle
- B) The time required for examination of random samples (handled by the LTD Technical Section) is two to three hours.

For every 100 vehicles imported, one vehicle is taken as a typical sample of the model lot. After it has been confirmed that this random sample satisfies all conditions of manufacture inspection, safety technical regulations, catalyst installation and vehicle inspection items, including glass, side slip, head lights and idling emissions, type approval is given for the whole lot.

-6 Administration of vehicle inspection system

The approaches used in Japan and Singapore are taken as models covering facilities and administration of vehicle inspections, and Japan's technical regulations are applied.

-7 Sale and registration of imported vehicles (including imported used vehicles)

A type approval certificate, which includes an outline of vehicle specifications, is submitted to LTD.

3.1.2.3 Canada

-1 Certification systems:

Self-certification

There are cases in which the government requires that records of compliance with technical regulations (test records) be submitted.

- 2 Approval-related laws and regulations :
 - a) Laws: Motor Vehicle Safety Act
 - b) Regulations: Motor Vehicle Safety Regulations
 Motor Vehicle Tire Safety Regulations, 1995

- 3 Differences in handling of imported and domestically produced vehicles

The “National Safety Mark” must be pasted on domestically-produced vehicles.
 The “National Safety Mark” does not have to be pasted on imported vehicles, but the importer can obtain the qualifications necessary for having this mark pasted.
 “Vehicle Import Form - Form 1” * must be included with imported vehicles.
 * Includes vehicle model, manufacturer, imported vehicle, compliance statement, etc.

- 4 Presiding government agency:
 Transport Canada

- 5 Recall system

The manufacturer is required to give a “Notice of Safety Defects” to the vehicle owner.
 There are no stipulations requiring the manufacturer to implement repairs but in actual practice, the manufacturer has all defects repaired and assumes all expenses thus incurred.
 The government has a “Recall and Defect” telephone line and maintains a database of information on safety defects.

3.1.2.4 Chile

- 1 Government certification:
 Ministry of Transport and Telecommunication

- 2 Approval-related laws and regulations :
 Regulation No. 18290

- 3 No distinctions between imported and domestically produced vehicles

- 4 Approval granting institution:
3CV (Center for Vehicle Control and Certification)

- 5 Approval procedure
 - A) Application for vehicle approval
The manufacturer, assembler, importer or representatives of each submits technological data materials to the Center for Vehicle Control and Certification (3CV).
 - B) Type approval
 - a) Approval or acknowledgement of emissions
For vehicle models scheduled to be sold inside Chile, the FTP75 mode of USEPA is implemented for verification of emissions values from emissions and from evaporation of hydrocarbons, along with emissions tests at idling and at high-speed idling rpm. These tests are performed by the Ministry of Transport or by a private institution through public bidding. (If done by a private institution, the program designated by MOT is followed.)
 - b) Structural approval
It is verified that dimensions and functions (including systems and components) are strictly adhered to as required in similar vehicles.

If the examinations under a) and b) are passed, the 3CV issues a certification form, and the applicant pastes a suitable label on the inside of the engine chamber so it remains permanently.

- 6 Vehicle registration
At the time of registration, the vehicle registration center provides a compliance mark (green-colored mark) to be pasted on the front glass.
- 7 Confirmation of compliance (Performed by 3CV)
For vehicles scheduled to be marketed in Chile, one or more vehicles is selected at random and measurements by FTP75 of the US-EPA and by idling are taken one to three times, and compliance with emissions standards is assessed.

3.1.2.5 China

- 1 Certification systems:
Government certification of both domestic products and imports

- 2 Approval-related laws and regulations :
Domestic products:
Measures for Administration of New Automobile Products (vehicle requirements and emissions, noise and vehicle assessment standards)
Imports: Measures for Administration of Import Commodity Quality Supervision (vehicle requirements and emissions, noise)
Law of the People's Republic of China on Import and Export Commodity Inspection
Detailed Rules and Procedures for Implementing the Safety License System for Import Commodities

- 3 Imported and domestically-produced vehicles
Although the systems for approval are completely different, both imports and domestics must be registered on a list of manufactured products in order to be sold in China. (Publication timing of manufactured products list: once every quarter)

- 4 Presiding government agencies:
Domestic products:
Ministry of Machinery (MMI), and Ministry of Public Security (MPS)
Imports: Administration of Import Export Commodity Inspection (SAIECI), and Ministry of public Security (MPS)

- 5 Type approval system
? A type approval system that includes examination of the plant's quality control system.
? Components approval applies to glass, tires and the seat belts of passenger cars and small buses.
? In principle, tests for approval are conducted at government laboratories, but vehicle tests by the manufacturer can also be acknowledged.

- 6 Approval procedure
? Application documents and application costs

Domestic products:

Design duty form, specifications, etc./ no application costs

Imports: Specifications, compliance certification form, general description of production plant, diagram of quality assurance system, etc.

? No. of sample vehicles

Domestic products: 3 or more, Imports: 1 or more

? Approval testing institutions

Domestic products:

Test centers at 7 locations throughout the nation (The Machinery Industry Bureau?? stipulates where tests will be conducted.)

Imports: Automobile Technology and Research Centers, Motorcycle Technology and Research Center

? Approval tests

Domestic products:

37 items including emissions (Mode E/M), noise, brakes, head lights, maximum speed and running durability

Imports: 31 items including emissions (Mode E/M for automobiles; idle E/M for motorcycles), noise, brakes, head lights and maximum speed (for motorcycles)

? Issue of certification

Domestic products:

Issued by an assessment committee that judges on approval after all tests have been completed.

Imports: After samples have passed inspections, the manufacturer's manufacturing and testing conditions are assessed.

After the plant has passed inspection, a quality approval form is issued granting permission to use the "CCIB" safety mark.

-7 Inspection of finished vehicles

Domestic products:

Random sample inspections are conducted at least once per year.

-8 Plant auditing

Imports: Conducted at least once per year.

-9 Recall system

Regulations stipulate that if a problem arises during a product's warranty period, the manufacturer, seller or service provider is obligated to repair or replace the

product. Abbreviated as the “Three Duties Law???” : Repair, Replacement, Return

3.1.2.6 Hong Kong

- 1 Government certification:
 - TD (Transport Department): Vehicle design requirements
 - EPA (Environmental Protection Department): Emissions and noise

- 2 Approval-related laws and regulations :
 - Road Traffic Ordinance (Chapter374)
 - Air Pollution Control (Vehicle Design Standard) (Emission) Regulations (Chapter 311)
 - Noise Control Ordinance (Chapter 400)

- 3 Production of finished vehicles does not take place. Approvals center on imported finished vehicles.
 - Approval is also given to import used vehicles. The procedures required are roughly the same as for import of finished vehicles.

- 4 Hong Kong has a type approval system. TD grants approvals, but in obtaining them, emissions approval by the Hong Kong EPA is also required.

- 5 Type approval procedures
 - ? Type approval application
 - a) Application Letter
 - b) Emission & Noise Certificates of Compliance
 - c) Document: Brake Circuit Diagram, Dimensions of Vehicle, Breakdown of Model
 - ? Type approval
 - a) For emissions and noise, a certificate from the manufacturer or laboratory verifying compliance with laws and regulations is required.
 - b) Safety items are glass, seat belt anchorage and wheel guards. Markings indicating compliance with ECE are required. If these are absent, a certificate from the manufacturer or a laboratory is required.
 - c) In order to receive inspection for type approval prior to registration, the local sales company must bring sample vehicles to TD.
 - d) At least four weeks is required for approval. There are no costs for type approval inspections.

- 6 There are no regulations or government guidelines covering quality control requirements and systems at plants.
- 7 There are no approval-related documents that need to be submitted to a government agency at the time of sale or registration.
Vehicle recalls are made by the enterprise under voluntary restrictions.

3.1.2.7 Indonesia

- 1 Government certification:
MOC (Ministry of Communication - Industry and Trade Regional Office)
Police Department
Road Traffic and Transport Region
- 2 Approval-related laws and regulations :
Regulation Government No.44/1993 - On Vehicles & Drivers
Ministerial Degree No. 81/1993 - On Vehicle Type Approval Testing
- 3 No distinctions between imported and domestically-produced vehicles
There is an audit test prior to mass production and the test is performed on finished vehicles.
- 4 No. of imported vehicles/No. of domestically-produced vehicles
Type approval testing is waived for 10 imported vehicles or less of a single type and for domestically produced vehicles.
- 5 Approval testing institutions :
Test centers under government (Department of Communications) jurisdiction
(Bekasi, West Java)
- 6 Approval procedures
? Application for type approval
 - a) Type Approval Application
 - b) General Data Company
 - c) Motorized Vehicle Technical Specification

- d) Delegation Letter
- E) Photos of Vehicle & Technical Drawing

? Type approval

- a) About 30 days required for document inspection, and about five days for approval testing.
- b) Items other than stipulated test items (*1) can be tested with approval from the minister.
- c) Approval forms from other countries or organizations can be accepted at about 95%.
- d) Compliance verification tests by testing institutions in other countries are acknowledged.

3.1.2.8 Japan

-1 Government certification:

Ministry of Transport (MOT) – Engineering and Safety Department of Road Transport Bureau

-2 Approval-related laws and regulations :

Road Vehicles Act (Safety regulations for road vehicles, Other)
 Related laws and regulations (Air Pollution Control Law, Noise Control Law, Road Traffic Law)

-3 No distinctions between imported and domestically-produced vehicles

-4 Vehicle approval system by No. of vehicles sold and by sales format

a) Type designation (approval) system

With regard to certain types of mass-production motor vehicles which have the identical construction, devices and performance upon receiving application, the documents concerned and vehicle themselves are examined.

If passed, the applications are given type designation relative to these motor vehicles concerned.

Examination of the designation are conducted mainly as to the following items enumerated below

? Conformity of motor vehicle with regard to the safety regulations (motor vehicle specifications, construction of vehicle, functions of each

construction and device, emissions control, noise, other)

? Vehicle uniformity (quality control system at the production stage)

? Vehicle completion inspection system

Type designations are made for automobiles and for motorcycles with an engine displacement of greater than 250cc. Upon initial inspection, if a verification of completion inspection performance issued by the vehicle manufacturer can be shown, the actual vehicle does not have to be presented.

For motorcycles with an engine displacement of 250cc or less, type approvals are given. Initial inspections and verifications of completion inspection performance are not required. The actual vehicle also need not be presented.

? In the case of import motor vehicles, they are entitled to receive a preliminary examination.

Japanese inspection officials are dispatched to overseas motor vehicle manufacturers upon receiving application under this arrangement of the preliminary examination.

The process of presenting the motor vehicles to Japan for inspection can be omitted.

b) Type notification system

This type notification system is provided for those motor vehicles whose production quantities are not great enough to justify the application for the type designation, but are significantly large. Hence, this type notification system has been utilized widely for large-sized trucks and buses in which versatility in use are required. In this system, previous to the initial inspection (for individual motor vehicles). Tests are carried out in connection with the basic motor vehicle (sample vehicle) In this way, the conformity of the common construction and devices with regard to the Safety Regulations as a type can be confirmed. Consequently, the initial inspection for individual motor vehicles can be performed effectively based on the thus-obtained test results. Thus, this system has been provided to rationalize the initial inspection.

This type notification system differs greatly from the type designation system. In that no examination is required for this type notification system with regard to the uniformity of motor vehicles (quality control system), the completion inspection system and so forth.

Therefore, under the arrangement of this system, it is necessary to present each individual motor vehicle without fail so as to get inspection to determine the conformity with regard to the Safety Regulations for Road Vehicles.

c) Preferential handling procedure for imported motor vehicles

This system applies to models of imported vehicles that are sold in small numbers (not more than 2,000 vehicles per year for each type) in Japan. If it has been indicated that type designation will be received in the future, however, the system covers up to 3,000 vehicles. Inspections take place in advance through documents only. Documents for submission have been drastically simplified. At the time of new registration, however, each actual vehicle must be presented and it must undergo testing.

d) Vehicle equipment type approval system

If the applicant wishes, a system type designation can be obtained. If a type has been obtained, examination of relevant tests at the time of approval can be omitted.

? Based on the 1958 Agreement, the following items apply for vehicle equipment type approval system

ECE 3 (reflex reflectors), ECE 7 (front and rear position (side) lamps, stop lamps and end outline marker lamps)

ECE13H (passenger vehicles brake unit), ECE19 (front fog lamps), ECE28 (audible warning devices)

? For equipment type approval based on Japan's regulations, the following items apply.

Child seat, noise prevention device, emissions device, head light, large rear reflector, warning reflector, stop display unit, tachograph, speedometer

-5 Approval testing institutions

Automobile Type Approval Test Division, Traffic Safety and Nuisance Research Institute, MOT, carries out inspections for type designation. The local MOT office where the vehicle manufacturer resides handles type acknowledgements.

-6 Approval procedures

a) Type approval procedure

Application (document submission) to MOT Documents inspection Examination of sample vehicles (sample equipment) Type approval

b) Time period required for examination

About two months is required, from application documents to approval.

c) Completion inspection

Completion inspection certificate of vehicles being mass produced issue by the manufacturer itself.

d) Plant audit

MOT conducts plant audits every other year covering such things as the

quality control system for mass-produced vehicles.

- 7 Vehicle inspection system
Automobiles and motorcycles with an engine displacement of greater than 250 cc undergo routine vehicle inspection.
If type designation approval has been received for a vehicle, Presentation of motor vehicle is omitted upon the initial inspection.
Renewal inspections take place once every two years after initial inspection. For a new passenger vehicle, however, renewal inspection takes place three years after initial inspection.
- 8 Recall system
If concern arises that a vehicle no longer meets safety regulations in terms of structure, devices or performance, notifications must be given as required and corrective measures must be taken.

3.1.2.9 Korea

A) Safety Items

- 1 Government certification:
MOCT (Ministry of Construction and Transportation)
- 2 Approval-related laws and regulations :
MVCA (Motor Vehicle Control Act)
- 3 No distinctions between imported and domestically-produced vehicles
No approvals given for import of used vehicles
- 4 There are two categories: application for full number of vehicles produced and application for test omission.
? Full application: Target is 1,000 or more vehicles of a single model
? Application for test omission: Target is less than 1000 vehicles of a single model

? The approval granting institution is KATRI (Korea Automobile Testing and Research Institute)

? Approval procedure

a) Type approval application (Submitted to KATRI)

? Application

? Specification Table

? Documents

b) Type approval

? Maximum of 15 actual working days for document inspections in addition to time required for testing.

? In the case of application for test omission, a maximum of 15 actual working days for document inspections only.

? The following three options are available in test implementation.

(1) Test conducted by KATRI

Approval of testing facilities obtained from MOCT (Maximum of 25 actual working days required for approval)

Time required for testing is a maximum of two months.

(2) Test conducted at manufacturer's laboratory with KATRI in attendance

Approval of testing facilities obtained from MOCT (Maximum of 25 actual working days required for approval)

(3) Manufacturer submits report of test conducted by the company itself

? For vehicles imported from foreign countries, ECE regulations and EEC directives on certification that are considered equivalent or even more severe can be recognized as substitutes for actual test performance.

-5 Confirmation inspection of mass-produced vehicles

Confirmation that the first vehicle under mass production has the same specifications as the approved vehicle is made by KATRI.

-6 Completion inspection

a) Completion inspection of mass-produced vehicles is carried out by the manufacturer.

b) If suitable inspection personnel and facilities are not available, KATRI serves as substitute.

c) For imported vehicles, completion inspections can be obtained at four testing centers.

What is more, if MOCT has given approval, completion inspection can be carried out by the importer itself at testing facilities that have suitable inspection

personnel and that have been approved for first-class maintenance.

B) Exhaust Emissions

-1 Government certification:

MOE (Ministry of Environment)

-2 Approval-related laws and regulations :

Air Act (The Atmospheric Environment Preservation Act)

-3 The institution actually giving approval is the NIER (National Institute of Environmental Research)

However, unconfirmed information has been obtained indicating that KMOE will handle all aspects from July of 1998.

-4 Approval procedure

Approvals are required covering emissions and noise.

? Application for each engine family (Submitted to NIER)

- a) Specification information (information on engine and EM-related components)
- b) Report on emissions and noise tests
- c) Warranty statement, etc.

? Verification test

- a) Application forms are submitted to NIER and if there are no problems, a pre-certification is issued.
- b) For each engine family, a single vehicle is selected for verification. It is exported to Korea based on a pre-certification and brought to NIER.

? At NIER, certification tests on emissions and noise are conducted, and a certification is issued based on the results.

3.1.2.10 Malaysia

-1 Government certification:

JAS (Department of Environment): emissions

-2 Approval-related laws and regulations :

The Rules and Regulations of Environment Quality (Diesel Smoke Emission

Control)1996

The Rules and Regulations of Environment Quality (Petrol Smoke Emission Control)1996

- 3 Laws and regulations on emissions are directed at locally-produced vehicles and imported finished vehicles.
- 4 Emissions approval only
- 5 Type approval procedure
 - a) Application for (emissions) type approval
Documents: Certificate of manufacture, vehicle reference information, summary of result, statement on emission standards
 - b) (Emissions) type approval: Inspection of documents, including manufacturer's data.
- 6 Emissions certification is required for sale and registration.

3.1.2.11 Mexico

- 1 Certification system
Prior to sale, data on emissions and on noise must be submitted to the relevant government office (see below). At this time, however, the government office does not issue a certification.
Furthermore, tests to confirm compliance (COP) by manufactured vehicles are conducted after sales begin, and at this time, compliance with laws and regulations must be verified. At the time of COP, data materials must be submitted to the relevant government office, and the government office issues a verification certificate based on the results of its examination of the data materials submitted.
- 2 Presiding government office–Approval-related laws and regulations
The government offices are INE and SECOFI
? NE: Ecology National Institute; Approval of emissions and noise
? SECOFI: Commerce and Industry Secretariat; Overall approval of safety, emissions, etc.
? Basic law = Agreement to establish the technical rules of the automotive

industry of Mexico (Without number)

- 3 Confirmation of compliance by manufactured vehicles (COP)
Carried out once per year.
On-the-spot tests are performed by the PROFEPA (Environment Protection Federal Agency).
- 4 Control of vehicles on the market
Not carried out.
- 5 Approval procedure
? Documents required for obtaining approval
 - a) Data on emissions
 - b) Noise data
 - c) Brake test data (brake distances)
 - d) List of safety devices attached
 - e) Data on principal dimensions

3.1.2.12 New Zealand

- 1 Government certification
There is no vehicle approval system. The only requirement is that a declaration be made on the registration form at the time of registration, affirming that the vehicle complies with the laws and regulations of New Zealand. (This registration form has not been sent.)
Normally, documents verifying compliance are not required, but there are cases in which documents verifying compliance, such as certifications from other countries, are requested.
- 2 Vehicle recall system
Based on the Fair Trade Act, the Commerce Department can direct that vehicles be recalled if they do not meet safety standards or if it is feared that they will cause damage and the supplier has not taken any countermeasures.
- 3 There are no distinctions between imports and domestically-produced vehicles.

- 4 Approvals are also given for imports of used vehicles.
Notification is made with the prescribed document, LTSA4085 Certificate of Design Compliance.
 - ? The following are required as notification documents: Certification of canceled registration in Japan; JAAI export verification; verification of seat belt mounting; compliance plate; foreign country registration and verification of compliance.
 - ? Items for which compliance is required include 17 items under Vehicle Standard Regulations and 7 items under Land Transport Rules.
 - ? Vehicle Standard Regulations: Brake, tyre, headlamp, side and rear lamp, reflector stop lamp, high mount stop lamp, direction indicator, reversing lamp, front fog lamp, daytime running lamp, wipe and wash, rear view mirror, seat belt, seat belt anchorage, seat and anchorage
 - ? Transport rules: Glazing, door retention system, interior impact, steering system, frontal impact, external projection, head restraint
 - ? The testing institution is the Land Transport Safety Authority

- 5 Approval-related laws and regulations :
Transport (Vehicle Standard) Regulation 1990

3.1.2.13 Papua New Guinea

- 1 Government certification:
There is an approval system for imported, newly manufactured vehicles but no application forms. The items that must be presented covering vehicle structure and performance are engine capacity, exhaust and noise. There are no such things as production plant quality control standards.
At the time of vehicle registration, the Department of Transport (DOT) checks in accordance with the Motor Vehicle Inspection Report (Check Sheet). Some 40 items are checked, including lamps, vision, seat belts, steering, brakes and structure, plus an additional 20 commercial items, for a total of 60 items.
The basic law is the Motor Traffic Act. The cost required for processing is \$50 per vehicle.
 - ? Department of Transport (DOT), Civil Aviation and Works Office of the Secretary
 - ? Trade Industry Department (TID), Office of the Superintendent of Motor Traffic

? National (PNG) Standards Council

-2 Recall system

Based on the Motor Car Dealers Act, if it is feared that vehicles might cause any damage to consumer health or safety, the company must recall the vehicles immediately.

There is also a Public Complaints Office in the DOT.

-3 Submission of sample vehicles (TID) for obtaining approval is required only for imported, newly-manufactured vehicles.

The test items are weight, brake power, exhaust emissions, noise level, caging construction and impact safety construction. Test standards are in accordance with the Road Worthiness Inspection Certificate.

Manufacturer reports are not acknowledged but test verifications from other countries can be acknowledged.

-4 Approvals are also given for imports of used vehicles.

Verifications of compliance with standards covering vehicle and engine structure and performance are not required. Vehicle safety condition inspections are carried out by testing institutions of the country (DOT/Licensed Inspection Stations). Inspections (standards) are in accordance with the Vehicle Inspection Manual, and the time required is 2 to 3 hours. The cost is \$100 per vehicle.

-5 Approval-related laws and regulations :

? Motor Traffic ACT

? Motor Car Dealers ACT

3.1.2.14 Philippines

-1 Government certification:

DENR (Department of Environment and Natural Resources): emissions

-2 Approval-related laws and regulations :

ADMINISTRATIVE ORDER No. 98-46 “1998 Revised Rules and Regulations for the Prevention and Control of Air Pollution form Motor Vehicles”

- 3 Laws and regulations on emissions are applied to locally-produced vehicles and imported vehicles.
- 4 Emissions approval only (Implementation status is unclear because laws were just promulgated.)
- 5 Type approval procedures
 - a) Application for (emissions) type approval
Document : Vehicle and / or the engine , the emission control system , the fuel feed system , test results of pre-production engine/vehicle , other particulars as referred to in Annex 1 and 2 of Economic Commission of Europe Nos. 15-04 , 83-01 , 49-01, 49-02 , and 40
 - b) (Emissions) type approval: Inspection of documents including manufacturer's data
- 6 Plant quality control requirements and systems
Local production plants submit data on idling emissions from mass-produced vehicles to the relevant government office.
- 7 No approval-related documents need be submitted to a government office at the time of sale or registration.

3.1.2.15 Singapore

- 1 Government certification:
Land Transport Authority
- 2 Approval-related laws and regulations:
Road Traffic Act and its subsidiary Rules
Road Traffic (Motor Vehicles, Construction & Use) Rules
Road Traffic (Motor Vehicles, Lighting) Rules
Road Traffic (Public Service Vehicles) Rules
Road Traffic (Motor Vehicles, Seat Belts) Rules
Road Traffic (Motor Vehicles, Registration & Licensing) Rules

- 3 Treatment of imported vehicles, domestically-produced vehicles and used vehicles:

At present, there are no auto manufacturers and no domestically-produced vehicles in Singapore.

For used vehicles, a certification of compliance from a testing facilities in other countries is required. This is not required for new vehicles.

- 4 Approval procedure

The import agency submits required documents to the Vehicle Engineering Department (VE) of LTA.

Required documents: Format of vehicle type approval application

? Vehicle data form

? Compliance certification for exhaust emissions and test report

? Compliance certification for glass

? Vehicle specifications and catalog

? Other

Examination of the first manufactured vehicle is carried out.

After the vehicle has passed examination, approval procedures are undertaken and the vehicle can be registered.

- 5 Approval test:

Examination of the first manufactured vehicle

- 6 There is a vehicle examination at time of registration.

- 7 There is a government organization to hear complaints from consumers.

Laws: Sales of Goods Act and Hire Purchase Act

Relevant government office: Ministry of Trade & Industry

3.1.2.16 Chinese Taipei

- 1 Government approval

There is a vehicle approval system and application forms at the MTC for domestically-produced vehicles and at the EPA for both domestically-produced vehicles and imports. Applications are handled at the MTC and the EPA. The time required for processing is 6 months for the MTC and one month for the EPA.

Approval of regulations are also required for individual components (vehicle manufacture/replacement components), and the time required is 5 to 10 days (BCIQ).

? Ministry of Transportation and Communications (MTC)

? Consumer Protection Commission, Executive Yuan (CPC)

? Environmental Protection Administration, Executive Yuan (EPA)

? Bureau of Commission Inspection & Quarantine, Ministry of Economic Affairs (BCIQ)

? Energy Commission, Ministry of Economic Affairs (MEA)

-2 Recall system

In accordance with the Consumer Protection Law, if it is feared that a vehicle might cause damage to consumers in terms of health or safety, the manufacturer must recall the vehicle as soon as possible (BCIQ).

-3 Sample vehicles for approval

Only domestically-produced vehicles are submitted as samples. They undergo testing for emissions and noise at the EPA and for fuel consumption at the MEA. There are separate prescribed documents for the EPA and the MEA, and they cannot be used interchangeably. For imported vehicles, samples need not be submitted, but for fuel consumption, a verification test of compliance performed by a national testing facility (Mechanical Industry Research Lab or Automotive Research & Testing Center) is required (MEA).

-4 Imported used vehicles

Verifications of compliance with regulations covering vehicle and engine structure and performance are not required (MEA). No entries were made by other government offices.

-5 Approval-related laws and regulations

? Road Act and Road Traffic Safety Regulation (MTC)

? Environmental Protection Related Regulations (EPA)

3.1.2.17 Thailand

-1 Government certification:

MOTC (Ministry of Transport and Communications)-DLT(Department of Land Transport)

MOI (Ministry of Industry)-TISI(Thai Industrial Standards Institute, Office of Industrial Economic)

- 2 Relevant government office – Approval-related laws and regulations – Approval-related domains – Applicable vehicles – Differences in standards

Relevant government office	Approval-related laws and regulations	Approval-related domains	Applicable vehicles	Differences in standards
DLT	LTA (Land Transport Act), MVA (Motor Vehicle Act), Ministerial Regulation	Vehicle approval, Manufacture/ presentation of sample vehicle for approval, Sale and registration	Domestically -produced vehicles, Imported, newly-manufactured vehicles, Used vehicles	No differences in standards for domestically -produced vehicles; imported, newly-manufactured vehicles, or used vehicles.
TISI	TIS (Thai Industrial Standard)	Vehicle approval, Manufacture/ presentation of sample vehicle for approval, Manufacture of mass-production vehicles	Domestically -produced vehicles, Imported, newly-manufactured vehicles	With respect to vehicle approval and manufacture of mass-production vehicles, there are differences in standards for domestically-produced vehicles and imported, newly-manufactured vehicles.

- 3 COP requirements are compiled and enforced by the TISI.
- 4 There is no control over vehicles on the market.
- 5 There are no categories for which tests are waived due to number of vehicles produced.
- 6 Approvals by the DLT are required only for vehicles stipulated by LTA and weighing over 1,600kg.
- 7 Approval procedure
 ? Documents required for obtaining approval (Letters in parenthesis denote relevant government agency.)
- a) An evidence of manufacturer, company (DLT)
 - b) A certification of manufacturer (DLT)
 - c) Motor vehicle specification (DLT)
 - d) Data on structure and on overall performance of domestically-produced vehicles (Office of Economics)

- e) Emissions (TISI)
- f) Safety certificate (TISI: Imported vehicles only Safety glasses & Safety belt, DLT: Safety glasses & LPG tank)

? Type approval

- a) Data on vehicle structure and overall performance is presented to the DLT and its approval is received. (About 45 days are required for approval.)
- b) Emissions tests are performed by TISI at the TISI testing center in accordance with ECE testing procedures. (At least one day is required for testing. The cost is 27,000 to 120,000 baht.)
- c) Compliance verification tests by testing facilities in other countries or other organizations are not accepted.

? Confirmation inspection of mass-produced vehicles

Domestically-produced vehicles: Tests are performed at the rate of one out of every 200,000 vehicles. If not more than 200,000 vehicles are produced in a year, tests are performed at the rate of one vehicle per year. Plant audits also take place on a regular basis.

Imported, newly-manufactured vehicles: Shipments are scheduled to be checked in accordance with new regulations covering plant quality control requirements standards and systems. (Details have not been clarified.)

? Completion vehicle inspection

- a) All vehicles (domestically-produced vehicles; imported, newly-manufactured vehicles, and used vehicles) must undergo a completed vehicle inspection prior to registration.
- b) For vehicles weighing over 1,600kg (vehicles stipulated by LTA), there are no inspection costs. For vehicles weighing 1,600kg (vehicles stipulated by MTA), the cost is 50 baht per vehicle.
- c) Inspections are carried out by the DLT.

-8 Components approval

- a) According to the answer from TISI, TISI performs tests on seat belts and glass in imported, newly-manufactured vehicles, and verifies compliance of components with laws and regulations. The TIS mark must also be affixed. (Some 43 actual working days are required for approval, including performance of tests.)
- b) According to the answer from DLT, regulations approval in accordance with TISI standards must be obtained for glass and LPG tank, as vehicle components, in domestically-produced vehicles; imported, newly-manufactured vehicles, and used vehicles.

3.1.2.18 United States

A) Safety Items

-1 Government agency:

Department of Transportation (DOT)

-2 Approval-related laws and regulations

? Laws: United States Code, Title 49 Transportation

? Regulations: Code of Federal Regulations, Title 49 Transportation

? Standards: Of parts No. 500 to 599, part 571 comes under the Federal Motor Vehicle Safety Standard (FMVSS)

-3 No distinctions between domestically-produced vehicles and imports

-4 Approval format

Self-certification is applied and government approval not required

-5 Supervisory government agency:

National Highway Traffic Safety Administration (NHTSA)

-6 Approval procedure

? Approval application

Since it is self-certification, application and approval are not required. However, the manufacturer must affix a label to the vehicle guaranteeing compliance with FMVSS.

? Documents for submission

Notification documents include Part 565 VIN, etc.

-7 Compliance Test (test of compliance with laws and regulations)

After sales starts, NHTSA purchases and checks the vehicle. The manufacturer is notified in advance of testing and requested to submit data on compliance with laws and regulations.

-8 Recall system is enforced.

USC Title 49 S30118 Notification of defects and noncompliance

USC Title 49 S30119 Notification procedures

USC Title 49 S30120 Remedies for defects and noncompliance

B) Exhaust Emissions

-1 Government agency:

Environmental Protection Agency (EPA)

-2 Approval-related laws and regulations

? Laws: Clean Air Act

? Regulations: Code of Federal Regulations, Title 49 Transportation

? Standards: Part 86

-3 No distinctions between domestically-produced vehicles and imports

USC Title 49 S30118 Notification of defects and noncompliance

USC Title 49 S30119 Notification procedures

USC Title 49 S30120 Remedies for defects and noncompliance

-4 Approval format

Government approval is required.

-5 Supervisory government agency:

Environmental Protection Agency (EPA)

-6 Approval procedure

? Approval application

The manufacturer performs durability tests to verify compliance with standards.

The EPA measures emissions from sample vehicles and checks compliance with standards.

? Documents for submission

Stipulated by approval format.

-7 Recall system is enforced.

3.1.3 On Organization of the Certification Systems in Each APEC Member Economy (Considerations and Proposals)

3.1.3.1 Government certification and self certification systems

Except for Canada and the United States (cases of safety items inspection), each of the APEC member economies has a system of examination or evaluation by government in some form or other, for which manufacturers are required to submit data, etc. This is seen as resulting from the fact that the motor vehicle industry is in the process of being developed, that the government must take the initiative in resolving social problems connected with motor vehicles, and that the system originates from an historical and policy-oriented political organization.

Accordingly, even for cases in which the system did not originate from the political organization, the government has ample resources for evaluating vehicle compliance in performance with standards. It is assumed that government-led vehicle examination and approval granting will continue to be in the mainstream if a system is not established for monitoring compliance with regulations in the market and conditions are not in an environment (USA and Canada) where the motor vehicle industry can conduct examinations adequately for verifying compliance with laws and regulations.

3.1.3.2 On elimination of trade barriers arising from certification systems

The majority of APEC member economies are now at the stage of planning for full preparation of approval systems. In order to make examination and approval systems highly effective and efficient, it is probably wise to make a breakdown into components type approval, system type approval and vehicle type approval. Comprehensive, vehicle-type approval alone is totally inappropriate for vehicles when the specifications governing components and systems vary with the environment in which the vehicle is used. It is for this reason that the system-type approval system introduced by Japan as an option is considered an effective approach. Hopefully, each APEC member economy will adopt this breakdown and gradually expand upon its standards and approval systems.

In addition, there should be uniformity or standardisation in examination items and examination procedures. Evaluation of vehicle performance under the same conditions also proves effective in providing proper information to consumers impartially. If testing procedures vary due to disparities in testing facilities, there is also a strong

possibility that levels of evaluation will be different. If freedom in distributions throughout the APEC is to be realized, highest priority must be put on appropriate and impartial provision of information to consumers.

Although it was not clarified in the latest survey, there should be as much uniformity as possible in the symbols, etc., used for marking or labeling to verify approvals. This will make it easier to relay information properly to consumers and for governments to judge compliance with laws and regulations.

3.1.3.3 Simplification of government administration in the operation of certification systems and a network of mutual cooperation by each APEC member economy

In the latest survey, it was found that in some APEC member economies, a plural number of administrative organs are involved in the same certification system.

It is forecast that motor vehicle technical regulations will become increasingly complex and that technologies will become more advanced. It is feared that an enormous number of processes will be required unless administration covering examination and approvals is simplified. In Japan, the Environmental Agency presents basic policies, etc., and develops strategies covering exhaust emissions and other environmental problems, but approvals of motor vehicles and rule governing motor vehicle regulations are handled by the Ministry of Transport. By simplifying the points of contact between government and industry, more effective and timely policies can be developed.

Meanwhile, current technical regulations for motor vehicles are becoming more advanced and huge investments have become necessary for introducing examination facilities. No doubt investments in facilities are gradually being made in each APEC member economy, but it is also worthwhile to consider the examination of test data provided by manufacturers as an alternative approach. In this case, it is assumed that the government of the country in question (where the manufacturer resides or where approval was granted) conducts audits of testing facilities. Another effective approach is to substitute (without modification) approvals issued by other countries as approval in the country in question. This approach has already been adopted in Australia and New Zealand, and in Japan, which became party to the revised 1958 Agreement, mutual acknowledgement of approvals has been inaugurated so that not only ECE-issued approvals, but ECE approvals obtained in other countries are accepted automatically. Such a system of mutual recognition of approvals by other countries will prove effective

for the establishment of an efficient approval system, and it is hoped that such a system will spread on the basis of agreements among governments.

3.2 Update of Comparative Information on Technical Regulations in Phase 3

Among the operational conditions given in the description of updates to information for comparisons of technical regulations in 2.2 phase 3, as mentioned earlier, 71 items in the formal answers received from member economies were updated.

There were also changes in item No. due to the consultant analytical categories.

The 51 items first analysed in 1996 are designated as [96-Item No.], and the 20 items analysed in 1997 are designated as [97-Item No.].

Since the printing of analysis results for this year on 71 items makes up such a large volume, the draft final report and the final report will be given to member economies on CD.

It was reported that a portion of the CD-ROM compiled by the 1997 consultant cannot be referenced, and countermeasures were taken.

The CD was made up as an Adobe Acrobat^{*} PDF file.

The following machine combinations are recommended for using the CD-ROM.

- * OS should be Windows 95 (E, J) or Windows NT V ver. 4.0 (E, J)
- * CD-ROM-loadable PC with at least 16M of memory and at least 40M in empty hard disc capacity. CPU is 386, 486 or Pentium.
- * Adobe Acrobat, Acrobat Exchange and Acrobat Reader are trademarks of Adobe Systems Incorporated.
- * Windows is a registered trademark of Microsoft in the United States and other countries. Windows NT is also a registered trademark of Microsoft in the United States and other countries.
- * Pentium is a registered trademark of Intel Corporation.

List of Revised Items

ITEM No.	Title	Analysis results
96-01	Direction indicator lamps	
96-02	Safety glazing	? New Zealand revision
96-03	Steering columns	
96-04	Brakes (motorcycles)	? Australia revision ? USA revision
96-05	Brakes (buses, trucks)	
96-06	Door latched and hinges	
96-07	External projections	? Canada revision ? New Zealand revision ? USA revision
96-08	Interior impact protection	? New Zealand revision ? Japan revision
96-09	Reversing lamps	? Revision came from Thailand but it was reflected in 97-16 because of the lamp install position.
96-10	Vehicle and component marking (incl VIN)	? Laws were revised in Canada, but it was judged as being a change in the name of the industry organization and there was no change in the analysis.
96-11	Seat belt anchorages	? Australia revision ? Canada revision
96-12	Stop lamps	? Revision came from Thailand but it was reflected in 97-16 because of the lamp install position.
96-13	Child restraint system	
96-14	Front position lamps	? Revision came from Thailand but it was reflected in 97-16 because of the lamp install position.
96-15	Tyres and wheels (motorcycles)	
96-16	Head Restraints	? Australia revision
96-17	Strength of seats	? Australia revision ? Japan revision ? Addition of laws and regulations in Thailand
96-18	Rear vision mirrors	? Canada revision ? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-19	Frontal collision protection	? Australia revision ? Canada revision
96-20	Noise (motorcycles)	? Revisions were made in laws and regulations in Canada but since these were only amendments to grammatical expressions, there were no changes in analysis results.
96-21	Filament lamps	
96-22	Prevention of fire risks	
96-23	Registration plate illumination	? Changes came from Australia, but there were no changes in analysis items. ? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-24	Front fog lamps	? Addition of laws and regulations in Thailand

ITEM No.	Title	Analysis results
96-25	Rear fog lamps	
96-26	Reflex reflectors	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-27	Diesel engine emissions (buses, trucks)	Member economies that made revisions: Japan, Hong Kong, Philippines, Singapore, Thailand, USA
96-28	Emergency exits (buses)	? Addition of laws and regulations in Thailand
96-29	Controls (motorcycles)	? Revisions were made in laws and regulations in Canada but since these were only amendments to grammatical expressions, there were no changes in analysis results.
96-30	EMC (Electromagnetic compatibility)	
96-31	Tyres and wheels (buses, trucks)	? Addition of laws and regulations in Thailand
96-32	Lighting installation (motorcycles)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-33	Wheel guards ((mudguards) trucks)	? Addition of laws and regulations in Thailand
96-34	Suspension (trucks)	? Addition of laws and regulations in Thailand
96-35	Driver controls	? Canada revision
96-36	Exhaust outlets (buses, trucks)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-37	Windows and ventilation (buses, trucks)	? Addition of laws and regulations in Thailand
96-38	Vehicle dimensions (motorcycles)	? Addition of laws and regulations in Thailand
96-39	Vehicle dimension limits	? Addition of laws and regulations in Thailand
96-40	Vehicle dimension limits (buses)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-41	Steering	
96-42	Sideguards & Rearguards (under-run prevention)	
96-43	Towing connections	? Australia revision
96-44	Brakes (trailers)	? Australia revision ? Addition of laws and regulations in Thailand
96-45	Side marker lamps (trailers)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-46	Brake tubing and brake hose (trailers)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-47	Parking lamps	? Revisions were made in laws and regulations in Thailand but judged as being the same as the previous analysis.
96-48	Vehicle alarm system	
96-49	Front and rear protective devices (bumpers)	? Revisions were made in laws and regulations in Thailand but judged as being the same as the

ITEM No.	Title	Analysis results
		previous analysis.
96-50	Warning devices (audible)	? Addition of laws and regulations in Thailand
96-51	Warning devices (audible-motorcycles)	? Addition of laws and regulations in Thailand
97-01	Hazard Warning Lamps	? No change in analysis because of change in vehicle category in Canada.
97-02	End Outline Marker Lamps	? No change in analysis because of change in vehicle category in Canada.
97-03	Antitheft	? No change in analysis because of change in vehicle category in Canada. ? ECE revision
97-04	Speedometer	? Change in name of law in Thailand and addition of passenger cars
97-05	Center High Mounted Stop Lamp	? Revision of category in Thailand
97-06	Omnibus Rollover Strength	
97-07	Side Marker Lamps	? Revision of category in Thailand
97-08	Windows and Ventilation	
97-09	Field of View	? Addition of laws and regulations in Thailand
97-10	Brake Tubing and Brake Hose	
97-11	Side Intrusion	? Canada revision
97-12	Windscreen Wipers	? Law in Thailand added to performance requirements
97-13	Tyres	
97-14	Exhaust Noise	? Addition of laws and regulations in Thailand
97-15	Rear Position Lamps (Tail Lamps)	? Thailand revision
97-16	Vehicle Lighting Installation	? Thailand revision
97-17	Headlamps	? Thailand revision
97-18	Seat Belts	
97-19	Emissions	? Canada revision ? Thailand revision
97-20	Brakes	? Canada revision

* Blank columns denote items for which no revisions were made.