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# **Government Status Report**

## **- Republic of Korea -**

**2007. 6**

**Ministry of Construction and Transportation**

**Sang-Do Kim, Director of Motor Vehicles Team**

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# 1. Certification System of Motor Vehicles

## Introduction of History of Korea's Certification System

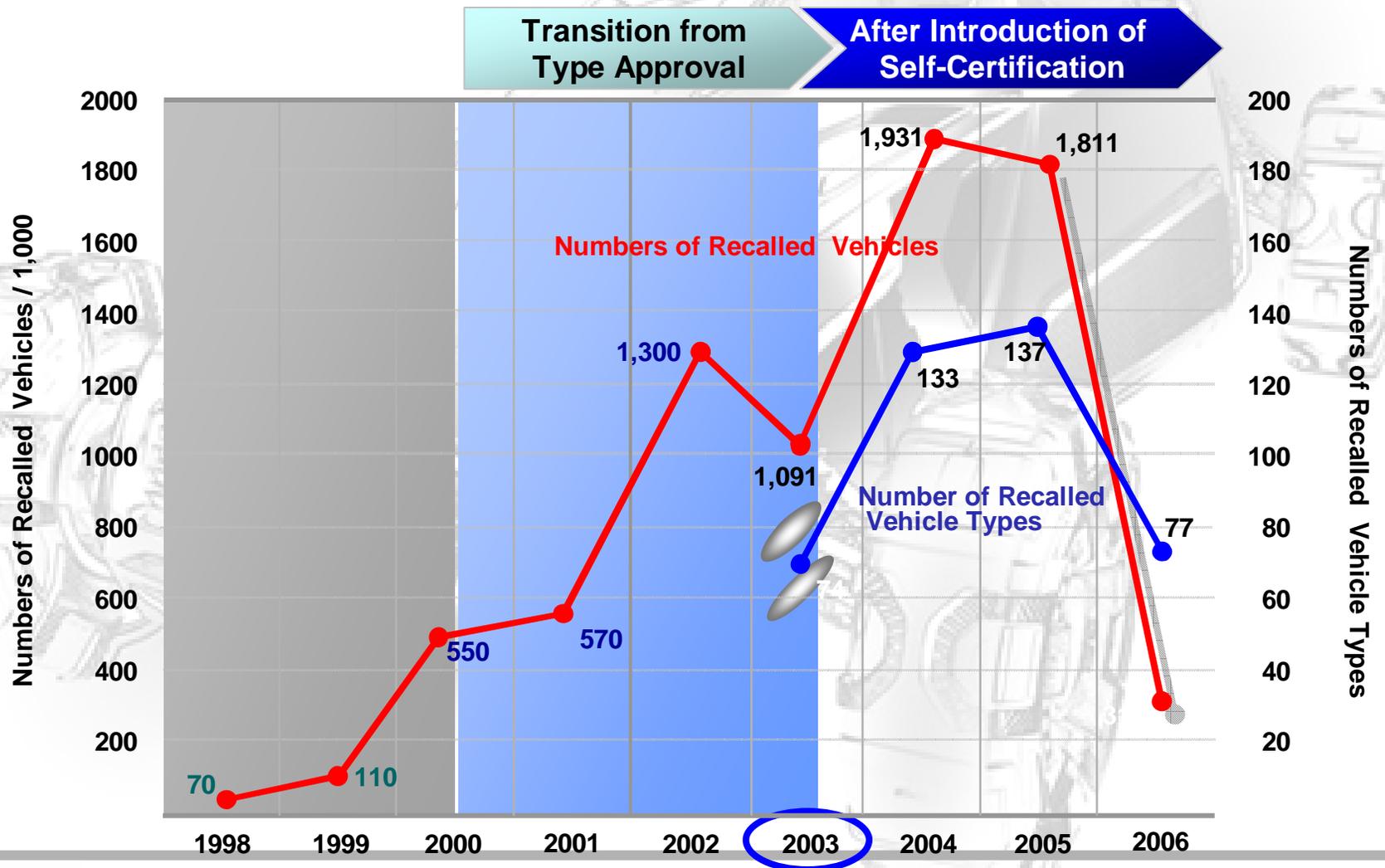


## Comparison of Certification System

	Type Approval System	Self-Certification System
Before Sale	<ul style="list-style-type: none"> <li>Government Pre-Approval</li> <li>Gov. Pre-Test and Inspection</li> </ul>	<ul style="list-style-type: none"> <li>No Government Pre-Approval</li> <li>In-House Test and Inspection</li> </ul>
After Sale	<ul style="list-style-type: none"> <li>Conformity of Production (COP)</li> <li>Revocation of Type Approval When Standards Not Met</li> <li>Passive Recalls</li> </ul>	<ul style="list-style-type: none"> <li>Defect Investigating</li> <li>Penalty and Recall When Standards Not Met</li> <li>Mandatory/ Voluntary Recalls</li> </ul>

## 2. Annual Trends of Recalls

- Recent decrease of recall numbers can be attributed to self-certification system as well as manufacturer's efforts to enhance product quality



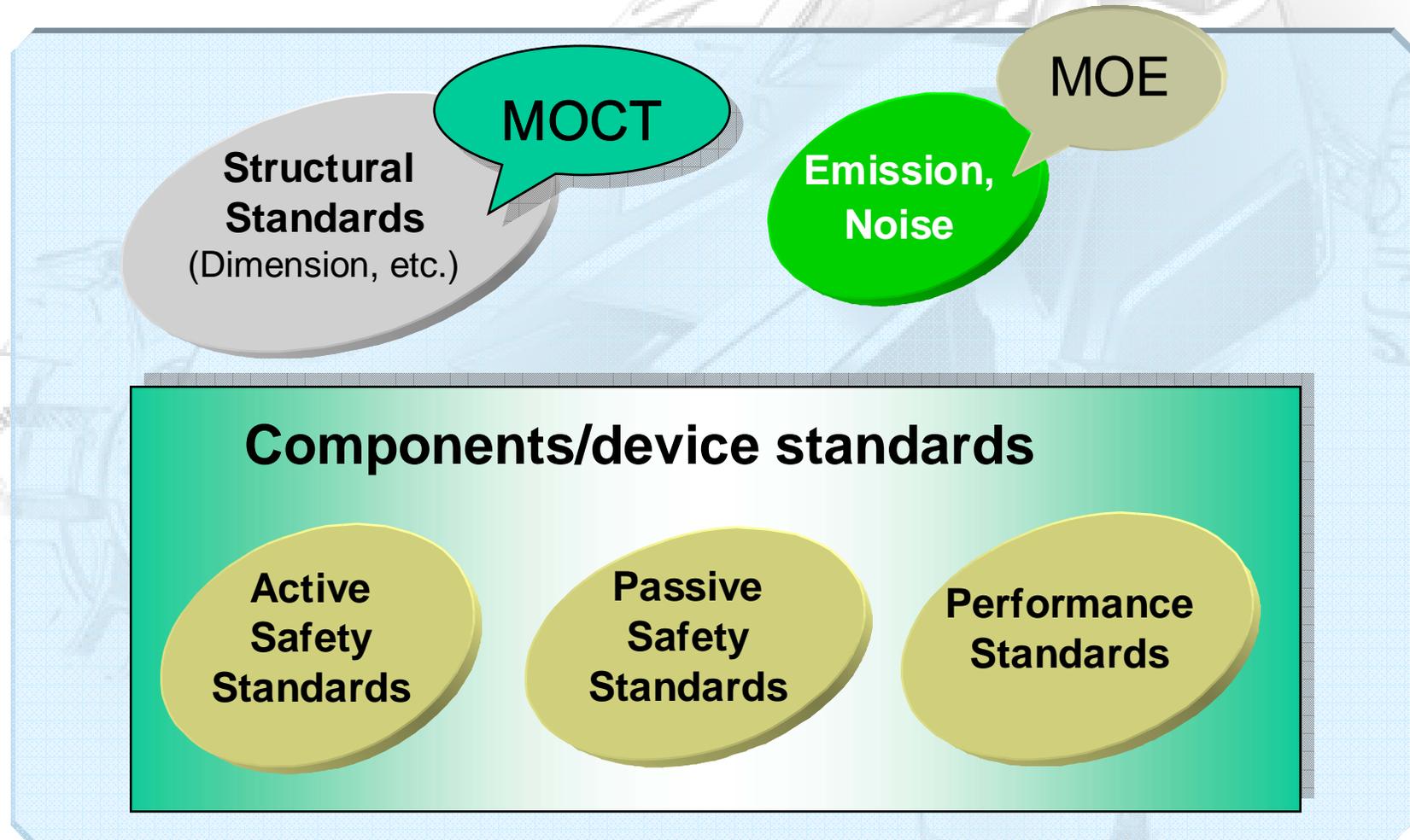
# 3. Structures of KMVSS ①

- Established based on Article 29 of Motor Vehicle Management Act
- Documented in the “Regulation of Motor Vehicle Safety Standards”
- Test Procedures and Method in the ministerial notice
- Composition of Safety Standards (Ministerial Regulation)

General Provisions	3 Articles(Art.1 ~ Art.3)
Provisions for Vehicles in use	56 Articles (Art.4 ~ Art.58)
Provisions for Motorcycles	27 Articles (Art.59 ~ Art.85)
Provisions for New Vehicles	32 Articles (Art.85-2 ~ Art.112)
Supplementary Provisions	4 Articles (Art.113 ~ Art.116)

# 3. Structures of KMVSS ②

- Structures : 7 Articles
- System and Equipment : 78 Articles



# 3. Structure of KMVSS ③

## ▣ Active Safety : 16 items

items	Relevant standards
1. Lamps, Reflective Devices and Associated Equipments	ECE 7,19,23,38,46,48 FMVSS 108
2. Forward and Rearward Visibility	ECE 46
3. Windshield Defrosting and Defogging System, Wiping and Washing System	FMVSS 103
4. Accelerator Control Systems	FMVSS 124
5. Brake for Passenger Cars	ECE 13H
6. Brake for Vehicle Other Than Passenger Cars	ECE 13
7. Brake for Trailers	ECE 13

## 3. Structure of KMVSS ④

### ▣ Active Safety : 16 items (Cont'd)

items	Relevant standards
8. Brake for Cars Equipped with ABS	ECE 13
9. Brake for Trailers Equipped with ABS	ECE 13
10. Brake during Turning for Combination Veh.	-
11. Rapid Tire Pressure Loss	FMVSS 110
12. Steering Performance	ECE 79
13. Speed Limitation Device	ECE 89
14. Speedometer	ECE 39
15. Electro-Magnetic Compatibility (EMC)	EEC 10
16. Horn	-

# 3. Structure of KMVSS ⑤

## ▣ Passive Safety : 21 items

items	Relevant standards
1. Occupant Crash Protection	ECE 95 (Side) FMVSS208 (Frontal)
2. Steering Control Rearward Displacement	FMVSS 204
3. Fuel System Integrity	FMVSS 301
4. Windshield Mounting	FMVSS 212
5. Windshield Zone Intrusion	FMVSS 219
6. Seating System Anchorages	FMVSS 207
7. Head Restraints	FMVSS 202
8. Door Locks and Door Retention Components	GTR 1
9. Impact Protection from the Instrument Panel	FMVSS 201
10. Impact Protection from the Seatback	FMVSS 201
11. Impact Protection from the Sun-visors	FMVSS 201

## 3. Structure of KMVSS ⑥

### ▣ Passive Safety : 21 items (Cont'd)

items	Relevant standards
12. Impact Protection from the Armrests	FMVSS 201
13. Impact Protection from the Interior Rearview Mirrors	FMVSS 111
14. Impact Protection for the Driver from the Steering Control System	FMVSS 203
15. Side Door Strength	FMVSS 214
16. Roof Crush Resistance	FMVSS 216
17. Seat Belt Assembly Anchorages	FMVSS 210
18. Rear Under Ride Protection	ECE 58
19. Flammability of Interior Materials	FMVSS 302
20. Interior Compartment Doors	FMVSS 201
21. Anchorages for Child Restraint System	-

## 3. Structure of KMVSS ⑦

### ▣ Other Performance related standards: 5 items

items	Relevant standards
1. Engine Power	ECE 85
2. Noise	-
3. Fuel Consumption	CFR 40 part 600
4. Bumpers	CFR 49 part 581
5. Towing Devices	EEC 77/389

- Active Safety Items mainly based on ECE Regulations, while Passive Safety Items mainly based on US FMVSS

# 4. NCAP in Korea ①

**Main  
Purpose  
of NCAP**

inform car buyers of vehicles' safety rating

promote the development of safer vehicles  
by automobile manufacturers

## Korea NCAP

- From 1999
- Based on the Motor Vehicle Management Act Article 32 of 2 (Aug. `02)
- Publish the results (Korean only)
- Website : [www.car.go.kr](http://www.car.go.kr)  
English version will be available in 2007

2001 Kia Sephia 4-DR.  
<http://www.nhtsa.dot.gov/hcap>  
Posted 12/26/2001

Frontal Star Rating	
Driver's Side	Passenger's Side
★★★★	★★★★★

Frontal Vehicle Weight  
2598 lbs

Side Impact Star Rating	
Front Occupant	Rear Occupant
★★★★	★★★★

side crash

Rollover Resistance Rating  
*Not Rated*

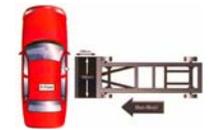
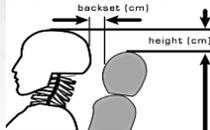
현대 EF 쏘나타 (EF SONATA) 운전자석 ★★★★★  
전방탑승자석 ★★★★★



# 4. NCAP in Korea ②

## ▣ Progress of NCAP

Total (47 vehicles) : 33 Passenger cars, 12 RV, 2 Buses

	1999	2000	2001	2002	2003	2004	2005
Frontal impact 	Compact Pass.(3)	Medium Pass.(4)	L.P(3) RV (6)	Mini(3) L.P(2) C.P(3)	Mini(3) L.P(2) C.P(3)	M.P(3) C.P(1) RV(1)	M.P(1) RV(2) BUS(2)
Brake test 			RV(6)	L.P(2) C.P(3)	L.P(2) C.P(2)	M.P(3) C.P(1) RV(1)	M.P(1) RV(2) BUS(2)
Side impact 					L.P(4) C.P(4)	M.P(3) C.P(1) RV(1)	M.P(1) RV(2) BUS(2)
Rollover 							M.P(1) RV(2) BUS(2)
Head restraint 							M.P(1) RV(2) BUS(2)

※ Some of the popular cars sold in Korea

# 5. Parts & Equip. Self-Certification System ①

## ▣ Backgrounds

- Vehicle safety guaranteed through NCAP and self-certification
- No safety management system for vehicle's parts and equipment
- Due to rapid increase of low quality products
  - Endanger passengers' safety and generate customer complaints



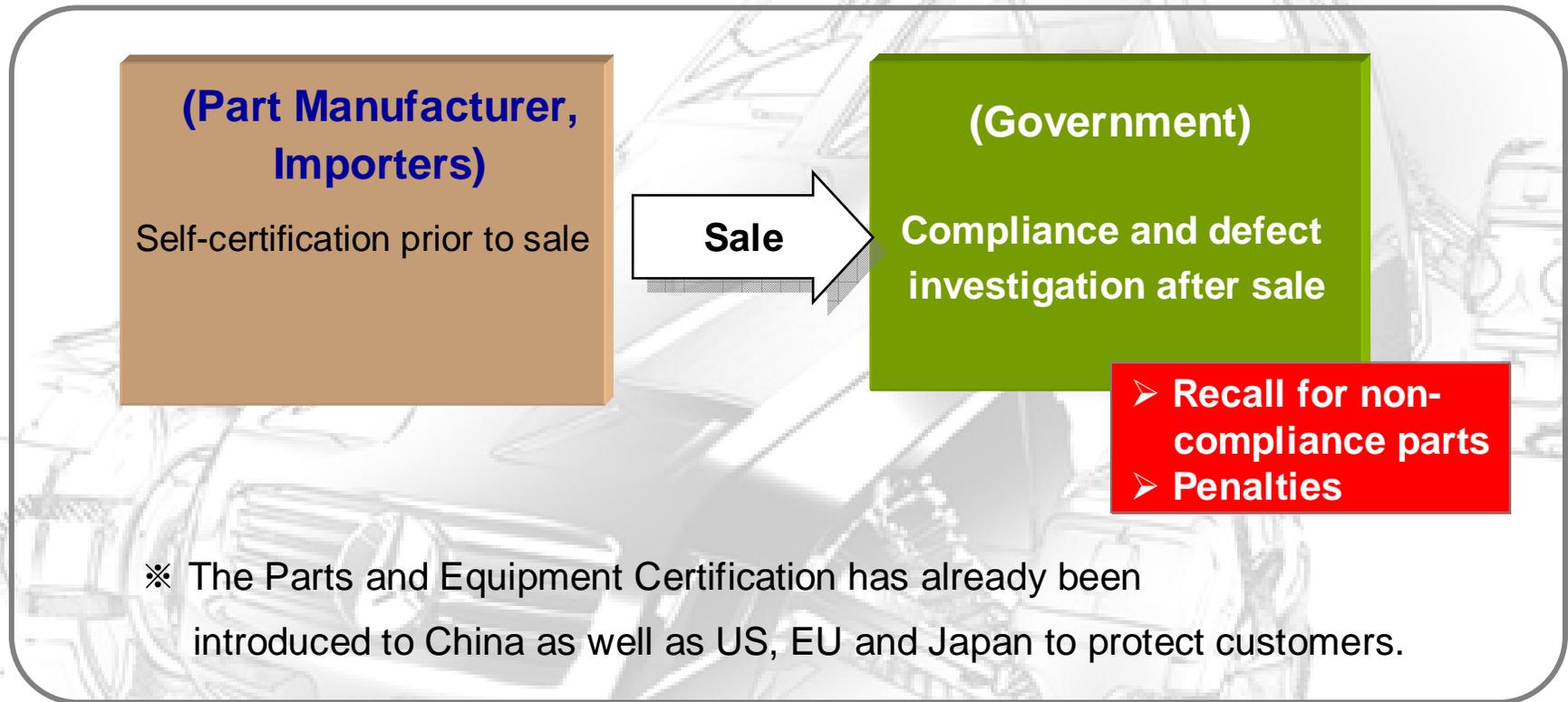
leading to serious social problems

※ '06.Jan.-Oct. : 29 out of 359 of highway death toll due to tire rupture

(Statistics from National Police Agency)

# 5. Parts & Equip. Self-Certification System ②

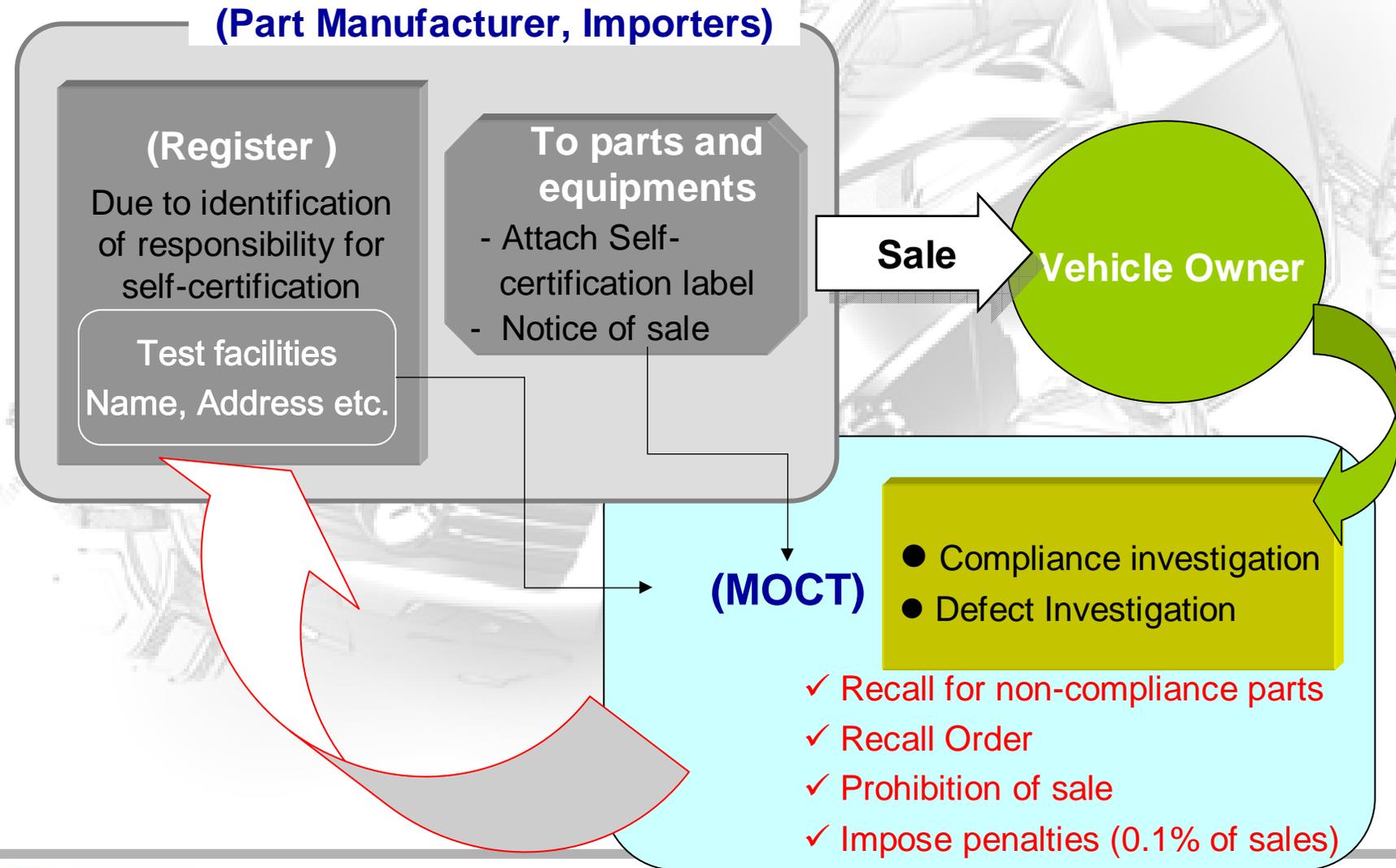
## ▣ System Overview



- Proposed Amendment of the introduction of Parts and Equipments Self-certification to Motor Vehicle Management Act」 (Submitted to the National Assembly in Dec.13, 2006)
- Effective in the Year of 2009

# 5. Parts & Equip. Self-Certification System ③

## ▣ Recall Procedure



# 5. Parts & Equip. Self-Certification System ④

## ▣ Applicable Items under consideration

**Total 16 Applicable Items  
equivalent to USA' Parts  
& Equipment  
Self-Certification**

1. Brake hoses
2. Lamps, reflective devices, and associated equipment.
3. New pneumatic tires
4. Tire selection and rims
5. Motor vehicle brake fluids
6. Retreaded pneumatic tires
7. Motor vehicle brake fluids
8. Tire selection and rims for passenger vehicles
9. Warning devices
10. New non-pneumatic tires for passenger cars
11. Glazing materials
12. Seat belt assemblies
13. Child restraint systems
14. Motorcycle helmets
15. Rear impact protection
16. Fuel system integrity of CNG vehicles

# 6. Reimbursement Prior to Recall Campaign①

## ▣ Backgrounds

- Conflicts between manufacturers and consumers on reimbursing owners for the cost of a repair incurred prior to manufacturers' recall campaign
- Consumer's complains due to Selective Reimbursement by manufacturers

# 6. Reimbursement Prior to Recall Campaign②

## ■ System Overview

- Proposed a rule that a manufacturer is obligated to reimburse owners for the cost of repair incurred prior to a manufacturer's recall
  - ※ The reimbursement program in place in USA since January 2003
  - ※ Proposed amendment of 「Motor Vehicle Management Act」 to introduce the reimbursement program  
(Submitted to the National Assembly in Dec.13, 2006)

### Scope of Reimbursement

- Repair within 3 years determined by Presidential Decree retroactive to the date of defect notice on vehicles and parts
- Repair made by an owner not knowing about recall campaign after a manufacturer's recall
  - ※ 3-year reimbursement period is in accordance with prescriptive expiration period of a corporation bond in Civil Act

# 6. Reimbursement Prior to Recall Campaign③

## ▣ Benefits

- Resolve unfairness among consumers with and without compensation regarding identical defect investigation issue
- Establish advanced consumer protection program by institutionalizing the rule of reimbursement
- Induce manufacturers to enhance parts & equipment quality and safety of passengers

## ▣ Future Plans

- Introduce the program by amendment of 「Motor vehicle Management Act」 within the year of 2007
- Establish implementation procedures by amendment of Enforcement Decree and Regulations of 「Motor vehicle Management Act」 within the year of 2008

# 7. International Harmonization Activities ①

## ▣ Backgrounds

- Most countries are applying their own safety regulations to motor vehicles to reduce traffic accidents, deaths and injuries.
- But different motor vehicles safety standards regarded as technical barriers to trade
  - Issues regarding trade barriers are shifting to “technical barriers to trade” from “tariff barrier” due to establishment of WTO system
- International Harmonization of Motor Vehicle Safety Standards is drawing worldwide attention
  - to enhance motor vehicle safety
  - to reduce trade barrier

# 7. International Harmonization Activities ②

Passive

Active

Continue Harmonization

1994

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2002

- WP29 observer
- APEC/VSHG ('96)
- G/I meeting ('00)
- '98 Agreement ('01)

2003

- Finalize Gov. policy on Internationalization
- Establish a T/F
- Attend WP29 Expert Meetings
- Chair APEC/VSHG (Since the 22<sup>nd</sup> meeting)
- Research on internationalization (Phase 1)

2004

- Acceded to 1958 Agreement (E51)
- Research on internationalization (Phase 2)
- Active participation in WP29 and APEC, etc.

2005-2006

- Research of 4 items for standard harmonization
- Harmonizing 4~5 Items each year and reflecting into domestic standard
- Active participation in WP29 and APEC, etc.

# 7. International Harmonization Activities③

## ▣ Policy Goals and Implementation Plans

- Improve safety standards to international levels
- Enhance vehicle quality to provide maximum protection of passengers

### Harmonize safety standards with international standards

- Align standards based on ECE Reg. with ECE Reg.
- Adopt GTR

### Enhance international cooperation on automobile safety standards

### Transparent Procedures

### Enhance Multilateral Cooperation

- Lead APEC/VSHG
- Participate in ESV
- Consider an office in Geneva

### Pursue Bilateral Cooperation

- Strengthen cooperation with China and US
- Plan to build coop. channel with EC, India, Russia and Latin America

# 8. Plans for Standards Harmonization ①

## ■ Standards Harmonization Policy

- Adopt all the GTRs
- Harmonize ECE R-based Standards
- Strengthening Cooperation between WP29 & APEC/VSHG

- Priority on Passenger Car Standards Harmonization
- Selecting Items First with Less Impact on Industries and Traffic Environment
- Harmonizing 4~5 Items Each Year

# 8. Plans for Standards Harmonization ②

## ■ Annual Standards Harmonization Plans

Year	ECE Regulation
2005	ECE R13H(Passenger Car Brakes), ECE R19(Front Fog Lamps) ECE R58(Rear Under-ride Protection), GTR No.1(Door Locks and Retention)
2006	ECE R39(Speedometers) ECE R95(Lateral Collision) ECE R121(Tell-Tales) ECE R25(Head restraints)
2007	ECE R10(Electromagnetic Stability) ECE R43(Safety Glazing Materials) Motorcycle Brake Systems GTR ECE R87(Daytime Running Lamp) ECE R30 & FMVSS(Tyres) ECE R123(Full-AFLS)
Total	Harmonizing 4~6 Items Each Year ❖ <u>(Selecting Harmonizing Items through Consultation with Various Stakeholders such as Vehicle Manufacturers and Consumer Organizations)</u> Plan to Harmonize Approximately 30 Items by 2010

# 9. R&D for Future Vehicles Study

- Focus on establishing safety performance requirement for future vehicles such as hydrogen, fuel cell, and hybrid vehicles to improve environment and energy problems
  - Hybrid Vehicle
    - ✓ Research started : 2006
    - ✓ Safety standards will be established in 2009
  - Fuel Cell Vehicle
    - ✓ Research started : 2007
    - ✓ Safety standards will be established in 2014

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**Thank you very  
much !!**

