

## GOVERNMENT STATUS REPORT – REPUBLIC OF KOREA

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### OVERVIEW

In 1960, the introduction of “Motor Vehicle Management System” for the efficient management of vehicle manufacturing, registration and scraping required the establishments of national type approval system and motor vehicle safety standards. The motor vehicle safety standards are documented in the “Regulation of motor vehicle safety standards” and the detailed test procedures and methods are listed in the bylaw of the regulations.

In 2003, dramatically, the national type approval system for vehicle was shifted to the self certification system in order to give more flexibility for the auto manufacturers. With the system change, the manufacturers have more responsibilities on the early stage of vehicle design. As a result, the domestic manufacturers can achieve the international competitiveness in the safety area. As shown in the following Figure 1, the statistics reveals that the number of recalled vehicles and vehicle types continuously increased during the first 3 years of initiation of recall campaigns. However, in 2006, the numbers of recalled vehicles and types decreased as the system was in a settled down stage.

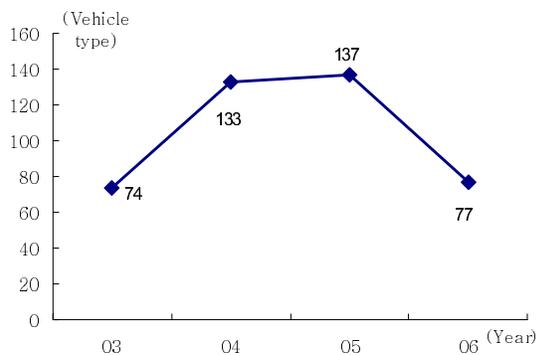


Figure 1 Numbers of Recalled Vehicle Types

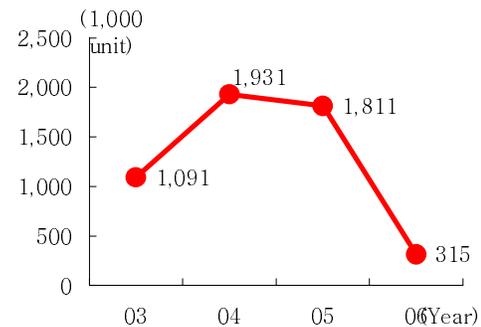


Figure 2 Numbers of Recalled Vehicles

### STRUCTURES OF KMVSS

The Korean Motor Vehicle Safety Standard (KMVSS) has been established based on the article 29 of the Motor Vehicle Management System; if the structure and device of vehicle which were defined by the presidential decree do not meet the safety requirements of performances and standards in the road operation, the vehicle shall not operate on the road and the more specified requirements and standards were provided by the directives of the Minister.

The structure of KMVSS has 5 sub parts; General rules, vehicle-in-operation regulations, 2 wheeled motorcycle regulations, vehicle manufacturing regulations, and supplementary rules. With 3 provisions of the general rules, the regulations of operating vehicles were composed of 56 provisions. The regulations of 2 wheeled motorcycle and vehicle manufacturing have 27 provisions and 32 provisions, respectively. With 4 provisions of the supplementary rules, KMVSS consists of the total 122 provisions.

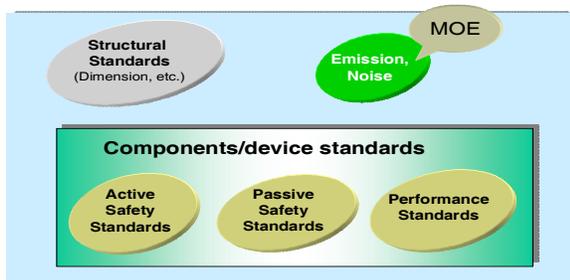


Figure 3 Structures of KMVSS

## THE 42 MAJOR SAFETY REGULATIONS AND RELEVANT REGULATIONS OF FOREIGN COUNTRIES

### Passive Safety Standards

The 21 passive safety standards were enforced to minimize the fatalities and damages in the event of traffic accidents based on the FMVSS of the United States as shown in Table 1.

Table1. Passive Safety Standards of KMVSS

	Items	Relevant Standard
1	Occupant Crash Protection	ECE 95 (Side) FMVSS 208 (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
12	Impact Protection from the Armrests	FMVSS 201
13	Impact Protection from the Interior Rearview Mirrors	FMVSS 111
14	Impact Protection from 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	-

### Active Safety Standards

The 16 active safety standards were enforced to prevent the traffic accidents based on the ECE regulations as shown in Table 2.

Table2. Active Safety Standards of KMVSS

	Items	Relevant Standard
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 System	FMVSS 124
5	Brake for Passenger Cars	ECE 13H
6	Brake for Vehicle other than Passenger Cars	ECE 13
7	Brake for Trailers	
8	Brake for Cars Equipped with ABS	ECE 13
9	Brake for Trailers Equipped with ABS	ECE 13
10	Brake during Turning for Combination Vehicle	-
11	Rapid Tire Pressure Loss	FMVSS 110
12	Steering Performance	ECE 79
13	Steering Limitation Device	ECE 89
14	Speedometer	ECE 39
15	Electro-Magnetic Compatibility (EMC)	EEC 10
16	Horn	-

### Others – Performance related Standards

Table3. Other Performance related Standards of KMVSS

	Items	Relevant Standard
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

## THE ENHANCED VEHICLE SAFETY POLICY

### Introduction of Auto Part Self Certification System

Through the Korean New Car Assessment Program (K-NCAP) and self-certification system, the safety of the auto maker's new vehicles can be guaranteed. However, due to insufficient management system to secure the safety of the vehicle components, it is difficult to guarantee safety of the driver.

Especially, skyrocketing number of non-tested components ended up creating defaulted vehicle component, which led to continuous occurrences of car accidents, as well as consumer damages. Last year, the revised Law of Motor Vehicle Management System which included the vehicle part self certification regulation was submitted to the National Assembly for approval. The brief summary of the revised Bill are as follows: first, all manufacturers of the equipments or parts that are attached or used in the vehicle should self-certify the compliance of their equipments or parts. Second, all manufacturers of the equipments or parts should register their manufacturing and test facilities with MOCT. When manufacturers of the equipments or parts certify their equipments or parts, their part specification should be reported to the agency and self certified mark can be displayed on their parts.

The proposed 16 items such as tire and lamp system etc. which were selected based on the items that applied in the Unites States will be subject to the safety standards. The incongruous part will be recalled, thus the safety of parts can be enhanced. In the bylaw of KMVSS, all the necessary procedures will be listed such as registration of makers, reports of sales, mark of self certification level and obligatory reporting of recalls. The regulation of part self certification will be effective in year 2009 or 2010.

#### INTRODUCTION OF RECALL REIMBURSEMENT PROGRAM

The lack of the proper indemnity system of the complaints of consumers who repaired their vehicles or parts before the recall campaign initiated by the manufacturers has been a social issue in Korea recently. The proposed law of motor vehicle management system also includes the manufacturer's obligation to reimburse the consumer's pre-paid cost 3 year before and during recall campaign.

The detailed reimbursement procedures will be legislated in the bylaw of motor vehicle management system and the recall reimbursement program will be effective in 2008.

#### EXPANSION OF K-NCAP

In 1999, Korean government established the Korean New Car Assessment Program (K-NCAP) after 3 years research work. The main purpose of KNCAP is that to not only promote buying a safer car but encourage auto makers to undertake more efforts in building safer cars by publishing test results every year. KNCAP also provides information on proper use of safety devices in order to enhance user's awareness and correct understanding on safety related devices such as airbag, ABS and seat belts. At the beginning, KNCAP test protocol and evaluation methods were similar to USA NCAP and only passenger car category was tested. In 2005, up to 4.5 tons of small trucks and vans were included in the K-NCAP.

The test items were only the full wrap frontal crash test and braking test until 2002, however, side crash test with 55kph impact speed was added in 2004 and in 2005, static roller and head restraint test became part of K-NCAP as shown in Table 2. This year, the pedestrian head test will be added to evaluate the protection of pedestrian. Next year, 2008, the pedestrian leg test and dynamic head restraint test will be conducted. Until 2011, the test items will be expanded up to 10 test items.

Table 4. K-NCAP Tested Vehicle Categories

	Total	'99	'00	'01	'02	'03	'04	'05	'06
Total	47	3	4	9	8	8	5	5	5
Compact (PCs)	3	-	-	-	3	-	-	-	-
Small (1300cc)	9	-	-	3	2	4	-	-	-
Small (1500cc)	13	3	-	-	3	4	1	-	2
Medium (PCs)	8	-	4	-	-	-	3	1	-
Medium (RV)	7	-	-	4	-	-	1	2	-
Large (PCs)	0	-	-	-	-	-	-	-	-
Large (RV)	5	-	-	2	-	-	-	-	3
4.5 ton (Trucks)	2	-	-	-	-	-	-	2	-

## **THE PROACTIVE PARTICIPATION IN INTERNATIONAL ACTIVITIES FOR THE HARMONIZATION OF MOTOR VEHICLE REGULATIONS**

In recent years, the target of free trade has been shifted to the elimination of technical barriers from tariff barriers since the WTO agreement. Various efforts in the motor vehicle regulations and certifications have been undertaken as part of the market opening policies. These efforts are intended to harmonize the regulations and mutual recognition of certification process. It is also due to the growth of international distribution of motor vehicles and parts, as well as the globalization of vehicles and parts manufacturers and rapid demands of common vehicle and part specifications. The modularization of vehicle components also accelerates the activities of harmonization.

After the accession to the 1998 Agreement in 2001 and 1958 Agreement in 2004, Korea has promoted international harmonization of motor vehicles regulations and has made an effort to apply more UN/ECE regulations. Currently, Korea actively participates in the United Nations Economic Commission for Europe, the world forum for the harmonization of vehicles regulations (UN/ECE/WP29), which is carrying out activities leading to the harmonization and integration of regulations. Korea has participated in all 6 GR meetings as well as the plenary sessions of WP29 on a regular basis and expressed our options and our policy and system.

Each year, 4 or 5 items of regulations are selected and studied to harmonize with GTR and ECE regulations. Last year, head restraint system, indicator display system, side crash test and speedometer were studied to apply or harmonize with ECE regulations.

As a chairman of APEC/VSHG, on the other hand, Korea is also endeavoring to invite more Asian countries to join the international activities for harmonization of standards and regulations.

In 2006, MOCT promoted to establish the Korean Society of Automotive Safety to encourage the development of new safety technologies and motor vehicle safety policies.

Korea will keep working on the harmonization of regulations step by step with the careful consideration of domestic road, traffic, and environment conditions. This year, regulations of motorcycle brake, windshield, variable headlamp and electromagnetic obstacle device will be studied for harmonization.

The activities of mutual cooperation will also be reinforced for the better understanding of policy and system of the counterpart countries. In 2004, Korea and China signed the Arrangement for Cooperation to discuss vehicle safety issues. Korea and the United States also signed the Memorandum of Cooperation (MOC) to work together on vehicle safety fields. On the basis of the agreements, the annual cooperation meeting has been held between Korea and China, and Korea and the United States, respectively. In 2007, Korea and Japan will sign MOC to promote the international harmonization of regulations and exchange the information on NCAP, and other vehicle safety matters. This mutual cooperation will be expanded to India, Russia and Latin American countries in the near future.

## **R&D FOR FUTURE VEHICLES SAFETY**

KMOCT's program for future vehicles, such as hydrogen, fuel cell and hybrid vehicles is focused on establishing safety performance requirements. The safety standards are vital to promoting the industry to early launch these future vehicles in the domestic market to improve environment and energy problems. In 2006, a R&D project for development of safety requirements and test protocol for hybrid vehicle was started and the standards will be established in 2009. This year, a project for safety requirement of the fuel cell vehicle will be initiated and the safety standards will be established in 2014.