Current Situation of Vehicle Safety Standards Harmonization

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I. Background for International Harmonization of Vehicle Safety Standards

- 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



II. Policy Goals and Implementation Plans

- Improve safety standards to international levels
- Enhance vehicle quality for the higher safety 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
- -Station personnel in Geneva

Expand Bilateral Cooperation

- -Strengthen cooperation with China, Japan and the US
- -Plan to build coop. channel with EC



III. Overview of Korea's Efforts for International Harmonization of Vehicle Safety Standards

Continue Harmonization Active Passive 2004 2005 2003 1994 2002 -- Research of 4 items for standard harmonization Acceded to 1958 Agreement (E51) -- Finalize Gov. policy on Internationalization **WP29** observer -- Harmonizing 4~5 Items each year and reflecting into domestic standard Research on internationalization (Phase 2) - Establish a T/F APEC/VSHG('96) Attend WP29 Expert Meetings Active participation in WP29 and APEC, etc. Active participation in WP29 and APEC, etc. G/I meeting('00) - Chair APEC/VSHG (Since the 22nd meeting) '98 Agreement - Research on internationalization (Phase 1) ('01)



1. Enhancing International Cooperation: Passive Participation

WP29 since 1994

Participate in WP29 as an Observer

■ APEC/VSHG since1996

 Focus on understanding roles with regard to international cooperation as a member economy

■ ASIA G/I Meeting since 2000

- Attend the meeting since 3rd G/I meeting

Acceded to 1998 Agreement in 2001

- Prepare for the smooth introduction of self-certification system in 2003



2. Enhancing International Cooperation: Active Participation

Start basic research for pursuing international standards harmonization: 2003

- Research on the status of international harmonization regarding motor vehicle safety standards
 - * UN/ECE/WP29, APEC/VSHG
- Examination on differences between domestic and foreign safety standards
 - * Structural & Device standards and Test Procedures, etc.
- Set the harmonization plans

Prepare for International Standards Harmonization: 2004

- ◆ Build ECE Regulation Data Base
- Accede to 1958 Agreement and pursue standards harmonization of 3 items
 - (Passenger Car Brakes, Rear Under-ride protection, Front Fog Lamps)



IV. Principles for Selecting Items for Harmonization

Principles of Standards Harmonization

- Adopt all the GTRs
- Harmonize standards based on ECE Regulations

Rules in selecting items for Standards Harmonization

- ◆Give priority to Passenger Car
- Select Items having less impact on Industries and Transportation Environment
- ◆ Harmonize 4~5 Items Each Year



Harmonized Standards (2005)

- * Passenger Car Brakes (ECE R13H)
- * Front Fog Lamps (ECE R19)
- * Rear Under-ride Protection (ECE R58)
- * Door Locks and Retention (GTR No.1)



	Before Harmonization	After Harmonization
Passenger Car Brakes	- Evaluate braking performance with braking distance only	-Subdivide braking performance test into vehicle classification, devices, road and driving conditions
Front Fog Lamps	-Main luminous axis of beam must be lower than the center of illumination -Shall not illuminate outermost side of the motor vehicle -The center of illumination shall be higher	-Main luminous axis of beam shall illuminate towards the front - The lowest point of illuminating surface shall
	than 25cm above the ground -Shall be designed to be operated independently from other lamps	be higher than 25cm above the ground - Shall be designed to be operated independently from headlamps
Rear Under- ride Protection	-Test Vehicle: Truck and special-purpose vehicles with more than 8 tons in GVW and 5 tons in Max. loading capacity -Installation Location: Based on the Vehicle width	-Test Vehicle: Extended to Truck and special- purpose vehicles with more than 3.5 tons in GVW -Installation Location: Based on the width of the outer wheel
Door Locks and Retention	Based on FMVSS 206	-Introduce back door -Strengthen sliding door



Research items for harmonization (2006)

- * Head restraint (Proposed GTR)
- * Speedometers (ECE R39)
- * Lateral Collision (ECE R95)
- * Tell-Tales (ECE R121)
- * Semi-AFLS (ECE R123)



	Before Harmonization	After Harmonization
Head Restraint	- Based on FMVSS 202 -Indication tolerance test of speedometer	-To be harmonized after GTR is established -Introduce definition, installation and test standards regarding Head Restraint -Introduce back-set and non-use position -Strengthen height and dynamic test -Subdivide indication tolerance test of
Speedo- meters	shall be conducted at a speed greater than 25 km per hour	speedometer * Less than 45km per hour * 45km to 100 km per hour * Greater than 150 km per hour -Introduce test standards for currently mass- produced -Introduce test standards for two-wheeled and three-wheeled motor vehicles
Lateral Collision	-Dummy : Euro SID-1 -Honeycomb : Multilayer	-Introduce Euro SID-2 and -Honeycomb : progressive honeycomb
Tell-Tales	- 31 Tell-Tales standards	-Add 11 more Tell-Tales standards resulting in 42 Tell-Tales standards



Reflection of Research Results into Domestic Safety Standards

◆ Head Restraint

Amend domestic safety standards through adopting Head Restraint GTR and allow
 3 year deferred period after revision

♦ Speedometers

- Make a draft amendment of domestic safety standards ('07)
- Effective Year ('08)

Lateral Collision

- Apply new honeycomb standards in 2008
- Use old and new dummy model concurrently for 3~5 years or allow 3~5 year deferred period after revision

♦ Tell-Tales

 Amend domestic safety standards through adopting Tell-Tales GTR and allow definite deferred period after revision

♦ Semi-AFLS:

- Apply amended standard regarding curve test road in 2008



Plans for Standards harmonization in 2007

- **♦** Safety Glazing Materials (ECE R43)
- **♦** Electromagnetic Stability (ECE R10)
- **♦ Motorcycles Brake Systems GTR**
- **♦** Tyres (ECE R30 & FMVSS 139)
- ◆ Full –AFLS(ECE R123)
- **♦** Daytime Running Lamp (ECE R87)



Primary Reasons for Selecting Harmonization Items in 2007

♦ Electromagnetic Stability (ECE R10)

- * Currently ECE R10 has been extensively amended, but old ECE R10 based regulation is under operation in Korea
- * Need to consider to reflect the newly amended ECE R10 to KMVSS

♦ Safety Glazing Materials (ECE R43)

- * Loose regulation for Safety Glazing Materials
- * Need to consider to reflect relevant GTR under discussion to KMVSS

♦ Motorcycles Brake Systems GTR

- * Adopted in November 2006 at 140th WP29 meeting
- * Need to harmonize according to the principles of standards harmonization



Primary Reasons for Selecting Harmonization Items in 2007

◆ Tyres (ECE R30 & FMVSS 139)

- * Loose regulation for Tyres
- * Prompt enactment of regulation regarding types is necessary considering that tyres are vital to securing vehicle safety
- ◆ Full –AFLS(ECE R123)
- * Need to adopt relevant regulation as AFLS technologies have fast developed
- **◆** Daytime Running Lamp (ECE R87)
- * Conduct a feasibility study as the introduction of DRL has been actively discussed in WP29



VI. Future Plan for Standards Harmonization

- ◆ Harmonizing 4~5 items each year through consultation with various stakeholders such as consumer organizations and vehicle manufacturers
- Candidate Items for Future Harmonization
- Steering Equipments : ECE R79
- Strength of Super Structure (bus): ECE R66
- Protective Helmet for Drivers and Passengers of Motorcycles: ECE R22
- Warning Triangles : ECE R27
- Replaced Brake Lining: ECE R90
- Illumination of Rear-Registration Plates : ECE R4
- Gas-charged Headlamps and Bulbs : ECE R98, R99
- Child Restraint System



Thank you very much!



