

GOVERNMENT STATUS REPORT OF REPUBLIC OF KOREA

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I. Overview of traffic accidents and relevant policies

1. Analysis of Road Traffic Accidents Statistics

The fatalities from road traffic accidents has been steadily decreased in Korea even though the number of vehicle registrations has been consistently increased over the past two decades through the Korean government’s continuous efforts and the implementation of policies.

The number of motor vehicle registrations increased by 35% in 2021 to about 2,491 thousand compared to that in 2011, but the fatalities due to traffic accidents decreased by half to 2,916 for the first time in 2021 to less than 3,000.

The number of traffic fatalities per 100,000 people had also continued to decline since 2014, when it fell below 10 for the first time, and was halved to 5.6 in 2020, but as of 2019, it was 1.3 times higher than the OECD averaged of 5.2(6.5 in Korea) and ranked 29th out of 36 countries, therefore, it will be still requiring steady efforts.

Table 1. Total fatalities and fatalities per 100,000 (unit: death)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Fatalities	5,229	5,392	5,092	4,762	4,621	4,294	4,185	3,871	3,349	3,081	2,916
Fatalities per 100,000	10.5	10.8	10.1	9.4	9.1	8.5	8.1	7.3	6.5	6.0	5.6
Number of Car Registration (million unit)	18.44	18.87	19.40	20.12	20.99	21.80	22.53	23,20	23,68	24,37	24,91

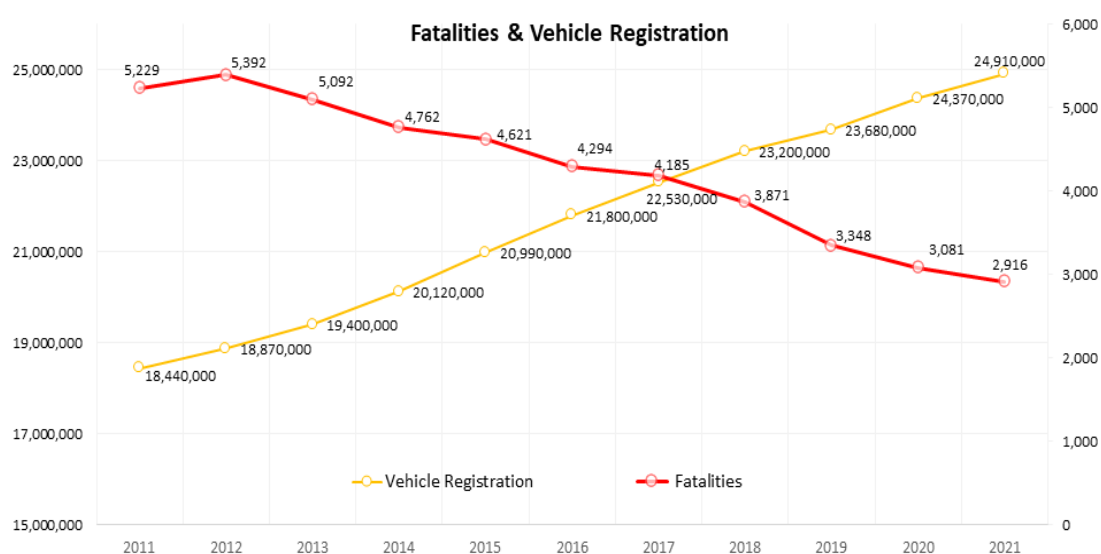


Figure 1. Road traffic fatalities

2. Overview of Traffic Safety Policies

The 9th National Transportation Safety Master Plan (2022-2026)

The Korean government establishes ‘The National Transportation Safety Master Plan’ every five years to improve road traffic safety, and according to the recently announced 9th Plan (2022 ~ 2026), it is actively implementing various government polices to improve traffic safety for vulnerable sectors such as pedestrians, the elderly, two-wheelers and freight vehicles with the goal of reducing the road deaths from 3,081 in 2020 to 50% by 2027.

The 3rd Vehicle Policy Framework Plan (2022~2026)

In addition, based on the 3rd Vehicle Policy Framework Plan (2022~2026) established in conjunction with the 9th National Transportation Safety Framework Plan, 4 strategies and 17 detailed implementation tasks have been set with the goal of realizing mobility in people’s daily lives, improving safety management and consumer rights as shown in Figure 2, including 1) Completing the commercialization base for fully automated vehicles(Level 4), 2) Establishing an eco-friendly mobility safety system and fostering new industries, 3) Revitalizing the automotive aftermarket and 4) Strengthening the consumer protection and safety.

To briefly introduce the detailed implementation tasks of the fourth strategy, Korea will continue to reflect vehicle regulations into the Korea Motor Vehicle Safety Standard(KMVSS) and continuously improve the New Car Assessment Program to convert it to comprehensive assessment program that includes the Automotive Life Cycle Assessment(A-LCA), the assessment of vehicle interior air quality of new vehicles and Battery Management System and so on.

also, for quick and extensive consumer protection, Korea will take proactive measures by recommending manufacturers to expand voluntary recalls and public free repairs if necessary before forced recall and introduce a mediation system and arbitration services in the vehicle exchange and refund legal system.

In order to establish a tighter safety management system for in-use vehicles, Korea will strengthen the management and supervision of uninsured vehicles, rationalize maintenance fees to ease the burden on consumers, and expand livelihood support for accident victims. also the Korean government plans to make several management systems such as safety inspections, maintenance qualification systems, scrapping systems and enforcement measures to eliminate safety blind spots for two-wheelers.

Strategies	① Completing the commercialization base for fully automated vehicles (Lv.4)
	② Establishing an eco-friendly mobility safety system & fostering new industries
	③ Revitalizing the automotive aftermarket
	④ Enhancing the consumer protection & Safety

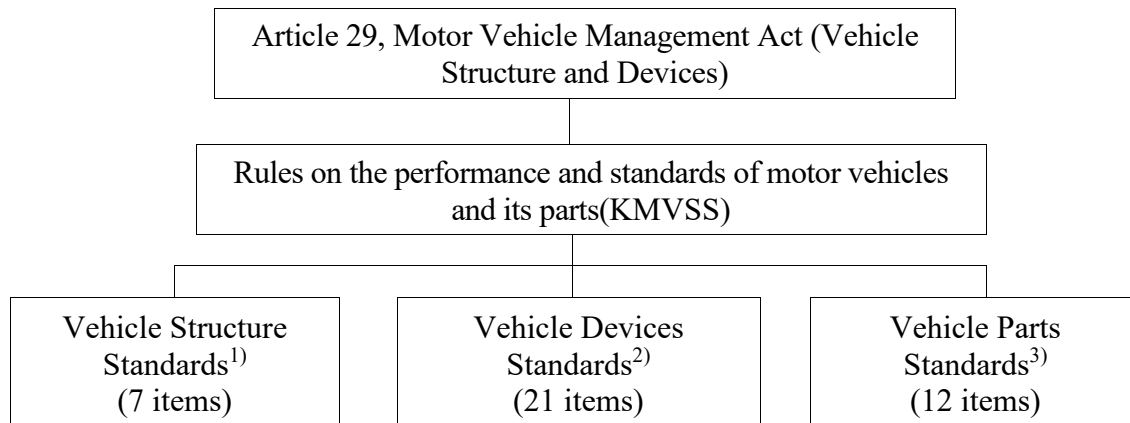
Figure 2. Strategies of the 3rd Vehicle Policy Framework Plan (2022-2026)

II. Measures for Ensuring Vehicle Safety

1. Overview of Korea Motor Vehicle Safety Standards (KMVSS)

The Korea Motor Vehicle Safety Standards (Hereafter, KMVSS) is based on the Motor Vehicle Management Act enacted to efficiently manage performance and safety of motor vehicles.

In detail, the KMVSS specifies requirements of vehicles and its parts and 7 items on the structure of vehicles, 21 items on the devices of vehicles, 12 items for vehicles' parts and detailed test methods to verify the performance of additional advanced devices.



- 1) Standards related to vehicle's dimension and weight for determining the road, lanes, tunnels and bridges for considering the traffic environment
- 2) Standards for vehicles or devices and accessories used or attached to vehicles can be classified safety and performance. and safety is further categorized into accident prevention, damage reduction and secondary accident prevention after an accident
- 3) Standards for determining strength, durability and performance, etc. of replacement part used in vehicles

Those who manufacture, assembles or import vehicles must self-certify the they have complied with the KMVSS and will be subject to corrective measures, fines and other penalties if the Korean government found non-compliance through the compliance test.

2. Activities in Harmonization of vehicle Regulations

Overview of Harmonization in Korea

The Korea is a contracting party to the 1958 Agreement and the 1998 Agreement of UN ECE(United Nations Economic Commission for Europe) WP.29(World Forum for Harmonization of Vehicle Regulations). UN Regulations and UN Global Technical Regulations have been reflected in The KMVSS.

Activities at UN ECE WP.29

In order to fulfill its responsible role as a contracting party of WP.29, The Korea is actively participating in the WP.29 Plenary Meetings and six expert group meetings(GR) and informal technical group meetings.

As of 2023, Korea has been serving as a Vice-Chairperson of Working Party on Passive Safety(GRSP) from 2014, the chair for the informal working group on Deployable Pedestrian Protection System (DPPS) to develop test procedures to mitigate pedestrian injury in pedestrian accidents and the co-chair of informal working group on Automotive Life Cycle

Assessment(A-LCA) and Vehicle Interior Air Quality Phase 3.

Korea also has been actively participating totally 13 informal working groups including Electric Vehicle Safety phase 2 and Hydrogen and Fuel Cell Vehicles (HFCV) phase 2.

The status of major amendments to the KMVSS

Korea has been continuously harmonizing with international Regulations since 2006 when it first introduced three UN regulations and one UN GTR into the KMVSS.

as of March 2023, 88 UN regulations and 16 UN GTRs were reflected in the KMVSS and about 91% of the KMVSS were harmonized with UN regulations and UN GTRs excluding Korea's own requirements in the KMVSS.

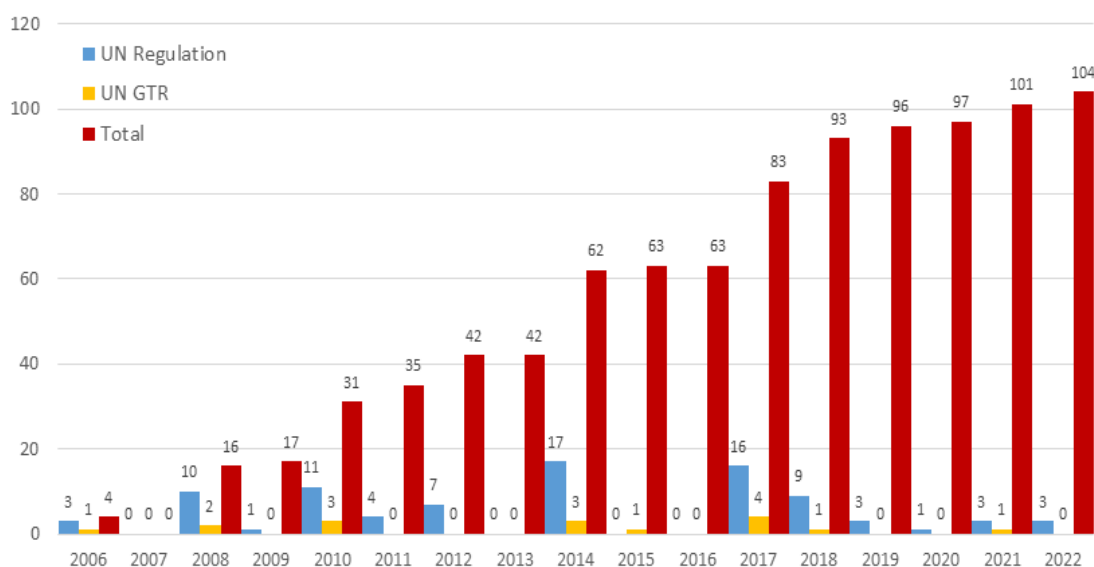


Figure 3. The number of introducing International regulations in the KMVSS

1) Introduction of UN R152 for Advanced Emergency Braking System(AEBS) for passenger vehicle (26.Oct. 2022)

Korea has steady mandated the installation of Advanced Emergency Braking System(AEBS) for large passenger vehicles, cargo and special vehicles with a gross vehicle weight of more than 3.5 tons to prevent heavy traffic accidents since 2017.

In addition, from 1. January. 2023, Passenger vehicles, cargo and special vehicles with weight 3.5 tons or less will be required to be installed in stages, and by 2027, all vehicles produced and imported in Korea should be installed as mandate requirements.

2) Reflection of revised international Regulations related to collision safety (26. Oct. 2022)

The amendments of UN regulations such as UN R94 and UN R95 on frontal collision, UN R95 on lateral collision were introduced into the KMVSS which are to enlarge applicable vehicles scope to passenger vehicles with weight of 3.5 tones or less and light trucks of a total permissible mass not exceeding 2.5 tons.

It is expected to significantly improve the collision safety of light trucks by applying frontal and lateral collision requirements and will take effect on 1. January. 2023 for new vehicles and 1. January. 2028 for existing vehicles.

3) Introduction of electrical safety of motorcycles (24. Dec. 2020)

Safety requirements of prevention of explosion and fire of traction batteries for electric motorcycles in the UN R136 in line with general electric vehicles were introduced into the KMVSS. it was come into effect on 24. December 2020.

Future plan for harmonization

Korea has been harmonized with international regulations according to mid-long term plan as a part of the 3rd Vehicle Policy Framework Plan.

In the process of establishing a mid-long term plan for the introduction of international regulations, we usually finalize decision to introduce which international regulations will be needed and proper time through technical researches and comprehensively reviews of domestic traffic conditions, policy priorities and opinions from vehicle manufacturers.

Currently, The Korea has launched several researches to introduce 10 UN regulations including simplified lighting regulations (UN R148, 149, 150), front and rear proximity alarm system for large passenger vehicles and trucks (UN R158, 159) and vehicle structure and seat strength for large passenger vehicles (UN R14, 16, 66, 80, 107).

in 2023, Korea plans to introduce international regulations that have still not been introduced such as conditions of operating stop lamp during regenerative braking and mandatory of automatically turn on headlamps and rear position lamps in the night time.

3. Korean New Car Assessment Program (KNCAP)

Korean New Car Assessment Program was introduced in 1999 with full frontal collision test of Hyundai Avante model. Since then, the number of assessment items and models have been continuously expanded, and as of 2022, the assessments of 21 items in the three areas of collision safety, pedestrian safety and accident prevention safety were conducted. and Korea plans to expand assessment system to the comprehensive assessment program in the future.

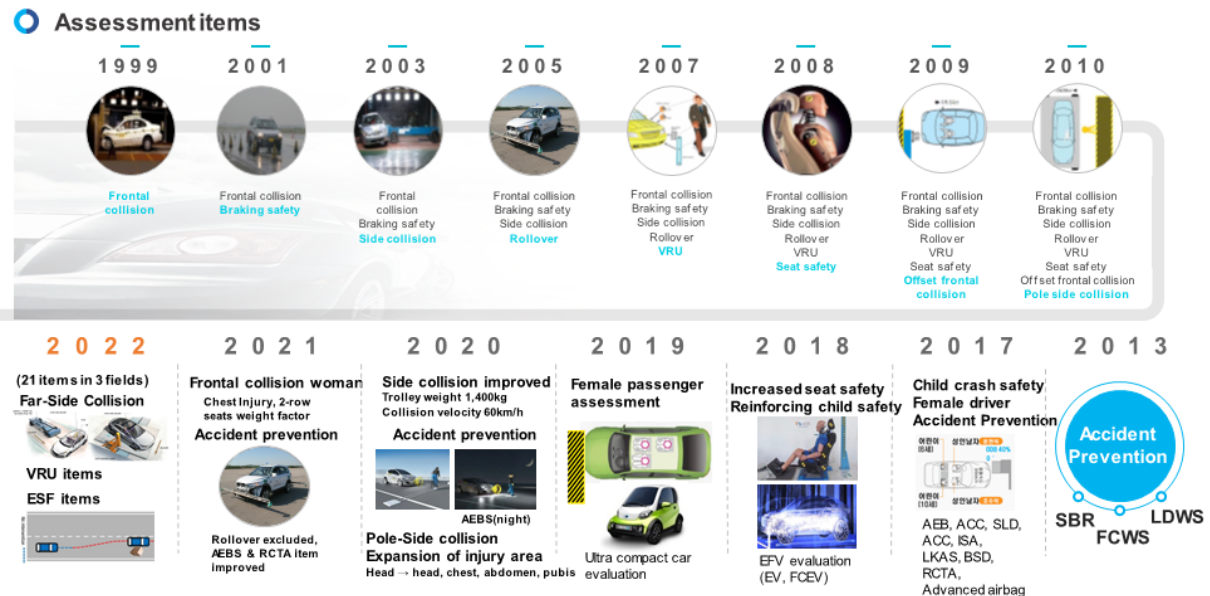


Figure 4. Expanding assessment items in KNCAP

In order to ensure the safety of vehicles in the event of an accident, as well as to strengthen accident prevention functions by installing real time monitoring system of traffic situation and

actively accident prevention system, Rating adjustment method for accident prevention assessments was reflected in 2022 for the first time and the proportion of these assessments will be expanded continuously.

In addition, beyond the safety which evaluates the safety of vehicles, Green NCAP which evaluates the GHS of whole life cycle of vehicles from the point of view of vehicle manufacturing stages and fuels, and interior air quality of new vehicles will be introduced.

Also, evaluation methods for Battery Management System(BMS) to prevent fires of electric vehicles and C-ITS to accelerate the development of V2X infrastructure will be introduced into the comprehensive assessment program.

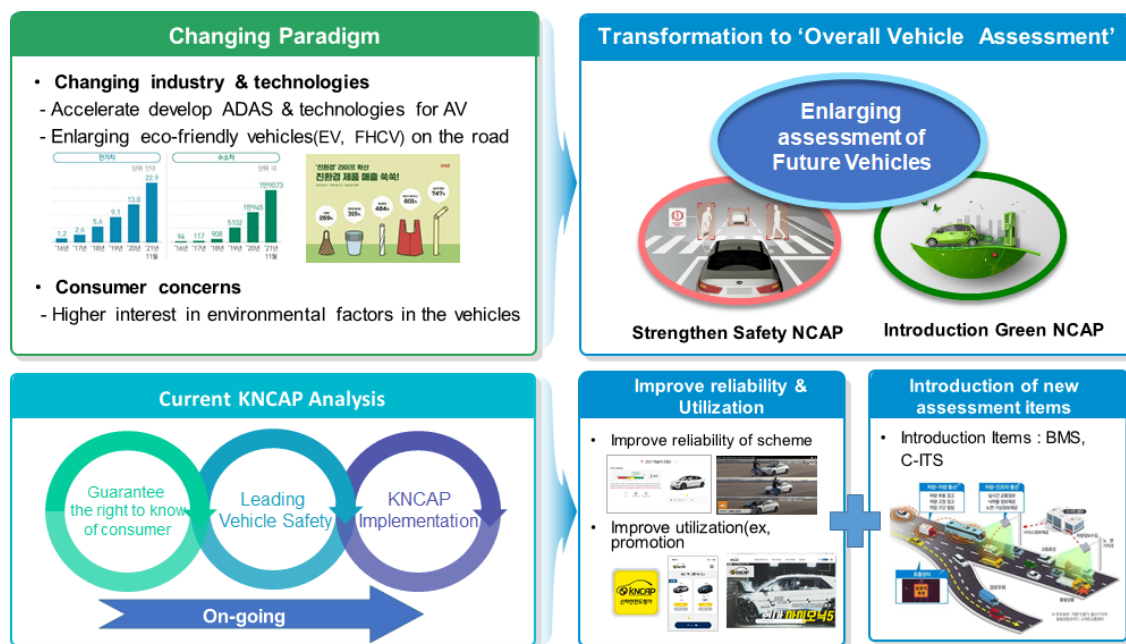


Figure 5. Policy direction for KNCAP

III. Conclusion

Korean Government has been making diverse efforts through improving the KMVSS to support the development and supply of vehicles to prepare the new mobility era, to actively participate international conferences to reduce trade barriers, trade friction and to harmonize with international regulations steadily according to the 9th National Transportation Safety Master Plan and the 3rd Vehicle Policy Framework Plan.

Also, KNCAP has been conducted to encourage to produce safer vehicles by manufacturers voluntarily. Korea now is preparing the upcoming future vehicle era by expanding KNCAP to the comprehensive assessment system.

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