



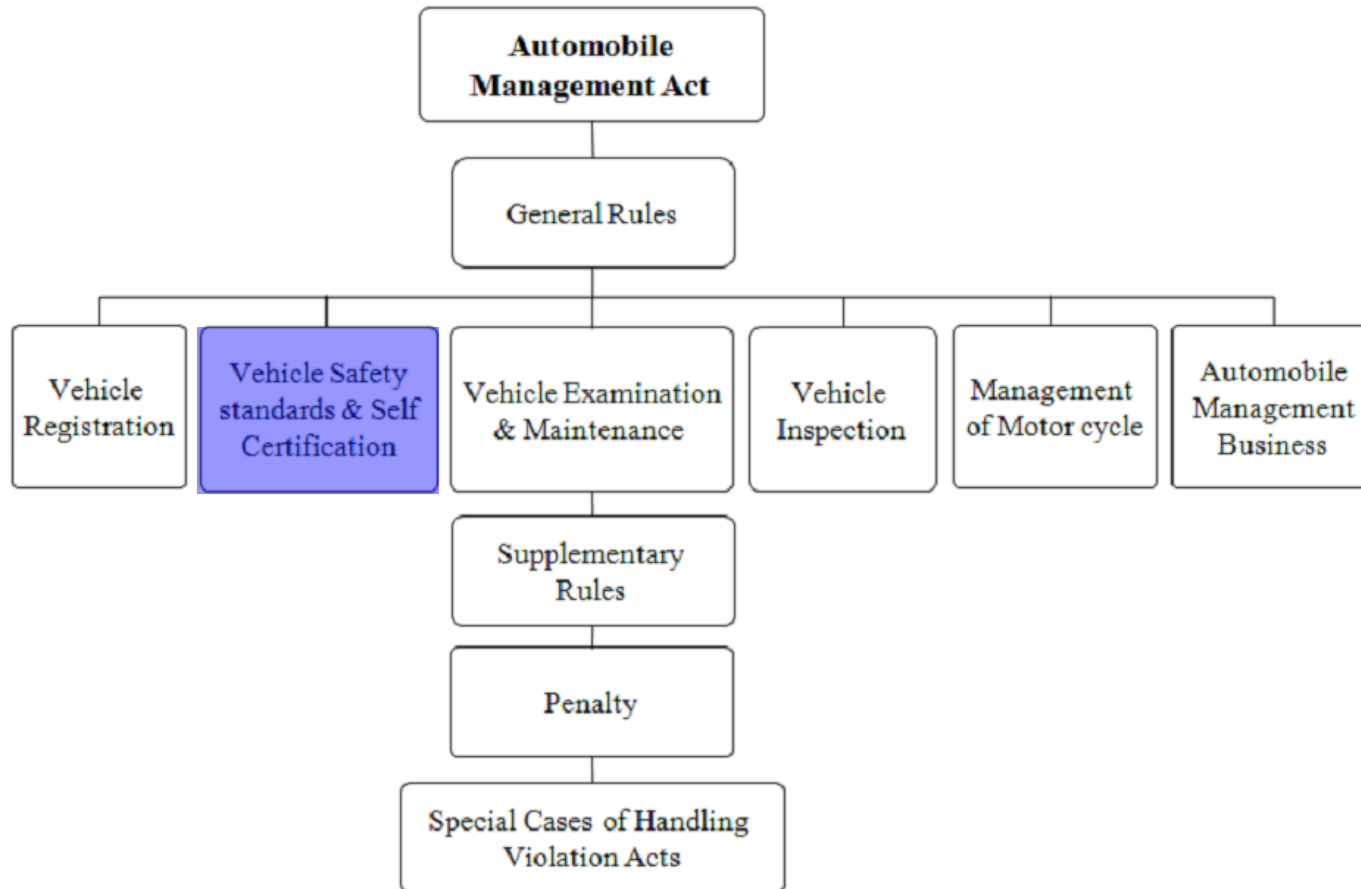
Introduction to Standards and Issues in regard to Max. power in KOREA

2017. 10. 17-18

**Korea Automobile Testing & Research Institute
(KATRI)**

Automobile Management Acts

➤ Configuration of Automobile Management Acts



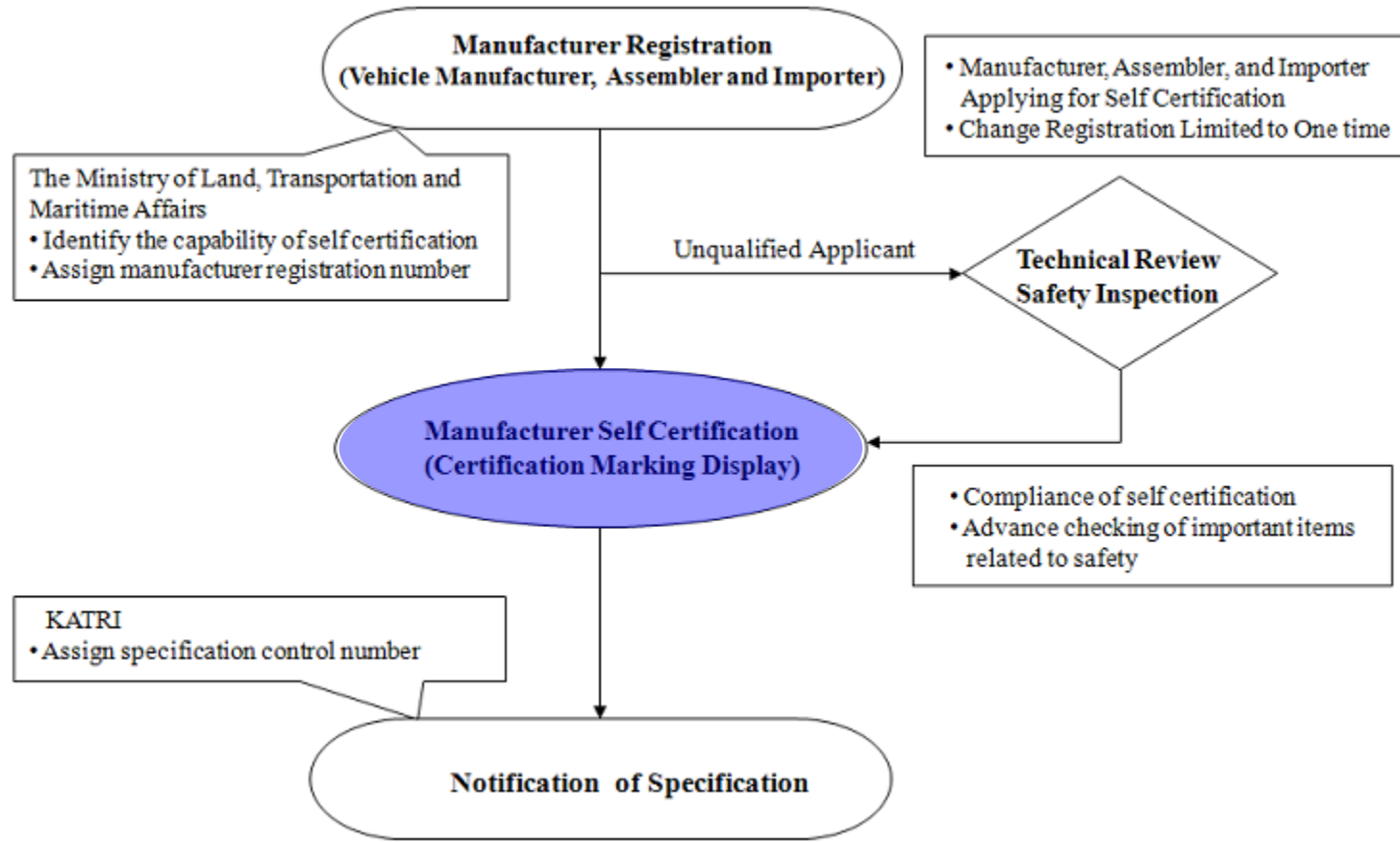
➤ The Article of Automobile Management Act in regard to “Self authentication(Certification) of motor vehicles”

Article 30 (Self Authentication of Motor Vehicles)

(1) A person who intends to manufacture, assemble, or import motor vehicles shall authenticate (hereinafter referred to as "self authentication of motor vehicles") that the model of the relevant motor vehicle meets the safety standards for motor vehicles, as determined by Ordinance of the Ministry of Land, Infrastructure and Transport. <Amended by Act No. 11690, Mar. 23, 2013>

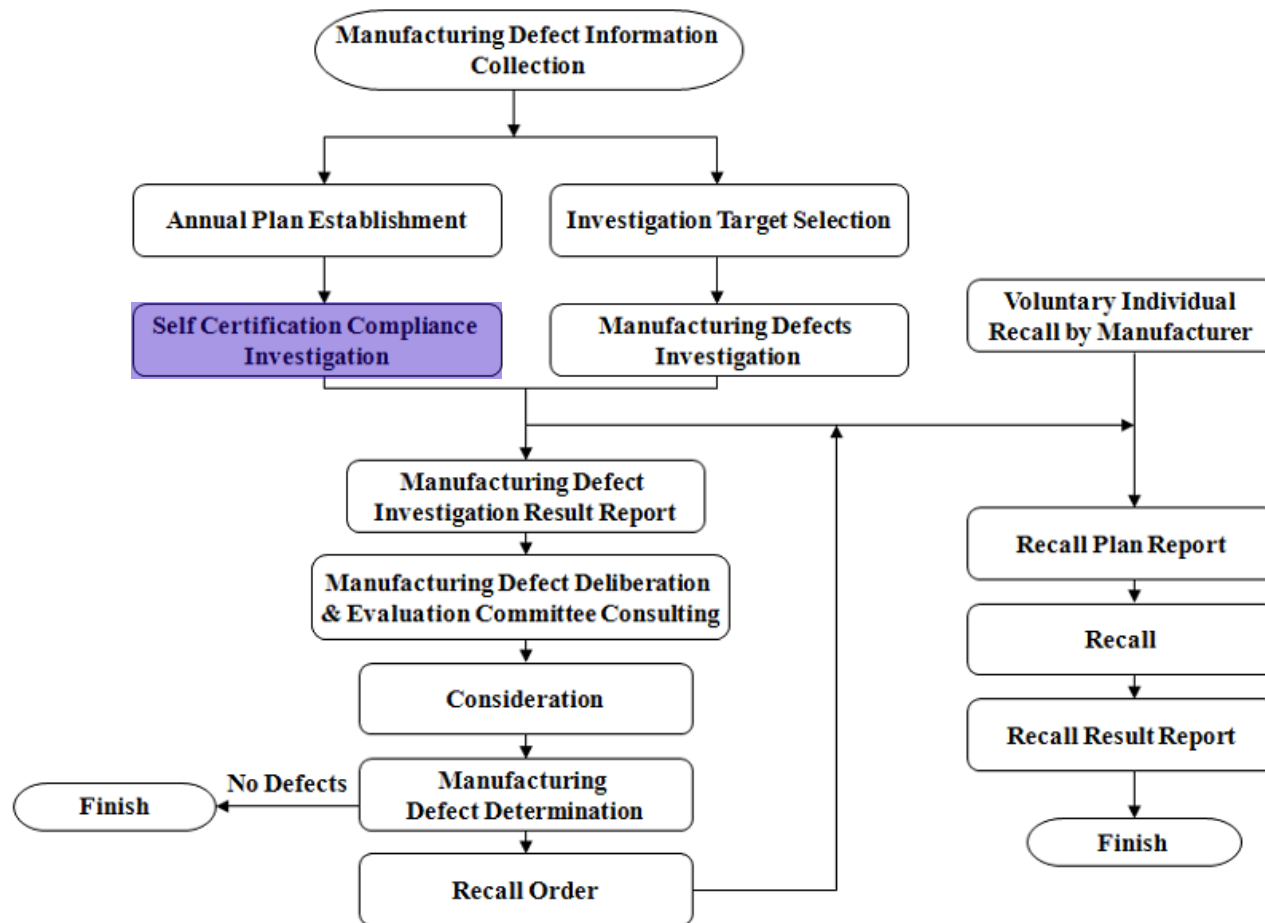
Self certification of motor vehicles

➤ Procedure of Self authentication(Certification) (From manufacturer Registration to Notification of specification)



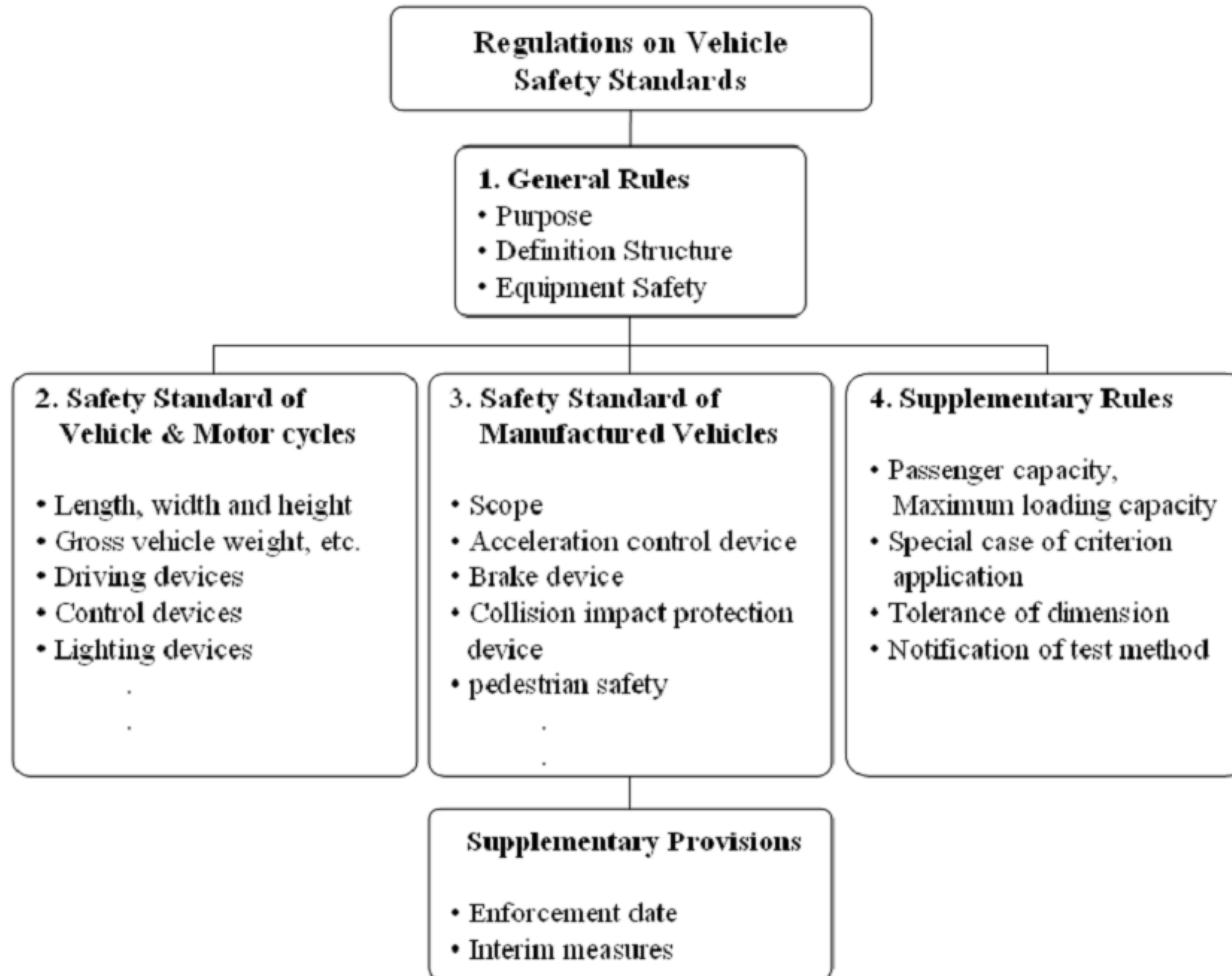
Procedure of Recall to Motor Vehicles

➤ Procedure of Recall(Compliance & Defects Investigation)



KMVSS (Korea Motor Vehicle Safety Standards)

➤ Configuration of KMVSS



Max. Power Measurement Tolerances in Korea

➤ Max. Power Measurement Tolerances

◆ In Accordance with Measured Max. Power

1. In case of Measured Power $\leq 11\text{kW}$,
Acceptable tolerance max. Power $\leq 10\%$
2. In case of Measured Power $> 11\text{kW}$,
Acceptable tolerance max. Power $\leq 5\%$

※ Same as CoP tolerance of motorcycle in EU. Reg.

◆ Scope

1. Application on Regardless of Displacement(including below 50cc)
2. Application on Excess Max. Speed 25km/h

Issues on Test Procedure of Net Power in KOREA

➤ Issues on Test Procedure of Net Power(KMVSS)

◆ Test Procedure of Net Power in KMVSS

1. Measurement at the end of the crankshaft in principle
2. Taking into account the actual efficiency of the transmission(or gearbox) where the net power can only be measured with them fitted to the propulsion.

◆ Issues & planning in regard to actual efficiency in Korea

1. No test procedure on measurement of the actual efficiency
=> Plan to research test procedure on those of the gearbox
2. No correction factor on transmission not to be able to separate from the engine
=> Harmonize with GTR, UN Reg. etc

Topics to be Covered by EPPR

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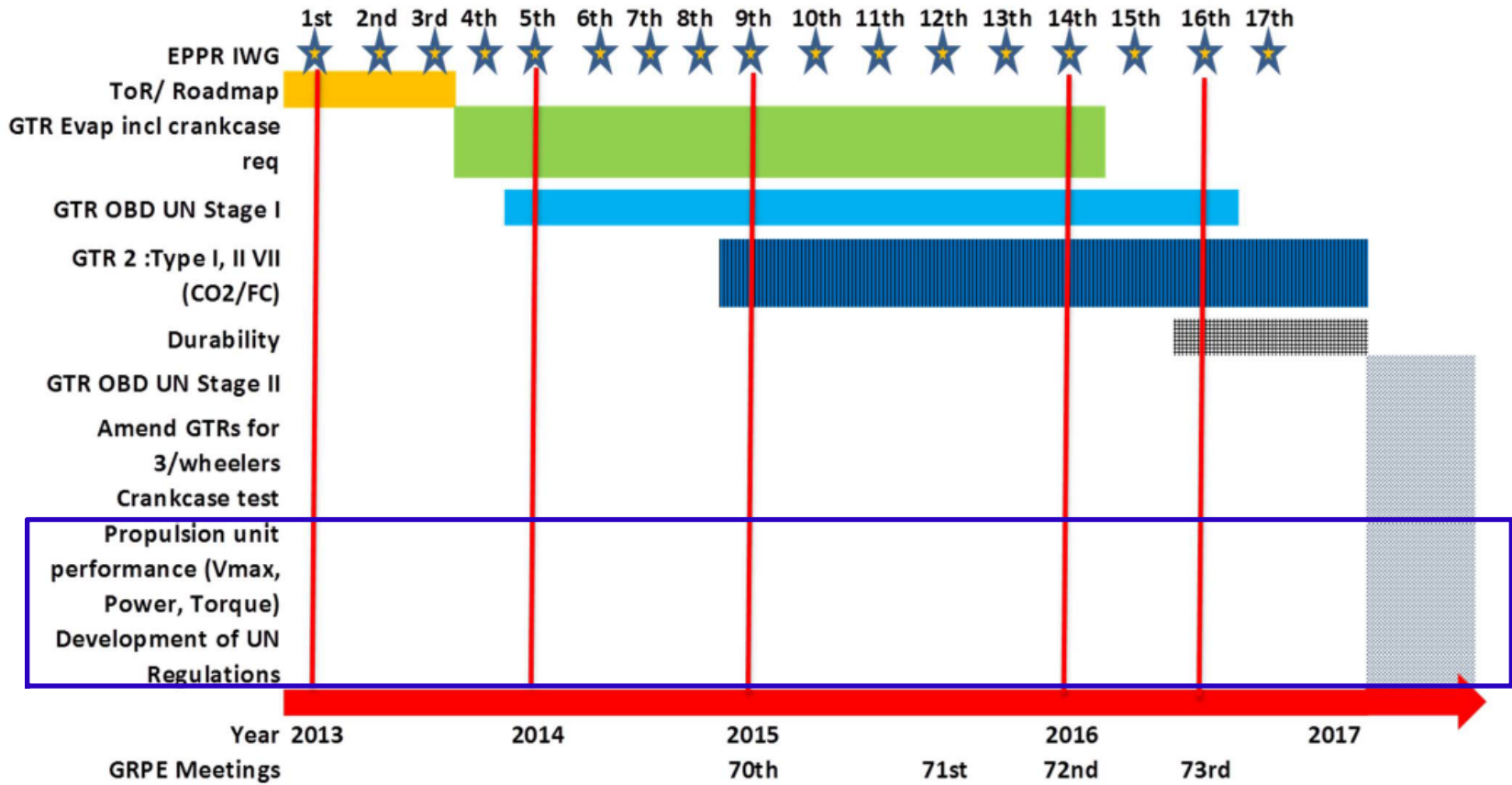
✓ Environmental performance:

- **Type I: Tailpipe emissions test after cold start (revision);** PRIORITY
- Type II: Tailpipe emissions test at (increased) idle / free acceleration;
- **Type III: Emission test of crankcase gases;** ★
- **Type IV: Evaporative emissions test;** PRIORITY ★
- **Type V: Durability testing of pollution control devices;** PRIORITY
- Type VII: Measurement of CO2 emissions, fuel consumption, electric energy consumption and electric range determination;
- **Type VIII: On-board diagnostics environmental verification tests.** ★ PRIORITY

✓ Propulsion unit performance:

- Unified rules and test procedures to measure power and torque for propulsion technologies fitted on L-category vehicles
- unified measurement of maximum design vehicle speed and/or power for restricted L-category vehicles should be developed and agreed upon.

Road map of EPPR



➤ **Opinion of KOREA regarding Max. Power**

◆ **Share Test Procedure & Reg. regarding Max. Power with members**

1. Presentation on actual test conditions regarding Max. power of KATRI and Manufacturers in Korea.(in Next meeting if possible)
2. Hope to Share those regarding Max. Power with members

◆ **Task Force to research on GTR, EC Reg. regarding Max. Power**

1. Starting 2 Phase of Propulsion unit Performance.
2. Discuss Issue Items on Propulsion unit Performance with members
3. Organization of a Task Force regarding Max. Power



Thank you for your Attention!!

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