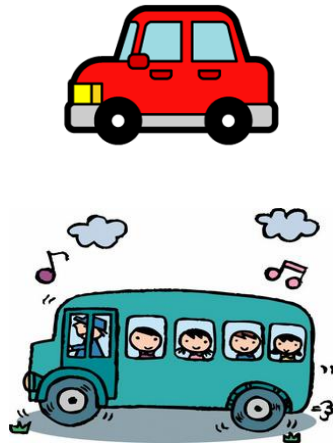


Scope of the Draft Regulation on Hydrogen and Fuel Cell Vehicles

GTR



Driver + 8 passengers
4.536 t

Test cycles;

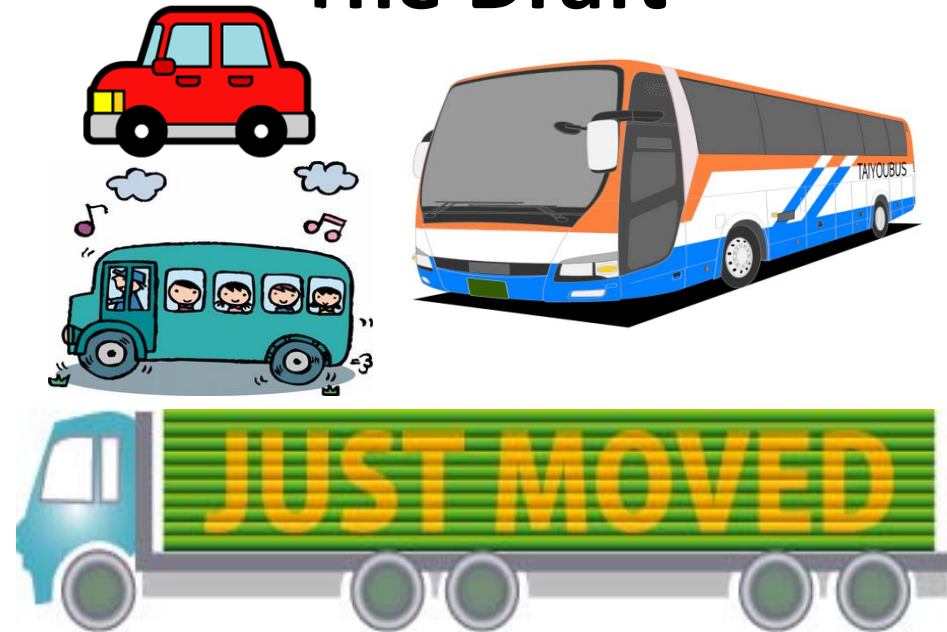
5,500 cycles

7,500 cycles

11,000 cycles

($\hat{=}$ 2 times \times 356 days \times 15 years)

The Draft



Driver + 22 passengers
12 t

Test cycles;

11,000 cycles ?

- Many Large vehicles drive long distances.
- Is 11,000 test cycles sufficient for large vehicles?
- Scope should not change from the GTR's scope.

LHSS of the Draft Regulation on Hydrogen and Fuel Cell Vehicles

GTR

CHSS
(Compressed Hydrogen
Storage System)

[Option]

LHSS
(Liquefied Hydrogen
Storage System)

The Draft

CHSS

~~**LHSS**~~



- LHSS is “Option” in the GTR.
- LHSS should be deleted from the Regulation on hydrogen and fuel cell vehicles.

Batch Tests and Production Tests of the Draft Regulation on Hydrogen and Fuel Cell Vehicles

	R67 (LPG vehicles)	R110 (CNG vehicles)	No406/2010* (CHG vehicles)	The Draft
Type approval test	Specified	Specified	Specified	Specified
Batch tests	Specified	Specified	Specified	(none)
Production tests	Specified	Specified	Specified	(none)

*COMMISSION REGULATION (EU) No406/2010(implementing Regulation (EC) No79/2009 of the European Parliament and of the Council on type-approval of hydrogen-powered motor vehicles)

- **From the point of view of safety, batch tests and production tests should be specified in the Regulation on hydrogen and fuel cell vehicles.**

Structure of the Draft Regulation on Hydrogen and Fuel Cell Vehicles

	Application for approval	Granting type approval	Approval mark	Communication
Hydrogen storage system	Para.3.1.	Para.4.1.1.	<u>Para.4.6.2.</u>	<u>Annex1 Part2-1</u>
Specific component	Para.3.2.	Para.4.1.2.	<u>Para.4.6.3.</u>	<u>Annex1 Part2-2</u>
Vehicle	Para.3.3.	Para.4.1.3.	Para.4.6.1.	<u>Annex1 Part2-3</u>

- In the case of a hydrogen storage system, the approval mark should be placed on the container.
- From the point of view of safety, the approval mark should be visible on the specific component in order to manage the scheme.
- “Annex1Part2” should be divided into “Part2-1”, “Part2-2” and “Part2-3”.

Labelling of the Draft Regulation on Hydrogen and Fuel Cell Vehicles


	The Draft (minimum labelling)	Japanese Proposal	Para.
On container 	“name of the manufacturer” “serial number” “date of manufacture” “NWP” <u>“type of fuel”</u> “date of removal from service”	The following item should be added. <u>“MFP”</u>	5.6.
On valve unit (specific components)	(none)	The following items should be added. “name of the manufacturer” “serial number” “date of manufacture” <u>“MFP”</u> “NWP” <u>“type of fuel”</u>	5.6.1.

Photo by TOYOTA MOTOR CORPORATION

- From the point of view of safety, labelling on the container and the valve unit are important in order to manage the scheme.
- In labelling, particularly important items are “MFP” and “type of fuel”.