

Transmitted by the expert from Japan

Informal document **GRB-66-08**
(66th GRB, 4-6 September 2017,
agenda item 10)

Review of Motorcycle Noise Regulation in Japan (Review of UN R41-04 Limit Value)



JAPAN AUTOMOBILE STANDARDS INTERNATIONALIZATION CENTER

1. Introduction

- Outline of Current Noise Regulations in Japan

2. Items to be Considered in the Future

- Contents to be Considered
- Deliberation Schedule

(Reference) Survey Contents

3. Summary

1. Introduction

Outline of Current Noise Regulations in Japan (New Vehicles)

- Noise Regulation Method prior to Introduction of UN Regulation

Regulation method	Outline
Accelerating vehicle noise	Regulate the noise generated when a vehicle with the acceleration pedal fully depressed has passed to reduce noise from an accelerating vehicle.
Cruising vehicle noise	Regulate the noise generated when a vehicle has passed at a constant speed (50 km/h) to reduce noise from a cruising vehicle.
Proximity stationary noise	Measure the noise generated near the exhaust pipe outlet of a vehicle at a halt when the accelerator is quickly released after the engine speed has reached a certain level to clamp down on illegally modified vehicles on the street.



Proximity stationary noise test
(No test track is required.)

- Cruising noise regulation was abolished for two-wheelers in 2013 and four-wheelers in 2015.
- Proximity stationary noise regulation was abolished for both two-wheelers and four-wheelers in 2015.

- Current Noise Regulation Method after Introduction of UN Regulation (New vehicles)

Harmonizing with International Standards

The Japanese noise regulations harmonize with international noise regulations, with R41-04 for two-wheelers, R51-03 for four-wheelers and R117-02 for tyre noise being adopted as testing methods and limit values.

2. Items to be Considered in the Future

Contents to be Considered

(These issues were raised in Informal Document GRB-62-12 at 62nd GRB held in September 2015.)

Noise Measures for New Vehicles

- Review of motorcycle noise regulation
(Review of R41-04 Limit Value where necessary)

Noise Measures for Vehicles in Current Usage

- Review of check system for issues such as muffler performance (review of replacement muffler system where necessary)
- Consideration of effective date of tyre noise regulation for noise outside of vehicles in current usage (application of R117-02 on vehicles in current usage)

2. Items to be Considered in the Future

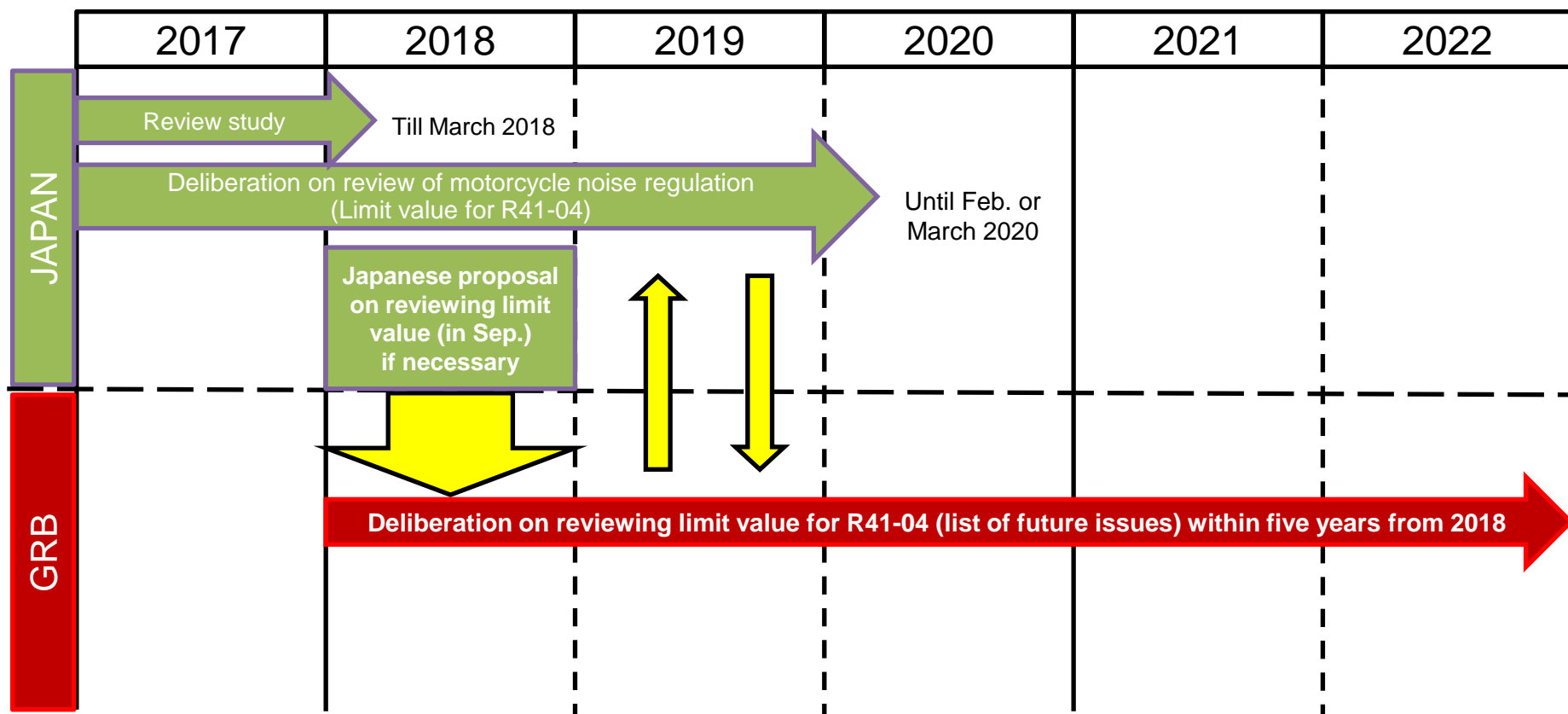
Deliberation Schedule

- Schedule proposed by Japan (draft)

Period	Outline
25 April 2017	Specialist committee under Central Environment Council (CEC) will commence investigations related to review of motorcycle noise regulations
May 2017 to August 2018	Hearings with relevant bodies will be held
December 2017 to August 2018	Japanese proposal related to review of limit value for R41-04 will be considered
September 2018	Japanese proposal for reviewing limit value for R41-04 based on the domestic study will be presented at Working Party on Noise (GRB)
September 2018 to January 2020	Based on state of discussion at GRB, Japan will consider proposal for reviewing limit value for R41-04
February 2020 to March 2020	Collate review of Motorcycle Noise Regulation

2. Items to be Considered in the Future

- Deliberation Schedule for Reviewing Limit Value for R41-04 in Japan and in GRB



(Reference) Survey Contents

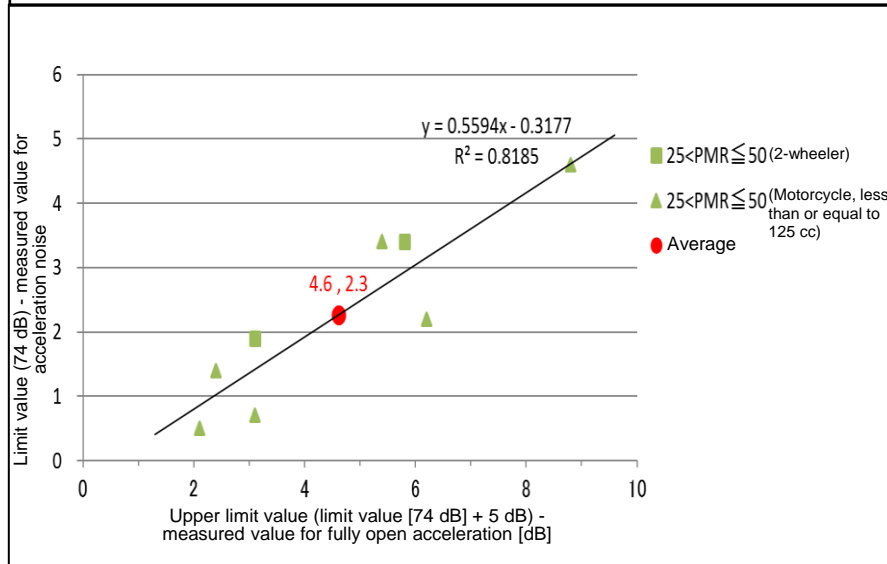
Study on Reviewing R41-04 Limit Value

- Noise Fact-Finding Investigation on Vehicles that conform to Latest Noise Regulations (R41-04)

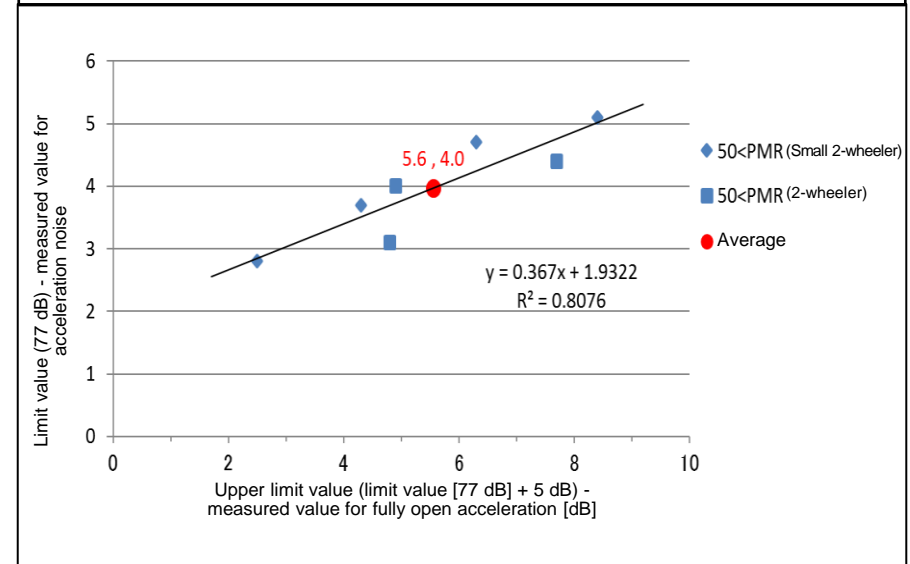
Regulation classification of R41-04	Type	Number of vehicles	Number of motorcycle manufacturers
Class 3 ($50 < \text{PMR}$)	Small 2-wheeler	4	4
	2-wheeler	3	3
Class 2 ($25 < \text{PMR} \leq 50$)		2	2
	Motorcycle, less than or equal to 125cc	6	3
Class 1 ($\text{PMR} \leq 25$)	Motorcycle, less than or equal to 50cc	2	1

The results of Noise Fact-Finding Investigation. (Relationship between Lrban and Lwot)

class 2 (25<PMR≤50)



class 3 (50<PMR)

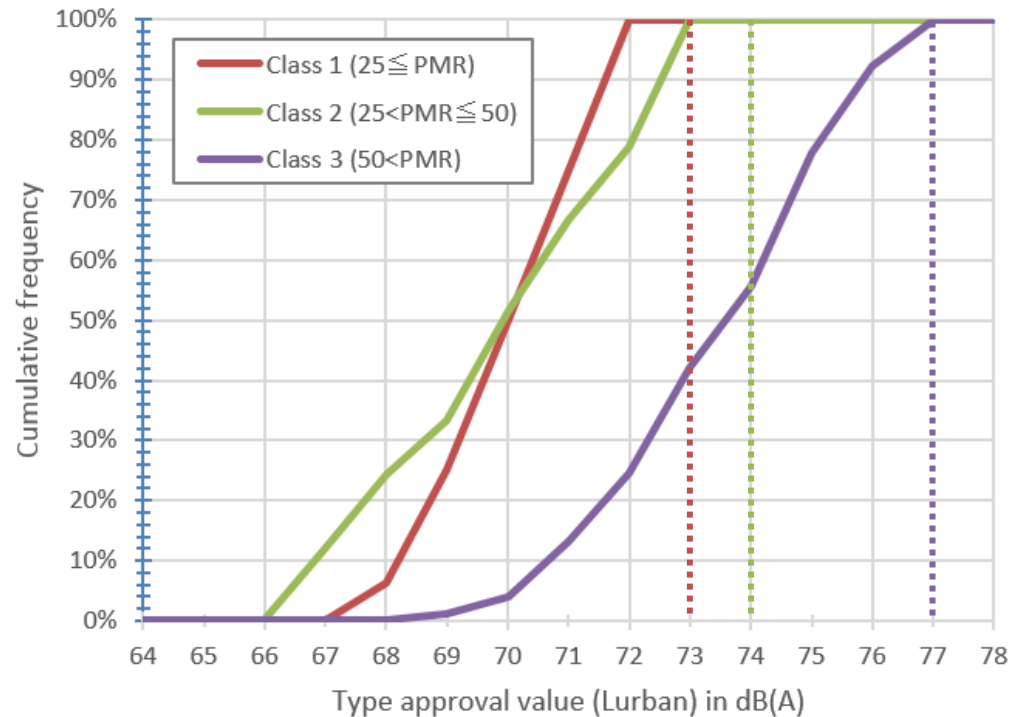


-Noise fact-finding investigations on 10 more motorcycles are planned and noise value distribution status to be considered by March 2018.

-Based on the study above, estimates to be made on the impact to road traffic noise by boosting noise limit values for 2-wheelers.

Hearings Survey Results from the Relevant Bodies

Cumulative Frequency Curve of the TA Value of the Motorcycles (L3 category) Sold in Japan



	Class 1	Class 2	Class 3
Current Limit Value	73dB	74dB	77dB
-1dB	72dB (100%)	73dB (100%)	76dB (92.4%)
-2dB	71dB (75.0%)	72dB (78.8%)	75dB (77.95%)

3. Summary

- We are considering reviewing the limit value for 2-wheeler acceleration noise regulation (UN R41-04), in the belief that there is a need to continue working toward better noise reductions.
- Japan hopes the consideration of reviewing limit value of UN R41-04 will start on schedule in 2018-2023 at GRB and that its deliberation schedule can be synchronized with the GRB deliberation schedule.
- Regarding the review of limit value for UN R41-04 and for other issues related to R41, we hope that another discussion arena will enable efficient discussions in order to move the plan ahead at a pace suitable to the GRB deliberation schedule.
- If there is to be discussions about measures for things like LAeq and LAm_{ax} within the deliberation on reviewing limit value for UN R41-04 at GRB, we would like to support such deliberations as well.

Thank you for your attention.



JAPAN AUTOMOBILE STANDARDS INTERNATIONALIZATION CENTER