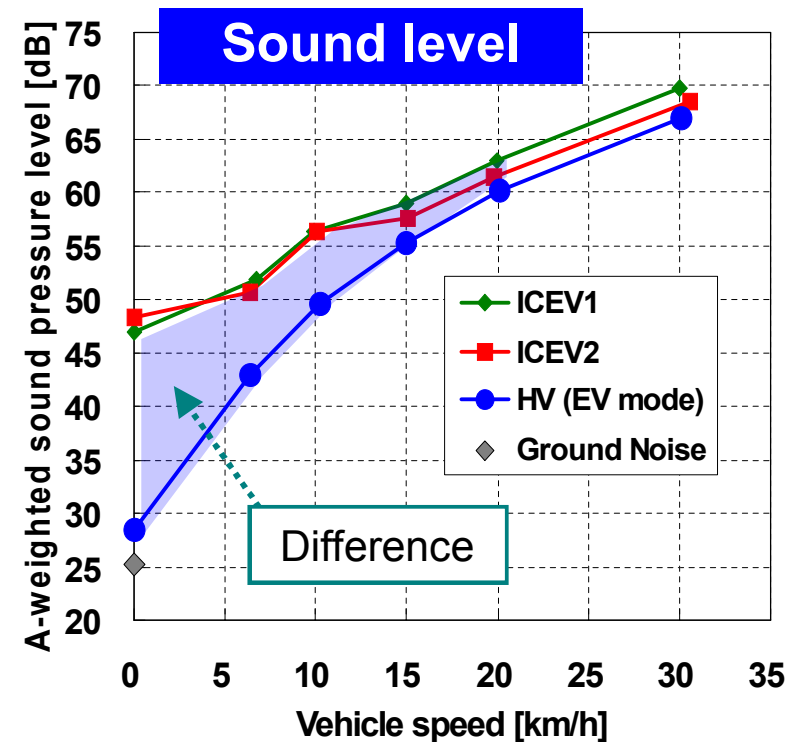
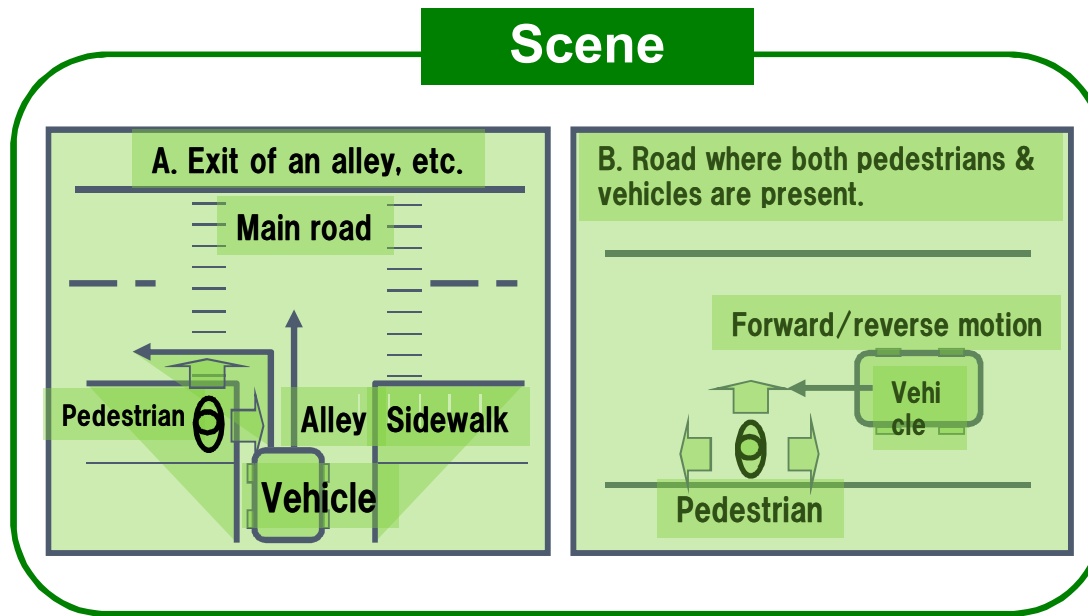


# **Background of specified vehicle speed for AVAS in Japanese Guideline**

**18-20 October 2011**

***JASIC***

# Situations where the measure is necessary

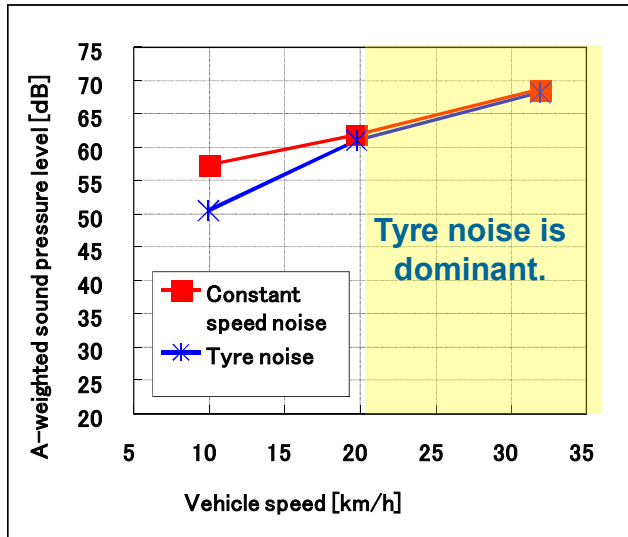


- According to experiments of visually-impaired people where the quietness becomes a problem (above A, B, *low vehicle speed*).
- Difference between sound levels of HV (EV mode) and ICE is *below 20km/h*.

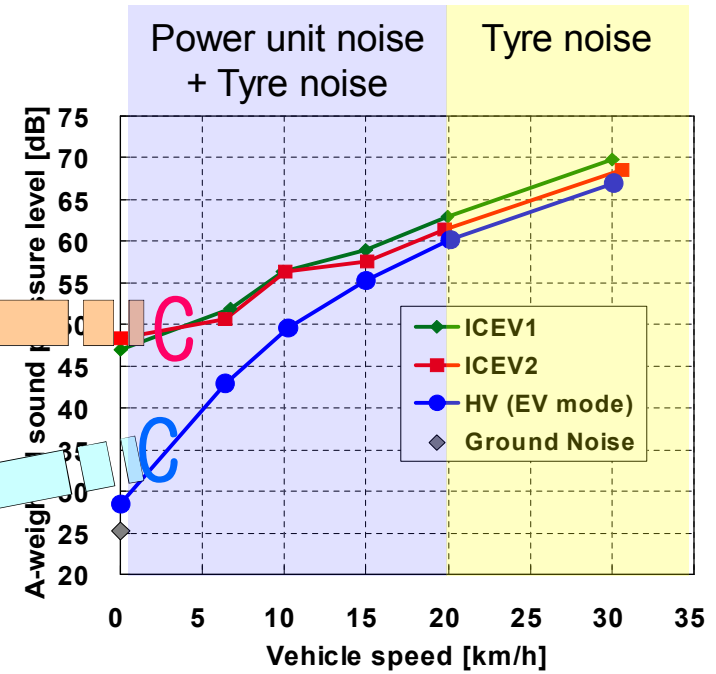
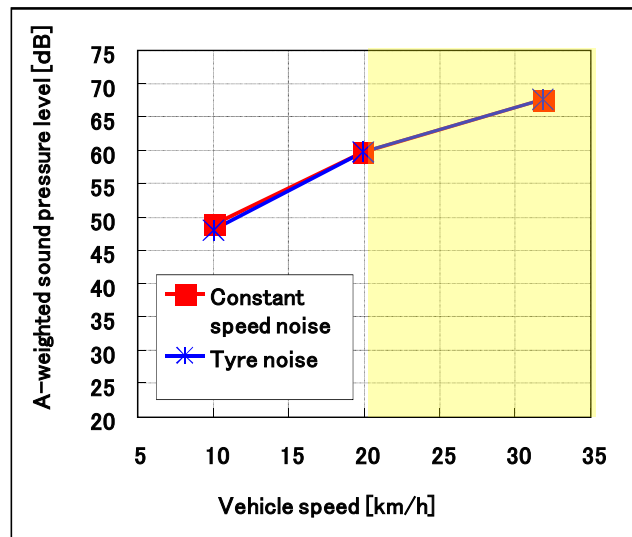
**Conclusion : Minimum speed range = up to 20 km/h**

# Difference between HEV(EV mode) and ICE

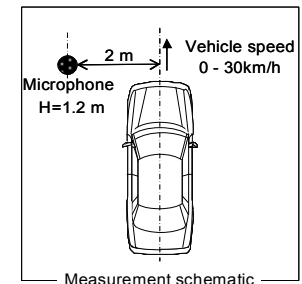
ICE



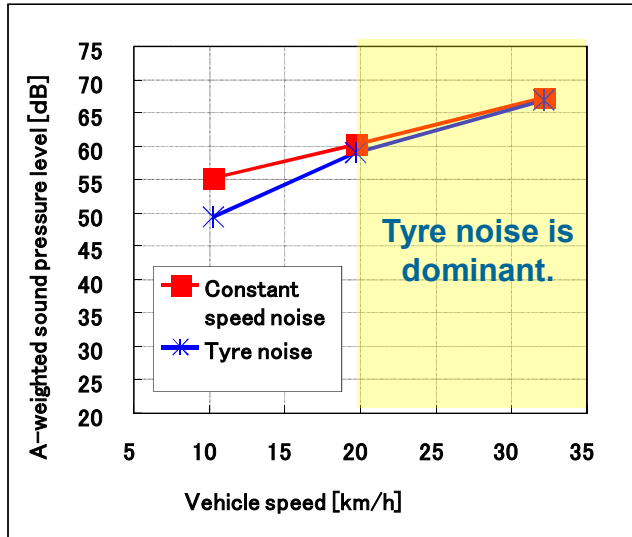
HEV (EV mode)



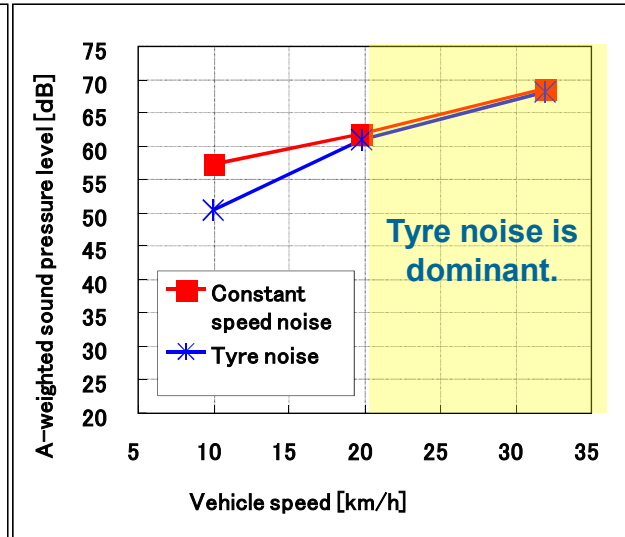
Tyre noise is dominant after 20 km/h for both of HEV and ICE.



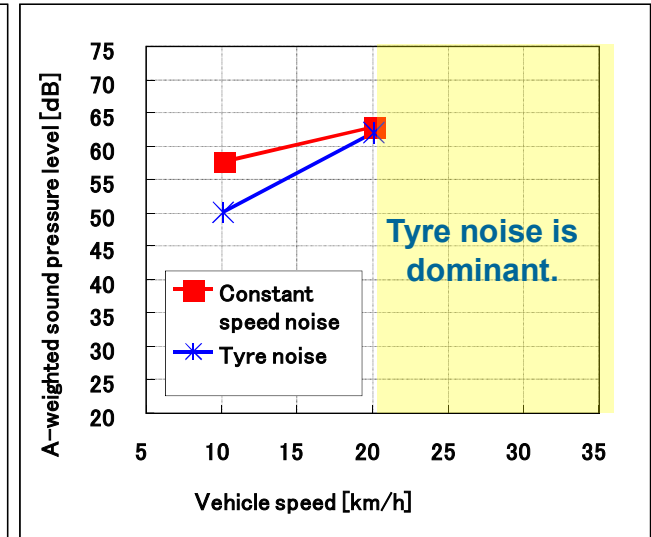
1.5L Gasoline



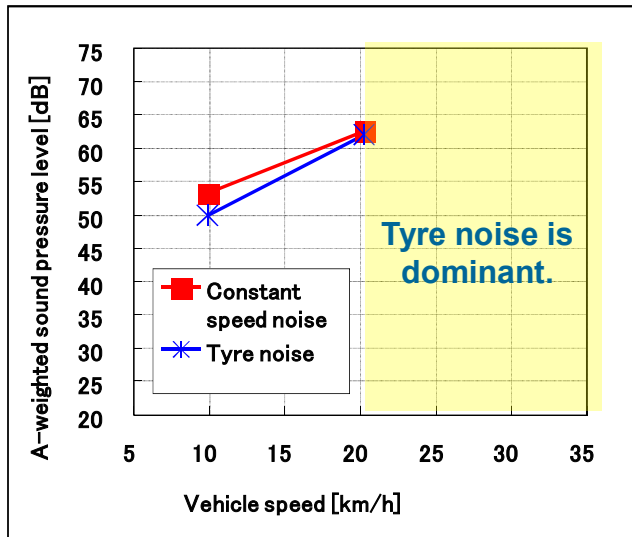
2.0L Gasoline



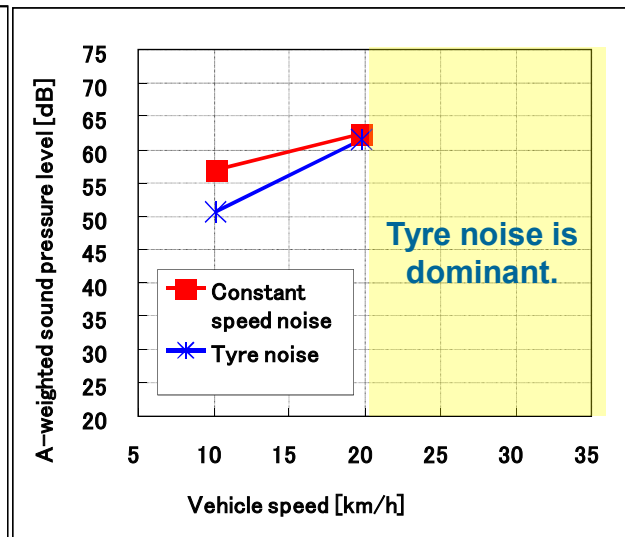
3.5L Gasoline



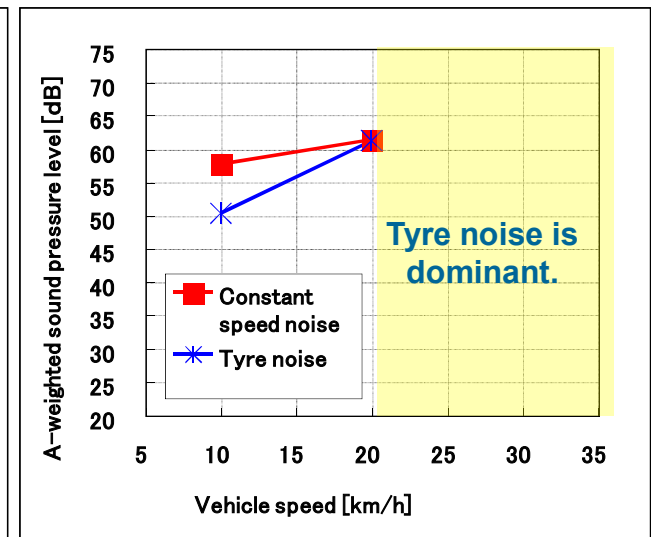
1.3L Gasoline



1.5L Gasoline



2.5L Gasoline



Tyre noise is dominant for every ICE vehicle at vehicle speed exceeded than 20km/h. Therefore, *there is no difference between EV/HEV and ICE above 20km/h.*

# Demonstration in the Workshop

- Participants were asked to raise their hand when they noticed the vehicle passing by.
- No body raised hand in case of EV at 10km/h.
- All of participants were noticed EV at 25km/h.

Driven at constant speed **10 km/h**



Driven at constant speed **25 km/h**

