

7th ASEP IWG, 20-22 March, 2018.
Changchun, China.

Technical plans on China ASEP

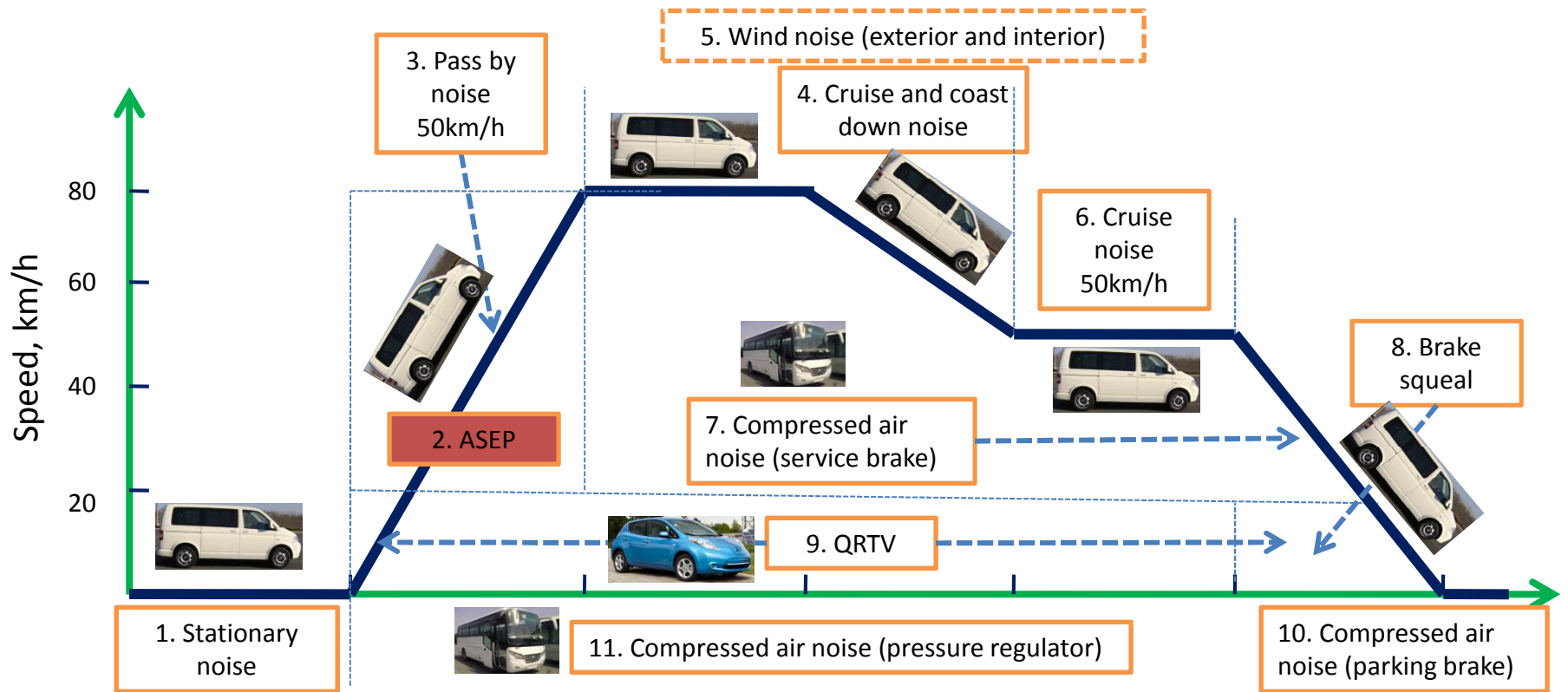


CHINA AUTOMOTIVE TECHNOLOGY & RESEARCH CENTER

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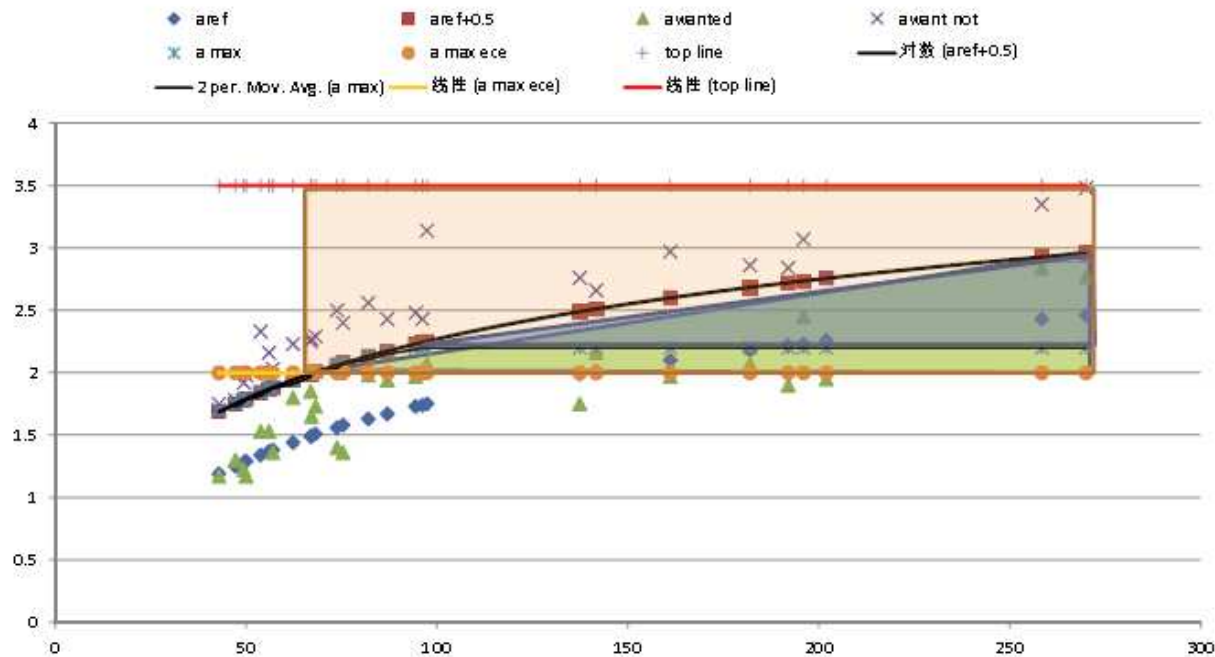
Long-term plans for noise working group



Build up a noise regulation system to cover all behaviors of all vehicles on road. See document "GRB-62-10", 2015.



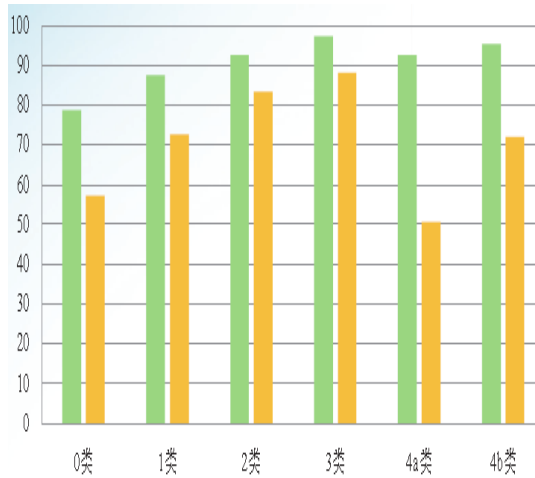
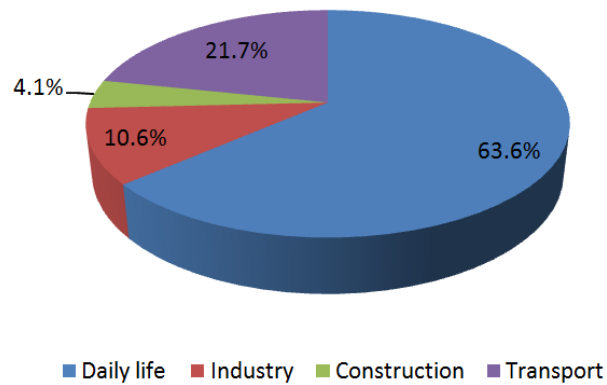
Products - SCOPE and border line



* China began the research on ASEP from the side of products, in the year of 2016. See document "ASEP-05-06".

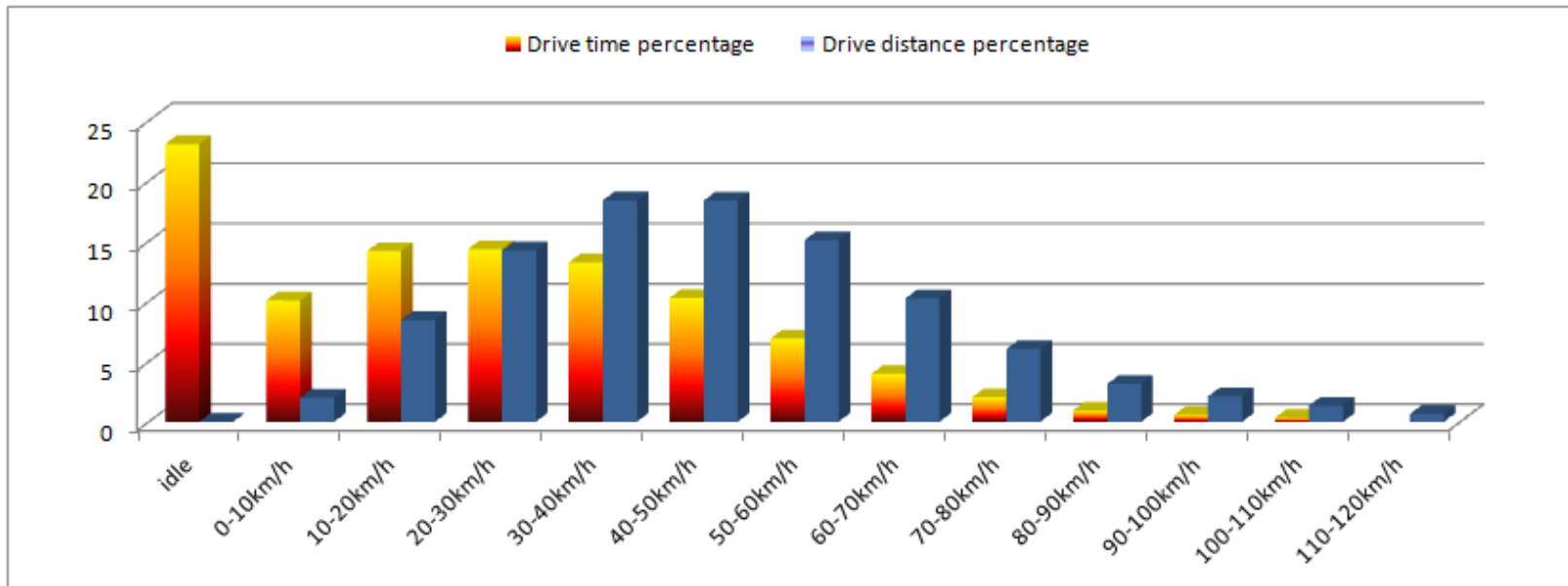
Environment-noise problems

Noise distribution



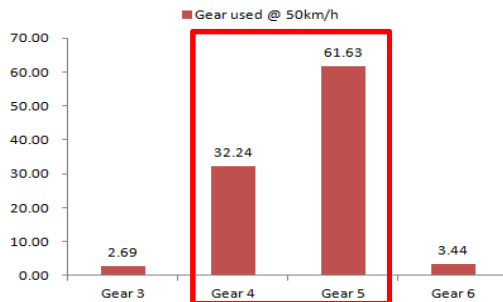
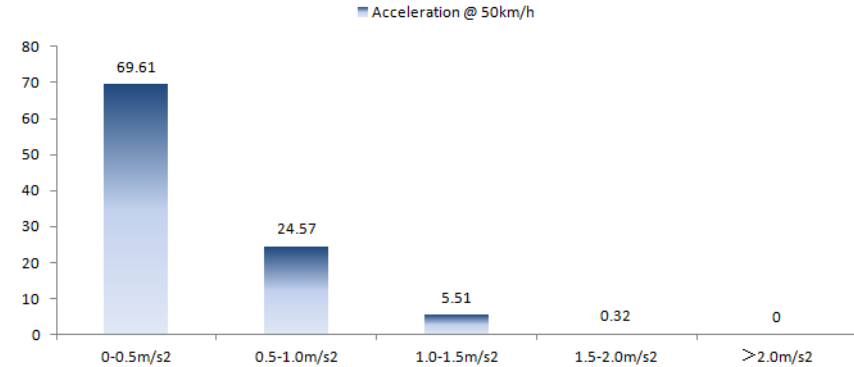
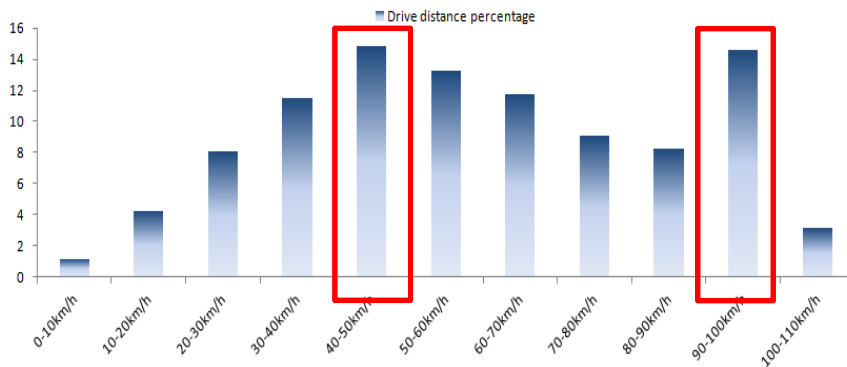
* China began to consider the real transport noise problems from the beginning of 2017. See document “ASEP-03-03”.

China automotive test cycles



* China tried to find the solutions for transport noise problems from CATC in the beginning of 2017. See document "ASEP-04-11".

Try to find solutions



ASEP	$v_{AA'}$ (km/h)	$n_{AA'}$ (r/min)	$v_{BB'}$ (km/h)	$n_{BB'}$ (r/min)
Gear 2	20.6	3786	48.9	3806
Gear 2	21.6	3636	46.1	3636

* The first round proof tests of China in the summer of 2017 for checking the test method now, the possible solutions on test method. See document "GRB-66-13".

Try to find solutions

- **Vehicle speed and vehicle acceleration**

- Vehicle speed (cruise tests with speed 30km/h, 50km/h and 70km/h).

- Vehicle acceleration (acceleration tests)

- V_{pp} = 30km/h, 50km/h and 70km/h;

- Gear for 30km/h: $(1+i)/2$; Gear for 70km/h: $(i+1+X)/2$, ("X" means the total gears number).

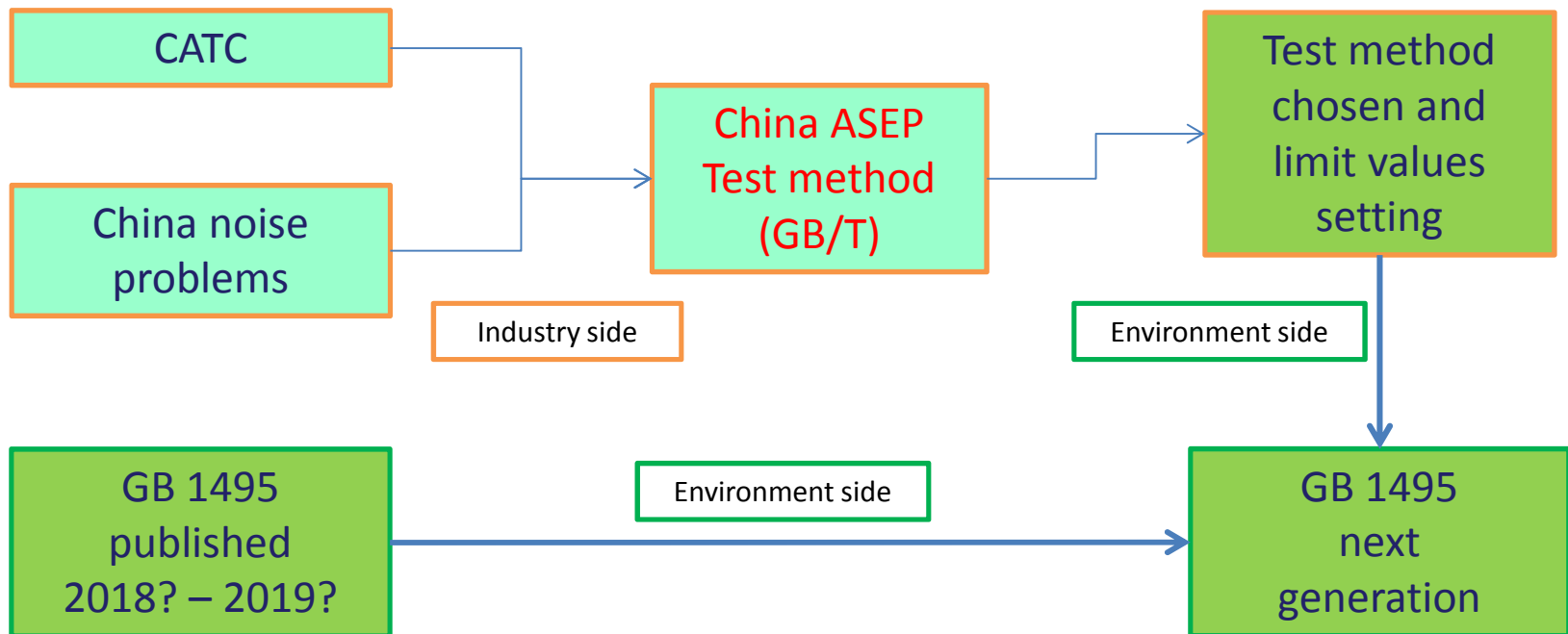
For ASEP:

- Stable noise (vehicle speed, engine speed).

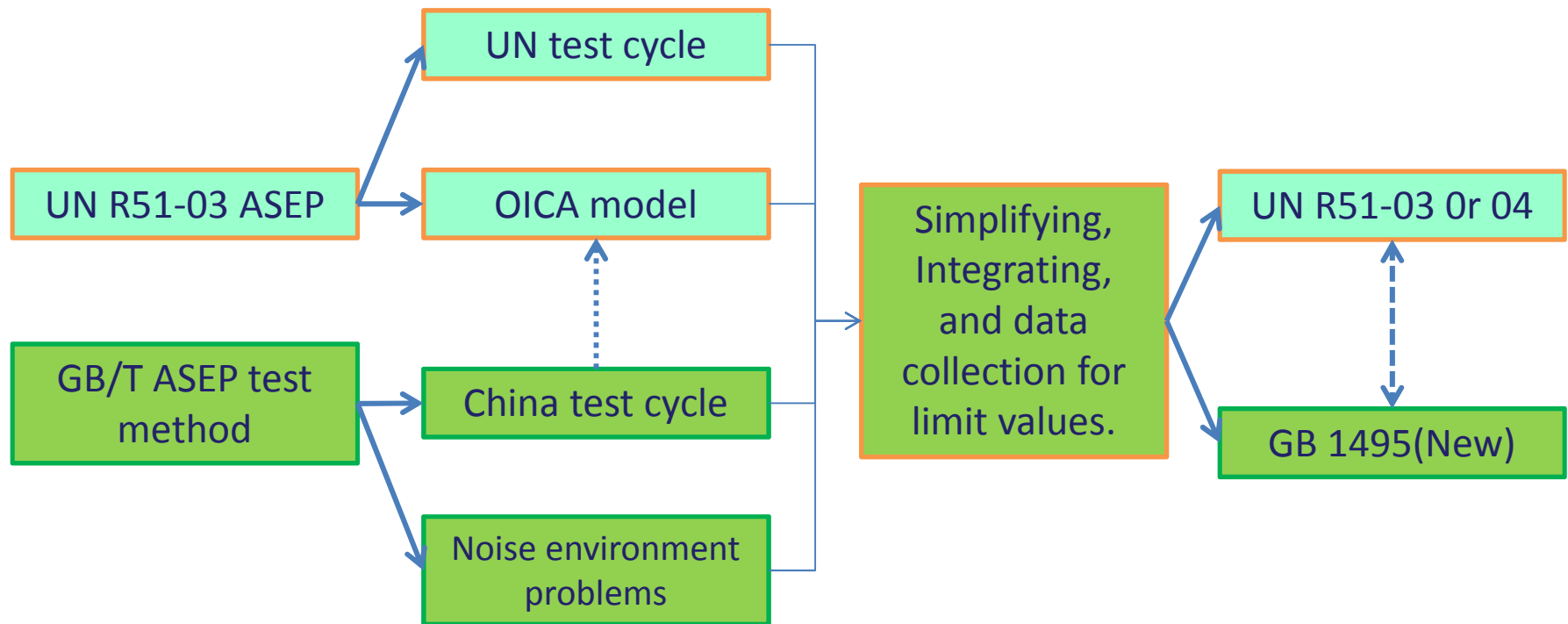
- Burst noise (engine acceleration, vehicle acceleration).

* China try to find the vehicle behaviors behind the noise problems and simplify the test method during the summer of 2017.
See document "ASEP-04-11".

Technical plans on China ASEP



How to combine with UNECE



Other issues

- Noise near the express way.
- Noise of commercial vehicles during the night (especially N_2 and N_3 categories).
- Electric vehicles (especially EV with high torque and M_3).



National Automotive Standardization Technical Committee



Thanks for your attention



Web site: www.catarc.org.cn

