

Issues to be considered for modifying the vibration requirement in GTR20

Vibration ad-hoc meeting 29 September 2021 Submitted by OICA



Issue 1: Why the vibration requirements need to be amended?

- ➤ GTR20 Phase 1 already includes vibration requirements equivallent to UNR100-02
- ➤ Although the test procedure might not be ideal, there is no reported field incident due to vibration
- > Existing requirements are effective (or might be redundant)
- If existing regulation is modified, there must be certain improvement expected on the products in the market with clear cost-benefit



Issue 2: How to determine the standard profile for GTR?

- > Various road and driving environments in the world
- Various vehicle concepts/packages
 - e.g. automated shuttle with limited operating domain
- ➤ Vibration characteristics of REESS **affected by various factors** such as masses and dimensions, mounting position, vehicle structure, suspension, tire, etc.
- >GTR should provide minimum safety requirements



Issue 3: Will minimum level be necessary for vehicle specific vibration profile?

- > The need of vehicle specific vibration profile:
 - Allows optimized design of REESS
 - Improve development efficiency as vibration tests will anyway be conducted for reliability and durability
- Vehicle concepts/packages and intended market conditions will be reflected
- > Determined with competitive and proprietary know-how