

# Proposal of Equivalence Criteria

42<sup>nd</sup> TF TA  
26<sup>th</sup> Jan 2026



**JAPAN AUTOMOBILE STANDARDS INTERNATIONALIZATION CENTER**

### **Equivalence criteria:**

- ✓ ETRTO to further explore and come with a text proposal for the conservative transfer function approach.
- ✓ JASIC to check what additional technical elements on drum test method specification and improvements that can be addressed in the UNRxxx for adoption in GRBP 83rd session.

JASIC agrees with the conservative transfer function approach proposed by ETRTO. We would like to propose an idea that combines the conservative transfer function approach with additional technical elements for the drum test method specification.

- ✓ At TFTA 41<sup>st</sup> session, JASIC proposed narrowing the abrasion level range of the SRTT to effectively establish testing under ‘same severity’ conditions as direction for improving the accuracy of the drum test method.
- ✓ Based on this idea, we propose a tentative improvement to the test accuracy of the 83rd GRBP by tightening the upper limit of the reference abrasion level.
- ✓ We propose a candidate upper limit of 135 mg/km/t for SRTT17S and SRTT17W, based on JRC’s recommendation reported in TA-42-3.

## Proposed change

### 2.4.2.3. Test Surface

...

The abrasion level of the SRTT17S reference tyre for all types of surface shall be in the range between 45 mg/(km·t) and ~~190~~ **135** mg/(km·t).

The abrasion level of the SRTT17W reference tyre for all types of surface shall be in the range between 35 mg/(km·t) and ~~165~~ **135** mg/(km·t).

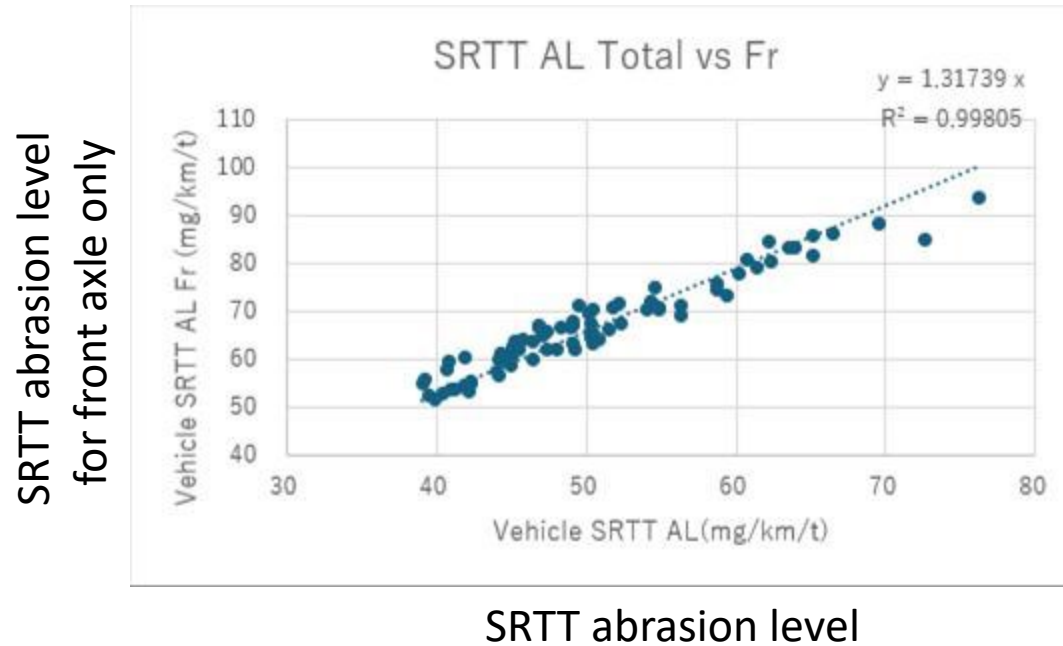
...

- ✓ This is a specific proposal from JASIC in response to the transfer function approach proposed by ETRTO.
- ✓ First, we emphasize that a COP of 0.25 has already been considered. COP is also valid for results between test methods. We propose provisionally setting a transfer function for outliers that exceed the COP.
- ✓ The idea is to use the abrasion level of the reference tyre as a basis to correct test results in areas where the severity deviates from vehicle test.
- ✓ Specifically, when the abrasion level of the reference tyre is between 100 mg/km/t and 135 mg/km/t, 0.2 is added to abrasion index of the drum test results.
  - ✓ The average outliers where the drum test results are smaller than the vehicle test results are between 0.4 (a difference of 0.25 or more) and 0.45 (a difference of 0.3 or more). Taking the COP 0.25 into account, a correction of 0.15 to 0.2 is appropriate.
  - ✓ The abrasion level of the reference tyre in vehicle test is approximately 100 mg/km/t for the front axle when the average for all four wheels is 75 mg/km/t. A maximum of 100 mg/km/t is expected in vehicle test.

### Proposed change (TBD)

In case a drum test is conducted and the abrasion index of the reference tyre is between 100 mg/km/t and 135 mg/km/t, the abrasion index obtained from the test results plus 0.2 shall be used as the abrasion index.

All data of SRTT17S and SRTT17W from vehicle tests  
 Relationship between four-wheel average and front axle average



The abrasion level of the reference tyre in vehicle test is approximately 100 mg/km/t for the front axle when the average for all four wheels is 75 mg/km/t. A maximum of 100 mg/km/t is expected in vehicle test.

TA-42-3 JRC analysis ETRTO-JASIC database

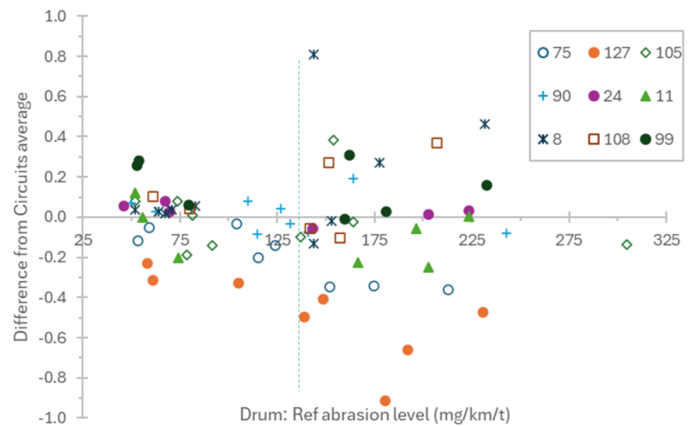
## Drum reference abrasion level

For some tyres higher abrasion levels resulted in higher differences from the average abrasion level index of the circuits.

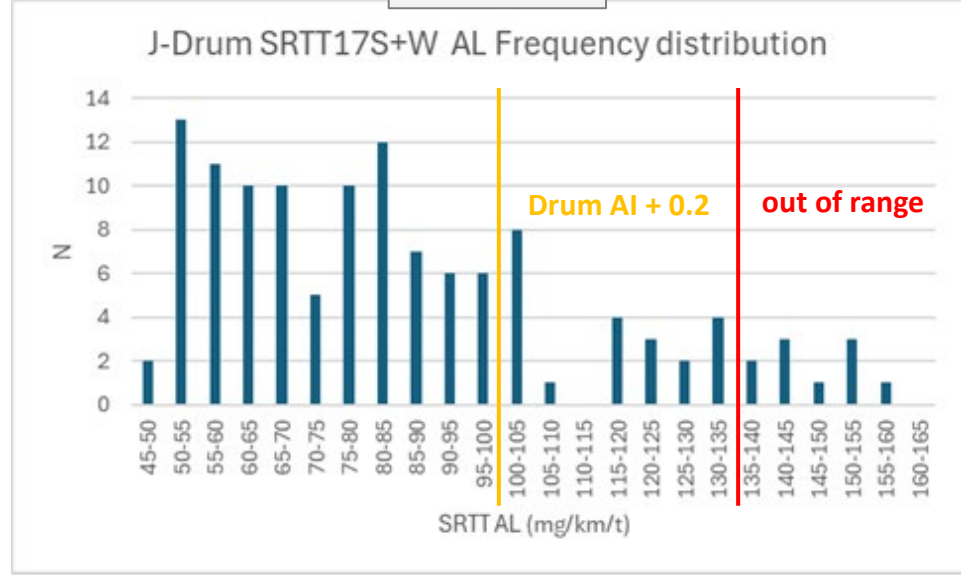
Maybe (like temperature) the test severity impacts some tyres differently than the reference tyre.

A maximum upper level of around 135 mg/km/t for the reference tyre is recommended

No conclusion can be drawn for the lower end (available data down to 45 mg/km/t)



JASIC analysis



**Upper limit**  
135 mg/km/t

**Correction applied**  
100 to 135 mg/km/t