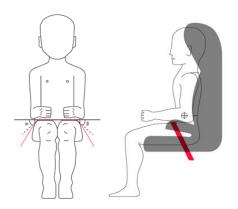
# Japan's Research of the Lap Strap Angle of CRS, and Revised Proposal to the "ECE/TRANS/WP.29/GRSP/2016/14"

60th GRSP Informal Group on Child Restraint System
13<sup>th</sup> September 2016
JASIC

# Background

Netherland made a proposal "ECE/TRANS/WP.29/GRSP/2016/14", to amend UN R44 by adding a requirement to measure the lap strap angle in the 59<sup>th</sup> GRSP. Japan basically supports the justification, however we think there are 3 issues in the proposal.

- There is no justification for the criteria, " $10^{\circ}$ ".
- There is no definition of the measuring method.
- There is no data of the lap strap angle of the available CRS.



Japan researched the lap strap angles of the booster seats or cushions available in Japan, with JAPIA's cooperation.

## **Measurement Condition**

Lap strap angles of 22 types of booster seats/cushions currently available in Japan were researched.

#### Conditions of measurement:

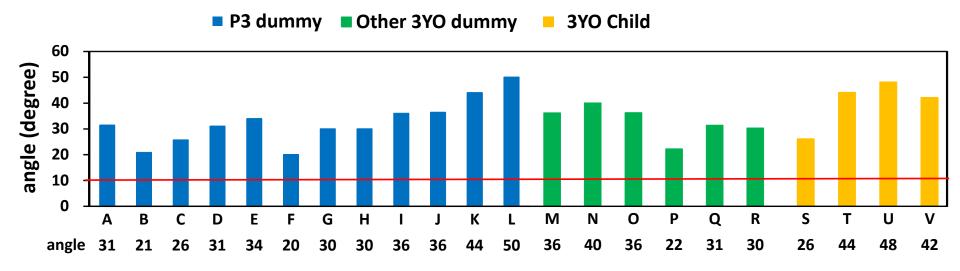
- On a UN R44 test bench, a vehicle or a seat jig
- With a P3 dummy, other 3-year-old dummy or a 3-year-old child
- At the front edge of the belt





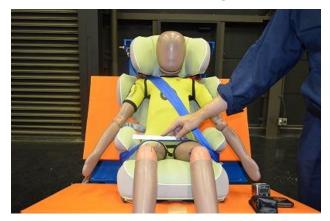


### Results



- The angle was measured on both the left and right sides;
   the smaller of the two is indicated.
- The smallest angle was 20°.
- In this research, all booster seats/cushions meet the 10° criterion in the Netherlands' proposal.

# Japan's Proposal





Japan basically supports the Netherlands' proposal and has confirmed that all CRS that we researched meet the 10° criterion.

However, we are concerned that (1) there is no basis for the  $10^{\circ}$  criterion, and that (2) there is no definition of measuring method.

Therefore, we propose to change the criterion to "0 $^{\circ}$ ".

This change will make it easier to measure the angle, by using the steel scale.

Additionally, in R44, the safety of the abdomen is already evaluated by using clay and high-speed video. So we think our proposal is enough effective to meet the purpose of the Netherlands' proposal, the exclusion of the dangerous CRSs.

## Question

The Netherlands' proposal covers all of groups I, II and III, and we confirm that the Netherland considers it necessary to measure the lap strap angle of integral type CRS as well as booster seat or not?