

TF4 Chinese proposal for further  
discussing about “REESS”

## ◆ For post crash safety

- In the EVS draft, there is no requirement for the tested battery pack to be performed standard charge/discharge cycle after mechanical shock test.
- The purpose of mechanical shock is to evaluate the safety of the battery pack during and after the vehicle crash. In the test profile, the max. longitudinal accel. is about 28g, which is equivalent to frontal vehicle crash at 25kph based on our experience. It is not very severe crash at 25kph and the driver may choose to drive the vehicle away after the crash , if the vehicle is still drivable.
- However, the shock may cause the internal electrical connection out of order, for example, short or resistance increase due to loose connection. It is not safe to charge or discharge the battery after that happen. In order to evaluate the safety performance of the REESS, a standard discharge and charge cycle should be conducted after the shock test, as is described in paragraph 7.2.1 .

## ◆ For Vibration

Firstly, we still suggest vibration test should be random.

- Because the vibration that the battery systems suffer mainly comes from the road, and this vibration has characteristics of randomness and low frequency(lower than 200Hz)

Secondly, as for the test method of random vibration:

- Together with other three AUTO manufactures, JARI have carried out the measurement and analysis of road vibration spectrum for the vehicle, maybe they can introduce their work and present the result.
- In China, several AUTO manufactures have been cooperating for road vibration spectrum measurement. The project will be finished at the end of 2015, the results and test procedure will be released at that moment.

Thanks !