Status of Informal Working Group on Deployable Pedestrian Protection Systems (IWG-DPPS)

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Secretary: Irina Dausse, OICA(Renault)
Overview

- **Objective**
  To develop the amendment of GTR No.9 & UN R127 w.r.t. Deployable Pedestrian Protection Systems (DPPS)

- **Activities**
  - IWG: MAR., 2018 ~ JUN., 2021 (TOR mandate)

- **Meetings**
  - 9th Meeting (20th ~ 21st JAN., 2021 / Online)
  - 10th Meeting (9th ~ 10th MAR., 2021 / Online)
  - 11th Meeting (27th ~ 28th APR., 2021 / Online)
  - Subgroup online meetings

* Due to the Covid19 pandemic, the progress is slow
Summary of the amendment discussion

Verification of detection

Prerequisites
- System info
- HIT

Potential options
- Simulation
- Physical testing
- Generic Method

Headform Test (physical)

Must meet the regulation criteria

Static test in undeployed position @LT x 0.9

Static test in deployed position @ 9.7 m/s

Static test in deployed position @ 9.7 m/s

Dynamic test @ 9.7 m/s

* HIT = Head Impact Time
LT = Lower Threshold (of speed)
Major Issues

- HIT determination: 3 possible options
  1. simulation: considering the modification from Euro NCAP procedure (HBM, position, etc.)
  2. physical testing: dummy testing based on SAE J2782
  3. beginning to discuss generic method
     - still some challenges

※ IWG requests for GRSP confirmation regarding
(all Contracting Parties, especially the United States)

→ applying the numerical simulation method to the regulation

* HBM = Human Body Model
Major Issues

- Defining test area
  - undeployed condition: Korea, Germany, Japan, UK
  - deployed condition: Netherland, OICA

- HIT vs WAD for dynamic test
  - regression: UK, Netherland, Germany, Spain
  - dot-to-dot: Japan, Korea

- Detection/Sensing area
  - detection area definition: Germany, Netherlands, Korea, Spain, France, Italy
  - additional deployment condition of DPPS: Japan

- Verification Impactor: Flex-PLI(decided)

* WAD = Wrap Around Distance
Plan

- Next Meeting
  - 29th ~ 30th JUN., 2021
  - Online meeting

- More meetings (t.b.d.)

- Extension of mandate of IWG-DPPS

Timeline:
- GTR9 drafting
- Informal GRSP Dec 2021
- Formal GRSP May 2022
- WP29 Nov 2022
Thank you for your attention