

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

**64th GRSP Session
11 – 14 DEC 2018**

Chair: Jin Seop Park, Republic of Korea

Secretary: Irina Dausse, OICA

Background

- **Background**

- Republic of Korea suggested the clarification of the test procedure for deployable pedestrian protection systems (56th session of GRSP, Dec. 2014)
- WP.29 and AC.3 endorsed the request for authorization to develop an amendment to GTR No.9 in Task Force (170th session of WP.29 and 48th session of AC3, Nov. 2016)
- TF-DPPS met during
7 - 8 Feb. 2017 in Paris, 28 - 29 Mar. 2017 in Paris,
7 Sep. 2017 in a web meeting, 21 - 23 Nov. 2017 in Berlin
- WP.29 and AC.3 endorsed the revision of the authorization to develop an amendment to GTR No.9, transforming the TF into an IWG (174th session of WP.29 and 52nd session of AC3, Mar. 2018)

Objective

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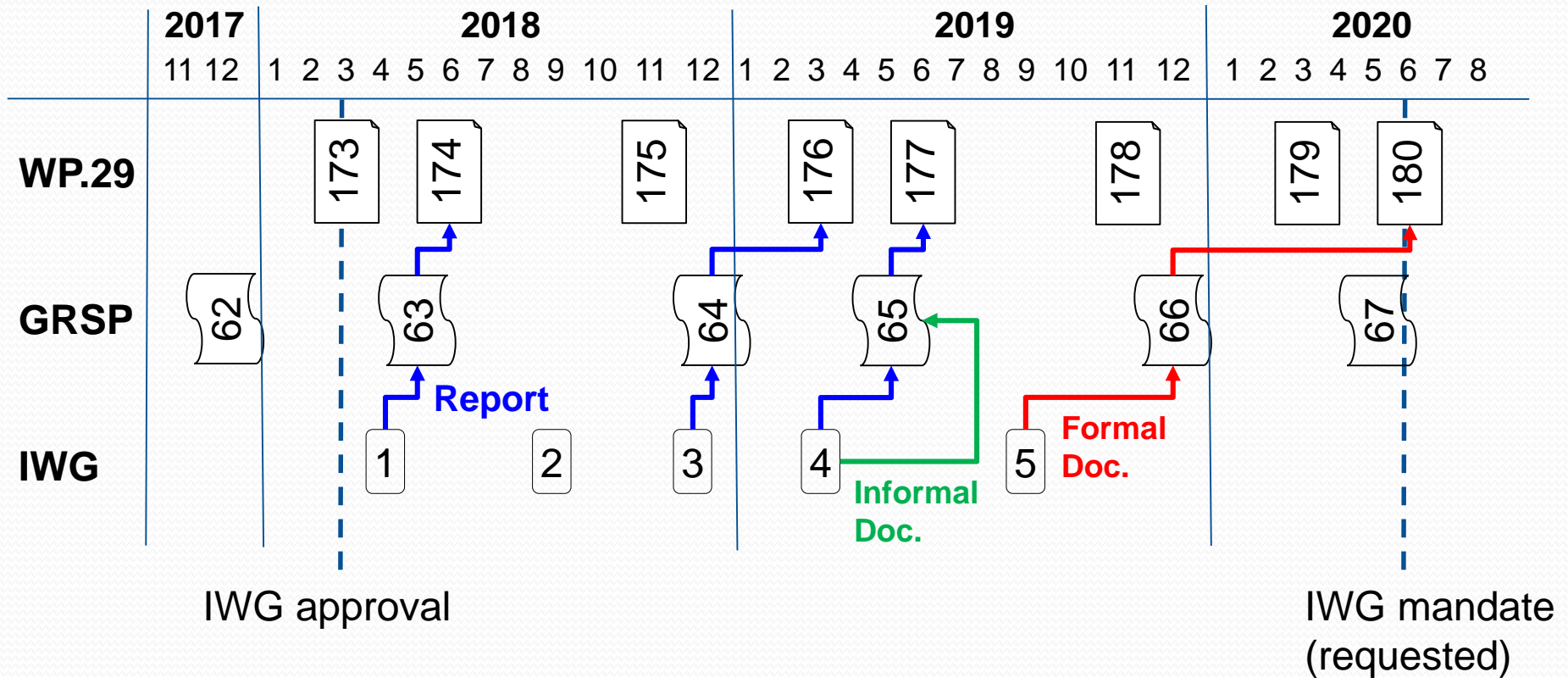
- To develop an amendment to GTR No.9 for a test procedure for deployable pedestrian protection systems, i.e. deployable bonnets or external airbags
- To develop new and more detailed requirements, so that the new procedure guarantees that deployable systems are correctly activated as designed to protect pedestrians and other vulnerable road users, and at least the same level of protection as non-deployable systems
- To consider the development of a corresponding proposal to amend the UN R 127 on Pedestrian Safety

IWG meeting

- 1st IWG-DPPS meeting
 - Date: 18 – 20 Apr. 2018
 - Location: KIA Motors office, Frankfurt, Germany
 - 2nd IWG-DPPS meeting
 - Date: 5 – 7 Sep. 2018
 - Location: EC office, Brussels, Belgium
 - 3rd IWG-DPPS meeting
 - Date: 10 Dec. 2018
 - Location: KICAS(KATRI Geneva office), Geneva, Switzerland
- ※ New Secretary: Ms. Irina Dausse (OICA)

Timeline

- Plan and Schedule



Status of Amendment Discussion

- IWG is making progress based on 25 discussion items for the amendment

Prerequisite & Criteria	Information to be submitted, HBM requirement, Simulation requirement, Protection requirement below lower deployment threshold, Protection requirement at higher speed, Bonnet deflection requirements due to body loading, etc.
Verification	Total response time test, Deployment test, Test for protection requirement below lower threshold, Test for protection requirement at higher speed
Headform Test	Static test at the undeployed position, Static test at the deployed position, Dynamic test, Partial dynamic test

Status of Amendment Discussion

- Major Issues

Issue	Status
HIT determination procedure	Considering both numerical simulation and physical dummy testing Further discussion on specific procedures* of both methods
Defining headform test area with deployed vs. un-deployed	Further review w.r.t. un-deployed condition
Impactor for verification testing at LT speed	Further study on impactors in current regulation
DPPS activation above the regulation impact speed	No test, but general requirement
Introduction of 'Sensing Area'	Further discussion on manufacturers' proposal
Deployable hood deflection & collapse due to body loading	Further discussion on requirement approach

* Numerical simulation procedures for HIT in M.R.1 or annex of regulation (under discussion)

Next IWG Meeting

- 4th IWG-DPPS Meeting
 - Date: 12 – 14 Mar. 2019
 - Location: Paris, France(OICA office)
 - Aiming at agreement on technical requirements

Thank you for your attention!