Introduction on CEL Annex issue

- How the split of R13H was done:
  - the split of R13H creates a specific issue on CEL
  - OICA is seeking for guidance from GRRF
The issue

- Existing R13H CEL fully covers braking system, ESC and BAS.

- The CEL Annex cannot simply be duplicated in the new ESC and BAS regulations, while remaining in R13H, since it may create:
  - duplication and additional workload to repeat CEL approval for ESC and BAS in both R13H and independent regulations
  - conflicting interpretations of CEL requirements by different CPs / between each regulation

- A smart solution has to be found to avoid these risks.

- OICA is seeking for guidance from GRRF, on whether and how referring to CEL requirements in the independent new ESC and BAS regulations
The purpose of the complex electronic control system requirements is to verify the basic braking system is not adversely affected by the complex electronic control systems, which override the basic braking system.

It is required to respect the basic performance prescribed by R13H under non-fault and fault conditions of the complex electronic control systems.

And fundamentally, this verification has to be completed by the braking regulation.

It is the same situation for steering systems.
ESC and BAS are currently covered by R13H CEL Annex: description of the function of “the system”; layout and schematics; safety concept; verification and tests…

When splitting R13H, OICA intentions are to:

1. Maintain the level of safety delivered today
2. Avoid duplication and any additional workload to cover separate CEL approval’s for R13-H, ESC and BAS
3. Avoid conflicting interpretations of CEL by CPs / between each regulation
4. Avoid design restrictive requirements

OICA is seeking for guidance from GRRF, on whether and how referring to CEL requirements in the independent new ESC and BAS regulations
CEL Annex
What are the options?

CEL Annex included in the Regulation Associated with the Basic Function:
- Regulation 13
- Regulation 13H
- Regulation 79

Requirement linking the new Regulation to the parent Regulation for the base function

Independent Regulation 1

Requirement in the new Regulation linking the CEL requirements to the parent Regulation for the basic function

Independent Regulation 2
**Option 1: CEL present in each regulation**

- R13H, ESC and BAS regulations include and call CEL Annex, **AND**

**Option 1A**

- ESC and BAS regulations propose two alternatives:
  1. Fulfilling CEL Annex, or
  2. the applicant demonstrates the Systems are already covered by R13H-CEL approval

**Option 1B**

- Braking system, ESC and BAS regulations propose two alternatives:
  1. Fulfilling CEL Annex, or
  2. Functions or sub-systems being subject to CEL requirements may be demonstrated by CEL annex of another regulation

**Option 2: CEL present in R13H only**

- Only R13H includes and calls CEL Annex, **AND**

- R13H CEL Annex covers all complex electronic control systems including ESC and BAS