

Report of the TF on ADAS for the 17th GRVA session

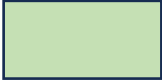

Status after the 16th GRVA session

- Two online meetings (26-27 June 2023, 25 & 27 July 2023)
- Hybrid meeting (Geneva, 28-30 August 2023)
- L2 “Hands-off” online workshop (26 July 2023)
- L2 demonstration trial (U.S., 17 July 2023)
- Eight online meetings and one in-person meeting (Paris, 13-14 June 2023) of the Small Drafting Group
- The draft DCAS UN Regulation is in the agenda of the 17th GRVA session
 - Not finally agreed by the ADAS TF working document ECE/TRANS/WP.29/GRVA/2023/20 with square brackets
 - Informal document GRVA-17-05 amending ECE/TRANS/WP.29/GRVA/2023/20, indicating the progress of discussions at the ADAS TF till now – still interim document, not ready for adoption by GRVA
- Development of the corresponding draft amendments to UN Regulation No. 79 to segregate its scope and the scope of the DCAS UN Regulation
- Link to the TF documents: <https://wiki.unece.org/display/trans/ADAS>

Submissions to the 17th GRVA session

- The report of the activities of the ADAS TF since the 16th GRVA session (this presentation);
- The draft DCAS UN R:
 - Working document ECE/TRANS/WP.29/GRVA/2023/20;
 - Informal document GRVA-17-05 amending the working document ECE/TRANS/WP.29/GRVA/2023/20;
 - The detailed presentation of the content of the draft DCAS UN R (GRVA-17-12);
 - Issues to seek guidance from GRVA (presentation GRVA-17-11);
- Corresponding draft amendments to UN R 79 to differentiate the scope of UN R 79 and the draft DCAS UN R (GRVA-17-07).

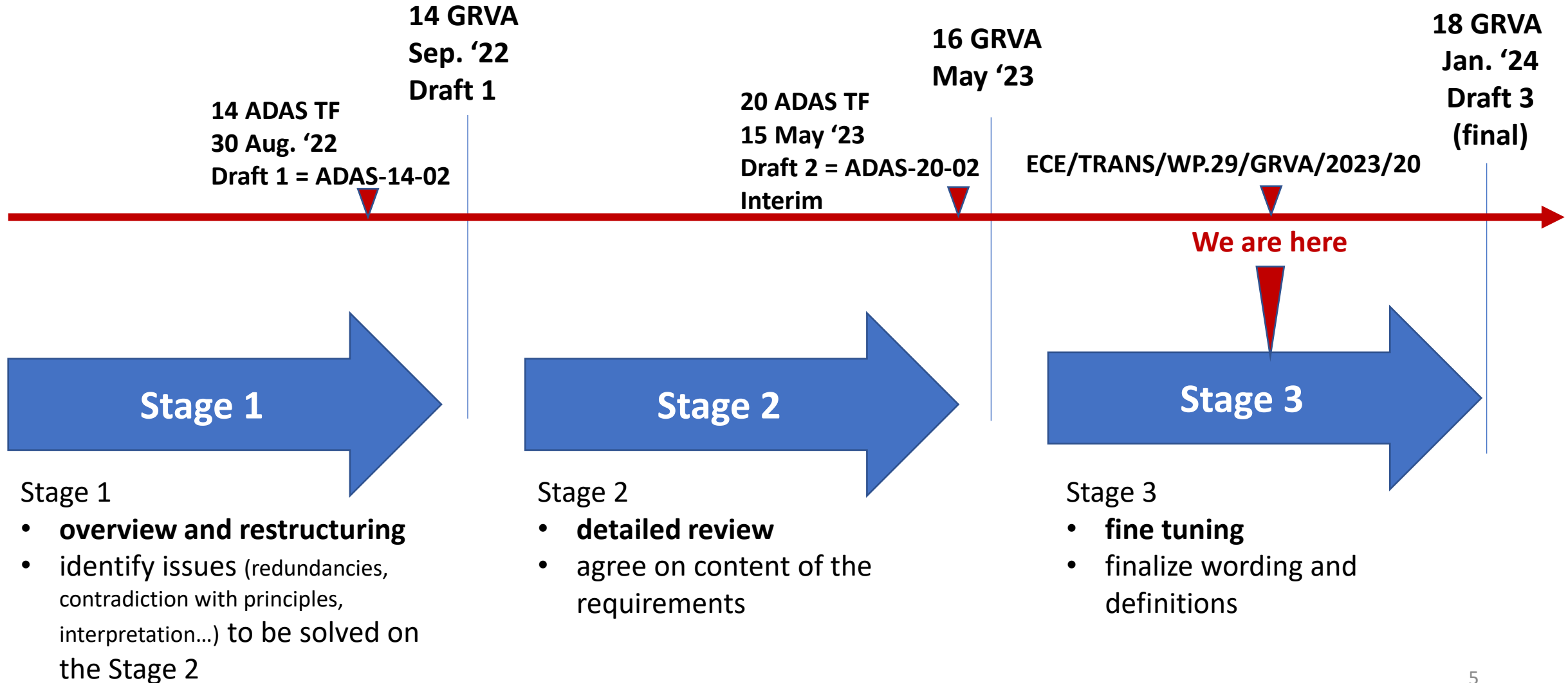
Progress with drafting the DCAS UN Regulation

-  The agreed content of the draft DCAS UN Regulation:
-  Reviewed sections close to finalization:

Introduction
1. Scope
2. Definitions
3. Application for approval
4. Approval
5. Specifications
6. Requirements for Specific DCAS Features
7. Monitoring of DCAS operation
8. System Validation
9. System Information Data
10. Requirements for Software Identification and Cyber Security

11. Modification of vehicle type and extension of approval
12. Conformity of Production
13. Penalties for non-conformity of production
14. Production definitively discontinued
15. Names and addresses of the Approval Bodies
Annex 1 - Communication
Annex 2 - Arrangements of approval marks
Annex 3 (plus appendixes) - Audit
Annex 4 - Physical Test Specifications for DCAS Validation
Annex 5 - Principles for Credibility Assessment for using Virtual Toolchain in DCAS Validation

DCAS UN Regulation Drafting Process Updated Timing



Further Workplan

- 5 October 2023 – 24th ADAS TF session online;
- 23-27 October 2023 – 25th ADAS TF hybrid session in Brussels at AVERE
 - Conference room capacity is about 40 seats;
 - Please inform the ADAS TF leadership (a.bocharov@nami.ru, mvanimpe@tesla.com) if you are going to attend the session in-person;
- Submitting the working document to the 18th GRVA session by 30 October 2023;
- Outstanding issues, if any, could have been discussed before the 18th GRVA session with the preparation of an informal document, if needed;
- Additional ADAS TF and/or Small Drafting Group (SDG) meetings will be organized if needed.

Thank you for your attention!

Back-up

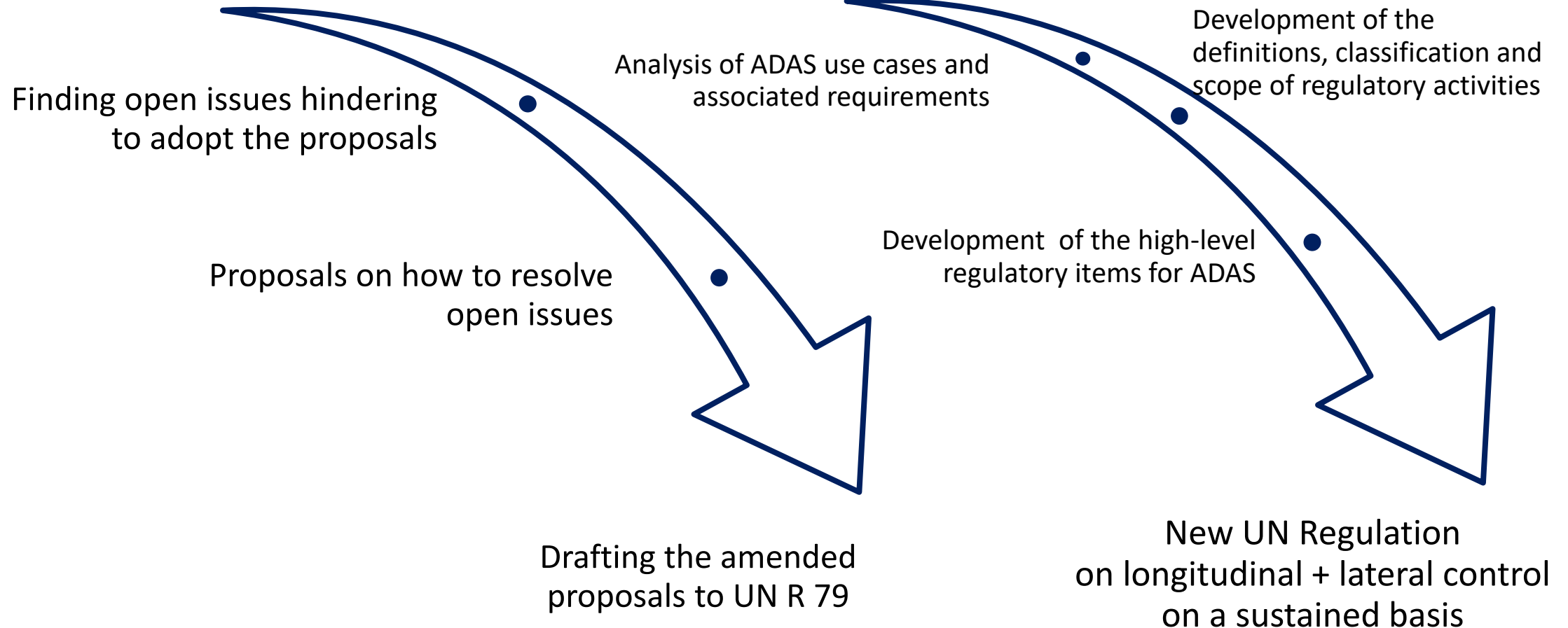
Background

- GRVA adopted at its 9th session in February 2021 the terms of reference for the Task Force on Advanced Driver Assistance Systems (ADAS).
- The Task Force (TF) focuses on Advanced Driver Assistance Systems (ADAS), and shall address the simplification of UN Regulation No. 79 and if needed, develop a new ADAS UN Regulation with a focus on ADAS systems up to of level 2 (as defined in ECE/TRANS/WP.29/1140).
- The TF on ADAS agreed to start developing a new UN Regulation

Two Parallel Workstreams of the TF

Working on the pending proposals for UN R 79

Development of the provisions for the new ADAS use cases



Agreed DCAS Key Principles

1. **“Driver” refers to a human being driving a vehicle.**
 - 1.1. A DCAS does not replace the driver (ADS); a DCAS assists the driver (ADAS).
 - 1.2. A DCAS does not change the driver’s responsibilities for control of the vehicle.
2. **A DCAS is a driver-operated vehicle system.**
 - 2.1. A DCAS must prevent reasonably foreseeable risks of driver misuse or abuse.
 - 2.2. A DCAS must have means to evaluate continuous driver involvement in and supervision of the vehicle operation.
 - 2.3. A DCAS do not aim to permit driver activities other than driving in addition to those permitted for manual driving.
 - 2.4. A DCAS must provide sufficient information to enable the driver to supervise its motion-control assistance.
3. **A DCAS assists the driver via sustained lateral and longitudinal motion-control support.**
 - 3.1. The DCAS support must not adversely impact road safety.
 - 3.2. The DCAS support must not adversely impact driver control over the vehicle behavior.
4. **The availability of a DCAS to the driver is constrained by defined system boundaries.**
 - 4.1. The manufacturer must describe the system boundaries.

The Small Drafting Group (SDG)

- The Small Drafting Group (SDG) was set up at the 11th ADAS TF session
 - The SDG participants: RUS, D, EC-JRC, NL, UK, AVERE, OICA, CLEPA, AAPC, ETSC
- The SDG:
 - Continues the development of the Master Document
 - Addressed separating DCAS between UN R 79 and DCAS UN Regulation
 - Targeted to submit the working document for the 17th GRVA session in September 2023