

Regulatory approach for Automated Driving Systems

I. Status of discussion

1. The secretariat prepared this document upon request from AC.2, following discussions at the seventeenth session of GRVA, at the informal AC.2 session in October 2023, the 143th session of AC.2 in November 2023 and an informal AC.2 session on 14 November 2023.
2. It reflects the consensus of the group following the discussion of the views from the stakeholders and several synthesis documents prepared by the Chair of GRVA.

II. Position of Contracting Parties for the ADS regulatory approach

A. Commonalities of Contracting parties for the ADS regulatory approach

3. Contracting Parties expressed support for:
 - (a) An ambitious timeline to deliver a regulation for ADS in 2026 to WP.29 (September/November 2026).
 - (b) The simultaneous development of a UN Global Technical Regulation and a UN Regulation, with the same delivery date to WP.29.
 - (c) A collaborative inclusive approach for Contracting Parties of both Agreements (1958 and 1998).
 - (d) A start of the work in the first half of 2024 with preparatory work to be started as early as possible.
 - (e) Using the work of FRAV and VMAD (the joint integration document to be submitted for the June 2024 session of WP.29) as a basis for drafting a regulation for ADS.
 - (f) Creating a new organisational structure to work on a regulation for ADS.
 - (g) The framework document on automated/autonomous vehicles of WP.29 to guide the future work of GRVA on automation.
4. Contracting Parties are understanding and considering the wish and need presented by industry at WP.29 and at GRVA to establish a regulation for ADS until 2026.

B. Open points for the ADS regulatory approach

5. Some Contracting Parties had different views of the working and organisational structure to draft a regulation for ADS.
6. Some Contracting Parties saw a risk for the date of delivery by aligning the timelines of the work under the 1958 Agreement and the 1998 Agreement for a regulatory text.
7. Some Contracting Parties' views were divided if the work on a regulation for ADS should be organised within one working group or in two working groups.

III. Proposal for an approach for a regulation for ADS addressing the needs of Contracting Parties

8. The text of the regulation (purpose, scope, definition, general requirements, performance requirements, test procedures) will be developed by one common group (Informal Working Group on ADS – IWG on ADS).

9. The IWG on ADS will give a status report during each session of GRVA.
10. GRVA will organise four ADS related two-days-workshops per year. The workshop is covering the 1958 and 1998 Agreement. One meeting day will be dedicated to the 1958 Agreement topics, the other day to the 1998 Agreement topics. An extension of the workshop to three days is possible, if needed.
11. The workshop will cover three tasks:
 - (a) Drafting and discussing the specific provisions needed for a UN Global Technical Regulation (e.g. technical rationale),
 - (b) Drafting and discussing the specific provisions for a UN Regulation (e.g. marking provisions),
 - (c) Preparing a guiding/interpretation document for the implementation of the regulations.
12. The workshop is organised by GRVA. It is co-chaired by the leadership of GRVA (Chair and Vice-Chairs). Secretary during the workshop is the Secretary of GRVA. Support can be provided to the Secretary by Contracting Parties and Non-Governmental Organisations.
13. All Contracting Parties to both Agreements, the 1958 and the 1998 Agreement can participate in and contribute to all meeting days and tasks of the workshop.
14. The report of the results of the workshop will be reported to GRVA by the Secretary of GRVA.

IV. Rationale

15. The above structure would allow a clear process for guidance to achieve the goal to draft a UN Global Technical Regulation and a UN Regulation on ADS in the given timeline.
16. It would take into account the needs of the different regions within both, the 1958 and the 1998 Agreement.
17. It would allow for a collaborative, global approach harmonising a regulation for ADS at the maximum level including all Contracting Parties to both Agreements.
18. It would lead to an efficient use of resources during the preparation of the regulatory text.
19. It would allow a coordinated approach and avoid deviations in the main elements of the two regulations to be drafted.

Annex

20. This annex contains the proposed amendment to the Framework Document based on the proposal above.
21. The proposed amendments to add the activities “UN Regulations and UN GTRs amendments related to their adaptation to automated driving” and “ADS vehicle categorization or sub categorization” were copied and added from the proposal from France to amend the framework document.

Informal document WP.29-191-30
191st WP.29 session, 14-16 November 2023
Agenda item 2.3.

Title	Description of work (including elements taken from ECE/TRANS/WP.29/2019/2)	Corresponding principles/elements	Allocation to	Main targets	Activities		Deliverable/ Deadline for submission to WP29
					Current activities	Future Activities	
Automated Driving Systems (ADS)	Work on regulatory activities for Automated Driving Systems, based on the deliverables from FRAV and VMAD as mandated by WP.29 including the joint FRAV-VMAD integrated document		GRVA Informal Working Group on ADS (IWG on ADS)	Automated Driving Systems	Drafting regulatory text on ADS for the use under the 1958 and 1998 Agreements (purpose, scope, definition, general requirements, performance requirements, test procedures)	Combining the draft regulatory text, the specific administrative provisions and annexes for a - UN GTR on ADS and - UN Regulation on ADS	June 2026: UN GTR on ADS UN Regulation on ADS
			GRVA workshops (4 times per year)		Drafting of administrative provisions and annexes needed for a UN Global Technical Regulation (Task 1) Drafting of administrative provisions and annexes needed for a UN Regulation (Task 2)		
					Drafting and preparing a guiding/ interpretation document (for both Agreements) (Task 3)	Guiding/ interpretation document	Nov. 2026 Guiding/ interpretation document

Title	Description of work (including elements taken from ECE/TRANS/WP.29/2019/2)	Corresponding principles/elements	Allocation to	Main targets	Activities		Deliverable/ Deadline for submission to WP29
					Current activities	Future Activities	
UN and GTR amendment related to their adaptation to automated driving	Following the work in 2022/2023 of screening of UN and GTRs (ECE/TRANS/WP.29/2023/86), adaptation of identified UN and GTRs to automated driving		All GRs, based on their respective expert group on regulatory fitness for ADS	Automated/A utonomous vehicles	Drafting amendments to UN and GTRs identified as priority in ECE/TRANS/WP.29/2023/86	Drafting amendments to UN and GTRs identified as non priority in ECE/TRANS/WP.29/2023/86	Timeline expected to be presented at the March 2024 WP.29
ADS vehicle categorization or sub categorization	Determining if new categories or new sub-categories are necessary to address AD vehicle specificities		GRSG and GRVA dedicated joint expert group	Automated/A utonomous vehicles	RE3 and SR1 to be adapted if necessary		[mid 2024]
Cyber security and (Over-the-Air) Software updates	Work of Task Force on Cyber Security and (OTA) software updates (TF CS/OTA) ongoing. Draft recommendations on the approach (based on draft technical requirements).	g. Cybersecurity h. Software Updates	GRVA Cyber/software update informal group	Conventional and Automated / Autonomous vehicles	Maintain the official documents regarding UNR 155 and UNR 156 and the recommendations on uniform provisions document. Provide opportunities for sharing of knowledge, experience and ideas from implementation of national regulation/standards regarding CS/OTA as well as UN Regulations Nos. 155 and 156.	Develop deliverables regarding recommendations for SW updates after registration and address items passed by GRVA.	November 2024

Title	Description of work (including elements taken from ECE/TRANS/WP.29/2019/2)	Corresponding principles/elements	Allocation to	Main targets	Activities		Deliverable/ Deadline for submission to WP29
					Current activities	Future Activities	
Data Storage System for Automated Driving vehicles (DSSAD)		i. EDR/DSSAD	GRVA EDR/DSSAD informal group	Automated / Autonomous vehicles	DSSAD performance elements for ADS		June 2024
Event Data Recorder (EDR)	Existing systems - as road safety measure (e.g. accident recording).	i. EDR/DSSAD	GRSG GRSG (in cooperation with GRVA) EDR/DSSAD informal group	All vehicles ADS	EDR Step 2: Consideration of amendment to Step #1 requirements with respect to additional data elements, durability considerations including potential fire resistance, potential test procedures and consideration of new triggering criteria (e.g. “jerk”).	Update EDR documents as necessary	March 2025 November 2024