Submitted by the experts of the
Informal Working Group on Automated Driving Systems

Informal document **GRVA-24-29**
24th GRVA, 19-23 January 2026 (Geneva)
Provisional agenda item 4(a)

Proposal to amend ECE/TRANS/WP.29/GRVA/2026/3 (Proposal for a new United Nations Regulation on uniform provisions concerning the approval of motor vehicles with regard to their Automated Driving Systems)

Proposal from the Informal Working Group on Automated Driving Systems to amend document ECE/TRANS/WP.29/GRVA/2026/3. Changes are marked in **bold** for new text and ~~strikethrough~~ for deleted text.

1. Introduction, para.1, amend to read (based on ADS-17-06/Rev.3):

   1. This Regulation establishes uniform ~~safety~~ provisions and a harmonized methodology for **validating the safety of vehicles with regard to** their Automated Driving System**s** (ADS) ~~safety~~ to enable the safe introduction of this technology in the market. As a general concept, this Regulation requires the ADS to deliver a level of safety in mixed traffic at least equivalent to that of a competent and careful human driver.

2. Paragraph 6., amend to read (based on ADS-17-14/Rev.2):

   6. The requirements in this Regulation are written with the expectation that ADS software does not include the use of online in-vehicle learning that self modifies system behaviour. ~~beyond pre-defined boundaries~~ ~~Artificial Intelligence can be used to analyse and improve ADS software in an engineering environment. By means of a software update (over the air or connected) this update can be installed in the vehicle, again without in-vehicle learning features during operation of this version.~~

3. Paragraph 2.11. *"Data Storage System for Automated Driving"*, remove brackets and amend to read (based on ADS-17-23/Rev.1):

   2.11. *"Data Storage System for Automated Driving (DSSAD)"* **means the capability to record and store data concerning the safety performance of a vehicle's ADS.**

4. Delete footnote 6 under paragraph 2.17. *"User-initiated deactivation of the ADS"* and renumber subsequent footnotes accordingly (based on ADS-17-12/Rev.1).

5. Paragraph 2.27., delete repetition (based on ADS-17-11/Rev.1):

   (a) Human component ensuring the ADS lifecycle is monitored by personnel with appropriate skills, training, and understanding to identify risks and appropriate mitigation ~~measures to identify risks and appropriate mitigation measures~~ while accounting for the possibility of human errors.

6. Delete paragraph 2.31. *"Edge case"* and renumber subsequent paragraphs accordingly (based on ADS-17-12/Rev.1).

7. Paragraph 2.35.4., renumber to 2.34.4. and renumber foonote 7 as footnote 6.

8. Introduce new paragraph 2.35.5. and renumber 2.35.5. and 2.35.6 accordingly (based on ADS-17-11/Rev.2):

2.35.5. *"Abstract scenario"* means a formalized, declarative description of a scenario derived from a functional scenario.[7] The specification on the abstract level enables highlighting of the relevant aspects of the scenario while focusing on efficient description of relations (cause-effect).

2.35.~~5~~**6**. *"Logical scenario"*…

Footnote (and renumber subsequent footnotes accordingly):

[7] Declarative descriptions can include structured natural language, programming language or other forms of languages that meet the required criteria (formalized and declarative).

9. Paragraph 2.35.5., renumber as 2.34.6. and renumber footnote 9 as footnote 8.

10. Paragraph 2.37, renumber and amend to read (based on ADS-17-19):

2.3**6**~~7~~. *"Vehicle Type with regard to its Automated Driving System (ADS)"* means vehicles which do not differ in such essential aspects as:

(a) The ~~system~~ characteristics and design of the ADS, ~~and~~

(b) Vehicle ~~features which~~ **characteristics that** significantly influence the performance of the ADS**, and**

(c) The manufacturer's designation of the vehicle type.

11. Paragraph 2.38, renumber (2.37) and remove brackets (based on ADS-17-19).

12. Paragraphs 3.1. to 3.1.1., remove brackets, delete hyphen in “type-approval”, amend to read, and append footnotes 9 and 10 (based on ADS-17-19):

~~[~~3.1. Prior to application for approval, and as early as reasonably practicable, the manufacturer or their duly accredited representative shall provide the following information to the approval authorities[9] of all ~~of~~ the Contracting Parties in whose territory features of the ADS can be active (‘receiving approval authorities’).[10]

(a) A single point of contact for the receiving approval authorities to request information from the manufacturer,

(b) The expected granting approval authority and the designated technical service being used by the manufacturer, if already selected, and

(c) Brief details of the ADS, its feature(s) and ODD; this information shall be treated as confidential by the receiving approval authority.

3.1.1. In the case that the territory of an additional Contracting Party is added as part of an application for extension of a type approval, the requirements of paragraph 3.1 shall apply *mutatis mutandis* with respect to that Contracting Party and its **approval authority** ~~Approval Authority.]~~

Footnotes:

[9] **Using the email address(es) provided on the online platform (“/343 Application”) provided by UNECE and dedicated to the exchange of such information: https://www.unece.org/trans/main/wp29/datasharing.html or, if unavailable/discontinued, in the latest revision of document ECE/TRANS/WP.29/343 ('/343 document'). Contracting Parties without an approval authority shall publish the relevant contact details on the online platform (“/343 Application”) or in the /343 Document in lieu of the details of an approval authority for this UN Regulation along with a note stating that this is not an approval authority.**

[10] **These provisions shall be kept under periodic review by GRVA for amendment as necessary to support effective implementation of this UN Regulation.**

13. Paragraph 3.2.2., remove brackets (based on ADS-17-19).

3.2.2. A description of the vehicle type with regard to the items mentioned in paragraph ~~[~~2.37~~]~~, together with a documentation package as required in ~~[~~Appendix 1 of Annex 1~~]~~ which gives access to the basic design of the ADS and the means by which it is linked to other vehicle systems or by which it directly controls output variables. The numbers and/or symbols identifying the vehicle type shall be specified.

14. Paragraph 3.2.3., remove brackets (based on ADS-17-19).

~~[~~3.2.3. In the case of ADS with features that can be active in the territory of Contracting Parties other than the Contracting Party issuing the approval, the manufacturer shall provide to the granting approval authority the following information for each territory:

(a) Summary of how freedom from unreasonable risk has been defined, including details of specificities for the respective territory (if any),

(b) Summary of how the safety level of a competent and careful human driver has been determined, including details of specificities for the respective territory (if any),

(c) Summary of how applicable traffic rules have been identified, interpreted, and assessed,

(d) Summary of specific testing carried out regarding the territory,

(e) A single point of contact for the receiving approval authorities to request information from the manufacturer, and

(f) Details of the authorities identified for fulfilling the obligation to provide post-deployment notifications and reports to the 'relevant authority'.~~]~~

15. Paragraph 4.1., remove brackets (based on ADS-17-19)

4.1.1. The Approval Authority or the Technical Service shall verify in accordance with paragraph 8, that the manufacturer has taken the necessary measures relevant for the vehicle type in respect of:

(a) The test environments according to paragraph ~~[~~7.2~~]~~

(b) The safety case according to paragraph ~~[~~7.3~~]~~

(c) Post-deployment safety according to paragraph ~~[~~7.4~~]~~

(d) Other manufacturer requirements according to paragraph ~~[~~7.5~~]~~

16. Paragraph 4.1.2., remove brackets and amend to read (based on ADS-17-19):

4.1.2. The ~~Approval Authority or the Technical Service~~ **approval authority or its designated technical service** shall verify by confirmatory testing of a vehicle of the vehicle type, according to paragraph ~~[~~8.3.3~~]~~, that the manufacturer has implemented the measures they have documented.

17. Paragraph 4.4., remove brackets and amend to read (based on ADS-17-19).

~~[~~4.4. The approval authority and its designated technical ~~services~~ **service(s)** shall ensure, in addition to the criteria laid down in Schedule 2 of the 1958 Agreement**,** that they have:

(a) **Competent personnel with appropriate skills and specific knowledge of:**

(i) Functional safety (e.g., ISO 26262),

(ii) Safety of the intended functionality (e.g., ISO 21448),

(iii) Modelling & simulation,

(iv) Safety management systems,

(v) Automated driving systems,

(vi) Human factors.

These personnel shall also be able to make the necessary link with cybersecurity.

(b) Implemented procedures for the uniform evaluation according to this Regulation.~~]~~

18. Paragraph 4.5., remove brackets and delete footnote and change reference 9 to 10 (based on ADS-17-19).

~~[~~4.5. Approvals covering ADS features which can be active in the territory of a Contracting Party other than the Contracting Party issuing the approval.[9] [10]

19. Paragraph 4.5.1., delete footnote and change reference 10 to 9, and amend to read (based on ADS-17-19):

4.5.1. Before granting an approval according to this UN Regulation, the granting approval authority shall inform the Approval Authorities~~[10]~~ [9] of the respective Contracting Parties in whose territory any feature of the Automated Driving System can be active. The following information shall be provided by the granting approval authority to each receiving approval authority **as soon as the granting approval authority has all necessary information from the manufacturer but at the latest** ~~at least~~ 30 days prior to granting the approval:

…

20. Paragraph 4.5.2., amend to read (based on ADS-17-19):

4.5.2. Following a review of the documentation described in paragraph 4.5.1, the receiving Approval Authority may provide comments to the granting Approval Authority on the interpretation or application of this UN Regulation with respect to their territory. Comments shall be provided within 30 days of receipt of the documentation described in paragraph 4.5.1. In case of dispute, a detailed justification shall be provided **by the receiving approval authority making the comments to the granting approval authority.**

21. Paragraph 4.5.2.1., amend to read (based on ADS-17-19):

4.5.2.1. **Having taken account of any comments, the granting approval authority shall grant the approval with the respective Contracting Party(ies) included in the list in Appendix ~~[~~2~~]~~ to Annex 1.**

~~Following receipt of any comments, the granting approval authority shall either:~~

~~(a) Ensure that the comments have been taken into account and grant the approval with the respective Contracting Party included in the list in Appendix [x] to Annex 1, or~~

~~(b) Ensure that the manufacturer has excluded the territory of the respective Contracting Party from the ODD of the ADS feature(s) concerned and exclude that Contracting Party from the list in Appendix [x] to Annex 1.~~

22. Paragraph 4.5.2.2., amend to read (based on ADS-17-19):

4.5.2.2. **If it is not possible for the granting approval authority to take into account the comments received or** in case of any dispute between Contracting Parties, this shall be settled in accordance with Article 10 and Schedule 6 of the 1958 Agreement.

23. Introduce a new paragraph 4.5.2.3. (based on ADS-17-19):

4.5.2.3. The granting approval authority remains responsible for all decisions regarding the granting of an approval under this Regulation.

24. Paragraph 4.5.6, remove the bracket at the end of the paragraph.

25. Paragraph 4.6.2., delete “and;” (based on ADS-17-11/Rev.2).

26. Paragraphs 6.1.4.4.1. and 6.1.4.4.2., amend to read (based on ADS-17-27/Rev.3):

6.1.4.4.1. **The procedure for** remote termination **of** an ADS performing the DDT shall ~~be capable of triggering~~ **include the capability to perform** an ADS fallback response.

6.1.4.4.2. **The** remote termination of an ADS or ADS feature(s) shall render it unable to be activated ~~by a user~~ until such time as the remote termination is rescinded.

27. Paragraph 6.2.2.1.2., subparagraph (b), amend to read:

(b) Devices for indirect vision, tell-tales, **indicators,** and non-ADS-related warnings may be disabled, suppressed, or, by other means, made unavailable, and

28. Paragraph 6.2.2.3.10., amend to read (based on ADS-17-29/Rev.1)::

6.2.2.3.10. At the completion of the deactivation procedure, control shall be returned to the driver without any ~~continuous~~ **sustained** lateral or longitudinal control assistance active. **However, any sustained lateral assistance system that is permitted or required to be automatically enabled at the initiation of the power train may be set to the same state as it was prior to ADS activation.**

29. Paragraph 6.3.6., amend to read (based on ADS-17-04/Rev.1):

6.3.6. The ADS shall receive and appropriately manage all signals received from other ~~vehicle~~ systems **of the ADS vehicle**. A list of these signals and how they are managed shall be included in the manufacturer’s safety case.

30. Paragraph 7.1.8.5.3., amend to read (based on ADS-17-12/Rev.1):

7.1.8.5.3. The data retention strategy shall ensure that:

(a) Data related to a detected safety issue is retained until any necessary corrective action and review processes are complete, and
(b) ~~The retention of the data for longer-term trend analysis (i.e., subset of the collected data)~~**A subset of the collected data is retained to enable longer-term trend analysis**.

31. Paragraph 7.2.1.3.1., amend to read (ADS-17-08/Rev.2):

7.2.1.3.1. The manufacturer shall manage the **relevant** data used to verify, validate, and update the simulation toolchain(s) ~~throughout its lifecycle~~ **until the ADS has been decommissioned.** The manufacturer shall consider the completeness, accuracy and consistency of this data.

32. Paragraph 7.2.1.13.2., delete explanatory remark (based on ADS-17-12/Rev.1):

7.2.1.13.2. The manufacturer shall demonstrate that robust calibration procedures have been adopted for assigning appropriate value(s) to all the simulation parameters while ensuring that special attention is taken for the most critical parameters. ~~This is to ensure that the simulation toolchain can be used to emulate the relevant real-world system.~~

33. Paragraph 7.3.1.3., amend item (a) to read (based on ADS-17-17/Rev.1):

(a) ~~Intended area of operation (e.g., jurisdictions, g~~ **G**eographic limitations~~)~~,

34. Paragraph 7.3.1.4.1.4., delete (based on ADS-17-12/Rev.1):

~~7.3.1.4.4. [The table specified in paragraph 5.3.1.4.1.2. of this Regulation shall be kept up to date with software and hardware updates.]~~

35. Paragraph 7.3.1.13.2., remove brackets (based on ADS-17-23/Rev.1):

~~[~~7.3.1.13.2. The manufacturer shall justify the use of data elements provided by an alternative format listed in Annex 8.~~]~~

36. Paragraph 7.3.1.15., amend to read (based on ADS-17-12/Rev.1):

7.3.1.15. The **system description** ~~safety concept~~ shall include the following information:

37. Delete paragraph 7.3.2.5. (based on ADS-16-01/Rev.1):

~~[7.3.2.5. The safety concept shall describe how software updates are validated and confirmed. Where UN Regulation No. 156 applies, the manufacturer shall describe how the ADS meets the requirements of that regulation in accordance with paragraph 7.1.4.3.]~~

38. Paragraph 7.3.2.10., amend to read (based on ADS-17-12/Rev.1):

7.3.2.10. The safety **concept** ~~case~~ shall include a list of safety risks to passengers (e.g., safety belts not fastened, passengers not seated) and a description of how they are managed for all passengers while an ADS feature is active.

39. Paragraph 7.3.2.16., amend to read (based on ADS-17-12/Rev.1):

7.3.2.16. The safety **concept** ~~case~~ shall describe the manufacturer's basis for its determination that it has in place the necessary processes, resources, and competent personnel to:

…

(d) ~~The~~ **Ensure that the** test routes enable verification of nominal requirements for the safety of user interactions, including prior to, at the time of, and after entering and exiting the ODD of an ADS feature,

(~~d~~**e**) Assess the behavioural competencies demonstrated by the ADS for each scenario against the DDT performance requirements under paragraph 6.1., and

(~~e~~**f**) Assess the capability of the ADS to ensure the safety of users and the safe use of the ADS.

40. Paragraph 8.3.1.3., amend item (g) to read (based on ADS-17-03/Rev.1):

(g) **Unique labelling of claims, arguments and evidence in accordance with paragraph 7.3.3.1.2., and backward** ~~backwards~~ and forward traceability from requirements to evidence in accordance with paragraph 7.3.3.3.

41. Paragraph 8.3.2.2.1., amend to read (based on ADS-17-12/Rev.1):

8.3.2.2.1. The approval authority or its designated technical service shall verify that the manufacturer has used suitable and documented processes to derive behavioural competencies **and scenarios** that are relevant to both the ODD and to the ADS safety case.[40]

42. Paragraph 8.3.2.2.3., delete footnote 15 (based on ADS-17-12/Rev.1):

8.3.2.2.3. The approval authority or its designated technical service shall verify that the set of scenarios and situations…

(b) Reasonably foreseeable situations that are not deemed to be preventable by the ADS (e.g., related to unsafe behaviour by other road users or by infrastructural failures). ~~[15]~~

~~[15] [The methodology in Annex 7, including the provided scenario template, is one suitable approach against which to review the approach adopted by the manufacturer.]~~

43. Paragraph 8.3.3.3.1., delete footnote:

8.3.3.1. Confirmatory testing conducted or required by the approval authority or its designated technical service shall use one or more test methods and pre-defined and repeatable test protocols to confirm that the evidence provided by the manufacturer accurately represents the ADS performance. The

confirmatory tests shall cover a range of driving conditions representative of the ODD, including at least and as appropriate:~~16~~

~~[16 The information reported in Annex 7 may be used to extend the list of scenarios that can be selected for confirmatory testing.]~~

44. Paragraph 9.1., remove brackets and amend to read (based on ADS-17-19/Rev.1):

~~[~~9.1. Every modification of the vehicle type ~~with regard to~~ **as defined in paragraph 2.37. of** this Regulation shall be notified to the approval authority that approved that vehicle type. The approval authority may then either:

(a) Consider that the modifications made do not have an adverse effect on the conditions of the granting of the approval and grant an extension of approval,

(b) Consider that the modifications made affect the conditions of the granting of the approval and require further assessment of the safety case, tests or additional checks before granting an extension of approval,

(c) Decide, in consultation with the manufacturer, that a new type-approval is to be granted, or

(d) Apply the procedure contained in paragraph 9.1.1. (Revision) and, if applicable, the procedure contained in paragraph 9.1.2. (Extension).~~]~~

45. Introduce a new paragraph (based on ADS-17-19/Rev.1):

9.4. The manufacturer may apply for a new approval for the purpose of differentiating software versions intended to be used on vehicles already registered in the market from the software versions intended to be used on new vehicles. This may cover the situations where type approval regulations are updated, or hardware changes are made to vehicles in series production. In agreement with the Approval Authority or its Technical Service, duplication of tests for these approvals shall be avoided where possible.

Annex 1, remove brackets.

1. Item 6.3., amend to read (based on ADS-17-19/Rev.1):

6.1. Overview of the ADS **elements** ~~subsystems (incl. components)~~:

2. Item 7, amend to read (based on ADS-17-19/Rev.1):

7. ADS ~~Feature(s)~~ **feature(s)** and overview (for each feature):

Item	*Description*	*Feature 1*	*...*	*Feature n*
7.1.	ADS ~~Feature~~ **feature** type (i.e., ADSF-1 or ADSF-2):			
7.2.	ADS feature(s) performance and limitations, **including a brief description of ODD**			
7.3.	Specified maximum speed of the ADS features declared by the manufacturer~~, including the associated internal and external conditions (e.g. ODD, mass, etc.)~~			

7.4. Overview of the interactions between the ADS and its user(s) and/or drawing of the ADS Human-Machine Interface (HMI) including:

Item	*Description*	*Feature 1*	*...*	*Feature n*
7.4.1.	Means to activate, deactivate **the ADS feature** and to take over the performance of the DDT from the system (if applicable)			
7.4.2.	Methods to detect user availability (if applicable)			
7.4.3.	Methods to determine user engagement (if applicable)			

3. Item 8, amend to read (based on ADS-17-19/Rev.1)

8. Data Storage System for Automated Driving (DSSAD):

8.1. **Details of how to access data from the DSSAD** ~~DSSAD performance verified after the tests performed according to Annex [X]: yes/no~~

~~8.2. DSSAD documentation concerning data retrievability, data integrity self-check and protection against manipulation of stored data verified: yes/no~~

4. Item 10, amend to read (based on ADS-17-19/Rev.1):

10. Safety case:

10.1. Manufacturers document reference for the Safety Case (including version number):

10.2. Information Document: see Annex 1-Appendix 1:

5. Introduce new item 19 (based on ADS-17-19/Rev.1):

19. Description of the means to enable periodic road worthiness tests, if applicable

Annex 1 - Appendix 1, remove brackets.

1. Section 0, amend to read (based on ADS-17-19/Rev.1):

0. General information
0.1. ~~Make (trade name of manufacturer):~~ **Trade name or mark of vehicle:**
0.2. ~~Type:~~ Vehicle type:
0.2.1. Commercial name(s) (if available):
~~0.3.~~ **0.2.2.** Means of identification of type, if marked on the vehicle:[17]
~~0.3.1.~~ **0.2.3.** Location of that marking:
~~0.4~~ **0.2.4.** Category of vehicle:[18]
~~0.5.~~ **0.3.** ~~Company name and address of manufacturer:~~ **Manufacturer's name and address:**
~~0.8.~~ **0.3.1.** Name(s) and address(es) of assembly plant(s):
~~0.9.~~ **0.4.** **If applicable,** ~~Name~~ **name** and address of the manufacturer's representative ~~(if any)~~:
0.5. **General construction characteristics of the vehicle:**
0.5.1. **Photographs and/or drawings of a representative vehicle:**

[17] **If the means of identification of type contains characters which are not relevant to describing the vehicle (i.e., types covered by the type-approval certificate), such characters shall be represented in the documentation by the symbol '?' (e.g., ABC??123??).**
[18] **As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.8, para. 2. https://unece.org/transport/vehicle-regulations/wp29/resolutions.**

2. Section 1, subsection 1.1, amend to read (based on ADS-17-19/Rev.1):

1.1. ADS description **and drawings** (~~as per para. 6.3 of the regulation~~ **in accordance with paragraph 7.3.1.**)
1.1.1. ADS intended uses (~~as per para. 7.3.1.2 of the regulation~~ **in accordance with paragraph 7.3.1.2.**)

3. Section 1, subsection 1.2, amend to read (based on ADS-17-19/Rev.1):

1.2. ~~Description~~ **List and description** of the ADS feature(s)
1.2.1. Operational Design Domain ~~/Boundary~~ **and boundary** conditions and expected operating conditions (~~ref. .3.1.3 of the ADS regulation~~ **in accordance with paragraph 7.3.1.3.**)

1.2.2. System Outline (~~ref. 7.3.1.4 and 6.3.1.4 of the ADS regulation~~ **in accordance with paragraph 7.3.1.4.**)
1.2.2.1. Main ADS ~~Functions~~ **functions** (functional architecture)
1.2.2.1.1. Vehicle-internal functions (e.g. Sensing and perception, Decision-making and planning, Information display/user interface)
1.2.2.1.2. Vehicle-external functions (e.g. backend, off-board infrastructure needed)
1.2.2.2. Overview of the major ~~components~~ **elements** of the ADS
... *1.2.2.2.1. through 1.2.2.3.2. unchanged.*

4. Section 1, item 1.3, amend to read (based on ADS-17-19/Rev.1):

1.3. ADS feature ~~Operational~~ information (for each feature) (~~*ref. 6.3.1.5/6/7/8/9/11/12/14/15/16 and 5.1 and 5.2 of the ADS regulation*~~ **in accordance with paragraphs 6.1., 6.2., 7.3.1.5. to 7.3.1.12, 7.3.1.15, and 7.3.1.16.**

"in accordance with para. 7.3.1.5/6/7/8/9/11/12/14/15/16 and 6.1 and 6.2" amended for clarity.

5. Section 1, replace items 1.3.1. through 1.3.3.7. with the following table (based on ADS-17-19/Rev.1):

Item	*Description*	*Feature 1*	*...*	*Feature n*
1.3.1.	ADS Feature type (i.e., ADSF-1 or ADSF-2)			
1.3.2.	ADS feature performance and limitations, including description of the ODD			
1.3.3.	Specified maximum speed of the ADS features declared by the manufacturer			
1.3.4.	Input and output relevant to ADS and their ranges			
1.3.5.	Description of the ADS performance of the DDT (nominal, critical, failure scenarios, at ODD boundaries, fallback strategies)			
1.3.6.	Description of interactions between the ADS and its user(s):			
1.3.6.1.	Human-machine interaction concept with occupants, other road users and remote interactions including information provided to the users			
1.3.6.2.	Description of the means to activate and deactivate the feature and to take over the performance of the DDT system (if applicable)			
1.3.6.3.	Description of the ADS feature deactivation to manual driving (if applicable)			
1.3.6.4.	Methods to detect user availability (if applicable)			
1.3.6.5.	Methods to determine user engagement (if applicable)			
1.3.6.6.	Conditions for triggering a request to the occupant(s) or for remote intervention			
1.3.6.7.	Written description or drawing of the information given to the user, including:			
1.3.6.7.1.	System status			
1.3.6.7.2.	The role of the fallback user (if applicable)			
1.3.6.7.3.	Adapted performance in case of failure			
1.3.6.7.4.	ADS feature deactivation to manual driving (if applicable)			
1.3.6.7.5.	Fallback to a Mitigated Risk Condition			

Table includes editorial amendments (e.g., “Mitigated”, not “Minimal” Risk Condition)

6. Section 1, item 1.4., amend to read (based on ADS-17-19/Rev.1):

1.4. Safety case (~~ref. 6.3.2 and 6.2, 6.1.4–8 and 6.4 of the ADS regulation~~ **in accordance with paragraphs 7.1.4. to 7.1.8., 7.2., 7.3.2., and 7.4.**) [21]

[19] **The manufacturer may provide a document reference and high-level description for sensitive or business confidential information.**

7. Section 1, item 1.4.2., amend to read (based on ADS-17-19/Rev.1):

1.4.2. ~~Description of ADS's detection, identification, and response to hazards including the list of all identified hazards and their mitigations.~~ **General description of failure-handling main principles and fallback strategy, including fallbacks to a Mitigated Risk Condition**

8. Section 1, item 1.4.8.1., amend to read (based on ADS-17-19/Rev.1):

1.4.8.1. ~~Selection~~ **Description of the approach for selection** of nominal, critical and failure scenarios.

9. Section 1, item 1.4.10., amend to read (based on ADS-17-19/Rev.1):

1.4.10. DSSAD and ISMR **(where applicable)**
~~1.4.10.1 ADS data elements~~
1.4.10.~~2~~**1**. Type of data stored
1.4.10.~~3~~**2**. Storage location**(s)**
1.4.10.~~5~~**3**. Recorded occurrences and data elements
1.4.10.~~6~~**4**. Means to ensure data **integrity,** security, and ~~data~~ protection
1.4.10.~~7~~**5**. Means to access the data

10. Section 1, item 1.5., amend to read (based on ADS-17-19/Rev.1):

1.5. ~~Operational Information (ref. 5.2.4, 5.3, 6.5 regulation): Information to user, Maintenance information, Instructions in case of failures and ADS request, Operational measures (e.g. when intervention is needed) (to be annexed to the information document)~~ **Operational information (in accordance with paragraphs 6.2.4. and 7.5.): Information to user(s), maintenance information, instructions in case of failures and ADS requests, operational measures (e.g., when intervention is needed) (to be annexed to the information document)**

11. Section 1, item 1.6., amend to read (based on ADS-17-19/Rev.1):

1.6. ~~Means to enable periodic road worthiness tests (ref. 5.3 of the ADS regulation)~~ **Description of the means to enable periodic roadworthiness tests, if applicable (in accordance with paragraph 6.3.5.1.)**

Annex 1, Appendix 2: Remove brackets around “E44 Uzbekistan” subject to confirmation by the Secretariat of the entry-into-force of Uzbekistan’s accession to the 1958 Agreement (expected as of December 2025).

Annex 4, Section "OCCURRENCE DETAILS", rows 3 and 4, remove brackets:

Maximum ADS-determined/estimated vehicle speed ~~[10]~~ **during the 10** seconds prior to the collision
Maximum ADS vehicle longitudinal deceleration ~~[10]~~ **during the 10** seconds after the collision

Annex 7 ODD-based Behavioural Competencies and Scenario Identification Approach:

1. Section 1, first paragraph, remove brackets around "[scenarios and situations]".

2. Section 1, 2nd paragraph, delete "and situations" and remove brackets:

   The suggested approach includes a description of how such competencies can be classified into nominal, critical and failure and mapped to the relevant ~~[~~scenarios ~~and situations]~~, selected either from existing databases or identified through the application of different approaches.

3. Section 1.2, delete 2nd paragraph:

   ~~[Nominal driving situations are those in which behaviour of other road users and the operating conditions of the given ODD are reasonably foreseeable (e.g., other traffic participants operating in line with traffic regulations) and no failures occur that are relevant to the ADS's performance of the DDT.]~~

4. Section, 1.2, 3rd paragraph, remove brackets and amend to read:

   ~~[~~Critical ~~driving~~ situations are those **requiring a prompt action of the ADS to avoid or mitigate the risk of a collision, that could result in adverse consequences on human health or property damage. For example, those** in which the behaviour of one or more road users (e.g., violating traffic regulations) and/or a sudden and not reasonably foreseeable change of the operating conditions of the given ODD (e.g., sudden storm, damaged road infrastructure) **requires the ADS to take prompt action**. ~~creates a situation that requires a prompt action of the ADS to avoid or mitigate a collision. In this case, it is recognised that the ADS may not be able to avoid a collision, but mitigation may be possible.]~~

5. Section 1.2, 4th paragraph, amend to read and remove brackets:

   ~~[~~Failure situations involve those in which the ADS or another vehicle system experiences a ~~fault or~~ failure that compromises the ADS's ability to perform the DDT, such as sensor or computer failure or a failed propulsion system.~~]~~

6. Section 1.2, 5th paragraph, amend to read:

   ~~[~~Nominal ~~driving~~ situations are those **that are neither critical nor failure, such as those** in which **the** behaviour of other road users and the operating conditions of the given ODD are reasonably foreseeable (e.g., other traffic participants operating in line with traffic regulations) and no failures occur that are relevant to the ADS's performance of the DDT.]

7. Section 2, 2nd paragraph, amend to read:

   Figure 1 describes the overall approach. Once acceptance criteria are defined based on **the** overall requirements, different approaches (described below) are used to generate nominal, critical and failure scenarios tests. Testing is performed using various test methods, and the outcome is evaluated to see if there is sufficient evidence to support the safety case claims and the acceptance criteria. The following section describes the different stages and steps.

8. Section 2.1.1. ODD analysis, first paragraph, amend to read:

This analysis represents the first step with the aim to identify the characteristics of the ODD. An ODD ~~[specification/~~description~~]~~ can consist of stationary physical elements (e.g., physical infrastructure), environmental conditions, dynamic elements (e.g., reasonably expected traffic level and composition, vulnerable road users) and operational constraints to the specific ADS application. **The output consists of a list of elements to be considered in the subsequent analysis.** ~~[Various sources provide useful guidance for precisely determining the elements of a particular ODD and their format definition….]~~

9. Section 2, subsection 2.1.3, 2nd paragraph, amend to read:

The outcome of the analysis is a set of ~~behaviour~~ **behavioural** competencies that can be applied to the events characterizing the ODD. Table 2 provides a qualitative example of a matching event – response.

10. Section 2.2, first paragraph, delete brackets and amend to read:

To ensure that the behavioural competencies identified in the previous paragraphs are ready to be assessed, ODD-relevant ~~[~~scenarios ~~and situations]~~ must be identified.

11. Section 2.2, 6th paragraph, item (e), amend to read:

(e) ~~[ISMR ref]~~ **In-Service Monitoring and Reporting findings.**

12. Section 2.2, 8th and 9th paragraphs, amend to read:

~~[~~While many of the knowledge-based methods are looking at existing data and knowledge, a different method is goal-based. ~~As the acceptance criteria are defined, they are actually setting the goals that should be demonstrated by testing and coverage and used as evidence for safety claims. Starting from these goals, and looking at the existing status of the evidence, gaps in testing and coverage can be identified, and mapped back to missing scenarios that should be used for testing.~~

~~Furthermore, existing scenarios already defined in standards, regulations or guidelines can also be utilised for the testing of ADSs. Additional scenarios include those that occur during real-world trials and deployments. Such scenarios might not have been considered pre-deployment but are key learnings. At the time of publishing this text, there is significant experience gathered with existing trials and tests, and thus a significant amount of driving logs and recording can be used.~~

13. Section 2.2, 10th paragraph, amend to read:

~~For AI centric~~ **Training** ADS systems~~, training~~ requires ~~usage of a lot~~ **large volumes** of data from driving logs and recordings. The same data resources can be used to test the behavioural competencies. The challenge is to map these into the scenario categories, in order to ensure that this testing and its results are counted correctly toward the acceptance criteria evaluation.

14. Section 2.2, 12th paragraph, remove brackets and add last sentence:

The scenario-generation method should include adequate coverage of relevant nominal, failure, and critical ~~[~~scenarios and situations~~]~~ to effectively validate the ADS. “Coverage” refers to the degree to which scenarios sufficiently incorporate driving situations in order to validate the relevant requirements of this regulation. Sufficient coverage is essential to the overall effectiveness and credibility of these methodologies as a validation approach. Sufficient coverage should be with respect to the ADS feature or ODD. Coverage can be measured across different domains, and metrics can be used to determine sufficiency. **Coverage can be measured both on the test scenarios serving as input to the test, as well as on the behavioural competencies and KPIs demonstrated during testing.**

15. Section 2.3.1, 2nd paragraph, amend to read:

Therefore, an **example** approach to codify rules of the road to provide additional specificity ~~was developed (see Appendix 1)~~ **is introduced in paragraph 2.5.2. below**. Additionally, application of models involving safe driving behaviour may be needed in addition to reference to codified rules of the road in developing behavioural competencies for nominal driving situations.

16. Section 2.3.2, first paragraph, last sentence, amend to read:

Additionally, it is also important to identify the occurrence of unplanned emergent ~~behaviour~~ **behaviours** in critical situations.

17. Section 2.3.2, 2nd paragraph, amend to read:

Analysis of the first type ~~may~~ **can** be based on a variety of methodologies, including ~~e.g. IEEE 2846~~ **reference to existing standards** (which ~~offers~~ **offer** guidance on what behaviours by other road users are reasonably foreseeable) and other models of reasonable driving behaviour. Analysis of the second factor may be based on various models of acceptable human driving behaviour in crash imminent situations.

18. Section 2.3, 3rd paragraph, amend to read:

Hazard identification methods **(e.g., Systems Theoretic Process Analysis)** ~~(e.g. STPA as mentioned in SAE J3187) which~~ **that** analyse the system design for functional and operational insufficiencies can help identify the occurrence of emergent ~~behaviour which~~ **behaviours that** may lead to critical situations.

19. Section 2.3, 6th paragraph, remove brackets:

~~[~~Critical situation behavioural competencies should provide evidence that an ADS needs to be responsive to actions by other road users, which may make a crash unavoidable. Therefore, critical scenarios should not be limited to those that are deemed preventable by the ADS. Unsafe behaviours of other road users (e.g., vehicle travelling in the wrong direction, sudden unsignalled lane changes, and exceeding the speed limit) — if reasonably foreseeable within the appropriate ODD — should be included as part of validation testing.]

20. Section 2.4, first paragraph, delete reference and amend to read:

Concrete performance requirements depend on the specific ~~situations~~ **situation** the ADS encounters, on a reference behaviour that is deemed appropriate for a human driver or a technical system, and on assumptions (e.g., cut-in speed values, reaction times, …) about the behaviour of the vehicle and other road users. Assumptions concerning the actions of other road users may need to account for cultural differences in driving styles in different geolocations, making it impracticable to harmonise these assumptions across different domains. Therefore, evidence should be provided to support the assumptions made. Existing standards~~, e.g., IEEE 2846-2022~~ provide ~~a set~~ **sets** of assumptions to be considered by ADS safety-related models for an initial set of driving situations. Additionally, several other tools, including data collection campaigns performed during the development phase, real-world accident analysis and realistic driving behaviour evaluations, constraint randomisation, Bayesian optimisation, among others, can be used to inform values for such assumptions.

21. Section 2.5, Table 5, row 1, column 4, amend to read “Behavioural Competency”.

23. Section 2.5, Table 5, row 3, column 5, amend to read:

In response to a fault, the ADS shall either execute a fallback response and prohibit activation of the impacted feature(s) if the fault prevents the ADS from performing the DDT in accordance with the requirements of ~~5.1.~~ **paragraph 4.1. of this Regulation** or adapt its performance of the DDT in accordance with the severity of the fault provided the resulting performance complies with the requirements of ~~section 5.1~~ **paragraph 4.1.**

24. Section 2.5, 2nd paragraph, amend to read:

On the other hand, **in** failure situations**, the aim is** ~~are performed~~ to assess the ADS ability to recognise faults/failures in the system and safely react to such cases.

26. Section 2.5, 3rd paragraph, amend to read:

For the purpose of defining performance criteria in critical situations, those **situations** where others are at fault, behaving unforeseeably, and the collision might potentially not be prevented have to be analysed further. In these situations, different considerations can be made.

27. Section 2.5.1, first paragraph, amend to read:

As testing by the manufacturer is an ongoing process, the outcome of the testing is constantly evaluated. The goal of the evaluation is to assess if sufficient evidence to support the claims of the safety case is achieved, and if an assessment of an acceptable residual risk can be developed. This evaluation is **a** major input to the decision ~~of~~ **on whether the** acceptance criteria are met, or if more scenarios and tests are required. If more are required, then additional effort is invested (by using all methods shown above) ~~in~~ **to** increasing the ODD and scenario coverage, until the goals of the acceptance criteria is met.

28. Section 2.5.1., introduce new paragraph:

Another way to look at it is represented by the goal-based methods. As the acceptance criteria are defined, they are actually setting the goals that should be demonstrated by testing and coverage and used as evidence for safety claims. Starting from these goals, and looking at the existing status of the evidence, gaps in testing and coverage can be identified, and mapped back to missing scenarios that should be used for testing.

29. Section 2.5.2, delete 2nd paragraph:

~~It is challenging to test against this requirement in the absence of codified rules of the road.~~

30. Section 2.5.2, Figure 3, change "behaviour competency" to "behavioural competency" in "current" and "codified" rules of the road equations and change "Codified Rule of the Road" to "Codified Rules of the Road"

Annex 6, Data Storage Systems for Automated Driving

1. Remove the brackets around the title: "[Data Storage Systems for Automated Driving]".

2. Paragraph 1.1., amend to read:

1.1. ~~This annex defines Data Storage System for Automated Driving (DSSAD) as the data storage capability of a vehicle to monitor the safety performance of ADS and establishes requirements to enable the evaluation of ADS safety performance.~~ **This annex provides DSSAD specifications in accordance with paragraphs 6.3.1.1., 7.3.1.13., 8.3.1.6., and 8.3.3.1. The manufacturer shall address these specifications in its description of the DSSAD installed on the ADS in accordance with paragraph 7.3.1.13.**

3. Paragraph 2.3., amend to read:

2.3. ~~In the case of the data intended to be stored off-board the vehicle cannot be transmitted, it shall remain stored on the vehicle.~~ **Data elements under paragraph 5 of this annex that may be stored off-board the vehicle shall remain stored on the vehicle until the data has been successfully uploaded to an off-board storage facility.**

4. Paragraph 3.1., remove brackets:

3.1. Each data element listed in paragraph 5 of this annex shall be available in accordance with paragraph 4 of this annex. The output shall be provided in an open standard format (e.g. JSON, CSV, XML), with the exception of 'sensor data', and the data shall be in a readable form, aside from 'sensor data' ~~[~~and 'visual images'~~]~~.

5. Paragraph 5.2.1., delete "and recording conditions":

5.2.1. The following table details the data elements of time-stamp data to be recorded, along with any additional information ~~and recording conditions~~.

Table of time-stamped data elements:

6. Delete column 3 and insert new row 3:

Event	*Additional Information*
Activation of the feature	ADS feature is activated by the: (a) system, or (b) user
The following data elements shall be recorded if they occur while an ADS feature is active.	
….	

7. Row 4, column 2, amend to read:

Deactivation of the feature	~~ADS feature is deactivated by the:~~ (a) ~~system, or~~ **Initiated by the system**, or (b) ~~user~~ **Initiated by a user**.

8. Row 5, column 2, amend to read:

Start of ADS fallback to user, if applicable	~~Deactivation of the ADS feature initiated due to:~~ **ADS fallback to user initiated due to:**

9. Row 6, column 2, amend to read:

Start of ADS fallback to an MRC	~~MRC resulting from:~~ **Fallback to an MRC initiated due to:**

10. Row 16, columns 1 and 2, amend to read:

Detected failure ~~situation~~ **that compromises the ADS capability to perform the DDT**	~~The failure could include the following:~~ ~~(a) ADS~~ ~~(b) Sensor~~ ~~(c) Other vehicle systems (mechanical, electrical, etc.)~~ **Nature of failure in accordance with para. 7.3.1.15.**

11. Paragraph 5.3.1., remove brackets and amend to read:

5.3.1. ~~[~~The data elements shall be recorded ~~in compliance with paragraph 5.3.x~~ if the following thresholds are reached or conditions occur:

(a) Detected collision

(b) EDR trigger input (excluding last stop trigger)~~]~~

Table of time-series data elements:

12. Insert new row 1:

Visual images[4]		

13. Insert new footnote 4:

[4] **This data element is generally represented by a camera image; however, this image may be a construct of other sensor data if camera images are unavailable.**

14. Amend footnote 5 to read:

[5] e.g., camera, radar, LiDAR, used by the ADS for decision making. This shall be documented in the information package provided to the Authorised Entity. This shall include a "Visual Representation" submitted to the Authorised Entity at the time of providing the DSSAD Data ~~and shall comply with the requirements of 4.1 and 5.4~~.

Justifications

This document proposes amendments to ECE/TRANS/WP.29/GRVA/2026/3 as agreed by the ADS IWG to remove brackets and resolve items that were pending at time of the formal document submission. These amendments have been agreed by the ADS informal working group, the GRVA ADS workshops, and the EDR/DSSAD informal working group. The amendments, including their rationale, can be found in the respective ADS IWG documents cited above.