

ADS IWG Working Document
Change Proposal Form
One major comment per form
(Shaded blocks for use by the IWG Secretariat)

Document Reference

ADS-17-19

Date

3 December 2025

Agenda item

Proposed by (affiliation only—no personal information)

EC/UK/NL

Summary of Change (25 words or less)

Administrative section of the UNR

Reason for Change (Justification)

The changes reflect the proposals concerning the definition of Vehicle Type, the Application for Approval, the Approval and the Modifications and extension of approval (ref. GRVA-WS12-03) and proposal on the Annex1 (ref. GRVA-WS12-04r1) which were already presented and agreed in the 12th ADS workshop.

Location

2.37., 3.1, 3.2, 4.1-4.10, 9.1-9.3/4, Annex1 and Annex1 appendix1

Original text

[2.37. “Vehicle Type with regard to its Automated Driving System (ADS)” means a category of vehicles which do not differ in such essential aspects as:

- (a) The system characteristics and design of the ADS, and
- (b) Vehicle features which significantly influence the performance of the ADS.]

[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 of all of the Contracting Parties in whose territory features of the ADS can be active (‘receiving approval authorities’).

- (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.]
- 3.2. The application for approval of a vehicle type with regard to its ADS shall be submitted by the manufacturer or by their duly accredited representative. It shall be accompanied by the documents mentioned below in triplicate:
 - 3.2.1. A certificate of compliance for the SMS in accordance with this regulation.
 - 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.
 - [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’.]

4. Approval

- 4.1. Approval authorities shall grant, as appropriate, type approval with regard to Automated Driving Systems, only to such vehicle types that satisfy the requirements of this Regulation.
- 4.1.1. The approval authority or its designated 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].
- 4.1.1.1. In the case of ADS vehicles that are subject to the requirements of UN Regulation No. 79, the approval authority or its designated technical service shall verify the compatibility between the safety concept of the ADS steering equipment and the safety concept of the ADS.
- 4.1.2. The 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.
 - 4.1.2.1. Confirmatory Testing shall at least include track and real-world testing.
 - 4.1.2.2. Track testing may be omitted from confirmatory testing if the approval authority or its designated technical service deems the evidence collected by real-world testing sufficient to verify that the manufacturer has implemented the measures they have documented.
- 4.1.3. The approval authority or its designated technical service shall verify that the Certificate of Compliance for SMS submitted by the manufacturer is valid and is applicable to the vehicle type.
- 4.1.4. The approval authority shall refuse to grant the type approval where the manufacturer has not fulfilled one or more of the requirements of this Regulation.
- 4.1.5. The approval authority shall also refuse to grant the type approval where the approval authority or its designated technical service has not received sufficient information from the manufacturer to assess the Automated Driving System of the vehicle type.
- 4.2. Notice of approval or of extension or refusal of approval of a vehicle type pursuant to this Regulation shall be communicated to the Parties to the 1958 Agreement that apply this Regulation by means of a form conforming to the model in Annex 1 to this Regulation.
- 4.3. Approval authorities shall not grant any type approval without verifying that the manufacturer has put in place satisfactory arrangements and procedures to properly manage all aspects required by this Regulation.
- [4.4. The approval authority and its designated technical services 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 functional safety (e.g., ISO 26262), safety of the intended functionality (e.g., ISO 21448), modelling & simulation, safety management system, automated driving systems, and

human factors, and shall be able to make the necessary link with cyber security.

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

[4.5. Approvals covering ADS features that can be active in the territory of a Contracting Party other than the Contracting Party issuing the approval⁹

4.5.1. Before granting an approval according to this UN Regulation, the granting approval authority shall inform the approval authorities¹⁰ 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 at least 30 days prior to granting the approval:

- (a) The information described in paragraphs 3.2.3.(a) to (f) above.
- (b) Details of requirements where a significant interpretation has been made (if any)

This information shall be considered as confidential by the receiving approval authority.

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.

4.5.2.1. 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.

4.5.2.2. In case of any dispute between Contracting Parties this shall be settled in accordance with Article 10 and Schedule 6 of the 1958 Agreement.

⁹These provisions shall be kept under periodic review by GRVA for amendment as necessary to support effective implementation of this UN Regulation.

¹⁰ 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> Contracting Parties without an Approval Authority shall publish the relevant contact details on the online platform (“/343 Application”) 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].

- 4.5.4. In the case that the territory of an additional Contracting Party is added as part of the extension of a type approval, the requirements of paragraphs 4.5.1. and 4.5.2. shall apply *mutatis mutandis* with respect to that Contracting Party and its approval authority.
- 4.5.5. In the case of modifications to a vehicle type resulting in extension of an approval that covers territory of other Contracting Parties, the granting approval authority shall consider whether these changes affect the validity of the information previously reviewed by receiving approval authorities. If so, the approval authorities of the relevant Contracting Parties shall be consulted in accordance with paragraph 4.5.1 and 4.5.2.
- 4.5.6. Each approval authority shall, within 14 days after granting or extending a type approval pursuant to this Regulation, upload the type approval together with the supplementing documentation (including all related test reports) in English language to the secure internet database "DETA", established by the United Nations Economic Commission for Europe.]
- 4.6. There shall be affixed, conspicuously and in a readily accessible place specified on the approval form, to every vehicle conforming to a vehicle type approved under this Regulation, an international approval mark consisting of:
- 4.6.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval¹¹,
- 4.6.2. The number of this Regulation, followed by the letter "R", a dash and the approval number, to the right of the circle prescribed in paragraph 4.6.1. above, and;
- 4.7. If the vehicle conforms to a vehicle type approved under one or more other Regulations annexed to the Agreement, in the country which has granted approval under this Regulation, the symbol prescribed in paragraph 4.6.1. above need not be repeated; in such a case, the Regulation and approval numbers and the additional symbols shall be placed in vertical columns to the right of the symbol prescribed in paragraph 4.6.1. above.
- 4.8. The approval mark shall be clearly legible and be indelible.
- 4.9. The approval mark shall be placed close to or on the vehicle or bodywork data plate affixed by the manufacturer.
- 4.10. Annex 2 to this Regulation gives examples of arrangements of approval marks.

¹¹ The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.8

9.Modifications and extension of approval of the vehicle type

- [9.1. Every modification of the vehicle type with regard to this Regulation shall be notified to the approval authority that approved that vehicle type. The approval authority may then either:
- (a) Decide, in consultation with the manufacturer, that a new type approval is to be granted; or
 - (b) Apply the procedure contained in paragraph 9.1.1. (Revision) and, if applicable, the procedure contained in paragraph 9.1.2. (Extension)]
- 9.1.1. Revision
- When particulars recorded in the information documents of Annex 1 - Appendix 1 have changed and the approval authority considers that the modifications made are unlikely to have appreciable adverse effect, and that in any case the vehicle still meets the requirements, the modification shall be designated a "revision".
- In such a case, the approval authority shall issue the revised pages of the information documents of Annex 1 - Appendix 1 as necessary, marking each revised page to show clearly the nature of the modification and the date of reissue. A consolidated, updated version of the information documents of Annex 1 - Appendix 1, accompanied by a detailed description of the modification, shall be deemed to meet this requirement.
- 9.1.2. Extension
- The modification shall be designated an "extension" if, in addition to the change of the particulars recorded in the information folder:
- (a) Further inspections or tests are required; or
 - (b) Any information on the communication document (with the exception of its attachments) has changed; or
 - (c) Approval to a later series of amendments is requested after its entry into force.
- 9.2. Notice of confirmation, extension, or refusal of approval shall be communicated by the procedure specified in paragraph 4.2. above, to the Contracting Parties to the Agreement applying this Regulation. In addition, the index to the information documents and to the test reports, attached to the communication document of Annex 1, shall be amended accordingly to show the date of the most recent revision or extension.
- 9.3. The approval authority issuing the extension of approval shall assign a series number to each communication form drawn up for such an extension.

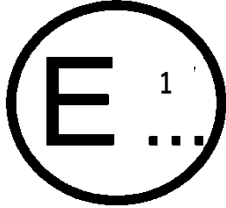
[Annex 1

Communication

(Maximum format: A4 (210 x 297 mm)

issued by:

Name of administration:



¹⁷

Concerning: ¹⁸

Approval granted

Approval extended

Approval withdrawn with effect from dd/mm/yyyy

Approval refused

Production definitively discontinued

of a vehicle type with regard to ADS pursuant to UN Regulation No XXX

Approval No.:

Extension No.:

Revision No.:

Reason for extension or revision:

1. Trade name or mark of vehicle):
2. Vehicle type
3. Manufacturer's name and address
4. If applicable, name and address of manufacturer's representative
5. General construction characteristics of the vehicle:
- 5.1 Photographs and/or drawings of a representative vehicle
6. Description and/or drawing of the ADS including:
 - 6.1. ADS intended uses:
 - 6.2 List of all ADS Features:
 - 6.3. Overview of the ADS subsystems (incl. components):
 - 6.4. Installation of the ADS sensing system:

¹⁷Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

¹⁸Strike out what does not apply.

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

<i>Item</i>	<i>Description</i>	<i>Feature 1</i>	<i>...</i>	<i>Feature n</i>
7.1.	ADS Feature type (i.e., ADSF-1 or ADSF-2):			
7.2.	ADS feature(s) performance and limitations:			
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:

<i>Item</i>	<i>Description</i>	<i>Feature 1</i>	<i>...</i>	<i>Feature n</i>
7.4.1.	Means to activate, deactivate 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)			

7.5. Written description and/or drawing of the information given to the user, including:

<i>Item</i>	<i>Description</i>	<i>Feature 1</i>	<i>...</i>	<i>Feature n</i>
7.5.1.	System status			
7.5.2.	The role of the fallback user (if applicable)			
7.5.3.	Adapted performance in case of failure			
7.5.4.	ADS feature deactivation to manual driving (if applicable)			
7.5.5.	Fallback to a Mitigated Risk Condition			

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

8.1. 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

9. Cyber Security and Software updates

9.1. Cyber Security Type Approval Number (if applicable):

9.2. Software Update Type approval number (if applicable):

10. Safety case:

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

11. Technical Service responsible for conducting approval tests.....

11.1. Date of report issued by that service

11.2. (Reference) Number of the report issued by that service.....

12. Approval granted/extended/revised/refused/withdrawn²
 13. Position of approval mark on vehicle.....
 14. Place.....
 15. Date
 16. Signature
 17. Annexed to this communication is a list of documents in the approval file deposited at the administration services having delivered the approval and which can be obtained upon request.
- Additional information regarding software identification and software updates (where applicable):
18. R_[number of this Regulation]SWIN:
 - 18.1. Is the R_[number of this Regulation]SWIN held on the vehicle²: Yes/No
 - 18.2. Information on how to read the R_[number of this Regulation]SWIN or software version(s) in case the R_[number of this Regulation]SWIN is not held on the vehicle:
.....
 - 18.3. If applicable, list the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the R_[number of this Regulation]SWIN under the item above:.....

Annex 1 - Appendix 1

Information document

The following information shall be supplied in triplicate and include a list of contents. Any drawings or pictures shall be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, shall show sufficient detail.

Information document

Information document No ... relating to the type-approval of a type of a Vehicle with regard to the Automated Driving System (ADS) pursuant to UN Regulation No. X.

- | | |
|------------|---|
| [0. | General information |
| 0.1. | Make (trade name of manufacturer): |
| 0.2. | Type: |
| 0.2.1. | Commercial name(s) (if available): |
| 0.3. | Means of identification of type, if marked on the vehicle: ¹ |
| 0.3.1. | Location of that marking: |
| 0.4. | Category of vehicle: ² |
| 0.5. | Company name and address of manufacturer: |
| 0.8. | Name(s) and Address(es) of assembly plant(s): |
| 0.9. | Name and address of the manufacturer's representative (if any): |

- 1. Automated Driving System (ADS)**
 - 1.1.** ADS description (*as per para. 6.3 of the regulation*)
 - 1.1.1. ADS intended uses (*as per para. 7.3.1.2 of the regulation*)
 - 1.2.** Description of the ADS feature(s)
 - 1.2.1. Operational Design Domain/Boundary conditions and expected operating conditions (*ref. 3.1.3 of the ADS regulation*)
 - 1.2.2. System Outline (*ref. 7.3.1.4 and 6.3.1.4 of the ADS regulation*)
 - 1.2.2.1. Main ADS 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 of the ADS
 - 1.2.2.2.1. Control units
 - 1.2.2.2.2. Sensors and installation of the sensors on the vehicle
 - 1.2.2.2.3. Actuators
 - 1.2.2.2.4. Maps and positioning
 - 1.2.2.2.5. Other hardware
 - 1.2.2.3. ADS diagrams and schematics
 - 1.2.2.3.1. Schematic system layout (e.g. block diagram)
 - 1.2.2.3.2. List and schematic overview of interconnections
 - 1.3.** ADS feature Operational information (*ref. 6.3.1.5/6/7/8/9/11/12/14/15/16 and 5.1 and 5.2 of the ADS regulation*)
 - 1.3.1. Input and output relevant to ADS and their ranges
 - 1.3.2. Description of the ADS Performance of DDT (nominal, critical and failure scenarios, at ODD Boundaries, fallback strategies)
 - 1.3.2.1. General explanation of the main design provisions built into the ADS so as to generate safe operation under fault conditions, under operational disturbances and the occurrence of conditions that would exceed the ODD
 - 1.3.2.3.1. General description of failure handling main principles and fall-back level strategy including fallbacks to a Mitigated Risk Condition
 - 1.3.3. Description of the interactions between the ADS and its User(s)
 - 1.3.3.2. Human machine interaction concept with occupants, other roads users and remote interactions including information provided to the users
 - 1.3.3.3. Description of means to activate, deactivate the ADS feature and to take over the performance of the DDT system (if applicable)
 - 1.3.3.4. Description of the ADS feature deactivation to manual driving (if applicable)
 - 1.3.3.5. Methods to detect driver availability (if applicable)
 - 1.3.3.6. Methods to determine driver engagement (if applicable)
 - 1.3.3.7. Conditions for triggering a request to the occupants or for remote intervention
 - 1.4.** Safety case (*ref. 6.3.2 and 6.2, 6.1.4-8 and 6.4 of the ADS regulation*)
 - 1.4.1. Manufacturer Statement that the vehicle is free from unreasonable risks
 - 1.4.1.1. Manufacturer's declaration:
The manufacturer(s) affirm(s) that the ADS is free of unreasonable safety risks to the occupants and other road users.
 - 1.4.2. Description of ADS's detection, identification, and response to hazards including the list of all identified hazards and their mitigations.

- 1.4.3. Description of the strategy to determine that the ADS feature is within its ODD, to remain within its ODD in case of operational disturbances (e.g. expected conditions exceed ODD ranges), to limit sudden ODD exits and frequent activation/deactivation situations.
- 1.4.4. Description of the strategy to prevent or mitigate abuse/misuse and errors by occupants, and to prevent, mitigate or deter harm to occupants caused by external sources and abuse/misuse of the vehicle or its systems from external sources.
- 1.4.5. Description of the strategy to manage the risk for passengers and to avoid operating the vehicle when the general working condition are not satisfactory
- 1.4.6. Description of the strategy to determine collision with safety-relevant object and to assess the damage (i.e. trivial or non-trivial damage).
- 1.4.7. Verification and validation by the manufacturer for the compliance to the DDT performance requirements, the interaction interactions between the ADS and its User(s) and the other ADS requirements and the conclusion that the system is designed in such a way that it is free from unreasonable risks for the occupants and other road users and reasonable coverage of the ODD and its boundaries is achieved .
- 1.4.8. Description of the adopted approach to derive behavioural competencies and scenarios that are ODD-relevant.
- 1.4.8.1. Selection of nominal, critical and failure scenarios.
- 1.4.9. Description of the used methods and tools (software, laboratory, others) and summary of the credibility assessment.
- 1.4.9.1. Description of the results.
- 1.4.9.2. Uncertainty of the results.
- 1.4.9.3. Interpretation of the results.
- 1.4.10. DSSAD and ISMR.
- 1.4.10.1. ADS data elements.
- 1.4.10.2. Type of data stored.
- 1.4.10.3. Storage location.
- 1.4.10.5. Recorded occurrences and data elements.
- 1.4.10.6. Means to ensure data security and data protection.
- 1.4.10.7. Means to access the data.
- 1.4.11. Cyber security and software update.
- 1.4.11.1. Cyber Security type-approval number (If applicable).
- 1.4.11.2. Number of the certificate of compliance for cyber-security management system (If applicable).
- 1.4.11.3. Software update type-approval number (If applicable).
- 1.4.11.4. Number of the certificate of compliance for software-update management system (If applicable).
- 1.4.12.5. Software Identification of the ADS.
- 1.4.12.5.1. Information on how to read the RxSWIN or software version(s) in case the RxSWIN is not held on the vehicle.
- 1.4.12.5.2. If applicable, list the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the RxSWIN.
- 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)
- 1.6.** Means to enable periodic road worthiness tests (*ref. 5.3 of the ADS regulation*)]

Revised text (~~deletions stricken and in bold~~, **additions in bold**)

2.37 “*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,
- (b) Vehicle ~~features~~ characteristics which significantly influence the performance of the ADS, and
- (c) **The manufacturer’s designation of the vehicle type**

3. Application for Approval

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 authorities⁹ 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.

3.2. The application for approval of a vehicle type with regard to its ADS shall be submitted by the manufacturer or by their duly accredited representative. It shall be accompanied by the documents mentioned below in triplicate:

3.2.1. A certificate of compliance for the SMS in accordance with this regulation.

- 3.2.2. A description of the vehicle type with regard to the items mentioned in paragraph {2.3.7}, 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.
- {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'.}
- 3.2.4. In the case of ADS vehicles that are subject to the requirements of UN Regulation No. 79, an analysis showing that the safety concept of the ADS steering equipment is compatible with the safety concept of the ADS.
- 3.3. In cases where information is shown to be covered by intellectual property rights or to constitute specific know-how of the manufacturer or of their suppliers, the manufacturer or their suppliers shall make available sufficient information to enable the checks referred to in this Regulation to be made properly. Such information shall be treated on a confidential basis.

⁹Using 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.

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

4. Approval

- 4.1. Approval Authorities shall grant, as appropriate, type approval with regard to Automated Driving Systems, only to such vehicle types that satisfy the requirements of this Regulation.
- 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}
- 4.1.1.1. In the case of ADS vehicles which are subject to the requirements of UN Regulation No. 79, the Approval Authority or the Technical Service shall verify the compatibility between the safety concept of the ADS steering equipment and the safety concept of the ADS.
- 4.1.2. The Approval Authority or the 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.
- 4.1.2.1. Confirmatory Testing shall at least include track and real-world testing
- 4.1.2.2. Track testing may be omitted from confirmatory testing if the Approval Authority or the Technical Service deems the evidence collected by real world testing sufficient to verify that the manufacturer has implemented the measures they have documented.
- 4.1.3. The Approval Authority or the Technical Service shall verify that the Certificate of Compliance for SMS submitted by the manufacturer is valid and is applicable to the vehicle type.
- 4.1.4. The Approval Authority shall refuse to grant the type approval where the manufacturer has not fulfilled one or more of the requirements of this regulation.
- 4.1.5. The Approval Authority shall also refuse to grant the type approval where the Approval Authority or Technical Service has not received sufficient information from the manufacturer to assess the Automated Driving System of the vehicle type.
- 4.2. Notice of approval or of extension or refusal of approval of a vehicle type pursuant to this Regulation shall be communicated to the Parties to the 1958 Agreement which apply this Regulation, by means of a form conforming to the model in Annex 1 to this Regulation.
- 4.3. Approval Authorities shall not grant any type approval without verifying that the manufacturer has put in place satisfactory arrangements and procedures to properly manage all aspects required by this Regulation.
- {4.4. The Approval Authority and its Technical Services 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.†

4.5. Approvals covering ADS features which can be active in the territory of a Contracting Party other than the Contracting Party issuing the approval⁹¹⁰

4.5.1. Before granting an approval according to this UN Regulation, the granting Approval Authority shall inform the Approval Authorities⁹¹⁰ 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 30 days prior to granting the approval:**

(a) The information described in paragraphs 3.2.3.(a) to (f) above.

(b) Details of requirements where a significant interpretation has been made (if any).

This information shall be considered as confidential by the receiving Approval Authority.

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.**

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.~~

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.

4.5.2.3. The granting Approval Authority remains responsible for all decisions regarding the granting of an approval under this regulation.

4.5.3. In the case that the territory of an additional Contracting Party is added as part of the extension of a type approval, the requirements of paragraphs 4.5.1. and 4.5.2. shall apply *mutatis mutandis* with respect to that Contracting Party and its Approval Authority.

4.5.4. In the case of modifications to a vehicle type resulting in extension of an approval which covers territory of other Contracting Parties, the granting Approval Authority shall consider whether these changes affect the validity of the information previously reviewed by receiving Approval Authorities. If so, the Approval Authorities of the relevant Contracting Parties shall be consulted in accordance with paragraph 4.5.1 and 4.5.2.

4.5.6. Each Approval Authority shall, within 14 days after granting or extending a type approval pursuant to this Regulation, upload the type approval together with the supplementing documentation in English language to the secure internet database "DETA", established by the United Nations Economic Commission for Europe.

4.6. There shall be affixed, conspicuously and in a readily accessible place specified on the approval form, to every vehicle conforming to a vehicle type approved under this Regulation, an international approval mark consisting of:

4.6.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval¹¹

4.6.2. The number of this Regulation, followed by the letter "R", a dash and the approval number, to the right of the circle prescribed in paragraph 4.6.1. above; and

4.7. If the vehicle conforms to a vehicle type approved under one or more other Regulations annexed to the Agreement, in the country which has granted approval under this Regulation, the symbol prescribed in paragraph 4.6.1. above need not be repeated; in such a case, the Regulation and approval numbers and the additional symbols shall be placed in vertical columns to the right of the symbol prescribed in paragraph 4.6.1. above.

4.8. The approval mark shall be clearly legible and be indelible.

4.9. The approval mark shall be placed close to or on the vehicle or bodywork data plate affixed by the manufacturer.

4.10. Annex {2} to this Regulation gives examples of arrangements of approval marks.

¹¹The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.7 [~~or Rev.8~~]

9.Modifications and extension of approval of the vehicle type

{9.1. Every modification of the vehicle type **as defined in paragraph 2.37. of this Regulation** shall be notified to the Approval Authority which approved the vehicle type. The Approval Authority ~~may~~**shall** 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).

9.1.1. Revision

When particulars recorded in the information documents of Annex 1 - Appendix 1 have changed and the Approval Authority considers that the modifications made are unlikely to have appreciable adverse effect, and that in any case the vehicle still meets the requirements, the modification shall be designated a "revision".

In such a case, the Approval Authority shall issue the revised pages of the information documents of Annex 1 - Appendix 1 as necessary, marking each revised page to show clearly the nature of the modification and the date of reissue. A consolidated, updated version of the information documents of Annex 1 - Appendix 1, accompanied by a detailed description of the modification, shall be deemed to meet this requirement.

9.1.2. Extension

The modification shall be designated an "extension" if, in addition to the change of the particulars recorded in the information folder:

(a) Further inspections or tests are required; or

(b) Any information on the communication document (with the exception of its attachments) has changed; or

(c) Approval to a later series of amendments is requested after its entry into force.

9.2. Notice of confirmation, extension, or refusal of approval shall be communicated by the procedure specified in paragraph 4.2. above, to the Contracting Parties to the Agreement applying this Regulation. In

addition, the index to the information documents and to the test reports, attached to the communication document of Annex 1, shall be amended accordingly to show the date of the most recent revision or extension.

- 9.3. The Approval Authority issuing the extension of approval shall assign a series number to each communication form drawn up for such an extension.
- 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.**

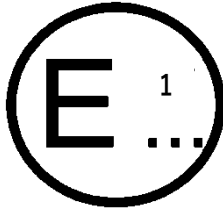
{Annex 1

Communication

(Maximum format: A4 (210 x 297 mm))

issued by:

Name of administration:



17

Concerning:¹⁸

Approval granted
Approval extended
Approval withdrawn with effect from dd/mm/yyyy
Approval refused
Production definitively discontinued

of a vehicle type with regard to ADS pursuant to UN Regulation No XXX

Approval No.:

Extension No.:

Revision No.:

Reason for extension or revision:

1. Trade name or mark of vehicle:

2. Vehicle type:

3. Manufacturer's name and address:

4. If applicable, name and address of manufacturer's representative:

5. General construction characteristics of the vehicle:

5.1 Photographs and/or drawings of a representative vehicle:

6. Description and/or drawing of the ADS including:
 - 6.1. ADS intended uses:
 - 6.2. List of all ADS Features:
 - 6.3. Overview of the ADS **elements subsystems (incl. components)**:
 - 6.4. Installation of the ADS sensing system:

¹⁷Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

¹⁸Strike out what does not apply.

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

Item	Description	Feature 1	...	Feature n
7.1.	ADS 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)			

7.5. Written description and/or drawing of the information given to the user, including:

Item	Description	Feature 1	...	Feature n
7.5.1.	System status			
7.5.2.	The role of the fallback user (if applicable)			
7.5.3.	Adapted performance in case of failure			
7.5.4.	ADS feature deactivation to manual driving (if applicable)			
7.5.5.	Fallback to a Minimal Risk Condition			

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

8.1. Details of how to access data from the DSSAD

8.1. 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~~

9. Cyber Security and Software updates:

9.1. Cyber Security Type Approval Number (if applicable):

9.2. Software Update Type approval number (if applicable):

10. Safety case:

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

10.2. Information Document: see appendix 1:.....

11. Technical Service responsible for conducting approval tests:.....

11.1. Date of report issued by that service:

11.2. Number of the report issued by that service:

12. Approval granted/extended/revised/refused/withdrawn²:

13. Position of approval mark on vehicle:

14. Place:.....

15. Date:

16. Signature:

17. Annexed to this communication is a list of documents in the approval file deposited at the administration services having delivered the approval and which can be obtained upon request.

Additional information regarding software identification and software updates (where applicable):

18. R_[number of this Regulation]SWIN:

18.1. Is the R_[number of this Regulation]SWIN held on the vehicle²: Yes/No

18.2. Information on how to read the R_[number of this Regulation]SWIN or software version(s) in case the R_[number of this Regulation]SWIN is not held on the vehicle:

18.3. If applicable, list the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the R_[number of this Regulation]SWIN under the item above:.....

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

Annex 1 - Appendix 1

Information document

The following information shall be supplied in triplicate and include a list of contents. Any drawings or pictures shall be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, shall show sufficient detail.

Information document

Information document No ... relating to the type-approval of a type of a Vehicle with regard to the Automated Driving System (ADS) pursuant to UN Regulation No. X.

0. General information

- 0.1. ~~Make (trade name of manufacturer):~~ Trade name or mark of vehicle:
- 0.2. Vehicle Type:
 - 0.2.1. Commercial name(s) (if available):
 - 0.2.2. Means of identification of type, if marked on the vehicle:¹⁹
 - 0.2.2.3. Location of that marking:
 - 0.2.2. Category of vehicle²⁰:
- 0.3. ~~Company name and address of manufacturer:~~ Manufacturer's name and address:
 - 0.3.1. Name(s) and Address(es) of assembly plant(s):
- 0.4. If applicable, name and address of manufacturer's representative:
- 0.5. General construction characteristics of the vehicle:
 - 0.5.1. Photographs and/or drawings of a representative vehicle:

¹⁹If 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??).

²⁰As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.8, para. 2. –

www.unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions

1. Automated Driving System (ADS)

- 1.1. ADS description and drawings (*in accordance with para. 7.3.1*)
 - 1.1.1. ADS intended uses (*in accordance with para. 7.3.1.2*)
- 1.2. List and Description of the ADS feature(s)
 - 1.2.1. Operational Design Domain/Boundary conditions and expected operating conditions (*in accordance with para 7.3.1.3 of the ADS regulation*)
 - 1.2.2. System Outline (*in accordance with para 7.3.1.4*)

- 1.2.2.1. Main ADS 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. Control units
- 1.2.2.2.2. Sensors and installation of the sensors on the vehicle
- 1.2.2.2.3. Actuators
- 1.2.2.2.4. Maps and positioning
- 1.2.2.2.5. Other hardware
- 1.2.2.3. ADS diagrams and schematics
- 1.2.2.3.1. Schematic system layout (e.g. block diagram)
- 1.2.2.3.2. List and schematic overview of interconnections

1.3. ADS feature information (for each feature) (in accordance with para. 7.3.1.5/6/7/8/9/11/12/14/15/16 and 6.1 and 6.2)

Item	Description	Feature 1	...	Feature n
1.3.1.	ADS Feature type (i.e. ADSF-1 or ADSF-2)			
1.3.2.	ADS feature(s) performance and limitations including a description of ODD			
1.3.3	Specified maximum speed of the ADS features declared by the manufacturer including the associated internal and external conditions (e.g. ODD, mass, etc.)			
1.3.4	Input and output relevant to ADS and their ranges			
1.3.5.	Description of the ADS Performance of DDT (nominal, critical and failure scenarios, at ODD Boundaries, fallback strategies)			
1.3.6.4	General explanation of the main design provisions built into the ADS so as to generate safe operation under fault conditions, under operational disturbances and the occurrence of conditions that would exceed the ODD-			
1.3.7.5	General description of failure handling main principles and fallback level strategy including fallbacks to a Mitigated Risk Condition-			
1.3.6.	Description of the interactions between the ADS and its User(s):			
1.3.6.1	Human machine interaction concept with occupants, other roads users and remote interactions including information provided to the users			
1.3.6.2	Description of means to activate, deactivate the ADS 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 occupants or for remote intervention			
1.3.6.7	Written description and/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 Minimal Risk Condition			

1.4. Safety case²¹: (in accordance with para. 7.3.2 and 7.2, 7.1.4-8 and 7.4)

1.4.1. Manufacturer Statement that the vehicle is free from unreasonable risks

1.4.1.1. Manufacturer's declaration:
The manufacturer(s) affirm(s) that the ADS is free of unreasonable safety risks to the occupants and other road users.

1.4.2. General description of failure handling main principles and fall-back level strategy including fallbacks to a Mitigated Risk Condition

1.4.3 Description of ADS's detection, identification, and response to hazards including the list of all identified hazards and their mitigations.

1.4.3. Description of the strategy to determine that the ADS feature is within its ODD, to remain within its ODD in case of operational disturbances (e.g. expected conditions exceed ODD ranges), to limit sudden ODD exits and frequent activation/deactivation situations.

1.4.4. Description of the strategy to prevent or mitigate abuse/misuse and errors by occupants, and to prevent, mitigate or deter harm to occupants caused by external sources and abuse/misuse of the vehicle or its systems from external sources.

- 1.4.5. Description of the strategy to manage the risk for passengers and to avoid operating the vehicle when the general working condition are not satisfactory
- 1.4.6. Description of the strategy to determine collision with safety-relevant object and to assess the damage (i.e. trivial or non-trivial damage).
- 1.4.7. Verification and validation by the manufacturer for the compliance to the DDT performance requirements, the interaction interactions between the ADS and its User(s) and the other ADS requirements and the conclusion that the system is designed in such a way that it is free from unreasonable risks for the occupants and other road users and reasonable coverage of the ODD and its boundaries is achieved .
- 1.4.8. Description of the adopted approach to derive behavioural competencies and scenarios that are ODD-relevant.
- 1.4.8.1. **Description of the approach for** selection of nominal, critical and failure scenarios.
- 1.4.9. Description of the used methods and tools (software, laboratory, others) and summary of the credibility assessment.
- 1.4.9.1. Description of the results.
- 1.4.9.2. Uncertainty of the results.
- 1.4.9.3. Interpretation of the results.
- 1.4.10. DSSAD and ISMR (**where applicable**)
- ~~1.4.10.1 — DSSAD data elements~~
- 1.4.10.1. Type of data stored
- 1.4.10.2. Storage location.
- 1.4.10.3. Recorded occurrences
- 1.4.10.4. Means to ensure data **integrity**, security and data protection.
- 1.4.10.5. Means to access the data.
- 1.4.11. Cyber security and software update.
- 1.4.11.1. Cyber Security type-approval number (If applicable).
- 1.4.11.2. Number of the certificate of compliance for cyber-security management system (If applicable).
- 1.4.11.3. Software update type-approval number (If applicable).
- 1.4.11.4. Number of the certificate of compliance for software-update management system (If applicable).
- 1.4.12.5. Software Identification of the ADS.
- 1.4.12.5.1. Information on how to read the RxSWIN or software version(s) in case the RxSWIN is not held on the vehicle.
- 1.4.12.5.2. If applicable, list the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the RxSWIN.
- 1.5. Operational Information (*in accordance with para. 6.2.4, 7.5 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)

1.6. Descriptions of the means to enable periodic road worthiness tests, if applicable (*in accordance with para. 6.3.5.1.*)

²¹*The manufacturer may provide the document reference and high-level description for sensitive and a business confidential information*