Administrative provisions of the draft UN Regulation on ADS

This document is based on ADS-15-05r2, with changes marked in red font.

0. Introduction

(Same as ADS-15-05r3)

1. Scope

(Same as ADS-15-05r3)

2. Definitions

(Content from the IWG on ADS, plus the following amended definition from the Workshop)

- 2.39 "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 characteristics which significantly influence the performance of the ADS, and
 - (c) The manufacturer's designation of the vehicle type.

3. Application for Approval

(Same as ADS-15-05r3)

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 vehicle 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 vehicle manufacturer has implemented the measures they have documented.
- 4.1.2.1. Confirmatory Testing shall at least include track and real-world testing
- Note: If the IWG on ADS includes this text in para. 8, then the WS accepts that it is deleted from this paragraph and moved to para. 8
- 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.
- Note: If the IWG on ADS includes this text in para. 8, then the WS accepts that it is deleted from this paragraph and moved to para. 8
- 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 vehicle 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 vehicle 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 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.
 - (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 approval¹
- 4.5.1. Before granting an approval according to this UN Regulation, the granting Approval Authority shall inform the Approval Authorities² 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.
- Following receipt Having taken account 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(ies) included in the list in Appendix [x] to Annex 1, or;
 - 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.
- The granting Approval Authority remains responsible for all decisions regarding the granting of an approval under this regulation.
- 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 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.

¹ These provisions shall be kept under periodic review by GRVA for amendment as necessary to support effective implementation of this UN Regulation.

² 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].

- 4.5.6. 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 approval³
- 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.

5. General requirements

(Content from the IWG on ADS).

6. ADS Safety requirements

(Content from the IWG on ADS).

7. Manufacturer requirements

(Content from the IWG on ADS).

8. Compliance Assessment

(Content from the IWG on ADS).

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 Type Approval Authority which approved that vehicle type. The Type Approval Authority may then either:

³ 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.7

- (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)



Every modification of the vehicle type as defined in paragraph [2.39.] of this Regulation shall be notified to the Type Approval Authority which approved the vehicle type. The Type Approval Authority 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 Type 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 Type 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 Type Approval Authority issuing the extension of approval shall assign a series number to each communication form drawn up for such an extension.



The vehicle manufacturer may apply for a new vehicle 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 Type Approval Authority or its Technical Service, duplication of tests for these approvals shall be avoided where possible.

10. Conformity of Production

(Same as ADS-15-05r3)

11. Penalties

(Same as ADS-15-05r3)

12. Production definitively discontinued

(Same as ADS-15-05r3)

13. Names and addresses of Technical Services responsible for conducting approval tests and of Type Approval Authorities

(Same as ADS-15-05r3)

14. Certificate of compliance for a Safety Management System (SMS)

(Same as ADS-15-05r3)

Annexes

(Same as ADS-15-05r3)