Informal document GRVA-21-44/Add.1 21st GRVA, 20-24 January 2025, Agenda item 4(a)

## Addendum 1 to GRVA-21-44

The text reproduced below is based on formal document ECE/TRANS/WP.29/2025/44. It was transmitted by the chairpersons of the informal working group on Automated Driving System and the chairpersons of the GRVA Workshops on ADS and considered in [January 2025]. It contains the progress report to the Executive Committee of the 1998 Agreement (AC.3) on the development of a new UN Global Technical Regulation on ADS (ECE/TRANS/WP.29/AC.3/62).

# I. Objective of this proposal

- 1. The representatives of China, Canada, the European Commission, Japan, the United Kingdom of Great Britain and Northern Ireland, and the United States of America have proposed the development of a UN Regulation and a UN Global Technical Regulation (GTR) on Automated Driving System (ADS).
- 2. This initiative builds on the work and results of two informal working groups: Functional Requirements for Automated and Autonomous Vehicles (FRAV) and Validation Methods for Automated Driving (VMAD). Their joint deliverable, the FRAV-VMAD integrated document (ECE/TRANS/WP.29/2024/39), forms the basis of this proposal.

## II. Background

- 3. The World Forum for Harmonization of Vehicle Regulations (WP.29) adopted, at its 191st session and the sixty-eighth session of the Executive Committee of the 1998 Agreement (A.C.3) in November 2023, a proposal for the regulatory approach for Automated Driving Systems (WP.29-191-30/Rev.1). This approach included, among other things, the collaborative development of a UN Global Technical Regulation (GTR) and a UN Regulation for ADS by 2026, with the establishment of an Informal Working Group (IWG) on ADS and the organization of at least two ADS-related two-day workshops per year by the Working Party on Automated/Autonomous and Connected Vehicles (GRVA).
- 4. The amendments to the programme of work and the framework document on automated/autonomous vehicles were also adopted (WP.29-191-31, WP.29-191-32).
- 5. At the eighteenth session of the GRVA, the regulatory approach for Automated Driving Systems, as adopted by WP.29, was discussed. GRVA deliberated on the establishment of a bureau composed of representatives from Canada, China, the European Commission, the United Kingdom, Japan, and the United States to lead the activity. GRVA adopted the draft terms of reference for the IWG on ADS and the workshops on ADS, and submitted them to WP.29 (GRVA-18-41/Rev.2 and GRVA-18-42/Rev.2).
- 6. At the 192nd session of the World Forum for Harmonization of Vehicle Regulations and the sixty-ninth AC.3 session in March 2024, WP.29 agreed that the IWG on ADS would be sponsored and led by Canada, China, European Commission, Japan, United Kingdom of Great Britain and Northern Ireland and the United States of America. WP.29 also noted that the secretariat services would be provided by the representatives of the America Automotive Policy Council (AAPC), the International Organization of Motor Vehicle Manufacturers (OICA), the Japan Automobile Standards Internationalization Center (JASIC) and SAE International. It was agreed that the IWG on ADS would develop the technical requirements for the ADS regulations and that the GRVA Workshops on ADS would develop the

administrative requirements for the two ADS regulations. Two ambassadors (from Australia and the Netherlands) were tasked to align the activities of the IWG on ADS and the Workshops and evaluate the progress of both activities.

- 7. WP.29 adopted, during the same session, an amendment to the Framework Document on automated/autonomous vehicles (ECE/TRANS/WP.29/2024/33 based on informal document WP.29-191-31).
- 8. AC.3 endorsed at its sixty-ninth session the request authorization to develop a new UN GTR on ADS (ECE/TRANS/WP.29/2024/38, ECE/TRANS/WP.29/AC.3/62).

## III. Subjects for review and tasks to be undertaken

- 9. The informal working group has identified the following areas of work:
  - Collating existing standards
  - Scope, purpose and definitions
  - Safety management system
  - Performance of the dynamic driving task
  - Interactions with users
  - ADS safety assessment
  - In-service monitoring and reporting
  - Virtual testing credibility assessment
  - Audit
  - Testing
  - Safety assessment
  - In-service monitoring and reporting
  - Provisions relevant to CS/OTA, EDR/DSSAD, AVC and FADS
  - New issues arising
- 10. The three deliveries of the Workshop on ADS are the development of the administrative requirements for the GTR ADS, likewise for the UNR ADS and the development of an interpretation document. The work was divided in tasks and topics:

#### Task Topic

- 1 Statement of technical rationale
- 2 Introduction
- 3 Procedural background
- 4 Technical background
- 5 Principle for developing the regulation
- 6 Technical rationale and justification
- 7 Benefits and costs
- / Appendix: Documentation of development of GTR

# IV. History of the discussions

## A. 22 April 2024, first session of IWG on ADS, Online

- 11. During the first session of the IWG on 22 April 2024, held as an online conference, the work plans and a draft structural framework referring to the ADS GTR and UNR content were explained based on specific sections (ADS-01-03), particularly "General requirements," "Performance requirements/Test specifications," and "Assessment/Test procedures." It was agreed to appoint "Officers of Principal Interest" (OPI) for each section, who would act as points of contact and coordinators, receiving assistance from IWG on ADS experts.
- 12. The initial objective of the IWG is to transpose the existing guidelines (FRAV/VMAD integrated document) into draft regulatory requirements.
- 13. The GRVA Chair explained the setup, planning, and tasks of the GRVA workshops (ADS-01-04). He introduced ambassadors from Australia and the Netherlands, who serve as points of contact and provide advice and recommendations to both the IWG and the WS.
- 14. Coordination between the IWG on ADS and other related IWG, such as the Task Force (TF) on Automated Vehicle Categorization and TF on the Fitness of UN Regulations and GTR for ADS (FADS), was discussed. As these activities are within GRVA, the ambassadors could play a role in coordination.
- 15. Areas of primary responsibility between the IWG on ADS and the GRVA workshops were indicated during the discussion.
- 16. The IWG also agreed on the internal methodology for the work. It will hold sessions roughly every 2-3 months. Volunteers will serve as OPI to prepare draft content for specific sections and act as points of contact to consolidate input from experts. The plan is to have phased development with defined OPI tasks for work between the IWG sessions.

### B. 17 May 2024, second session of IWG on ADS, Online

- 17. The activities to draft a UN Regulation and a UN GTR on ADS were reported during the nineteenth session of GRVA in May/June 2024. The status report (GRVA-19-52) of the IWG on ADS was endorsed. GRVA noted that sections of the regulation under development were assigned to Officers of Principle Interests (OPIs) with a specific role.
- 18. The expert from OICA provided views and considerations for an Automated Driving System (ADS) regulation (GRVA-19-34). GRVA advised act under both the 1958 and the 1998 Agreements and to discuss this document at a future session of the IWG on ADS.
- 19. At the 193rd session of the World Forum for Harmonization of Vehicle Regulations and the seventeenth AC.3 session, the representative of Canada, on behalf of the sponsoring countries, informed delegates about the ongoing activities of the informal group on ADS. He reported on the first meeting and the management of the group. The information was given that the second meeting was planned as web conference for 17 May 2024 to start the technical discussion and to transpose the integration document into text for the regulations on ADS. He added that the third meeting would be held from 9 to 12 July 2024 in Brussels hosted by the European Commission, also with the possibility of online participation (hybrid format).
- 20. The second meeting on 17 May 2024 was held as online conference. The main objective was to review and discuss the updated core document structure (ADS-01-03 and ADS-02-03).
- 21. The initial objective of the IWG to work on a "translation" of the Integration document into an UN Regulation and a UN GTR was further defined. While new and additional considerations not addressed yet in here may come up during the preparation, these shall

become part of a "list of open issues" and be considered for follow up versions of the regulations (example: ADS interaction with other road users).

22. The items of Annex 10 of the Integration document ("parked items") shall be prioritized based on both urgency and timing needed to be delivered. The guideline document (Task 3 of Workshop of IWG on ADS) can be used to address some of these items (example: template for description of an ODD).

### C. 5 June 2024, first GRVA Workshop on ADS, Online

- 23. The first GRVA Workshop on ADS took place on 5 June 2024 under the leadership of the Chair and Vice-chairs of GRVA, with support from the Ambassadors from Australia and the Netherlands and the secretariat. This workshop aimed to clarify organizational matters for the tasks, inform participants about the mandate and tasks, and define the organization, methods, prioritization, and schedule for the three tasks.
- 24. The workshop, conducted as an online meeting, brought together a diverse group of experts who engaged in an in-depth review of the three key tasks assigned by the Regulatory Approach for Automated Driving Systems, as outlined in document WP.29-191-31/Rev.1. The tasks discussed were:
  - (1). Drafting Administrative Provisions for a UN Global Technical Regulation: Participants focused on identifying and discussing the essential provisions necessary for establishing a UN Global Technical Regulation, including a detailed assessment of the technical rationale to ensure harmony within regulatory approaches by contracting parties.
  - (2). Drafting Administrative Provisions for a UN Regulation: This task involved discussing various aspects, including marking requirements, crucial for compliance and identification purposes in the context of automated driving systems.
  - (3). Preparing a Guiding Document for Implementation: Another significant focus was on preparing a guiding or interpretation document to assist in the implementation of these regulations, aiming to clarify the regulations and provide practical guidance for stakeholders involved in the deployment of automated driving technologies.
- 25. In addition to these discussions, the workshop called for volunteers to take on the role of "Officers of Principal Interest" (OPI). These individuals will be responsible for developing the necessary paragraphs related to tasks (1) and (2), ensuring that the provisions are comprehensive and aligned with the overarching goals of the regulatory framework.

#### D. 9-12 July 2024, third session of IWG on ADS, Brussels, Belgium.

- 26. The third IWG on ADS session was held in Brussels from 9 to 12 July 2024. The IWG reviewed the progress of Phases 1 to 3. Phase 1, focusing on ADS requirements, was set to conclude by December 2024. Phase 2, addressing regulatory provisions and test methods, was planned to begin in July and also aimed for completion in December 2024. Phase 3, starting later in 2024, aimed to finish by May 2025, including discussions on open issues.
- 27. Key discussions included the core document (ADS-03-10rev.2), with agreements on the scope for the UN regulation and preparations for the GTR. Unfinished business was categorized for further discussion, and OPIs were assigned tasks for Phase 2. Industry representatives presented principles for ADS regulation, initiating discussions that will continue in future meetings.

- 28. The status of work for Phases 1 to 3 was reviewed. Phase 1, covering ADS requirements based on the FRAV work, was in progress with a plan to finish in December during the fifth IWG meeting. Phase 2 activities, starting in July, included regulatory provisions for ADS assessment and test methods based on the VMAD work, also planned to finalize by December at the fifth meeting.
- 29. Phase 3, scheduled to begin later in 2024, aimed to finish by May 2025, including consideration of open issues in Annex 10 ("parked items").
- 30. A main part of the 3rd meeting was to further work on the core document (ADS-03-10rev.2). The scope for the UN Regulation was agreed (Categories M and N with regard to ADS), while the scope of the GTR was under preparation with the objective to finalize it at the fourth session. Further items under discussion included critical occurrences, the safety management system, the safety assessment, ADS performance of the DDT, credibility assessment, In Service Monitoring and Reporting requirements (ISMR), and coverage of existing regulations, directives, and international voluntary standards.
- 31. Unfinished business and open issues were categorized into three patterns: new expressions needed during transformation, structural changes in the document, and deeper discussion of new or open items.
- 32. The planning of Phase 2 was further defined, and OPIs were tasked with assessment and test methods (SMS Audit, virtual, track, real-world testing, ISMR, safety assessment). Responsibilities for incorporating inputs from other IWG (CS/OTA, EDR/DSSAD, FADS/AVRS/AVSR, AVC) were agreed upon.
- 33. Forward planning included addressing major open issues identified during the discussion. The schedule of IWG sessions was discussed and agreed upon, with a specific timeline for the submission of contributions and task deliveries.
- 34. Industry presented "Considerations for ADS regulation Basic principles and conceptual overview," leading to a first discussion that will continue during further development, especially as general consensus was that this concept might need discussion by the GRVA Workshop given it is mainly a type approval consideration.

#### E. 10-11 September 2024, second GRVA Workshop on ADS, Online

- 35. The second Workshop on ADS was held online on 10-11 September 2024. The main outcome was to monitor the progress on tasks 1 and 2 and prepare for the third workshop scheduled as an in-person (hybrid) meeting in Beijing.
- 36. During this session, participants engaged in a comprehensive review of the initial contributions submitted by the volunteers who had taken on the role of Officers of Principal Interest (OPI). The workshop emphasized that the final wording of the provisions would evolve based on feedback received during the review of the draft paragraphs, particularly in light of the advancements made by the Informal Working Group (IWG) on Automated Driving Systems (ADS).
- 37. Additionally, the workshop received a presentation from an industry expert on the approach to regulating Automated Driving Systems.

### F. 8-11 October 2024, fourth session of IWG on ADS, London, UK.

38. The fourth session for IWG on ADS was held in London from 8-11 October 2024. The IWG has been moving in phases. The first phase concerns the review and transposition of the ADS guidelines into common (1958 and 1998 Agreement) regulatory provisions, focusing first on requirements and then on assessment methods/processes. This phase is expected to be completed by the end of the year. The second phase involves transposing the

common provisions into UN GTR and UN Regulation texts and integrating the GRVA ADS WS outcomes into these texts. Volunteers have been appointed as Officers of Principal Interest (OPI) to prepare draft proposals for IWG consideration. The last IWG meeting of 2024 will take place in Seoul from 9-13 December 2024.

- 39. The ADS IWG continued its review and discussion of common provisions under the 1998 and 1958 Agreements. The IWG agreed to a conceptual restructuring of the provisions based on Safety Management System (SMS), Safety Case, and In-Service Monitoring and Reporting (ISMR). The SMS concerns the manufacturer's management processes for ensuring ADS safety. The safety case demonstrates the application of the SMS to the ADS under assessment, including its design and intended uses (safety concept) and an evidence-based structured argument that the safety concept meets or exceeds the safety requirements. ISMR enables monitoring of ADS performance in the field for compliance with the safety requirements and identifying areas for improvement. Following a review of the SMS (i.e., SMS audit) and the safety case (i.e., safety assessment), the ADS would be subjected to selective testing (virtual, track, and real-world) to verify the manufacturer's documentation and evidence.
- 40. The IWG also received reports on the work of other informal groups, including Automated Vehicle Categorisation (AVC), Event Data Recorders and Data Storage Systems for Automated Driving (EDR/DSSAD), Regulation Fitness for Automated Driving Systems (FADS), and the GRVA ADS WS. The IWG noted the need for consistency across all these activities with the ADS regulations under development. In particular, AVC is discussing categorisation of ADS features (i.e., Type I and Type II); EDR/DSSAD is developing DSSAD guidelines with the intent to integrate DSSAD provisions into the ADS regulations; and FADS (including related AVRS/VSR activities) has identified obstacles to testing some ADS configurations under current regulations. The GRVA WS discussions raised comments on the SMS/Audit and Safety Case/Safety Assessment concepts: SMS covers management activities applicable across ADS, while Safety Case/Assessment is specific to the ADS under assessment.

### G. 15-16 October 2024, third GRVA Workshop on ADS, Beijing, China

- 41. The third workshop on ADS was held in Beijing on 15-16 October 2024 in hybrid mode. The workshop reviewed the progress made by OPIs and their submissions of proposals towards tasks 1 and 2.
- 42. During this session, participants engaged in in-depth discussions on the proposals submitted by the designated Officers of Principal Interest (OPIs) concerning both the UN Global Technical Regulation and the UN Regulation. The OPIs for the UN Global Technical Regulation presented a consolidated draft document outlining the technical rationale and justification for the proposed regulations. This document was thoroughly discussed, and valuable feedback was gathered from other experts in attendance. Similarly, the OPIs for the UN Regulation submitted a draft addressing the relevant paragraphs necessary for the regulation.
- 43. An industry expert presented a proposal for a new approach to the UN Regulation on ADS. The participants acknowledged the importance of this new approach but emphasized that it should not impede ongoing work. The industry expert was tasked with preparing a more detailed version of the proposal in collaboration with other participants. One potential avenue for this proposal could be to frame it as an interpretation document, aligning with Task 3 of the regulatory framework.
- 44. The workshop also addressed the status of the work and the need to synchronize efforts with the Informal Working Group on Automated Driving Systems (IWG-ADS). It was noted that progress on this synchronization could commence once draft structures

become available. The participants agreed to revisit this topic in future workshops and during IWG-ADS meetings to ensure alignment and continuity in their efforts.

#### H. 9-13 December 2024, fifth session of IWG on ADS, Seoul, Republic of Korea

- 45. The 5th session of the Informal Working Group (IWG) on Automated Driving Systems (ADS) was held from December 9-13, 2024, in Seoul, chaired by representatives from Japan with participation from various countries and organizations. The primary focus was on advancing the development of UN regulations and Global Technical Regulations (GTR) for ADS, addressing key regulatory challenges, and ensuring the safety and reliability of ADS technologies. Participants included experts from government, industry, and international organizations. Each OPI presented their work for review and discussion. Significant progress was made in several areas, including the topic of the dynamic driving task.
- 46. Several critical topics were discussed in detail. The session began with an overview of the status of work on ADS regulations, highlighting progress and challenges. Japan presented the foundational principles of the ADS regulations, elaborating on the role of liability and the judiciary in ADS safety. Canada emphasized that vehicle safety falls within their jurisdiction, while liability issues do not. The EC raised questions about the acceptable level of safety for ADS compared to human drivers, underscoring the complexity of defining "how safe is safe enough."
- 47. Germany presented the approval process for defined operating areas, involving a three-step process: vehicle approval, approval of the defined operating area, and vehicle registration. Participants discussed approaches among countries, noting the need for harmonization of ADS requirements across different jurisdictions and expressing a desire to share documents and experiences.
- 48. The session also delved into the safety concept and safety case, with Canada presenting updates on document structure and harmonization. The discussion highlighted the importance of separating provisions on products and processes and the need for clear documentation requirements. Amendments to the Safety Management System (SMS) provisions were proposed and approved to enhance post-deployment processes, safety assurance, and safety promotion. The idea of introducing certification for the SMS system, like UN Regulation 157, was supported, though it might require further elaboration and could be discussed in future workshops.
- 49. Virtual testing credibility assessment was another critical area, with the EC presenting simulation credibility requirements and assessment methods. The proposed text for virtual testing was approved, reflecting the group's consensus on the importance of robust testing methods for ADS validation. The session also addressed the integration of existing regulations, directives, and international standards, with China providing an updated list. The need for consistency and harmonization across different regulatory frameworks was emphasized, with participants agreeing to reach out directly to Officers of Principal Interest (OPIs) to address any errors or misunderstandings.

#### I. 17 & 19 December 2024, fourth GRVA Workshop on ADS, Online

50. The fourth GRVA Workshop on Automated Driving Systems (ADS) was held online on December 17 and 19, 2024, with 72 experts representing various Contracting Parties and organizations. The workshop aimed to review the progress of the Informal Working Group (IWG) on ADS and discuss the development of the UN Global Technical Regulation (GTR) and the UN Regulation on ADS. The session also focused on integrating inputs from different task forces and informal groups to ensure a harmonized approach to ADS regulation.

- 51. The workshop began with a progress review of the IWG on ADS, presented by the expert from Japan. The presentation highlighted upcoming meetings, projected deliverables, and the coordination between the IWG on ADS, GRVA ADS workshop, and ambassadors. The group agreed on the proposed timeline to finalize draft inputs by April 2025 and present an integrated document by July 2025. The discussion also covered the agreed structure of the regulation and the progress on various chapters, including the overlap between the new UN Regulation on ADS and UN Regulation No. 157 (ALKS).
- 52. The review of inputs prepared for the UN GTR on ADS included presentations on the Detailed Task Decomposition Framework Structure and OPIs Table for GTR. The group discussed the need for additional volunteers for open sections in the GTR and reviewed the integrated document prepared by the expert from China. Key sections such as the introduction, procedural background, technical background, principles for developing the GTR, and technical rationale and justification were discussed. The group noted the need to revisit the terminology used for Operational Design Domain (ODD) and agreed to further review the benefits and cost section in the upcoming workshop.
- 53. For the UN Regulation on ADS, the secretariat presented the updated Detailed Task Decomposition Framework Structure and OPIs Table. The expert from the Netherlands presented documents relevant to the scope of the draft UN Regulation on ADS and justifications to exclude ALKS from its scope. The group discussed the need to harmonize the text and agreed to further discussions on the safety management system, approval, and approval marking. The expert from the United Kingdom, on behalf of the OPI for the approvals topic, presented possible solutions for mutual recognition based on the 1958 Agreement, and the group agreed that further discussion was needed. The experts from Japan, Netherlands, and the United Kingdom jointly presented a consolidated document, and the group agreed to use color coding to differentiate agreed text from sections still under discussion.
- 54. The workshop concluded with a briefing on future sessions and the integration of documents with the IWG on ADS. The group also agreed to prepare a report for consideration by GRVA in January 2025.

### V. Work schedule

55. Work schedule as of January 2025 (Subject to changes)

	2024					2025												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
WP.29 sessions					12-15 UN				4-7 UN			24-27 UN					18-21 UN	
GRVA sessions			23-27 UN				20-24 UN				19-22 TH	2-6 TH			22-26 UN			
Deliverables										ADS IWG Draft Docume nt of content			ADS+ WS Informal Docume nt			ADS+ WS Formal Docume nt		
ADS IWG sessions	9-12 EC			8-11 UK		9-13 RoK		18-19 Web	17-21 NL	14-18 JP	19-21 Web		7-11 FIN		[Early Sept. Web]	[6-10] CND		[8-12 ASIA]
Deliverables									WS Draft Docume nt of content									
GRVA ADS Workshops			10-11 Web	15-16 CN		17+19 Web		13+14 Web	25-26 Web			9-10 Web			18-19 GVA		4-5 Web	
	CND Canada GVA 0 JP Japan NL N						'A Geneva	Geneva Netherlands					CN China UK United Kingdom RoK Republic of Korea Web Online Meeting					
In-Person event only					Hybrid Session					Web-only sessions								

#### 56. Past sessions

November 2023	GRVA to seek consent of WP.29 and AC.3 to mandate a new IWG on ADS							
January 2024	Proposal of draft Terms of Reference to GRVA (informal documents)							
March 2024	Adoption of draft Terms of Reference by WP.29 and authorisation by AC.3							
22 April 2024	First IWG on ADS session	(Web-only)						
17 May 2024	Second IWG on ADS session	(Web-only)						
May 2024	Progress Report to GRVA							
5 June 2024	First WS on ADS	(Web-only)						
June 2024	First Progress Report to WP.29							
9-12 July 2024	Third IWG on ADS session	(Brussels, Belgium, hybrid)						
10-Sept 2024	Second WS on ADS	(Web-only)						
September 2024	Progress report to GRVA							
8-11 Oct 2024	Fourth IWG on ADS Session	(London, UK, Hybrid)						
15-16 Oct 2024	Third WS on ADS	(Beijing, China, Hybrid)						
9-13 Dec 2024	Fifth IWG on ADS Session	(Seoul, RoK, Hybrid)						
17 & 19 Dec 2024	Fourth WS on ADS	(Web-Only)						

## 57. Next meetings (IWG on ADS and WS on ADS)

Fifth WS on ADS, 13-14 February 2025, ONLINE

Sixth IWG on ADS session, 18-19 February 2025, ONLINE

Seventh IWG on ADS session, 17-21 March 2025 (Netherlands)

Sixth WS on ADS, 25-26 March 2025, ONLINE

Eighth IWG on ADS session, 14-18 April 2025 (Japan)

Ninth IWG on ADS session, 19-21 May 2025, ONLINE

Seventh WS on ADS, 9-10 June 2025, ONLINE

Tenth IWG on ADS session, 7-11 July 2025, (Finland)

Eleventh IWG on ADS session, September 2025, Online

Eighth WS on ADS, 18-19 September 2025, (UN Geneva)

Twelfth IWG on ADS session, [6-10 October 2025], (Canada)

Ninth WS on ADS, 4-5 November 2025, ONLINE

Thirteenth IWG on ADS session, [8-12 December 2025, Asia]

# VI. Documents

## 58. Documents for the IWG on ADS meetings

ADS-01-01 (Co-chairs) Invitation to the first ADS informal working group session

ADS-01-02 (Co-chairs) Agenda for the first ADS IWG session

ADS-01-03 (Co-chairs) Initial working document structure, contents, and OPI table

ADS-01-04 (Co-chairs) GRVA workshops structure, tasks, planning, and IWG coordination

ADS-01-05 (GRVA) ADS IWG terms of reference

ADS-01-06 (WP.29) GRVA table from Programme of Work

ECE/TRANS/WP29/2024/39 (GRVA) ADS guidelines and recommendations submitted to WP.29

ADS-02-01 Adopted wrap-up report of the first ADS session

ADS-02-02r2 Adopted agenda for the 2nd ADS session

ADS-02-03r1 (Chairs) Initial structure for content development

ADS-02-04 (Secretariat) Draft working table (scope, purpose, definitions)

ADS-02-05 (Chairs) Orientation slides for the 2nd ADS session

ADS-03-01 (Secretary) Wrap-up report of the 2nd ADS session

ADS-03-02r1 (Chairs) Agenda for the 3rd ADS IWG session

ADS-03-03-rev1 (OPI) Initial SMS requirements from ADS guidelines

ADS-03-04 (OPI) Initial Safety Assessment requirements from ADS guidelines

ADS-03-05 (OPI) Initial user safety requirements

ADS-03-06 (OPI) ADS user interactions-open issues

ADS-03-07-rev.1 (OPI) Directives, regulations, industry standards

ADS-03-08 (OPI) Initial DDT performance requirements

ADS-03-09r1 (OPI) Initial monitoring and reporting requirements

ADS-03-10r2 (Secretary) Table of draft ADS safety provisions

ADS-03-11 (OPI) Initial provisions concerning virtual testing credibility assessment

ADS-03-12 (OPI) DDT performance open issues

ADS-03-13 (OPI) FADS IWG status (inc. AVC task force)

ADS-03-14 (OICA/CLEPA) Considerations for an ADS Regulation (Principles/concepts)

ADS-04-01 (Chairs) Wrap-up report of the 3rd ADS IWG session

ADS-04-02r3 (Chairs) Adopted agenda for the 4th ADS IWG session

ADS-04-03 (OPI) ADS user interactions draft requirements

ADS-04-04r1 (OPI) DDT performance proposals and open issues

ADS-04-05r1 (OPI) Draft In-Service Monitoring/Reporting provisions

ADS-04-06 (OPI) Progress of the ADS Safety Assessment workstream

ADS-04-07r1 (OPI) Draft Safety Assessment provisions

ADS-04-08 (OPI) Draft Safety Management System provisions

ADS-04-09 (OPI-SA) Presentation-ADS Regulation Structure

ADS-04-10 (OPI) Virtual Testing Credibility Assessment provisions

ADS-04-11 (OPI) Initial Audit assessment provisions

- ADS-04-12-r1 (OPI) Presentation-Virtual Testing Credibility Assessment
- ADS-04-13 (OPI) Presentation-Test Methods
- ADS-04-14 (Secretary) Discussion table for ADS-04-07-Rev.1
- ADS-04-15r2 (Secretary) Consolidated table of draft provisions on ADS safety
- ADS-04-16 (Waymo) Safety Cases within a Regulatory Context
- ADS-04-17 (OPI) Draft listing of ADS-relevant standards, regulations, etc.
- ADS-04-18 (OPI) Example text for "standards, regulations" listing
- ADS-04-19 (AVC) Automated Vehicle Categorisation task force report
- ADS-04-20 (OPI) Draft provisions on user information
- ADS-04-21 (OPI) Presentation: ISMR provisions-Phase 1
- ADS-04-22 (OPI) Presentation: ISMR provisions-Phase 2
- ADS-04-23 (UK DfT) Report on GRVA Scenarios Workshops
- ADS-04-24 (UK Dft) Potential application of AV categories and ADS feature types
- GRVA-20-20e (Ambassador)Status GRVA ADS Workshops
- ADS-05-00 (Host) Logistical information for the 5th session
- ADS-05-00a2(Host) In-room wifi networks
- ADS-05-00-Add.1 (Secretary) Session travel advisory
- ADS-05-01 (Secretary) Wrap-up of the previous session
- ADS-05-02 (Chairs) Invitation to the 5th ADS IWG session
- ADS-05-03r1 (Chairs) Agenda for the 5th ADS IWG session
- ADS-05-04 (Chairs) Session orientation
- ADS-05-05 (OPI) In-service monitoring and reporting draft provisions
- ADS-05-06-Rev.2 (OPI) Safety concept and case draft provisions
- ADS-05-07 (OPI) Virtual Testing Credibility Assessment provisions
- ADS-05-08 (UK) ADS feature type definitions
- ADS-05-09 (OPI) Draft DDT performance requirements
- ADS-05-10 (OPI) Draft user information requirements
- ADS-05-10 (OPI) Draft user information requirements
- ADS-05-11 (UK) Proposal for general ADS requirements
- ADS-05-12 (OPI) Proposal for general requirements
- ADS-05-13 (OPI) Draft Safety Management System provisions
- ADS-05-14 (OPI) Draft provisions on SMS audit procedures
- ADS-05-15 (MLIT) Premises of the Discussions on ADS Regulation
- ADS-05-16 (OPI) Draft provisions on test procedures
- ADS-05-17 (FADS/AVRS chairs) Regulatory Fitness for ADS-Horizontal issues
- ADS-05-18 (OPI) Draft provisions for ISMR assessment

- ADS-05-19 (OPI) Draft ISMR reporting templates annex
- ADS-05-20 (OPI) Progress report on Safety Case provisions
- ADS-05-21 (OPI) Progress report on Safety Assessment provisions
- ADS-05-22 (AVC task force chairs) AV Categorisation status report
- ADS-05-23 (KBA) Assessment guide with requirements and assessment criteria for granting an approval of defined operating areas
- ADS-05-24 (OPI) Update on structure and harmonization
- ADS-05-25 (WS OPI) Vehicle approval and SMS
- ADS-05-26 (RDW) Approvals versus Safety Management Systems
- ADS-05-27 (WS OPI UNR) ADS workshop draft input
- ADS-05-28r1 (WS Ambassadors) Progress report from the GRVA ADS workshops
- ADS-05-29r1 (OPI) Update on drafting test method provisions
- ADS-05-30 (OPI) Update on virtual testing credibility assessment provisions
- ADS-05-31 (OPI) Updated user-safety provisions
- ADS-05-32 (OICA/CLEPA) Comments on ADS feature types
- ADS-05-33 (KADIF) Korea Autonomous Driving Development Innovation Program
- ADS-05-34 (OPI) In-Service Monitoring and Reporting progress report
- ADS-05-35 (KATRI) Korea R&D Project on ADS

#### 59. Documents for the Workshops on ADS

- GRVA-WS01-01 (UNECE) Provisional agenda for the first GRVA Workshop on ADS
- GRVA-WS01-02/Rev.1 (Secretariat) Slide deck (reflecting the outcome of the workshop)
- GRVA-WS02-01/Rev.1 (Secretariat) Provisional agenda prepared for the 2nd GRVA Workshop on ADS
- GRVA-WS02-02 (Secretariat) Minutes of the first GRVA workshop on ADS
- GRVA-WS02-03 (OPIs) Input provided by the OPIs regarding the relevant paragraphs of a new UN R on ADS
- GRVA-WS02-03/Rev.1 (OPIs) Input provided by the OPIs regarding the relevant paragraphs of a new UN Regulation on ADS Revision 1\*
- GRVA-WS02-04 (OPIs) UN GTR on ADS Benefits and Costs section
- GRVA-WS02-04/Rev.1 (OPIs) UN GTR on ADS Benefits and Costs section Rev. 1
- GRVA-WS02-05 (Secretariat) Detailed Task Decomposition Framework Structure and OPIs Table for GTR
- GRVA-WS02-05/Rev.1 (China) Detailed Task Decomposition Framework Structure and OPIs Table for GTR Revision 1
- GRVA-WS02-06 (Japan) Status report of the 3rd IWG on ADS session
- GRVA-WS02-07 (Secretariat) Detailed Task Decomposition Framework Structure and OPIs Table for the UN Regulation

GRVA-WS02-08 (OICA/CLEPA) Considerations on a new approach for the ADS Regulation

GRVA-WS03-01/Rev.1 (Secretariat) Provisional agenda for the 3rd GRVA workshop on ADS

GRVA-WS03-02 (Secretariat) Minutes of the second GRVA Workshop on ADS

GRVA-WS03-03 (Secretariat) Running order and tentative timetable for the third GRVA Workshop on ADS

GRVA-WS03-05 (China) Consolidated document with the OPIs input for the UN GTR

GRVA-WS03-06 (OPI (UK)) Peer review and mutual recognition

GRVA-WS03-07 (OPI (UK)) Approval and approval mark

GRVA-WS03-08 (ADS) Status report to the 3rd GRVA Workshop on ADS

GRVA-WS03-09 (OPI (China)) Approach for developing the UN GTR on ADS

GRVA-WS03-10 (OICA) Consideration on a new approach for the UN Regulation on ADS

GRVA-WS03-11 (OPI (NL)) Points of attention/ for the workshop

GRVA-WS03-12 (Secretariat) Detailed Task Decomposition Framework Structure and OPIs Table for GTR

GRVA-20-41 (Sponsors of the UN GTR and UN R on ADS) Draft status report to WP.29 and AC.3

GRVA-WS02-03/Rev.1 (OPIs) Input provided by the OPIs regarding the relevant paragraphs of a new UN Regulation on ADS - Revision 1\*

GRVA-WS04-01/Rev.1 (Secretariat) Provisional agenda for the 4rd GRVA workshop on ADS

GRVA-WS04-02 (Secretariat) Minutes of the third GRVA Workshop on ADS

GRVA-WS04-03 (OPI/China) Input for the Global Technical Regulation on Automated Driving System (ADS)

GRVA-WS04-04/Rev.1 (Secretariat) Detailed Task Decomposition Framework Structure and OPIs Table for GTR

GRVA-WS04-05 (OPIs/Japan, Netherlands, UK) Elements for the UN Regulation on ADS\*

GRVA-WS04-06/Rev.1 (Secretariat) Detailed Task Decomposition and OPIs table for the UN Reg. on ADS

GRVA-WS04-07 (CLEPA/OICA) Update on the activities regarding a New Reg approach for ADS

GRVA-WS04-08 (OPI/UK) Update on task 5 (Approval and approval marking)

GRVA-WS04-09 (NL) SMS vs. approval

GRVA-WS04-10 (NL) Justification for certification of the Safety Management System (SMS) independent of the vehicle approval under the ADS regulation.

GRVA-WS04-11 (NL) Proposal for the scope for the UNR on ADS\*

GRVA-WS04-12 (NL) Justification to exclude UN R 157 from the scope

GRVA-WS04-13 (Japan) Progress report of the IWG on ADS