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ISO/TS 5083

**Road vehicles — Safety for
automated driving systems —
Design, verification and validation**

*Véhicules routiers — Sécurité des systèmes de conduite
automatisée — Conception, vérification et validation*

**First edition
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Foreword	vi
Introduction	ix
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	7
5 Document overview and motivation	7
5.1 Purpose.....	7
5.2 Overall goals of this document.....	7
5.3 Application of this document.....	7
5.4 Safety life cycle.....	8
5.4.1 Purpose.....	8
5.4.2 General.....	8
5.5 Description of ADS safety case.....	8
5.5.1 Purpose.....	8
5.5.2 General.....	8
5.5.3 How this document supports a layered structure of an ADS safety case.....	9
5.5.4 Perspective from the ADS-equipped vehicle.....	11
5.6 Role of the ADS within safe vehicle operation.....	12
5.6.1 Purpose.....	12
5.6.2 General.....	12
5.6.3 Task dependency of ADS safety.....	12
5.6.4 Time dependency of ADS safety.....	13
5.6.5 Examples.....	14
5.7 Application of other standards.....	15
5.7.1 Purpose.....	15
5.7.2 Classification of standards.....	15
5.7.3 Applying the related (safety) standards.....	16
5.8 Safety principles of ADS.....	17
5.8.1 Purpose.....	17
5.8.2 ADS safety principles.....	17
6 Safety strategy	18
6.1 Defining the ADS feature.....	18
6.1.1 Objectives.....	18
6.1.2 Requirements and recommendations.....	18
6.1.3 Example solution: ADS feature description with capabilities.....	19
6.2 Defining the risk acceptance criteria.....	20
6.2.1 Objectives.....	20
6.2.2 Requirements and recommendations.....	20
6.2.3 Example solution: Absence of unreasonable risk and risk acceptance criteria.....	21
6.2.4 Example solution: Selection and use of risk acceptance criteria.....	21
6.2.5 Example solution: Defining a risk acceptance criterion.....	21
6.2.6 Example solution: Quantitative risk balance.....	21
6.2.7 Example solution: A quantitative risk acceptance criterion.....	21
6.3 Defining safety requirements.....	21
6.3.1 Objectives.....	21
6.3.2 Requirements and recommendations.....	21
6.3.3 Example solution: Quantitative risk acceptance criterion and incident classification approach.....	22
6.3.4 Example solution: Safety capabilities.....	22
6.3.5 Example solution: ADS external assumptions with respect to injury risk.....	22
7 Safety by design	22

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7.1.2	Requirements and recommendations.....	22
7.1.3	Example solution: A design for adapting tactical decisions to variations in the operational capabilities.....	23
7.1.4	Example solution: Elements defining the design.....	23
7.2	ADS external design, prerequisites and assumptions.....	23
7.2.1	Objectives.....	23
7.2.2	General.....	23
7.2.3	Requirements and recommendations.....	30
7.2.4	Example solution: Training for users.....	30
7.2.5	Example solution: Instructions to first responders.....	31
7.2.6	Example solution: Organizational aspects of a robo taxi service.....	31
7.2.7	Example solution: Organizational aspects of an L4 hub-to-hub transport service.....	31
7.3	ADS verification.....	31
7.3.1	Objectives.....	31
7.3.2	General.....	31
7.3.3	Requirements and recommendations.....	31
7.3.4	Example solution: Verification of elements.....	32
7.3.5	Example solution: The layered approach facilitating verification of safety arguments.....	32
7.4	Verification and confirmation of aspects external to the ADS.....	32
7.4.1	Objectives.....	32
7.4.2	General.....	32
7.4.3	Requirements and recommendations.....	32
8	Validation.....	33
8.1	Objectives.....	33
8.2	General.....	33
8.3	Requirements and recommendations.....	33
8.4	Example solution: Metrics.....	33
8.5	Example solution: Validation through computation of collision rates.....	34
8.6	Example solution: Generating evidence for injury risk assumptions external to the ADS.....	34
9	Operation of the ADS-equipped vehicle.....	34
9.1	Objectives.....	34
9.2	General.....	34
9.2.1	Overview.....	34
9.2.2	Field monitoring including data collection.....	35
9.2.3	Cybersecurity monitoring related to safety of ADSs.....	35
9.2.4	Change management during the operational phase.....	35
9.2.5	Inspection, maintenance and repair.....	37
9.2.6	Management of crashes and incidents.....	37
9.3	Requirements and recommendations.....	37
10	Verification and validation requirement considerations.....	38
10.1	General.....	38
10.2	Example solution: Verification and validation.....	38
	Annex A (informative) Example application of the concepts of this document.....	39
	Annex B (informative) Safety for artificial intelligence (AI) - Application to automated driving systems.....	48
	Annex C (informative) List of related standards.....	65
	Annex D (informative) Safety principles for ADS.....	69
	Annex E (informative) Safety strategy example solutions.....	73
	Annex F (informative) Safety by design and verification example solutions.....	98
	Annex G (informative) Validation example solutions.....	129

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Библиографу **152**

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 32, *Electrical and electronic components and general system aspects*.

This first edition cancels and replaces the first edition (ISO/TR 4804:2020), which has been technically revised.

The main changes are as follows:

- a fully revised scope;
- the inclusion of objectives and requirements for normative clauses of the document;
- a revised presentation of the overarching safety strategy applicable to ADS development (including the addition of clarifications on assumptions and requirements that are to be allocated externally to the ADS);
- connections to cybersecurity concerns; and
- a revision of annexes with example applications and further considerations of artificial intelligence safety.

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Automated driving is one of the key emerging technologies for road vehicles, where major goals in deploying automated driving systems (ADS) include the societal benefits due to broader access to mobility and the reduction of human driver related crashes. Successful deployment is contingent upon ensuring safety of the ADS. This document presents guidance and requirements for achieving safety through the ADS development, including design, verification and validation, as well as operation post deployment.

The successful design and deployment of the ADS can involve a variety of stakeholders, from technology, component, and subsystem suppliers to system integrators and vehicle OEMs, as well as transportation service providers and regulatory bodies; this document is intended to be used by all those involved.