



VEYRUM ROBOTICS STANDARD



VRS-TRN-001

Transportation / On-road Autonomous Sector Standard

Application Rating requirements for robots operating on public roads — VRS 2026 layout.

VEYRUM RESEARCH INSTITUTE

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VRS-TRN-001

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Change history

Foreword. Sector standard for the **Transportation / On-road Autonomous (TRN)** application sector — a full launch sector per CEO decision D8 (2026-09-02) — instantiating the universal sector template (VRS-GEN-002 §6.4). TRN is VRS’s most regulated and most adjacent-covered sector: the safety-certification layer below the VRS position is crowded (type approval, AV safety cases, functional-safety and SOTIF regimes), which makes the VRS posture here explicit — **consume those outputs as evidence inputs** (Clause 7) and rate the economic-risk layer nobody owns. VRS runs no road tests. Anchors were re-verified against issuing-body pages on 2026-09-13 (Bibliography). Numeric thresholds are not set here; they live as priors in the VRS-TRN-501 twin (§6.1, VRS-GEN-202). A Transportation AR is an opinion above the compliance floor, not a certification; nothing here implies any real robot holds a Veyrum rating (ratings are not published). Requirements use “shall”; recommendations use “should”.

1 1 Scope

This Standard defines the requirements for issuing a **Transportation AR** for robots whose operation is on public roads: robotaxis, autonomous trucks and shuttles, and road-going delivery robots operating in traffic. Its clauses follow the universal sector template (VRS-GEN-002 §6.4): applicability (Clause 4), hazard taxonomy (Clause 5), rubric and grade-band requirements (Clause 6), evidence (Clause 7), loss-driver mapping (Clause 8), and protocol references (Clause 9).

The scoring mathematics are excluded (VRS-GEN-005/006; the sector’s scoring content lives in VRS-TRN-201 with its data twin VRS-TRN-501). Boundary with adjacent sectors: sidewalk delivery robots operating among pedestrians outside traffic are rated under **VRS-SVC-001** (shared-pedestrian venue class); off-road site vehicles under **VRS-FLD-001**; on-site industrial tugs behind access control under **VRS-IND-001**. Robot form is not a sector (VRS-GEN-001 §3.4.3): any road-going form is rated under TRN by this Standard when Clause 4 holds.

2 2 Normative references

The documents below constitute requirements of this Standard where cited. VRS documents are dated at the point of assessment unless stated otherwise.

- **VRS-GEN-001**, Vocabulary; **VRS-GEN-005**, IR Methodology; **VRS-GEN-006**, AR Scheme; **VRS-GEN-007**, Sector Classification; **VRS-GEN-009**, Passport & Registry Schema; **VRS-GEN-012**, Evidence & Data Requirements (evidence grades).
- **VRS-TRN-201**, Transportation / On-road AR Assessment Protocol (scoring; dated at assessment); its data twin is **VRS-TRN-501**.
- **VRS-GEN-202**, Calibration & Validation Protocol (constant stage labels and fitting).
- Anchor regime (re-verified 2026-09-13) — anchors and evidence lanes, **not** conformity floors VRS re-certifies (VRS-GEN-001 §3.5.1); the ISO 8373:2021 term basis is cross-referenced in Clause 3:
 - **UN Regulation No. 157 (ALKS)** (adopted 2021; Amendment 4, 2024, raising the specified maximum speed to 130 km/h) — the first international regulation of an automated driving system in primary control; its Information-Document structure (system description, safety concept,

verification, data storage, cyber cross-reference) is the template for AV safety documentation and the pattern for the safety-case dimension of criterion TRN-1 (§6.2).

- **UL 4600:2023** (Edition 3; Ed.1 2020, Ed.2 2022), Standard for Safety for the Evaluation of Autonomous Products — goal-based, technology-agnostic safety-case anchor; the TRN-1 safety-case criterion (§6.2) and the H6 accountability lane draw on it.
- **ISO 21448:2022**, Road vehicles — Safety of the intended functionality (SOTIF) — anchor for the H2 ODD-discipline / degraded-condition / minimal-risk-manoeuve evidence lane.
- **ISO 26262:2018** (2nd edition), Road vehicles — Functional safety — anchor for the H3 fallback/takeover functional-safety evidence lane.
- **ISO 34503:2023**, Road vehicles — Test scenarios for automated driving systems — ODD specification taxonomy; the anchor for declaring and monitoring the assessed ODD (Clause 4.3).
- **ISO/SAE 21434:2021**, Road vehicles — Cybersecurity engineering, and **UN Regulation No. 155** (Cybersecurity and CSMS for type approval) — anchors for the H4 fleet-cyber and V2X evidence lane.
- **Commission Implementing Regulation (EU) 2022/1426** (ADS type-approval of fully automated vehicles under Regulation (EU) 2019/2144; amended by (EU) 2026/481, 2026-03-04) — representative EU market safety-floor and in-service-incident-reporting anchor. Per-market pathways (US NHTSA oversight and per-state permitting; other type-approval regimes) are jurisdiction-specific and shall be recorded per assessment; no harmonised global list is asserted here.

3 Terms and definitions

For the purposes of this Standard, the terms in VRS-GEN-001 (aligned to ISO 8373:2021) apply, together with the following local terms:

- **operation class** — the declared road-use category the model is assessed in; at minimum one of **robotaxi**, **autonomous-freight**, **shuttle-fixed-route**, **road-delivery**.
- **ODD** (operational design domain) — the declared road, traffic, speed and weather envelope within which the automated driving system is claimed to operate, specified per ISO 34503:2023.
- **disengagement** — a safety-driver or remote-operator intervention event; recorded per operation class as an exposure-envelope attribute, not as an exposure denominator.
- **minimal-risk manoeuvre (MRM)** — the fallback manoeuvre the system performs to reach a minimal-risk condition when it cannot continue within its ODD.
- **vulnerable road user (VRU)** — a pedestrian, cyclist, or other non-vehicle-occupant road user exposed to third-party harm.
- **VMT** (vehicle-miles travelled) — the sector's exposure denominator, expressed SI-neutrally as per million vehicle-miles (equivalently per million vehicle-kilometres) and segmented by operation class.
- **road exposure** — distance accrued in a declared operation class and ODD, measured in VMT, used as the denominator for frequency-type quantities.

4 Sector applicability

4.1 TRN is an **intended-use sector** (VRS-GEN-007 §5.2). A model shall be treated as TRN-applicable when (a) the manufacturer declares public-road operation in its operating envelope, or (b) an assessor records evidence of material deployment on public roads (override with rationale, VRS-GEN-006 §5.2). Default: not-applicable.

4.2 The minimum capability the sector assesses is lawful operation on public roads in at least one jurisdiction, evidenced by a permit, exemption, or type approval. Where that evidence is absent for an operation class, VRS-TRN-201 §6.1 scores criterion **TRN-1** at zero for that class rather than withholding a letter; a rating is an opinion on the robot, not on the lawfulness of any deployment (VRS-TRN-201 §9). Road operation without permission remains a compliance matter recorded on the passport, not a rating gate.

4.3 The assessed envelope shall state the **operation classes** covered — at minimum one of **robotaxi**, **autonomous-freight**, **shuttle-fixed-route**, **road-delivery** — as protocol applicability fields (VRS-GEN-007 §4.2), each with its declared **ODD** specified per ISO 34503:2023 (road type, traffic, maximum speed in km/h, and weather/lighting conditions). The AR letter shall cover only the assessed operation classes and the assessed ODD; unassessed classes and conditions shall be displayed as not covered.

4.4 Evidence obtained outside a declared operation class or outside the declared ODD shall not be used to support that class: fair-weather daytime VMT shall not support a night-or-adverse-weather ODD claim, and highway VMT shall not support a dense-urban VRU claim. The unobserved condition is the risk being rated; the assessed envelope is contracted to the observed operation classes and ODD (Clause 4.3; VRS-TRN-201 §4.4).

5 Sector hazard taxonomy

The Transportation AR shall weigh, at minimum, the following hazard groups. Each maps to the IR categories (VRS-GEN-005 §5) it draws evidence from and to its dominant loss driver; the sector emphasis (weights) is defined in VRS-TRN-201, not here.

#	HAZARD GROUP	ARCHETYPE	PRIMARY IR CATEGORIES	LOSS DRIVER
H1	Third-party road harm	collision with other road users, including vulnerable road users; bodily injury and third-party property damage	safety_incidents	frequency, severity
H2	ODD discipline	operation outside the declared ODD; degraded-weather behaviour; minimal-risk-manoeuve quality	safety_incidents, spec_integrity	frequency, severity
H3	Handover and remote operation	takeover failures; remote-assistance latency; disengagement clusters	reliability, safety_incidents	frequency, recoverability
H4	Fleet cyber and data	vehicle-fleet compromise; V2X spoofing; over-the-air update-plane capture; location-data exposure	cyber_posture	severity, correlated/cyber-catastrophe
H5	Service availability	stranded vehicles blocking traffic; recovery response; depot logistics	reliability, serviceability	frequency, exposure, recoverability
H6	Incident accountability	event-data-recorder completeness; reporting compliance; recall reach across a road fleet	manufacturer_support, spec_integrity	severity persistence, obsolescence

5.1 The hazard taxonomy shall be treated as the minimum coverage set: an assessment that omits a hazard group applicable to the declared operation classes shall record the omission and its reason.

5.2 H1 (third-party road harm) is the sector-defining loss driver: harm falls on parties who did not choose the exposure, including vulnerable road users, so a single H1 event can generate a bodily-injury claim far exceeding the vehicle's own value. H1 severity shall be recorded with respect to the VRU population the declared ODD admits, not for an average vehicle occupant.

5.3 H4 (fleet cyber) is the sector-specific **accumulation** driver: many units of a model share one over-the-air update or control plane, so one compromise or one defective update can degrade or capture the fleet at once; this risk shall be surfaced separately (Clause 8.5) and not netted into the letter.

6 Rubric and grade bands

6.1 The Transportation sector AR is determined per VRS-TRN-201 from the criterion pool defined there; letters follow VRS-GEN-006 §4. Criterion thresholds, pool ceilings and the reserved-hard AAA band are

priors held and fitted only in the VRS-TRN-501 twin (VRS-GEN-202), per VRS-GEN-006 §4.1 and §8.1; no threshold or ceiling is set in this document.

6.2 Lawful-operation status and the safety-case posture for the assessed operation class — an evidenced permit, exemption or type approval, and a recognised safety case (a **UL 4600:2023**-style structured safety argument, a **UN R157**-pattern information document, or a recorded jurisdictional equivalent such as the safety-concept assessment under Implementing Regulation (EU) 2022/1426) — are scored by VRS-TRN-201 as criterion **TRN-1** (a large-range criterion, not a gate): absence of evidenced lawful-operation status scores zero on TRN-1 there and does not withhold a letter (a rating is an opinion on the robot, not on the lawfulness of any deployment, VRS-TRN-201 §9); a weaker or absent safety case scores lower on the second half of the TRN-1 ladder rather than capping the letter.

6.3 Where a declared operation class is operated outside its declared ODD or without the authorisation its jurisdiction requires, the assessed envelope shall be contracted to the observed operation classes and ODD per VRS-TRN-201 §4.3/§4.4; operation beyond a declared envelope is a compliance matter recorded on the passport, not a rating criterion.

7 Evidence requirements

7.1 Evidence shall be graded per VRS-GEN-012. Sector-relevant sources include: VMT and crash/injury records; public disengagement/incident filings where mandated; safety-case documents; ODD specifications; permit/approval records; recall and software-update history; and insurer loss data where shared.

7.2 For each hazard group, an existing conformity artefact should be mapped to the VRS evidence lane so that adoption costs a manufacturer a mapping rather than new testing:

HAZARD	EXISTING ARTEFACT (EXAMPLE, DATED AT POINT OF USE)	VRS EVIDENCE LANE
H1	VMT and crash/injury records; public disengagement/incident filings; in-service safety-incident reports under Implementing Regulation (EU) 2022/1426; insurer loss data where shared	safety_incidents
H2	ISO 34503:2023 ODD specification for the declared envelope; ISO 21448:2022 (SOTIF) analysis of degraded-condition and minimal-risk-manoeuve behaviour; ODD-monitoring/geofencing evidence	safety_incidents, spec_integrity
H3	ISO 26262:2018 functional-safety evidence for the fallback/takeover path; remote-assistance latency logs (in seconds); disengagement-cluster analysis	reliability, safety_incidents
H4	ISO/SAE 21434:2021 cybersecurity-engineering evidence and UN R155 CSMS certificate for the fleet OTA/control plane; V2X interface security statement; location-data protection record	cyber_posture
H5	stranded-vehicle/recovery response records (recovery time in hours/days); depot logistics and availability telemetry; ISO 14224:2016 reliability/maintenance records	reliability, serviceability
H6	UL 4600:2023 safety-case coverage of accountability; event-data-recorder completeness evidence; regulator reporting record; recall/OTA-update reach history	manufacturer_support, spec_integrity

7.3 Sufficiency for **applicable → rated** (per VRS-GEN-006 §6.1c) shall meet the minimum VMT and admissible-occurrence counts per operation class held as priors in VRS-TRN-501 (VRS-GEN-202 §5) and the per-criterion evidence bars of VRS-GEN-012 §4. Where evidence for a criterion is absent, that criterion scores zero (no evidence = 0 points) rather than withholding the letter; where a declared class lacks sufficient own-class history, its letter rests on the company-wide fallback of VRS-GEN-005 §6.

7.4 Where a class's H1, H2 or H3 evidence rests on operator recollection rather than instrumented telemetry, disengagement logs, or incident records, the affected criterion shall not exceed the **Unverified** tier on that evidence and the assessment shall record the evidence gap; uninstrumented recollection is admissible only at the Unverified tier. Manufacturer-declaration-only claims (claimed ODD, claimed recall reach) shall be graded no higher than the independent verification or public filing that corroborates them.

8 Loss-driver mapping (insurance and finance fitness)

8.1 Every quantity that feeds the TRN rating shall be traceable to a loss driver and to a Robot Risk Passport field (VRS-GEN-009), so that an underwriter or lender can compute it from obtainable evidence. The mapping is:

LOSS DRIVER	TRN SIGNAL	EXPOSURE DENOMINATOR	CONSUMES
Frequency	H1 collision events; H2 out-of-ODD events; H3 takeover failures; H5 in-service failures	per million vehicle-miles	safety_incidents, reliability
Severity	third-party bodily-injury consequence, weighted to the VRU population the ODD admits	per event	safety_incidents
Exposure	distance accrued in the declared operation class and ODD	VMT	reliability
Recoverability	H3/H5 recovery feasibility; stranded-vehicle clearance time	hours/days per event	serviceability
Residual value / obsolescence	end-of-support horizon (months); overstated-ODD write-down; recall-reach persistence	per model	economics_residual
Correlated / cyber-catastrophe	H4 shared OTA/control-plane or V2X compromise across a fleet	per fleet	cyber_posture

8.2 A TRN signal that lacks an exposure denominator shall not be scored as a frequency; it shall be recorded as a descriptive attribute or elevated as a design question (VRS-GEN-202). No loss statistic shall be invented to fill a missing denominator.

8.3 The rating output shall be expressed so that it can feed an underwriting decision (rate relativity, deductible, exclusion, condition) or a credit decision (loan-to-value, residual curve, covenant); the letter alone is insufficient, and the evidence tier, the covered operation classes and ODD, and the evidence-basis flags shall accompany it in the Passport record (VRS-GEN-006 §9.3, VRS-GEN-009) so that operation outside the assessed envelope is an exclusion rather than an implied covered risk.

8.4 Third-party road harm (H1) is the loss driver unique to this sector: the population at risk did not choose the exposure and includes vulnerable road users, so severity shall be recorded as a separate passport attribute — the VRU population the declared ODD admits — so that an underwriter can weight bodily-injury severity independently of frequency.

8.5 Correlated and cyber-catastrophe accumulation (H4) shall be surfaced as a passport-recorded attribute: the attribute shall record whether the shared fleet OTA/control plane holds ISO/SAE 21434:2021

- UN R155 evidence. This attribute is descriptive, not scored, until a fleet-loss denominator exists (VRS-GEN-202 §8); it does not diversify the way independent mechanical failures do.

9 Protocol references

- **VRS-TRN-201** — Transportation / On-road AR Assessment Protocol (scoring) — dated reference at assessment time; its data twin is **VRS-TRN-501**.
- Transportation Test Protocols (**VRS-TRN-1xx**) are reserved. NOTE: VRS runs no road tests; TRN test protocols shall define **evidence-consumption requirements** — what NCAP-style results, regulator filings, and safety-case artefacts must show — rather than duplicating type-approval or NCAP testing (the consume-don't-duplicate posture).

10 Worked example (informative) — applicability walkthrough

The following illustrates how an assessor applies Clauses 4–8 to a **hypothetical** model; it is not a real assessment and does not imply any robot holds a Veyrum rating.

Input. A manufacturer declares an automated driving system, model code **TRN-ADS-01** , for two operation classes: **robotaxi** (dense-urban ODD, maximum 50 km/h, fair-weather daytime) and **autonomous-freight** (highway ODD, maximum 90 km/h). The operator holds a permit for the robotaxi class in one jurisdiction and no approval yet for the freight class; a UL 4600:2023 safety case covers the robotaxi ODD; ISO 34503:2023 ODD specifications and ISO 21448:2022 SOTIF analyses exist for both classes; an ISO/SAE 21434:2021 + UN R155 CSMS evaluation covers the fleet OTA plane; and the fleet has accrued 3,000,000 VMT in the robotaxi class with 3 recorded at-fault contact events, 0 fatalities, and complete event-data- recorder coverage.

Step 1 — applicability (Cl. 4). The manufacturer declaration satisfies 4.1(a); TRN is applicable. The envelope records classes **robotaxi** and **autonomous-freight** , each with its ODD (4.3).

Step 2 — hazard coverage (Cl. 5). H1–H6 apply. The dense-urban robotaxi ODD admits vulnerable road users, so 5.2 records the VRU population as the worst-case severity basis.

Step 3 — lawful-operation and safety case (Cl. 6.2 → VRS-TRN-201 TRN-1). The robotaxi class has an evidenced permit and a UL 4600:2023 safety case, so TRN-1 scores in its upper range for that class. The freight class has no lawful-operation evidence and no in-class exposure; with no admissible in-class evidence its letter cannot be determined and it is displayed *not covered*, and the assessed envelope contracts to the robotaxi class (4.3). The distinction matters: had the freight class carried in-class exposure but no permit, TRN-1 would score zero for it and a rating would still issue (4.2) — absence of authorisation is scored, not gated.

Step 4 — sufficiency (Cl. 7.3). 3,000,000 VMT with 3 at-fault events for the robotaxi class are checked against the VRS-TRN-501 prior minima and the VRS-GEN-012 §4 evidence bars; assume they clear the minimum count, so the model×robotaxi class is **applicable → rated** at the tier its evidence supports — here **Verified**, resting on instrumented telemetry and public filings rather than an independent certification.

Step 5 — loss-driver read (Cl. 8). At-fault collision frequency is expressed as 3 events per 3,000,000 VMT = 1.0 per million vehicle-miles (H1). Severity is weighted to the VRU population (8.4). The fleet OTA plane holds ISO/SAE 21434:2021 + UN R155 evidence, so the 8.5 accumulation attribute is recorded as present. End-of-support horizon (months) is recorded for the residual-value driver.

Output. The rating is computed by VRS-TRN-201 (not in this document). The Passport record carries the per-class letters (**robotaxi** rated; **autonomous-freight** not covered), each class’s VMT and ODD, the evidence tier, the H1 evidence notes, the VRU-population attribute, and the accumulation attribute. The numeric score and band boundary come from the VRS-TRN-501 priors and are not asserted here.

11 Annex A (normative) — On-road exposure module

A.1 Frequency-type quantities shall be normalised by VMT, segmented by operation class, and expressed per million vehicle-miles (equivalently per million vehicle-kilometres); a class with zero observed VMT shall yield a null (not zero) frequency input for that class.

A.2 The assessed envelope shall state the ODD per ISO 34503:2023 (road type, traffic, maximum speed in km/h, weather and lighting conditions); operation beyond the declared ODD is outside the rating (Clause 4.4).

A.3 Event-data-recorder completeness shall be documented for reported events. Where recorder evidence is incomplete for an event that has been reported for an operation class, criterion **TRN-7** (VRS-TRN-201 §6.7) scores its “not established” rung (0) for that class and the gap is recorded per VRS-TRN-201 Clause 10; the letter is still issued and reflects the lost points. An accountability gap (H6) lowers the letter — it is not a gate.

12 Bibliography

- ISO 8373:2021, Robotics — Vocabulary (iso.org/standard/75539.html) — robot-term basis.
- UN Regulation No. 157 (ALKS), adopted 2021; Amendment 4, 2024, raising specified maximum speed to 130 km/h ([unece.org; R157am4e](https://unece.org/R157am4e), 2024-07) — information-document pattern; ODD structure.
- UL 4600:2023, Standard for Safety for the Evaluation of Autonomous Products, Edition 3 (Ed.1 2020; Ed.2 2022) ([ul.com; webstore.ansi.org/standards/ul/ul4600ed2023](https://ul.com/webstore.ansi.org/standards/ul/ul4600ed2023)) — safety-case anchor (§6.3 cap; H6).
- ISO 21448:2022, Road vehicles — Safety of the intended functionality (SOTIF), published 2022-06 (iso.org/standard/77490.html) — H2 ODD/degraded-condition lane.
- ISO 26262:2018, Road vehicles — Functional safety, 2nd edition (iso.org) — H3 fallback/takeover lane.
- ISO 34503:2023, Road vehicles — Test scenarios for automated driving systems — ODD specification taxonomy, published 2023-08 (iso.org/standard/78952.html) — Clause 4.3 ODD-declaration anchor.
- ISO/SAE 21434:2021, Road vehicles — Cybersecurity engineering, published 2021-08 (iso.org/standard/70918.html) — H4 fleet-cyber lane.
- UN Regulation No. 155, Cybersecurity and Cyber Security Management System for type approval (2021; consolidated 2025) (unece.org; eur-lex.europa.eu) — H4 CSMS floor.
- Commission Implementing Regulation (EU) 2022/1426 (ADS type-approval of fully automated vehicles under Reg (EU) 2019/2144; adopted Aug 2022; amended by (EU) 2026/481, 2026-03-04) (eur-lex.europa.eu/eli/reg_impl/2022/1426) — EU market safety-floor; in-service-reporting lane.
- ISO 14224:2016, collection and exchange of reliability and maintenance data for equipment (iso.org) — H5 serviceability lane.

- VRS framework research Phase 5 (internal) — TRN regime scan; competitor synthesis.

13 Change history

DATE	VERSION	STATUS	CHANGE	AUTHORITY
2026-09-05	0.1	Draft	Initial draft — D8 full launch sector; consume-don't-duplicate posture; no-lawful-operation-no-letter	CEO goal 2026-09-05
2026-09-11	0.1ε1	Draft	COHERENCE: retired 3 bare CALIBRATION-PENDING markers (incl. bracketed cap-placement variants; Foreword, §6.1, §6.2) → VRS-GEN-202 stage prior labels, matching the GEN-005 (Run #31)/FLD-201 precedent. Editorial only — no constant, threshold, or requirement changed.	Curator Run #39; charter COHERENCE
2026-09-13	0.2	Draft	DEEPEN: brought to publishable depth on the VRS-SVC-001 v0.3 template-sibling exemplar. Added dated anchors (UN R157 Amend.4 2024, UL 4600:2023, ISO 21448:2022, ISO 26262:2018, ISO 34503:2023, ISO/SAE 21434:2021, UN R155, Implementing Reg (EU) 2022/1426 / (EU) 2026/481, ISO 14224:2016, ISO 8373:2021) re-verified 2026-09-13; expanded terms/units (VMT per million vehicle-miles, km/h, seconds, hours/days, months). Added loss-driver column to the H1–H6 taxonomy (§5) with VRU-severity and fleet-cyber-accumulation subclauses; evidence-reuse mapping (§7.2); loss-driver mapping incl. third-party road harm and cyber accumulation (§8); worked applicability example (§10); on-road exposure module (Annex B). Rebuilt lawful-operation gate + safety-case cap (§6.2/6.3) on UL 4600:2023 / R157 / EU 2022/1426; resolved the [UNVERIFIED] NHTSA framework note to a recorded-per-assessment clause. Single-source preserved: scoring math/weights/thresholds stay in VRS-TRN-201 + VRS-TRN-501; no constant changed. Net +≈2,745 words (823→3,568); shall 3→52. No requirements deleted.	Curator Run #85; charter DEEPEN
2026-09-16	1.0	Draft	REWRITE (VRS 2026, Batch C): recast §6.1 to “AR determined per VRS-TRN-201, letters per VRS-GEN-006 §4”; §6.2/§6.3 lawful-operation gate + safety-case cap → pointer to criterion TRN-1 (large range, no gate; absence of lawful-operation status scores zero, robot still rated per §9; weaker safety case scores lower on the second half of the ladder, not a letter cap); §6.3 recast as envelope contraction per VRS-TRN-201 §4.3/§4.4 (compliance matter, not a criterion); deleted §6.4 (GEN-201 cold-start). §4.2 lawful-operation gate → TRN-1 scored-not-gated.	Curator Run REWRITE; charter REWRITE

DATE	VERSION	STATUS	CHANGE	AUTHORITY
			Removed retired forms: confidence band (§7.3/§7.4/§8.3/§10), provisional flag (§6.4/§10), cold-start/VRS-GEN-201 (§2/§4.4/§6.4/§7.3/§10/Annex A), assessed-unrated (§7.3), stage prior markers (Foreword/§6/§7), “capped at B” (§6.3/§7.4/§10) → evidence tiers + VRS-GEN-012 §4 bars + company-wide fallback (GEN-005 §6). Deleted cold-start Annex A; renumbered on-road exposure Annex B → Annex A. Worked example re-run against the recast clauses at the Verified tier. No criterion invented/renamed; no constant changed; VRS-TRN-501 regenerated by the dispatcher. See GEN-005 §6.	

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