

UNECE 电动汽车认证准备度清单 · 免费样章

UNECE EV Certification Readiness Checklists — Free sample

R100 电安全与 REESS · R10 电磁兼容 · R155 网络安全 · R156 软件升级
中英双语 · Bilingual EN / 中文 · 资料核对日期 Checked 2026-10-31

内含 Inside: 67 条可勾选检查项,每条附中英要求、所需证据、条款索引、建议负责部门和公开来源;关键时间线;配套 Excel(状态下拉、自动准备度看板)。
67 check items with bilingual requirement, evidence list, paragraph reference, suggested owner and public source; key timeline; companion Excel with status drop-downs and an automatic readiness dashboard.

样章说明:每项法规仅展示前 4 条。完整版含全部条目与 Excel 看板。
Sample shows the first 4 items per regulation. The full version includes every item and the Excel dashboard.

Readiness self-assessment aid only. Not legal advice and not a substitute for the official regulation text, your Approval Authority or Technical Service. Paragraph references point to the public consolidated texts listed under Sources; confirm the version and series that apply to your approval. Prepared with AI assistance from public sources only; contains no confidential employer or client information.
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关键时间线 Key timeline

日期 Date	里程碑 Milestone	来源 Source
2022-07-06	EU GSR: R155 & R156 mandatory for new vehicle types 欧盟 GSR:R155、R156 对新车型强制	https://eur-lex.europa.eu/eli/reg/2019/2144/oj
2024-07-07	EU GSR: R155 & R156 mandatory for all new vehicles 欧盟 GSR:R155、R156 对所有新车强制	https://eur-lex.europa.eu/eli/reg/2019/2144/oj
2025 (Jun)	UN R10 07 series in force (06 series approvals subject to transitional provisions) UN R10 07 系列生效(06 系列认证按过渡条款处理)	https://globalautoregs.com/rules/20/modifications
2026-07-01	China: GB 44495 / GB 44496 / GB 38031 apply to new type applications 中国:GB 44495 / GB 44496 / GB 38031 对新申请车型执行	https://www.miit-eidc.org.cn/art/2026/6/22/art_1657_12509.html
Every 3 years	CSMS and SUMS certificates expire — plan renewal 6+ months ahead CSMS 和 SUMS 证书到期,提前 6 个月以上安排换证	https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ%3AL_202500005
Yearly	R155 monitoring report to the Approval Authority R155 年度监测报告	https://unece.org/sites/default/files/2021-03/R155e.pdf

UN R100 – 电动汽车电力驱动系统安全与 REESS

UN R100 – Electric power train safety & REESS

✓	ID	领域 Area	要求 Requirement	证据 Evidence	条款 Ref	负责 Owner
☐	100-01	范围与策略 Scope & strategy	确认车辆类别(M/N),以及 REESS 单独认证(第二部分)还是随整车认证(第一部分)。 Confirm vehicle category (M/N) and whether REESS is approved separately (Part II) or with the vehicle (Part I).	认证策略说明;型式定义 Approval strategy memo; type definition	§ 1, § 2	Homologation 认证
☐	100-02	范围与策略 Scope & strategy	确认目标认证日期适用的修订系列(03 系列)及过渡条款。 Identify the applicable series of amendments and transitional provisions for the target approval date.	法规版本记录;技术服务机构确认 Regulation version log; Technical Service confirmation	Transitional provisions	Homologation 认证
☐	100-03	防触电 – 直接接触 Electric shock – direct contact	带电部件防直接接触:乘员舱/行李舱内 IPXXD,其他位置 IPXXB;高压外壳/遮栏有警示标识。 Live parts protected against direct contact: IPXXD inside passenger/luggage compartment, IPXXB elsewhere; marking of high-voltage barriers/enclosures.	IP 测试报告;标识图纸;高压部件清单 IP test reports; label drawings; HV component list	Part I § 5.1.1	Vehicle Eng 整车
☐	100-04	防触电 – 间接接触 Electric shock – indirect contact	外露可导电部件与电底盘等电位连接;等电位电阻低于限值($\geq 0.2\text{ A}$ 时 $0.1\text{ }\Omega$)。 Exposed conductive parts bonded to electrical chassis; potential-equalisation resistance below the limit ($0.1\text{ }\Omega$ at $\geq 0.2\text{ A}$).	等电位电阻测量报告 Bonding resistance measurement report	Part I § 5.1.2	Vehicle Eng 整车

UN R10 – 电磁兼容(EMC)

UN R10 – Electromagnetic compatibility (EMC)

✓	ID	领域 Area	要求 Requirement	证据 Evidence	条款 Ref	负责 Owner
☐	10-01	范围与策略 Scope & strategy	确定认证路径:整车型式、电子电气子组件(ESA)型式,或两者;列出全部 ESA。 Decide approval route: vehicle type, ESA (electrical/electronic sub-assembly) type, or both; list all ESAs.	认证策略;ESA 清单 Approval strategy; ESA list	§ 3– § 5	Homologation 认证
☐	10-02	修订系列 Series of amendments	确认适用系列:06 系列应用广泛;07 系列已于 2025 年生效(新增自动驾驶相关条款)。与技术服务机构确认过渡条款。 Confirm series: 06 series widely used; 07 series entered into force in 2025 (adds ADS-related provisions). Check transitional provisions with the Technical Service.	法规版本记录 Regulation version log	Transitional provisions	Homologation 认证
☐	10-03	抗扰相关功能 Immunity-related functions	列出抗扰相关功能(转向、制动、驱动扭矩、灯光、人机界面、REESS 管理等)及其失效判据。 List immunity-related functions (e.g. steering, braking, drive torque, lighting, HMI, REESS management) and their failure criteria.	功能清单及判定准则 Function list with acceptance criteria	Definitions; Annex 6	EE/EMC 电子电气
☐	10-04	试验计划与配置 Test plan & configuration	与技术服务机构确认最恶劣车辆/ESA 配置与工况,包括 REESS 充电模式。 Worst-case vehicle/ESA configurations and operating modes agreed with the Technical Service, including REESS charging mode.	已确认的试验计划 Agreed test plan	§ 6, Annexes	EE/EMC 电子电气

UN R155 – 网络安全与 CSMS

UN R155 – Cyber security & CSMS

✓	ID	领域 Area	要求 Requirement	证据 Evidence	条款 Ref	负责 Owner
☐	155-01	适用性(欧盟) Applicability (EU)	欧盟通过《通用安全法规》(EU) 2019/2144 强制 R155:新车型 2022-07-06 起,所有新车 2024-07-07 起(M、N 类;带 ECU 的 O 类)。其他市场需另行确认。 In the EU, UN R155 is mandatory via the General Safety Regulation (EU) 2019/2144 — new types since 6 July 2022 and all new vehicles since 7 July 2024 (M, N; O with ECUs). Confirm for other markets.	目标市场适用性矩阵 Market applicability matrix	—	Homologation 认证
☐	155-02	CSMS – 治理 CSMS – governance	网络安全管理的组织流程:角色职责、方针、能力、管理层承诺。 Organisational processes for cybersecurity management: roles, responsibilities, policy, competence, management commitment.	网络安全方针;职责矩阵;培训记录 CS policy; RACI; training records	§ 7.2.2	Management 管理层
☐	155-03	CSMS – 风险识别 CSMS – risk identification	识别车辆型式风险的流程,覆盖附件 5 A 部分威胁及其他相关威胁。 Processes to identify risks to vehicle types, considering the threats in Annex 5 Part A and other relevant threats.	TARA 流程(如 ISO/SAE 21434 第 15 章) TARA procedure (e.g. ISO/SAE 21434 cl. 15)	§ 7.2.2.2	Cybersecurity 信息安全
☐	155-04	CSMS – 风险评估与处置 CSMS – risk assessment & treatment	对已识别风险进行评估、分级和处置,并验证风险得到妥善管理。 Processes for assessment, categorisation and treatment of identified risks; verification that risks are appropriately managed.	风险处置记录 Risk treatment records	§ 7.2.2.2	Cybersecurity 信息安全

UN R156 – 软件升级与 SUMS

UN R156 – Software update & SUMS

✓	ID	领域 Area	要求 Requirement	证据 Evidence	条款 Ref	负责 Owner
☐	156-01	适用性(欧盟) Applicability (EU)	欧盟通过 (EU) 2019/2144 强制 R156:新车型 2022-07-06 起,所有新车 2024-07-07 起(适用于可进行软件升级的车辆)。 In the EU, UN R156 is mandatory via (EU) 2019/2144 for new types since 6 July 2022 and all new vehicles since 7 July 2024 (for vehicles that allow software updates).	目标市场适用性矩阵 Market applicability matrix	—	Homologation 认证
☐	156-02	SUMS – 版本识别 SUMS – version identification	唯一识别型式认证系统初始与升级后软件版本及相关硬件的流程。 Process to uniquely identify initial and updated software versions and relevant hardware components of a type-approved system.	配置管理流程 Configuration management procedure	§ 7.1.1	Software 软件
☐	156-03	SUMS – RXSWIN SUMS – RXSWIN	RXSWIN(法规 X 软件识别号)的读取与更新流程;可通过标准接口读取;防止未授权修改。 Process for accessing and updating RXSWIN (Regulation X Software Identification Number); RXSWIN readable via standardised interface; protection against unauthorised modification.	RXSWIN 登记表;读取方式 RXSWIN register; read-out method	§ 7.1.1	Software 软件
☐	156-04	SUMS – 依赖与兼容 SUMS – dependencies & compatibility	识别与其他系统的相互依赖;识别目标车辆并在升级前确认与已知最新配置兼容。 Identify interdependencies with other systems; identify target vehicles and confirm compatibility with the last known configuration before update.	依赖矩阵;兼容性检查规范 Dependency matrix; compatibility check spec	§ 7.1.1	Software 软件

来源 Sources

文件 Document	链接 URL
UN Regulation No. 100 Rev.3 (03 series), UNECE	https://unece.org/sites/default/files/2024-01/R0100r3e.pdf
UN Regulation No. 10, 06 series Amendment 4 text, UNECE	https://unece.org/sites/default/files/2025-10/R10r6am4e.pdf
UN R10 modification history (07 series), GlobalAutoRegs	https://globalautoregs.com/rules/20/modifications
UN Regulation No. 155, UNECE	https://unece.org/sites/default/files/2021-03/R155e.pdf
UN Regulation No. 155 as published in the EU Official Journal (OJ L 2025/5)	https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ%3AL_202500005
UN Regulation No. 156, UNECE	https://unece.org/sites/default/files/2021-03/R156e.pdf
Regulation (EU) 2019/2144 (General Safety Regulation), EUR-Lex	https://eur-lex.europa.eu/eli/reg/2019/2144/oj
GRSP-76-39 Thermal propagation SIG, UNECE	https://unece.org/sites/default/files/2024-12/GRSP-76-39e.pdf
工信部装备工业发展中心:关于做好《公告》标准实施及整改工作的通知 (2026-06-22)	https://www.miit-eidc.org.cn/art/2026/6/22/art_1657_12509.html

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