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Road vehicles - Functional safety -

Part 8: Supporting processes

道路车辆 功能安全 第8部分：支持过程

(ISO 26262-8:2011, MOD)

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Foreword

GB/T 34590, *Road vehicles – Functional safety – Part 8: Supporting processes*, comprises the following parts:

- *Part 1: Vocabulary;*
- *Part 2: Management of functional safety;*
- *Part 3: Concept phase;*
- *Part 4: Product development at the system level;*
- *Part 5: Product development at the hardware level;*
- *Part 6: Product development at the software level;*
- *Part 7: Production and operation;*
- *Part 8: Supporting processes;*
- *Part 9: Automotive Safety Integrity Level (ASIL)-oriented and safety-oriented analyses;*
- *Part 10: Guideline.*

This Part is Part 8 of GB/T 34590.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part was redrafted, modifying and adopting ISO 26262-8:2011, *Road vehicles – Functional safety – Part 8: Supporting processes*.

The technical differences between this Part and ISO 26262-8:2011 and their reasons are as follows:

- the scope of application of this Part is modified, where “applied to safety-related systems that include one or more electrical and/or electronic (E/E) systems and that are installed in series production passenger cars with a maximum gross vehicle mass up to 3 500 kg” in the original text is changed into “applied to safety-related systems that include one or more electrical and/or electronic (E/E) systems and that are installed in series production passenger cars”;
- with respect to normative references, some adjustments are made in this Standard in order to adapt to the technical conditions in China, which have resulted in technical differences. The details of adjustments are reflected collectively in Clause 2 “Normative references”, including:

- GB/T 34590.1-2017 modifying and adopting the international standard replaces ISO 26262-1:2011;
- GB/T 34590.2-2017 modifying and adopting the international standard replaces ISO 26262-2:2011;
- GB/T 34590.3-2017 modifying and adopting the international standard replaces ISO 26262-3:2011;
- GB/T 34590.4-2017 modifying and adopting the international standard replaces ISO 26262-4:2011;
- GB/T 34590.5-2017 modifying and adopting the international standard replaces ISO 26262-5:2011;
- GB/T 34590.6-2017 modifying and adopting the international standard replaces ISO 26262-6:2011;
- GB/T 34590.7-2017 modifying and adopting the international standard replaces ISO 26262-7:2011;
- GB/T 34590.9-2017 modifying and adopting the international standard replaces ISO 26262-9:2011.

The following editorial modifications are made in this Part:

- the introduction and its expression and the content of Figure 1 of the international standard are modified.

This Part was proposed by China Electrical Equipment Industrial Association.

This Part shall be under the jurisdiction of National Technical Committee 114 on Automobiles of Standardization Administration of China (SAC/TC 114).

The responsible drafting organizations of this Part: China Automotive Technology and Research Center Co., Ltd., Pan Asia Technical Automotive Center Co., Ltd., Beijing Sincode Science and Technology Co., Ltd., Schaeffler Holding (China) Co., Ltd., Shanghai Hella Electronics Co., Ltd., Bosch Automotive Products (Suzhou) Co., Ltd., Continental Automotive Investment (Shanghai) Co., Ltd., China FAW Group Corporation, United Automotive Electronic Systems Co., Ltd., JEE Power Systems Co., Ltd., SAIC-GM-Wuling Automobile Co., Ltd.

The contributory drafting organizations of this Part: Beiqi Foton Motor Co., Ltd., Zhengzhou Yutong Bus Co., Ltd., BAIC BJEV Co., Ltd., Beijing HiRain Technologies Co., Ltd., Business Cube and Partners, Inc., Shanghai Haima Automobile Research and Development Co., Ltd., Zhejiang VIE Science and Technology Co., Ltd., Daimler Great China Investment Co., Ltd.

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Road vehicles - Functional safety -

Part 8: Supporting processes

1 Scope

This part of GB/T 34590 specifies the requirements for supporting processes, including the following:

- interfaces within distributed developments;
- overall management of safety requirements;
- configuration management;
- change management;
- verification;
- documentation;
- confidence in the use of software tools;
- qualification of software components;
- qualification of hardware components;
- proven in use argument.

This Standard is applicable to safety-related systems containing one or more electrical and electronic systems installed on mass production passenger cars.

This Standard does not address unique E/E systems in special purpose vehicles such as vehicles designed for drivers with disabilities.

Systems and their components released for production, or systems and their components already under development prior to the publication date of this Standard, are exempted from the scope. For further development or alterations based on systems and their components released for production prior to the publication of this Standard, only the modifications will be developed in accordance with this Standard.

This Standard addresses possible hazards caused by malfunctioning behaviour of E/E safety-related systems, including interaction of these systems. It does not address

hazards related to electric shock, fire, smoke, heat, radiation, toxicity, flammability, reactivity, corrosion, release of energy and similar hazards, unless directly caused by malfunctioning behaviour of E/E safety-related systems.

This Standard does not address the nominal performance of E/E systems, even if dedicated functional performance standards exist for these systems (e.g. active and passive safety systems, brake systems, Adaptive Cruise Control).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition dated applies to this document. For undated references, the latest edition of the referenced documents (including all amendments) applies to this document.

GB/T 34590.1-2017, *Road vehicles - Functional safety - Part 1: Vocabulary* (ISO 26262-1:2011, MOD)

GB/T 34590.2-2017, *Road vehicles - Functional safety - Part 2: Management of functional safety* (ISO 26262-2:2011, MOD)

GB/T 34590.3-2017, *Road vehicles - Functional safety - Part 3: Concept phase* (ISO 26262-3:2011, MOD)

GB/T 34590.4-2017, *Road vehicles - Functional safety - Part 4: Product development at the system level* (ISO 26262-4:2011, MOD)

GB/T 34590.5-2017, *Road vehicles - Functional safety - Part 5: Product development at the hardware level* (ISO 26262-5:2011, MOD)

GB/T 34590.6-2017, *Road vehicles - Functional safety - Part 6: Product development at the software level* (ISO 26262-6:2011, MOD)

GB/T 34590.7-2017, *Road vehicles - Functional safety - Part 7: Production and operation* (ISO 26262-7:2011, MOD)

GB/T 34590.9-2017, *Road vehicles - Functional safety - Part 9: Automotive Safety Integrity Level (ASIL)-oriented and safety-oriented analyses* (ISO 26262-9:2011, MOD)

ISO/IEC 12207, *Systems and software engineering - Software life cycle processes*

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