

ISO 26262-6:2018-12 (E)

Road vehicles - Functional safety - Part 6: Product development at the software level

Contents		Page
Foreword		v
Introduction		vii
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	Requirements for compliance	2
4.1	Purpose	2
4.2	General requirements	2
4.3	Interpretations of tables	3
4.4	ASIL-dependent requirements and recommendations	3
4.5	Adaptation for motorcycles	4
4.6	Adaptation for trucks, buses, trailers and semi-trailers	4
5	General topics for the product development at the software level	4
5.1	Objectives	4
5.2	General	4
5.3	Inputs to this clause	5
5.3.1	Prerequisites	5
5.3.2	Further supporting information	5
5.4	Requirements and recommendations	5
5.5	Work products	7
6	Specification of software safety requirements	7
6.1	Objectives	7
6.2	General	8
6.3	Inputs to this clause	8
6.3.1	Prerequisites	8
6.3.2	Further supporting information	8
6.4	Requirements and recommendations	8
6.5	Work products	10
7	Software architectural design	10
7.1	Objectives	10
7.2	General	10
7.3	Inputs to this clause	10
7.3.1	Prerequisites	10
7.3.2	Further supporting information	10
7.4	Requirements and recommendations	11
7.5	Work products	16
8	Software unit design and implementation	16
8.1	Objectives	16
8.2	General	17
8.3	Inputs to this clause	17
8.3.1	Prerequisites	17
8.3.2	Further supporting information	17
8.4	Requirements and recommendations	17

8.5	Work products	19
9	Software unit verification	19
9.1	Objectives	19
9.2	General	19
9.3	Inputs to this clause	20
9.3.1	Prerequisites	20
9.3.2	Further supporting information	20
9.4	Requirements and recommendations	20
9.5	Work products	24
10	Software integration and verification	24
10.1	Objectives	24
10.2	General	24
10.3	Inputs to this clause	24
10.3.1	Prerequisites	24
10.3.2	Further supporting information	25
10.4	Requirements and recommendations	25
10.5	Work products	28
11	Testing of the embedded software	28
11.1	Objective	28
11.2	General	28
11.3	Inputs to this clause	28
11.3.1	Prerequisites	28
11.3.2	Further supporting information	28
11.4	Requirements and recommendations	29
11.5	Work products	30
Annex A (informative)	Overview of and workflow of management of product development at the software level	31
Annex B (informative)	Model-based development approaches	36
Annex C (normative)	Software configuration	40
Annex D (informative)	Freedom from interference between software elements	46
Annex E (informative)	Application of safety analyses and analyses of dependent failures at the software architectural level	48
Bibliography	57