

ISO 26262-8:2018-12 (E)

Road vehicles - Functional safety - Part 8: Supporting processes

Contents		Page
Foreword		vi
Introduction		viii
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	Interfaces within distributed developments	4
5.1	Objectives	4
5.2	General	4
5.3	Inputs to this clause	4
5.3.1	Prerequisites	4
5.3.2	Further supporting information	5
5.4	Requirements and recommendations	5
5.4.1	Application of requirements	5
5.4.2	Supplier selection criteria	5
5.4.3	Initiation and planning of distributed development	6
5.4.4	Execution of distributed development	7
5.4.5	Functional safety assessment activities in a distributed development	8
5.4.6	Agreement for production, operation, service and decommissioning	8
5.5	Work products	8
6	Specification and management of safety requirements	9
6.1	Objectives	9
6.2	General	9
6.3	Inputs to this clause	10
6.3.1	Prerequisites	10
6.3.2	Further supporting information	10
6.4	Requirements and recommendations	11
6.4.1	Specification of safety requirements	11
6.4.2	Attributes and characteristics of safety requirements	11
6.4.3	Management of safety requirements	13
6.5	Work products	14
7	Configuration management	14
7.1	Objectives	14
7.2	General	14
7.3	Inputs to this clause	15
7.3.1	Prerequisites	15
7.3.2	Further supporting information	15
7.4	Requirements and recommendations	15

7.5	Work products	15
8	Change management	16
8.1	Objectives	16
8.2	General	16
8.3	Inputs to this clause	16
8.3.1	Prerequisites	16
8.3.2	Further supporting information	16
8.4	Requirements and recommendations	16
8.4.1	Planning and initiating change management	16
8.4.2	Change requests	17
8.4.3	Change request analysis	17
8.4.4	Change request evaluation	17
8.4.5	Implementing and documenting the change	18
8.5	Work products	18
9	Verification	18
9.1	Objectives	18
9.2	General	19
9.3	Inputs to this clause	19
9.3.1	Prerequisites	19
9.3.2	Further supporting information	19
9.4	Requirements and recommendations	20
9.4.1	Verification planning	20
9.4.2	Verification specification	20
9.4.3	Verification execution and evaluation	21
9.5	Work products	22
10	Documentation management	22
10.1	Objectives	22
10.2	General	22
10.3	Inputs to this clause	23
10.3.1	Prerequisites	23
10.3.2	Further supporting information	23
10.4	Requirements and recommendations	23
10.5	Work products	24
11	Confidenceintheuseofsoftwaretools	24
11.1	Objectives	24
11.2	General	24
11.3	Inputs to this clause	26
11.3.1	Prerequisites	26
11.3.2	Further supporting information	26
11.4	Requirements and recommendations	27
11.4.1	General requirement	27
11.4.2	Validity of predetermined Tool Confidence Level or qualification	27
11.4.3	Software tool compliance with its evaluation criteria or its qualification	27
11.4.4	Planning of usage of a software tool	27
11.4.5	Evaluation of a software tool by analysis	28
11.4.6	Qualification of a software tool	30
11.4.7	Increased confidence from use	30
11.4.8	Evaluation of the tool development process	31
11.4.9	Validation of the software tool	32
11.5	Work products	32
12	Qualificationofsoftwarecomponents	32
12.1	Objectives	32
12.2	General	32
12.3	Inputs to this clause	33
12.3.1	Prerequisites	33
12.3.2	Further supporting information	33

12.4	Requirements and recommendations	33
12.4.1	General	33
12.4.2	Specification of software component qualification	33
12.4.3	Verification of qualification of a software component	35
12.5	Work products	35
13	Evaluation of hardware elements	35
13.1	Objectives	35
13.2	General	36
13.3	Inputs to this clause	36
13.3.1	Prerequisites	36
13.3.2	Further supporting information	36
13.4	Requirements and recommendations	37
13.4.1	General	37
13.4.2	Evaluation of class I hardware elements	38
13.4.3	Evaluation of class II hardware elements	38
13.4.4	Evaluation of class III hardware elements	40
13.5	Work products	40
14	Proven in use argument	40
14.1	Objectives	40
14.2	General	41
14.3	Inputs to this clause	41
14.3.1	Prerequisites	41
14.3.2	Further supporting information	42
14.4	Requirements and recommendations	42
14.4.1	General	42
14.4.2	Proven in use credit	42
14.4.3	Minimum information on candidate	43
14.4.4	Analysis of modifications to the candidate	43
14.4.5	Analysis of field data	43
14.5	Work products	45
15.1	Objectives	46
15.2	General	46
15.3	Inputs to this clause	46
15.3.1	Prerequisites	46
15.3.2	Further supporting information	46
15.4	Requirements and recommendations	46
15.5	Work products	47
16.1	Objectives	47
16.2	General	47
16.3	Inputs to this clause	48
16.3.1	Prerequisites	48
16.3.2	Further supporting information	48
16.4	Requirements and recommendations	48
16.5	Work products	48
Annex A (informative)	Overview of and workflow of supporting processes	49
Annex B (informative)	Development Interface Agreement (DIA) example	53
Bibliography	60