ISO 26262-6:2011-11 (E)

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

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 2

3 Terms, definitions and abbreviated terms 2

4 Requirements for compliance 2
4.1 General requirements 2
4.2 Interpretations of tables 2
4.3 ASIL-dependent requirements and recommendations 3

5 Initiation of product development at the software level 3
5.1 Objectives 3
5.2 General 3
5.3 Inputs to this clause 4
5.4 Requirements and recommendations 4
5.5 Work products 6

6 Specification of software safety requirements 6
6.1 Objectives 6
6.2 General 7
6.3 Inputs to this clause 7
6.4 Requirements and recommendations 7
6.5 Work products 9

7 Software architectural design 9
7.1 Objectives 9
7.2 General 9
7.3 Inputs to this clause 9
7.4 Requirements and recommendations 10
7.5 Work products 15

8 Software unit design and implementation 15
8.1 Objectives 15
8.2 General 15
8.3 Inputs to this clause 16
8.4 Requirements and recommendations 16
8.5 Work products 18

9 Software unit testing 19
9.1 Objectives 19
9.2 General 19
9.3 Inputs to this clause 19
9.4 Requirements and recommendations 19
9.5 Work products 21

10 Software integration and testing 22
10.1 Objectives 22

10.2 General 22
10.3 Inputs to this clause 22
10.4 Requirements and recommendations 23
10.5 Work products 25

11 Verification of software safety requirements 25
11.1 Objectives 25
11.2 General 25
11.3 Inputs to this clause 25
11.4 Requirements and recommendations 26
11.5 Work products 27

Annex A (informative) Overview of and workflow of management of product development at the software level 28

Annex B (informative) Model-based development 31

Annex C (normative) Software configuration 33

Annex D (informative) Freedom from interference between software elements 38

Bibliography 40