### **TECHNICAL** REPORT



First edition 2022-02

## k **Road vehicles — Comparison between** ISO 26262-12 and other parts of the ISO 26262 series to support motorcycle adaptation

Véhicules routiers — Comparaison entre l'ISO 26262-12 et les autres parties de la série ISO 26262 pour soutenir l'adaptation aux motocycles



Reference number ISO/TR 3152:2022(E)



© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Page

### Contents

Fo	eword		iv
Int	roductio	D <b>n</b>	v
1	Scop	De	1
2	Nori	mative references	1
3	Terr	Terms and definitions	
4	<b>Gene</b> 4.1 4.2 4.3	eral Overview Categorization of differences Interpretation of comparison tables.	1 1 4 4
5	Comparison of safety culture		4
6	Com	parison of confirmation measures	5
7	Comparison of hazard analysis and risk assessment		7
8	Comparison of vehicle integration and testing		15
9	Comparison of safety validation		
Bił	liograp	hy	

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

### Introduction

The ISO 26262 series is the adaptation of the IEC 61508 series, its purpose is to address the sector-specific needs of electrical and/or electronic (E/E) systems within road vehicles.

This adaptation applies to all activities during the safety lifecycle of safety-related systems comprised of electrical, electronic and software components.

E/E systems on motorcycles comply with the ISO 26262 series by meeting all of the requirements of ISO 26262-2:2018 through ISO 26262-9:2018. However, some requirements can require a degree of tailoring in order to apply them to motorcycles. In such cases, these tailored requirements supersede the corresponding requirements of the ISO 26262 series.

ind a. The specific requirements for motorcycles compared in this document correspond to requirements of ISO 26262-2:2018, 5.4.2 and 6.4.9; ISO 26262-3:2018, Clause 6; ISO 26262-4:2018, 7.4.4; and ISO 26262-4:2018, Clause 8.

© ISO 2022 - All rights reserved

this document is a preview demendence of the document is a preview demendence of the document of the document

# Road vehicles — Comparison between ISO 26262-12 and other parts of the ISO 26262 series to support motorcycle adaptation

### 1 Scope

This document lists differences between ISO 26262-12:2018 and other parts of the ISO 26262 series, and supports the adaptation of the ISO 26262 series for motorcycles by clarifying the intention.

This document is based on ISO 26262-12:2018 and makes a comparison with the following documents:

- ISO 26262-2:2018,
- ISO 26262-3:2018,
- ISO 26262-4:2018.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 26262-1:2018, Road vehicles — Functional safety — Part 1: Vocabulary

### 3 Terms and definitions

For the purposes of this document, the terms, definitions and abbreviated terms given in ISO 26262-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

### 4 General

#### 4.1 Overview

The objective of this clause is to give an overview of the comparison in this document. This clause describes the contents of ISO 26262-12:2018 and the superseded clauses from ISO 26262-2:2018, ISO 26262-3:2018 and ISO 26262-4:2018. However, identical clauses (Clause 1 to Clause 4) in all parts are excluded from comparison. Additionally, annexes are also excluded from the comparison because of their informative nature.

123 differences are identified as the target of categorization by comparison. The overview for each clause is as follows.

 In Clause 5 regarding safety culture, 5 differences are categorized. These are mainly relevant to communication channels and changed because these are implemented to limited models of motorcycle.