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Road vehicles — Standardized access to automotive repair and maintenance information (RMI) —

Part 2: Technical requirements

Véhicules routiers — Normalisation de l'accès aux informations relatives à la réparation et à la maintenance pour l'automobile (RMI) —

Partie 2: Exigences techniques

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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 www.iso.org/directives).

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 www.iso.org/patents).

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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 31, *Data communication,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 301, *Road vehicles,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 18541-2:2014), which has been technically revised.

The main changes compared to the previous edition are as follows:

— security-related RMI according to SERMI scheme moved to Annex A;

— previous Annex A "PC specification" has been removed; the corresponding subclauses 9.2 and 9.3 were updated accordingly;

— Figures 2, 3 and 4 were updated (security-related RMI has been deleted);

— correction of errors and improvement of formulations in the entire document.

A list of all parts in the ISO 18541 series can be found on the ISO website.

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 www.iso.org/members.html.

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Introduction

The ISO 18541 series includes the requirements to be fulfilled by repair and maintenance information (RMI) systems as applied by the European Commission — Enterprise and Industry Directorate-General, Consumer goods — Automotive industry EC mandate M/421,[6] dated Brussels, 21 January 2008.

This mandate relates to the EC type-approval system for vehicles falling into the scopes of Directives 70/156/EEC (replaced by 2007/46/EC [9]), 2002/24/EC [replaced by (EU) 168/2013 [7]] and 2003/37/EC [replaced by (EU) 167/2013 [8]] and, in particular, to requirements for access to vehicle repair and maintenance information by independent operators.

The purpose of the EC Mandate M/421 is to develop a standard or set of standards which specify the requirements to provide standardized access to automotive repair and maintenance information (RMI) for independent operators.

The ISO 18541 series only covers access to automotive repair and maintenance information for light passenger and commercial vehicles [see (EC) No 715/2007 [15], (EC) No 692/2008 [14] and (EU) No 566/2011 [11]] and heavy-duty vehicles [see (EC) No 595/2009 [13], (EU) No 582/2011 [12] and (EU) No 64/2012 [10]] based on Directive 2007/46/EC [9] and for two-or three-wheel vehicles and quadricycles based on regulation (EU) 168/2013 [7].

The information included in the ISO 18541 series derives from the legislative requirements on European level in the field of RMI and related security requirements and can be referenced by legislation in other countries.

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Road vehicles — Standardized access to automotive repair and maintenance information (RMI) —

Part 2: Technical requirements

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1 Scope

This document includes technical requirements which are related to automotive repair and maintenance information (RMI) systems in order to standardize access to RMI for independent operators.

This document specifies the minimum set of technical requirements related to a vehicle manufacturer's RMI system. These requirements will reflect the deriving needs from the use cases as specified in ISO 18541-1.

Furthermore, this document defines requirements for granting access to security-related RMI in Annex A following the SERMI scheme.

This document is applicable to light passenger and commercial vehicles as defined in regulation (EC) 715/2007 Article 2 [15].

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 18541-1, *Road vehicles — Standardized access to automotive RMI — Part 1: General information and use case definition*

ISO 18541-3, *Road vehicles — Standardized access to automotive repair and maintenance information (RMI) — Part 3: Functional user interface requirements*

ISO 22900-2, *Road vehicles — Modular vehicle communication interface (MVCI) — Part 2: Diagnostic protocol data unit application programming interface (D-PDU API)*

SAE J2534-1, *Recommended Practice for Pass-Thru Vehicle Programming*

SAE J2534-2, *Optional Pass-Thru Features*

SERMI scheme[1)] — *Scheme for accreditation, approval and authorization to access security-related repair and maintenance information*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18541-1 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

1) Available at https://www.vehiclesermi.eu/.

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