Road vehicles - Standardized access to automotive repair and maintenance information (RMI) - Part 1: General information and use case definition (ISO 18541-1:2021)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 18541-1:2021 sisaldab Euroopa standardi EN ISO 18541-1:2021 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 18541-1:2021 consists of the English text of the European standard EN ISO 18541-1:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

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Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.

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English Version

Road vehicles - Standardized access to automotive repair and maintenance information (RMI) - Part 1: General information and use case definition (ISO 18541-1:2021)

Véhicules routiers - Normalisation de l'accès aux informations relatives à la réparation et à la maintenance pour l'automobile (RMI) - Partie 1: Informations générales et définitions de cas d'utilisation (ISO/FDIS 18541-1:2021)

Straßenfahrzeuge - Standardisierter Zugang zu Reparatur- und Wartungsinformationen (RMI) - Teil 1: Allgemeine Informationen und Beschreibung der Anwendungsfälle (ISO/FDIS 18541-1:2021)

This European Standard was approved by CEN on 1 June 2021.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 18541-1:2021) has been prepared by Technical Committee ISO/TC 22 "Road vehicles" in collaboration with Technical Committee CEN/TC 301 "Road vehicles" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 18541-1:2014.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 18541-1:2021 has been approved by CEN as EN ISO 18541-1:2021 without any modification.

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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).

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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 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 18541-1:2014), 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;
- 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, [5] 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 $^{[8]}$), 2002/24/EC [replaced by (EU) 168/2013 $^{[6]}$] and 2003/37/EC [replaced by (EU) 167/2013 $^{[7]}$] 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 based on Directive 2007/46/EC $^{[8]}$ and for two-or three-wheel vehicles and quadricycles based on regulation (EU) 168/2013 $^{[6]}$.

de quirem. 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.

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

Part 1:

General information and use case definition

1 Scope

This document provides a general overview and structure of each part of the ISO 18541 series. This document also describes the use cases applicable to the standardized access to automotive RMI. The use cases address real world scenarios (e.g. servicing vehicles) regarding the information access necessary to perform vehicle roadside assistance, inspection, diagnosis, repair and maintenance, including the updating and replacement of electronic control units (ECU).

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

The RMI systems used by personnel to perform the services consist of:

- a web-based system, which provides access to RMI needed to perform the service(s);
- contact information for specific RMI;
- a security framework to protect access to security-related RMI (vehicle theft protection measures).

This document is applicable to light passenger vehicles and light commercial vehicles.

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/IEC 9594-8, Information technology — Open systems interconnection — Part 8: The Directory: Public key and attribute certificate frameworks

ISO 18541-2, Road vehicles — Standardized access to automotive repair and maintenance information (RMI) — Part 2: Technical requirements

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/