INTERNATIONAL STANDARD

ISO 18542-2

First edition
2014-05-01

Road vehicles — Standardized repair and maintenance information (RMI) terminology —

Part 2: Standardized process implementation requirements, Registration Authority

Véhicules routiers — Terminologie normalisée pour l'information sur la réparation et la maintenance (RMI) —

Partie 2: Exigences de mise en oeuvre des procédés normalisés, autorité d'enregistrement

Reference number
ISO 18542-2:2014(E)

© ISO 2014



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions, symbols and abbreviated terms ... **2**
3.1 Terms and definitions ... 2
3.2 Abbreviated terms ... 4

4 Standard and implementation ... **4**
4.1 Overview of Standard ISO 18542 ... 4
4.2 Overview of the usage of the Digital Annex within the context of ISO 18541 ... 5

5 Structure of the COTS TMS Requirements ... **6**
5.1 Main technical requirements clusters ... 6

6 [1]: Overall system architecture ... **9**
6.1 [1.1] Conceptual architecture ... 9
6.2 [1.2] Conceptual data and role models ... 9

7 [2]: System infrastructure ... **12**
7.1 [2.1] General IT infrastructure ... 12
7.2 [2.2] Infrastructure components ... 12
7.3 [2.3] Database management system and data storage ... 13
7.4 [2.4]: Security ... 14

8 [3]: User Interface ... **16**
8.1 [3.1] Graphical User Interface / Interactive web pages ... 16
8.2 [3.2] Other interfaces ... 18

9 [4]: Data Management ... **19**
9.1 [4.1] Meta objects model ... 19
9.2 [4.2] Data exchange ... 19
9.3 [4.3] Data management services ... 20
9.4 [4.4] Reporting ... 21

10 [5]: Application and workflow management ... **22**
10.1 [5.1] General workflow ... 22
10.2 [5.2] Proposal ... 22
10.3 [5.3] Evaluation ... 23
10.4 [5.4] Review ... 23
10.5 [5.5] Translation ... 24
10.6 [5.6] Release ... 24
10.7 Download for VM ... 25
10.8 [5.7] Publication ... 25

11 [6]: Operation ... **25**
11.1 [6.1] Availability ... 25
11.2 [6.2] Support ... 26
11.3 [6.3] Change and release ... 26
11.4 [6.4] System administration ... 26

Bibliography ... **28**

© ISO 2014 – All rights reserved

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).

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

ISO 18542-2 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 18542 consists of the following parts, under the general title *Road vehicles — Standardized repair and maintenance information (RMI) terminology*:

— *Part 1: General information and use case definition*

— *Part 2: Standardized process implementation requirements, Registration Authority*

 © ISO 2014 – All rights reserved

Introduction

The ISO 18542 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[1] "MANDATE TO THE EUROPEAN STANDARDIZATION ORGANISATIONS FOR STANDARDIZATION IN THE FIELD OF VEHICLE OBD, REPAIR AND MAINTENANCE INFORMATION" dated Brussels, 21 January 2008.

This mandate relates to the EC type-approval system for vehicles falling into the scopes of Directives 2002/24/EC,[2] 2003/37/EC[3] and 70/156/EEC (replaced by 2007/46/EC),[4] and, in particular, to requirements for access to vehicle repair and maintenance information by independent operators.

This part of ISO 18542 addresses terminology for access to automotive repair and maintenance information for light passenger and commercial vehicles[1)] and heavy duty vehicles[2)] based on Directive 70/156/EEC (replaced by 2007/46/EC).

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 information included in this part of ISO 18542 derives from the legislative requirements on a European level in the field of repair and maintenance information and related security requirements and can be referenced by legislation in other countries.

It is intended to be read in conjunction with:

— ISO 18542-1: General information and use case definition, that defines a framework and a process for agreeing terms for a standardized automotive terminology process;

— ISO 18541-1: General information and use case definition, that describes the requirements for the vehicle manufacturers RMI systems;

— ISO 18541-2: Technical requirements;

— ISO 18541-3: Functional user interface requirements, and;

— ISO 18541-4: Conformance test.

This part of ISO 18542-2 is predicated by some key decisions and concepts that need to be understood in order to fully appreciate its intent.

---

1) REGULATION (EC) No 715/2007 [5] OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information and COMMISSION REGULATION (EC) No 692/2008 of 18 July 2008 [6] implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information and amending COMMISSION REGULATION (EU) No 566/2011 of 8 June 2011 [7] amending Regulation (EC) No 715/2007 of the European Parliament and of the Council and Commission Regulation (EC) No 692/2008 as regards access to vehicle repair and maintenance information.

2) REGULATION (EC) No 595/2009 [8] OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2009 on type approval of motor vehicles with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information, COMMISSION REGULATION (EU) No 582/2011 of 25 May 2011 [9] implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI), and COMMISSION REGULATION (EU) No 64/2012 of 23 January 2012 [10] amending Regulation (EU) No 582/2011 2011 implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI).

© ISO 2014 – All rights reserved

From the outset it was determined that a set of 'Agreed Terms' would be used by an IO to search a VM's RMI. The phrase 'Agreed Terms' is used rather than 'Standardized Terms' because the terms should not be 'standardized' in the established sense. The standardization process is lengthy and the need to have terms available for searching in a short timescale means such an approach is inappropriate. The process by which a panel of expert terminologists agrees and reviews terms is systemized and central to ISO 18542-1.

The provision of the agreed Automotive RMI Terminology itself is outside the remit of this part of ISO 18542 and therefore outside the scope of this part of ISO 18542. Rather, it is foreseen that the agreed Automotive RMI Terminology will follow a lifecycle beyond the timeframe of this part of ISO 18542 and be dependent upon the work of a Registration Authority, a Terminology Review Group for its creation and management, and of a Digital Annex for its publication. For the development of the Digital Annex existing standards will be reviewed and elements included where appropriate and practical.

— In order to effectively maintain the 'Agreed Terminology', it has been determined that a Commercial-Off-The-Shelf (COTS) Terminology Management System (TMS) is required. The COTS TMS functions as a 'back-end' database repository with a workflow element that will ensure 'Agreed Terms' are created, and managed in line with the standardized process outlined in ISO 18542-1.

— It is anticipated that there will be a maintenance agency which will be responsible for overseeing the procurement and hosting of the COTS TMS.

— A Registration Authority (RA) controls the IP for the Digital Annex (DA) and is responsible for managing and publishing the content of that DA.

— The maintenance agency for the Commercial-Off-The-Shelf Terminology Management System (COTS TMS) and the Registration Authority (RA) for the Digital Annex (DA) may be a single organization.

© ISO 2014 – All rights reserved

Road vehicles — Standardized repair and maintenance information (RMI) terminology —

Part 2: Standardized process implementation requirements, Registration Authority

1 Scope

The ISO 18542 series is structured into two parts:

— Part 1: General information and use case definition: defines a framework and a process for agreeing terms

— Part 2: Standardized process implementation requirements, Registration Authority: defines the process implementation requirements for a Terminology Management System and for a Registration Authority with a Digital Annex.

The purpose of the ISO 18542 series is to facilitate searching by Independent Operators (IOs) of Vehicle Manufacturer (VM) Repair and Maintenance Information (RMI) websites.

This part of ISO 18542 specifies:

— the technical requirements that must be met by the Terminology Management System (TMS) that will be used to manage and store the 'Agreed RMI Terminology';

— the requirements for the Registration Authority (RA) (i.e. the agency responsible for maintaining and publishing the 'Agreed RMI Terminology').

The framework and process for creating 'Agreed Terminology' is the subject of ISO 18542-1.

The target audience for this part of ISO 18542-2 is a technical one, and focused on those responsible for the implementation of mandate M/421.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 18542-1, *Road vehicles — Standardized repair and maintenance information (RMI) terminology — Part 1: General information and use case definition*

ISO 18541-1[3], *Road vehicles — Standardized access to automotive repair and maintenance information (RMI) — Part 1: General information and use case definition*

ISO 18541-2[4], *Road vehicles — Standardized access to automotive repair and maintenance information (RMI) — Part 2: Technical requirements*

3) To be published.

4) To be published.

© ISO 2014 – All rights reserved