

Second edition
2021-06

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

**Part 4:
Conformance test**

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

Partie 4: Test de conformité
ISO 18541-4:2021

<https://standards.iteh.ai/catalog/standards/sist/562e3d45-cad5-47bf-86bf-52548ec32ae3/iso-18541-4-2021>



Reference number
ISO 18541-4:2021(E)

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 18541-4:2021](#)

<https://standards.iteh.ai/catalog/standards/sist/562e3d45-cad5-47bf-86bf-52548ec32ae3/iso-18541-4-2021>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

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

Contents

	Page
Foreword	xiii
Introduction	xiv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 Conformance test basic principles and clustering	2
5.1 Basic principles for conformance test case definition	2
5.2 Conformance test clustering	3
5.2.1 General	3
5.2.2 Main conformance test case clusters	3
6 Test case structure	7
6.1 Conformance test case — General structure	7
6.1.1 Overview	7
6.1.2 Test case reference number and title [RMI-CT...] [title]	8
6.1.3 Test purpose	8
6.1.4 Configuration	8
6.1.5 Preamble (setup state)	8
6.1.6 Test execution	8
6.1.7 Post-amble	8
6.2 Result criteria	8
7 CT cluster 1 — Test technical infrastructure	9
7.1 [RMI-CT_TREQ-13, 14, 15, ^{16, 17, 18, Annex A} _{ISO 18541-4:2021}] Test client configuration	9
7.1.1 Overview	9
7.1.2 Test purpose	9
7.1.3 Configuration	9
7.1.4 Preamble (setup state)	9
7.1.5 Test execution	9
7.1.6 Post-amble	10
7.2 [RMI-CT_TREQ-17] Test presentation formats for information packages	10
7.2.1 Overview	10
7.2.2 Test purpose	10
7.2.3 Configuration	10
7.2.4 Preamble (setup state)	10
7.2.5 Test execution	10
7.2.6 Post-amble	10
8 CT cluster 2 — Test client's external interfaces	10
8.1 [RMI-CT_TREQ-9] Test vehicle communication interface (VCI)	10
8.1.1 Overview	10
8.1.2 Test purpose	10
8.1.3 Configuration	11
8.1.4 Preamble (setup state)	11
8.1.5 Test execution	11
8.1.6 Post-amble	11
8.2 [RMI-CT_TREQ-11] Test parts ordering for security-related features	11
8.2.1 Overview	11
8.2.2 Test purpose	11
8.2.3 Configuration	12
8.2.4 Preamble (setup state)	12
8.2.5 Test execution	12
8.2.6 Post-amble	12

8.3	[RMI-CT_TREQ-12] Test partnered accessory provider systems.....	12
8.3.1	Overview.....	12
8.3.2	Test purpose.....	12
8.3.3	Configuration.....	12
8.3.4	Preamble (setup state).....	12
8.3.5	Test execution.....	13
8.3.6	Post-amble.....	13
9	CT cluster 3 — Test user authentication, authorization and administration	13
9.1	[RMI-CT_UC1.1] Test to register IO for use of the VM RMI system.....	13
9.1.1	Overview.....	13
9.1.2	Test purpose.....	13
9.1.3	Configuration.....	13
9.1.4	Preamble (setup state).....	13
9.1.5	Test execution.....	14
9.1.6	Post-amble.....	14
9.2	[RMI-CT_UC1.2_A] Test to register IO employee for use of the VM RMI system — Scenario A.....	14
9.2.1	Overview.....	14
9.2.2	Test purpose.....	14
9.2.3	Configuration.....	14
9.2.4	Preamble (setup state).....	14
9.2.5	Test execution.....	15
9.3	[RMI-CT_UC1.2_B] Test to register IO employee for use of the VM RMI system — Scenario B.....	15
	iTeh STANDARD PREVIEW (standards.iteh.ai)	
9.3.1	Overview.....	15
9.3.2	Test purpose.....	15
9.3.3	Configuration.....	15
9.3.4	Preamble (setup state).....	15
9.3.5	Test execution.....	15
9.3.6	Post-amble.....	16
9.4	[RMI-CT_UC1.3] Test to maintain IO status.....	16
9.4.1	Overview.....	16
9.4.2	Test purpose.....	16
9.4.3	Configuration.....	16
9.4.4	Preamble (setup state).....	16
9.4.5	Test execution.....	16
9.4.6	Post-amble.....	17
9.5	[RMI-CT_UC1.4] Test to maintain user status.....	17
9.5.1	Overview.....	17
9.5.2	Test purpose.....	17
9.5.3	Configuration.....	17
9.5.4	Preamble (setup state).....	17
9.5.5	Test execution.....	17
9.5.6	Post-amble.....	18
9.6	[RMI-CT_UC1.5] Test to the deletion of the registration of an IO employee.....	18
9.6.1	Overview.....	18
9.6.2	Test purpose.....	18
9.6.3	Configuration.....	18
9.6.4	Preamble (setup state).....	18
9.6.5	Test execution.....	18
9.6.6	Post-amble.....	19
9.7	[RMI-CT_UC1.6] Test login to VM RMI system.....	19
9.7.1	Overview.....	19
9.7.2	Test purpose.....	19
9.7.3	Configuration.....	19
9.7.4	Preamble (setup state).....	19
9.7.5	Test execution.....	19
9.7.6	Post-amble.....	19

9.8	[RMI-CT_UC1.7] Test for granting access to security-related RMI	19
9.8.1	Overview	19
9.8.2	Test purpose	19
9.8.3	Configuration	20
9.8.4	Preamble (setup state)	20
9.8.5	Test execution	20
9.8.6	Post-amble	20
10	CT cluster 4 — Test functional user interface implementation	20
10.1	[RMI-CT_FREQ-1] Test for RMI access mode	20
10.1.1	Overview	20
10.1.2	Test purpose	20
10.1.3	Configuration	20
10.1.4	Preamble (setup state)	21
10.1.5	Test execution	21
10.1.6	Post-amble	21
10.2	[RMI-CT_FREQ-2] Test for registration and login support	21
10.2.1	Overview	21
10.2.2	Test purpose	21
10.2.3	Configuration	21
10.2.4	Preamble (setup state)	21
10.2.5	Test execution	21
10.2.6	Post-amble	22
10.2.7	Result criteria	22
10.3	[RMI-CT_FREQ-3] Test for implemented use cases map	22
10.3.1	Overview	22
10.3.2	Test purpose	22
10.3.3	Configuration	22
10.3.4	Preamble (setup state)	22
10.3.5	Test execution	22
10.3.6	Post-amble	22
10.4	[RMI-CT_FREQ-4] Test for download area	23
10.4.1	Overview	23
10.4.2	Test purpose	23
10.4.3	Configuration	23
10.4.4	Preamble (setup state)	23
10.4.5	Test execution	23
10.4.6	Post-amble	23
10.5	[RMI-CT_FREQ-5] Test for navigational pathway	23
10.5.1	Overview	23
10.5.2	Test purpose	24
10.5.3	Configuration	24
10.5.4	Preamble (setup state)	24
10.5.5	Test execution	24
10.5.6	Post-amble	24
11	CT cluster 5 — Test payment for RMI	24
11.1	[RMI-CT_UC2] Test payment for RMI	24
11.1.1	Overview	24
11.1.2	Test purpose	25
11.1.3	Configuration	25
11.1.4	Preamble (setup state)	25
11.1.5	Test execution	25
11.1.6	Post-amble	25
12	CT cluster 6 — Test for vehicle identification	26
12.1	[RMI-CT_UC3.1] Test vehicle identification through use of VIN	26
12.1.1	Overview	26
12.1.2	Test purpose	26
12.1.3	Configuration	26

12.1.4	Preamble (setup state)	26
12.1.5	Test execution.....	26
12.1.6	Post-amble.....	26
12.2	[RMI-CT_UC3.2] Test vehicle identification via product features	27
12.2.1	Overview.....	27
12.2.2	Test purpose.....	27
12.2.3	Configuration.....	27
12.2.4	Preamble (setup state)	27
12.2.5	Test execution.....	27
12.2.6	Post-amble.....	27
13	CT cluster 7 — Test selection methods for RMI	28
13.1	[RMI-CT_UC4.1] Test selection of information type	28
13.1.1	Overview.....	28
13.1.2	Test purpose.....	28
13.1.3	Configuration.....	28
13.1.4	Preamble (setup state)	28
13.1.5	Test execution.....	28
13.1.6	Post-amble.....	28
13.2	[RMI-CT_UC4.2] Test search by standardized terms.....	28
13.2.1	Overview.....	28
13.2.2	Test purpose.....	29
13.2.3	Configuration.....	29
13.2.4	Preamble (setup state)	29
13.2.5	Test execution.....	29
13.2.6	Post-amble.....	29
13.3	[RMI-CT_UC4.3] Test navigation using product structure.....	29
13.3.1	Overview.....	29
13.3.2	Test purpose.....	29
13.3.3	Configuration.....	ISO 18541-4:2021 30
13.3.4	Preamble (setup state).....	ISO 18541-4:2021 30
13.3.5	Test execution.....	ISO 18541-4:2021 30
13.3.6	Post-amble.....	30
13.4	[RMI-CT_UC4.4] Test selection by document identifier.....	30
13.4.1	Overview.....	30
13.4.2	Test purpose.....	30
13.4.3	Configuration.....	30
13.4.4	Preamble (setup state)	30
13.4.5	Test execution.....	31
13.4.6	Post-amble.....	31
14	CT cluster 8 — Test retrieval of information packages	31
14.1	[RMI-CT_UC5.1.1] Test retrieval of general workshop procedures	31
14.1.1	Overview.....	31
14.1.2	Test purpose.....	31
14.1.3	Configuration.....	31
14.1.4	Preamble (setup state)	31
14.1.5	Test execution.....	32
14.1.6	Post-amble.....	32
14.2	[RMI-CT_UC5.1.2] Test retrieval of body repair procedures	32
14.2.1	Overview.....	32
14.2.2	Test purpose.....	32
14.2.3	Configuration.....	32
14.2.4	Preamble (setup state)	32
14.2.5	Test execution.....	32
14.2.6	Post-amble.....	33
14.3	[RMI-CT_UC5.1.3] Test retrieval of temporary repair procedures	33
14.3.1	Overview.....	33
14.3.2	Test purpose.....	33

14.3.3	Configuration	33
14.3.4	Preamble (setup state)	33
14.3.5	Test execution	33
14.3.6	Post-amble	34
14.4	[RMI-CT_UC5.1.4] Test retrieval of preparation for PTI	34
14.4.1	Overview	34
14.4.2	Test purpose	34
14.4.3	Configuration	34
14.4.4	Preamble (setup state)	34
14.4.5	Test execution	34
14.4.6	Post-amble	35
14.5	[RMI-CT_UC5.2] Test retrieval of wiring diagrams	35
14.5.1	Overview	35
14.5.2	Test purpose	35
14.5.3	Configuration	35
14.5.4	Preamble (setup state)	35
14.5.5	Test execution	35
14.5.6	Post-amble	35
14.6	[RMI-CT_UC5.3] Test retrieval of technical service bulletin	35
14.6.1	Overview	35
14.6.2	Test purpose	36
14.6.3	Configuration	36
14.6.4	Preamble (setup state)	36
14.6.5	Test execution	36
14.6.6	Post-amble	36
14.7	[RMI-CT_UC5.4] Test retrieval of recall information	36
14.7.1	Overview	36
14.7.2	Test purpose	36
14.7.3	Configuration	36
14.7.4	Preamble (setup state)	37
14.7.5	Test execution	37
14.7.6	Post-amble	37
14.8	[RMI-CT_UC5.5] Test retrieval of maintenance schedule	37
14.8.1	Overview	37
14.8.2	Test purpose	37
14.8.3	Configuration	37
14.8.4	Preamble (setup state)	37
14.8.5	Test execution	38
14.8.6	Post-amble	38
14.9	[RMI-CT_UC5.6.1] Test retrieval of spare parts (identification)	38
14.9.1	Overview	38
14.9.2	Test purpose	38
14.9.3	Configuration	38
14.9.4	Preamble (setup state)	38
14.9.5	Test execution	38
14.9.6	Post-amble	39
14.10	[RMI-CT_UC5.6.2] Test retrieval of spare parts (access)	39
14.10.1	Overview	39
14.10.2	Test purpose	39
14.10.3	Configuration	39
14.10.4	Preamble (setup state)	39
14.10.5	Test execution	39
14.10.6	Post-amble	40
14.11	[RMI-CT_UC5.7.1] Test retrieval of accessory information factory fitted (included in general RMI)	40
14.11.1	Overview	40
14.11.2	Test purpose	40
14.11.3	Configuration	40

14.11.4	Preamble (setup state)	40
14.11.5	Test execution.....	40
14.11.6	Post-amble.....	40
14.12	[RMI-CT_UC5.7.2] Test retrieval of accessory information partnered with a VM part number	41
14.12.1	Overview.....	41
14.12.2	Test purpose.....	41
14.12.3	Configuration.....	41
14.12.4	Preamble (setup state)	41
14.12.5	Test execution.....	41
14.12.6	Post-amble.....	41
14.13	[RMI-CT_UC5.7.3] Test retrieval of fitting information for accessories with no VM part number	41
14.13.1	Overview.....	41
14.13.2	Test purpose.....	42
14.13.3	Configuration.....	42
14.13.4	Preamble (setup state)	42
14.13.5	Test execution.....	42
14.13.6	Post-amble.....	42
14.14	[RMI-CT_UC5.8] Test retrieval of labour times	42
14.14.1	Overview.....	42
14.14.2	Test purpose.....	42
14.14.3	Configuration.....	43
14.14.4	Preamble (setup state)	43
14.14.5	Test execution.....	43
14.14.6	Post-amble.....	43
14.15	[RMI-CT_UC5.9] Test retrieval of converted vehicle information	43
14.15.1	Overview.....	43
14.15.2	Test purpose.....	43
14.15.3	Configuration.....	43
14.15.4	Preamble (setup state)	43
14.15.5	Test execution.....	44
14.15.6	Post-amble.....	44
14.16	[RMI-CT_UC5.10] Test retrieval of special tool information	44
14.16.1	Overview.....	44
14.16.2	Test purpose.....	44
14.16.3	Configuration.....	44
14.16.4	Preamble (setup state)	44
14.16.5	Test execution.....	45
14.16.6	Post-amble.....	45
15	CT cluster 9 — Test vehicle diagnostics	45
15.1	[RMI-CT_UC6.1] Test DTC resolution.....	45
15.1.1	Overview.....	45
15.1.2	Test purpose.....	45
15.1.3	Configuration.....	45
15.1.4	Preamble (setup state)	45
15.1.5	Test execution.....	45
15.1.6	Post-amble.....	46
15.2	[RMI-CT_UC6.2] Test VM symptom resolution.....	46
15.2.1	Overview.....	46
15.2.2	Test purpose.....	46
15.2.3	Configuration.....	46
15.2.4	Preamble (setup state)	46
15.2.5	Test execution.....	46
15.2.6	Post-amble.....	47
15.3	[RMI-CT_UC6.3] Test integrated diagnostics	47
15.3.1	Overview.....	47
15.3.2	Test purpose.....	47

15.3.3	Configuration	47
15.3.4	Preamble (setup state)	47
15.3.5	Test execution	47
15.3.6	Post-amble	48
16	CT cluster 10 — Test updating, replacing and tuning of modules (ECUs)	48
16.1	[RMI-CT_UC7.1] Test updating and replacing modules information	48
16.1.1	Overview	48
16.1.2	Test purpose	48
16.1.3	Configuration	48
16.1.4	Preamble (setup state)	48
16.1.5	Test execution	48
16.1.6	Post-amble	49
16.2	[RMI-CT_UC7.2] Test tuning kit	49
16.2.1	Overview	49
16.2.2	Test purpose	49
16.2.3	Configuration	49
16.2.4	Preamble (setup state)	49
16.2.5	Test execution	49
16.2.6	Post-amble	50
17	CT cluster 11 — Test electronic maintenance history	50
17.1	[RMI-CT_UC8] Test electronic maintenance history	50
17.1.1	Overview	50
17.1.2	Test purpose	50
17.1.3	Configuration	50
17.1.4	Preamble (setup state)	50
17.1.5	Test execution	50
17.1.6	Post-amble	51
18	CT cluster 12 — Test repair assistance, technical support	51
18.1	[RMI-CT_UC9] Test repair assistance technical support	51
18.1.1	Overview	51
18.1.2	Test purpose	51
18.1.3	Configuration	51
18.1.4	Preamble (setup state)	51
18.1.5	Test execution	51
18.1.6	Post-amble	52
19	CT cluster 13 — Test request for contact information	52
19.1	[RMI-CT_UC10.1] Test for retrieval of electronic tool information (diagnostic, reprogramming, VCI)	52
19.1.1	Overview	52
19.1.2	Test purpose	52
19.1.3	Configuration	52
19.1.4	Preamble (setup state)	52
19.1.5	Test execution	52
19.1.6	Post-amble	53
19.2	[RMI-CT_UC10.2] Test for retrieval of test equipment and diagnostic tool manufacturers information	53
19.2.1	Overview	53
19.2.2	Test purpose	53
19.2.3	Configuration	53
19.2.4	Preamble (setup state)	53
19.2.5	Test execution	53
19.2.6	Post-amble	54
19.3	[RMI-CT_UC10.3] Test for retrieval of training material (delegate information)	54
19.3.1	Overview	54
19.3.2	Test purpose	54
19.3.3	Configuration	54

19.3.4	Preamble (setup state)	54
19.3.5	Test execution.....	54
19.3.6	Post-amble.....	54
19.4	[RMI-CT_UC10.4] Test for retrieval of redistributor contact information.....	54
19.4.1	Overview.....	54
19.4.2	Test purpose	55
19.4.3	Configuration	55
19.4.4	Preamble (setup state)	55
19.4.5	Test execution.....	55
19.4.6	Post-amble.....	55
19.5	[RMI-CT_UC10.5] Test for retrieval of republisher information.....	55
19.5.1	Overview.....	55
19.5.2	Test purpose	55
19.5.3	Configuration	55
19.5.4	Preamble (setup state)	56
19.5.5	Test execution.....	56
19.5.6	Post-amble.....	56
19.6	[RMI-CT_UC10.6] Test for retrieval of inspection and testing services information.....	56
19.6.1	Overview.....	56
19.6.2	Test purpose	56
19.6.3	Configuration	56
19.6.4	Preamble (setup state)	56
19.6.5	Test execution.....	57
19.6.6	Post-amble.....	57
19.7	[RMI-CT_UC10.7] Test for retrieval of alternative fuels retrofit system information	57
19.7.1	Overview.....	57
19.7.2	Test purpose	57
19.7.3	Configuration	57
19.7.4	Preamble (setup state)	57
19.7.5	Test execution.....	57
19.7.6	Post-amble.....	58
19.8	[RMI-CT_UC10.8] Test for retrieval of engine and components remanufacturing information	58
19.8.1	Overview.....	58
19.8.2	Test purpose	58
19.8.3	Configuration	58
19.8.4	Preamble (setup state)	58
19.8.5	Test execution.....	58
19.8.6	Post-amble.....	59
19.9	[RMI-CT_UC10.9] Test for retrieval of component and parts manufacturer information ..	59
19.9.1	Overview.....	59
19.9.2	Test purpose	59
19.9.3	Configuration	59
19.9.4	Preamble (setup state)	59
19.9.5	Test execution.....	59
19.9.6	Post-amble.....	59
19.10	[RMI-CT_UC10.10] Test for retrieval of validation of independently developed non-proprietary VCI information	60
19.10.1	Overview.....	60
19.10.2	Test purpose	60
19.10.3	Configuration	60
19.10.4	Preamble (setup state)	60
19.10.5	Test execution.....	60
19.10.6	Post-amble.....	60
20	CT cluster 14 — Test courses and training information.....	60
20.1	[RMI-CT_UC11] Test for courses and training information.....	60
20.1.1	Overview	60
20.1.2	Test purpose	61

20.1.3	Configuration	61
20.1.4	Preamble (setup state)	61
20.1.5	Test execution	61
20.1.6	Post-amble	61
21	CT cluster 15 — Test data administration requirements	61
21.1	[RMI-CT_TREQ-1] Test general access-related data administration	61
21.1.1	Overview	61
21.1.2	Test purpose	61
21.1.3	Configuration	61
21.1.4	Preamble (setup state)	62
21.1.5	Test execution	62
21.1.6	Post-amble	62
21.2	[RMI-CT_TREQ-2] Test administration of IO data by the VM	62
21.2.1	Overview	62
21.2.2	Test purpose	62
21.2.3	Configuration	62
21.2.4	Preamble (setup state)	62
21.2.5	Test execution	62
21.2.6	Post-amble	62
21.3	[RMI-CT_TREQ-3] Test administration of IO employee data by the VM	63
21.3.1	Overview	63
21.3.2	Test purpose	63
21.3.3	Configuration	63
21.3.4	Preamble (setup state)	63
21.3.5	Test execution	63
21.3.6	Post-amble	63
21.4	[RMI-CT_TREQ-4] Test administration of invoicing data by VM	63
21.4.1	Overview	63
21.4.2	Test purpose	63
21.4.3	http://standards.iteh.ai/catalog/standard/sist/562e3d45-cad5-47bf-86bf-52548ee32a03/iso-18541-4-2021	63
21.4.4	Preamble (setup state)	63
21.4.5	Test execution	63
21.4.6	Post-amble	64
21.5	[RMI-CT_TREQ-5] Test administration of access event data by VM	64
21.5.1	Overview	64
21.5.2	Test purpose	64
21.5.3	Configuration	64
21.5.4	Preamble (setup state)	64
21.5.5	Test execution	64
21.5.6	Post-amble	64
21.6	[RMI-CT_TREQ-6] Test administration of access event data to security-related RMI by VM	64
21.6.1	Overview	64
21.6.2	Test purpose	64
21.6.3	Configuration	65
21.6.4	Preamble (setup state)	65
21.6.5	Test execution	65
21.6.6	Post-amble	65
22	CT cluster 16 — Test VM software installation on the IO client	65
22.1	[RMI-CT_TREQ-20] Test for requirements for installing VM-specific software on the IO client	65
22.1.1	Overview	65
22.1.2	Test purpose	65
22.1.3	Configuration	65
22.1.4	Preamble (setup state)	65
22.1.5	Test execution	66
22.1.6	Post-amble	66

22.2	[RMI-CT_TREQ-21] Test for requirements for updating of installed VM data and applications on the IO client.....	66
22.2.1	Overview.....	66
22.2.2	Test purpose.....	66
22.2.3	Configuration.....	66
22.2.4	Preamble (setup state)	66
22.2.5	Test execution.....	66
22.2.6	Post-amble.....	67
22.3	[RMI-CT_TREQ-22] Test for requirements for the operation of VM-specific software on the IO client.....	67
22.3.1	Overview	67
22.3.2	Test purpose	67
22.3.3	Configuration	67
22.3.4	Preamble (setup state)	67
22.3.5	Test execution.....	67
22.3.6	Post-amble.....	68
22.4	[RMI-CT_TREQ-23] Test for requirements for the uninstalling of VM-specific software on the IO client.....	68
22.4.1	Overview	68
22.4.2	Test purpose	68
22.4.3	Configuration	68
22.4.4	Preamble (setup state)	68
22.4.5	Test execution.....	68
22.4.6	Post-amble.....	68
22.5	[RMI-CT_TREQ-24] Test for requirements for restoring in case of an abnormal termination of the VM specific software on the IO client.....	68
22.5.1	Overview	68
22.5.2	Test purpose	69
22.5.3	Configuration	69
22.5.4	Preamble (setup state)	69
22.5.5	Test execution	69
22.5.6	Post-amble.....	69
23	CT cluster 17 — Test VM RMI operations.....	69
23.1	[RMI-CT_TREQ-25] Test for VM RMI system availability time	69
23.1.1	Overview.....	69
23.1.2	Test purpose	69
23.1.3	Configuration	69
23.1.4	Preamble (setup state)	70
23.1.5	Test execution.....	70
23.1.6	Post-amble.....	70
23.2	[RMI-CT_TREQ-26] Test for support for the usage of the VM RMI system	70
23.2.1	Overview	70
23.2.2	Test purpose	70
23.2.3	Configuration	70
23.2.4	Preamble (setup state)	70
23.2.5	Test execution.....	70
23.2.6	Post-amble.....	71
24	CT cluster 18 — Test trust centre (certificate management).....	71
24.1	[RMI-CT_TREQ-10] Test for trust centre (certificate management)	71
Annex A (normative) Access to security-related RMI according to SERMI scheme.....		72
Bibliography.....		76

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 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.

**ITEH STANDARD PREVIEW
(standards.iteh.ai)**

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 18541-4:2015), which has been technically revised.

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

- security related updates taken in synchronization with ISO 18541-1 to ISO 18541-3;
- editorial updates.

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.

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] and 2003/37/EC [replaced by (EU) 167/2013] and, in particular, to requirements for access to vehicle repair and maintenance information by independent operators.

The purpose of the EC Mandate M/421 [5] is to develop a standard or set of standards which specify the requirements to provide "standardized access to 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 [9], (EC) No 692/2008 [10] and (EU) No 566/2011 [11]] and heavy-duty vehicles [see (EC) No 595/2009, (EU) No 582/2011 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.

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

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 18541-4:2021](#)

<https://standards.iteh.ai/catalog/standards/sist/562e3d45-cad5-47bf-86bf-52548ec32ae3/iso-18541-4-2021>

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

Part 4: Conformance test

1 Scope

This document specifies a conformance test for a vehicle manufacturer assessment of self-conformance of the VM RMI system. The conformance test cases follow the use case definition of ISO 18541-1 and the requirements stated in ISO 18541-2 and ISO 18541-3.

The primary, but not exclusive, purpose of this document is to provide information to the VM RMI system provider to build and test the VM RMI system against the conformance test cases. This final step in the development process of the VM RMI system is an enabler for all providers that their VM RMI system meets a high degree of functional requirements expected by the end user.

Furthermore, this document defines in [Annex A](#) conformance test cases for the use cases and requirements versions that apply for granting access to security-related RMI following the SERMI scheme.

This document is applicable to light passenger and commercial vehicles as defined in regulation (EC) 715/2007 Article 2 [\[9\]](#).

[ISO 18541-4:2021](#)

<https://standards.iteh.ai/catalog/standards/sist/562e3d45-cad5-47bf-86bf-52548ec32ae3/iso-18541-4-2021>

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

ISO 18541-2:2021, *Road vehicles — Standardized access to automotive repair and maintenance information (RMI) — Part 2: Technical requirements*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18541-1, ISO 18541-3 and the following 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/>