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## Release Overview

### CAR 2 CAR Communication Consortium



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#### About the C2C-CC

Enhancing road safety and traffic efficiency by means of Cooperative Intelligent Transport Systems and Services (C-ITS) is the dedicated goal of the CAR 2 CAR Communication Consortium. The industrial driven, non-commercial association was founded in 2002 by vehicle manufacturers affiliated with the idea of cooperative road traffic based on Vehicle-to-Vehicle Communications (V2V) and supported by Vehicle-to-Infrastructure Communications (V2I). The Consortium members represent worldwide major vehicle manufactures, equipment suppliers and research organisations.

Over the years, the CAR 2 CAR Communication Consortium has evolved to be one of the key players in preparing the initial deployment of C-ITS in Europe and the subsequent innovation phases. CAR 2 CAR members focus on wireless V2V communication applications based on ITS-G5 and concentrate all efforts on creating standards to ensure the interoperability of cooperative systems, spanning all vehicle classes across borders and brands. As a key contributor, the CAR 2 CAR Communication Consortium and its members work in close cooperation with the European and international standardisation organisations.

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#### Disclaimer

The present document has been developed within the CAR 2 CAR Communication Consortium and might be further elaborated within the CAR 2 CAR Communication Consortium. The CAR 2 CAR Communication Consortium and its members accept no liability for any use of this document and other documents from the CAR 2 CAR Communication Consortium for implementation. CAR 2 CAR Communication Consortium documents should be obtained directly from the CAR 2 CAR Communication Consortium.

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**Document information**

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<b>Title:</b>	Release Overview			<b>Document Type:</b>	TR
<b>Release</b>	1.6.5				
<b>Release Status:</b>	Public				
<b>Status:</b>	Final				

**Table 1: Document information**

**Changes since last release**

Release	Date	Changes	Edited by	Approved
1.6.5	2023-12-15	Updated according to R1.6.5	Release Management	Steering Committee
1.6.4	2023-07-21	Updated according to R1.6.4	Release Management	Steering Committee
1.6.3	2022-12-16	Updated according to R1.6.3	Release Management	Steering Committee
1.6.2	2022-07-22	Updated according to R1.6.2	Release Management	Steering Committee
1.6.1	2021-12-17	Updated according to R1.6.1	Release Management	Steering Committee
1.6.0	2021-07-23	Updated according to R1.6.0	Release Management	Steering Committee
1.5.3	2021-03-12	Updated according to R1.5.3	Release Management	Steering Committee
1.5.2	2021-12-16	Updated according to R1.5.2	Release Management	Steering Committee
1.5.1	2020-07-31	Updated according to R1.5.1	Release Management	Steering Committee
1.5.0	2020-03-27	Initially provided	Release Management	Steering Committee

**Table 2: Changes since last release**

**Index**

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## 1 Introduction

**Other (informational)**

**TR\_ RelOv\_00147**

The CAR 2 CAR Communication Consortium is pleased to provide the release 1.6.5 on the 15th of December 2023.

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## 2 Scope

### Other (informational)

TR\_RelOv\_00146

This Release Overview provides information on the specifications which are part of this release, like:

- which deliverables are part of the release or
- what are the changes since the last release.

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### 3 Conventions used

#### Other (informational)

TR\_RelOv\_00152

Conventions used in this and other C2C-CC specification documents can be found in [C2CCC ConV].

## 4 Deliverables

The following table shows all documents which are part of this release (1.6.5):

**Table 3: Deliverables**

UID	Abbreviation	Symbol for Referencing	Long Name	File Name
2000	RelOv	[C2CCC RelOv]	Release Overview	C2CCC_TR_2000_Release Overview.pdf
2002	tcAdWe	[C2CCC tc Docs]	[C2CCC tcAdWe] Triggering Conditions and Data Quality Adverse Weather Conditions	C2CCC_RS_2002_Adverse Weather.pdf
2003	tcDaSi		[C2CCC tcDaSi] Triggering Conditions and Data Quality Dangerous Situation	C2CCC_RS_2003_Dangerous Situation.pdf
2004	tcIRC		[C2CCC tcIRC] Triggering Conditions and Data Quality Exchange of IRCs	C2CCC_RS_2004_Exchange of IRC.pdf
2005	tcSpVe		[C2CCC tcSpVe] Triggering Conditions and Data Quality Special Vehicle Warning	C2CCC_RS_2005_Special Vehicle.pdf
2006	tcStVe		[C2CCC tcStVe] Triggering Conditions and Data Quality Stationary Vehicle Warning	C2CCC_RS_2006_Stationary Vehicle.pdf
2007	tcTrJa		[C2CCC tcTrJa] Triggering Conditions and Data Quality Traffic Condition	C2CCC_RS_2007_Traffic Condition.pdf
2035	OBJ	[C2CCC OBJ]	Objectives	C2CCC_RS_2035_Objectives
2036	FEA	[C2CCC FEA]	Features	C2CCC_RS_2036_Features
2037	BSP	[C2CCC BSP]	Vehicle C-ITS station Profile	C2CCC_RS_2037_Profile
2052	Refs	[C2CCC Refs]	Reference list	C2CCC_RS_2052_References
2053	Glos	[C2CCC Glos]	Glossary	C2CCC_TR_2053_Glossary
2056	HSM	[C2CCC HSM]	Protection Profile V2X Hardware Security Module	C2CCC_PP_2056_HSM
2080	ARI	[C2CCC ARI]	Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service	C2CCC_RS_2080_IVI_Automotive Requirements
2086	ConV	[C2CCC ConV]	Conventions used	C2CCC_TR_2086_Conventions
2302	VCS	[C2CCC VCS]	Protection Profile Vehicle C-ITS Station	C2CCC_PP_2302_VCS
2305	DENMM	[C2CCC DENMM]	Mapping between DENM and other message formats	C2CCC_TR_2305_DENM_Mapping



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The entries of column 'Symbol for Referencing' are used to reference documents of this release. Furthermore, the symbol: [C2CCC tc Docs] represents all Triggering Condition documents as in the table above.

## 5 Change history

### 5.1 In general

The achievements of this release are:

- Aftermarket devices:
  - are fully covered in the vehicle C-ITS station profile now
- Introduced:
  - new attribute (#a) (which expresses whether a requirement is relevant to allow for a communication technology agnostic implementation)
- Significant updates of
  - *Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service (UID 2080)*
- New deliverable added which is crucial for mapping of DENMs to backend standards:
  - *Mapping between DENM and other message formats (UID 2305)*

### 5.2 Per document

The following table shows the changes since the last release per document:

**Table 4: Change history per document**

UID	Long Name	History
2000	Release Overview	<ul style="list-style-type: none"> <li>• Adapted according to release 1.6.5</li> </ul>
2002	Triggering Conditions and Data Quality Adverse Weather Conditions	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2003	Triggering Conditions and Data Quality Dangerous Situation	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2004	Triggering Conditions and Data Quality Exchange of IRCs	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2005	Triggering Conditions and Data Quality Special Vehicle Warning	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2006	Triggering Conditions and Data Quality Stationary Vehicle Warning	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2007	Triggering Conditions and Data Quality Traffic Condition	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2035	Objectives	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2036	Features	<ul style="list-style-type: none"> <li>• No changes</li> </ul>
2037	Vehicle C-ITS station profile	<ul style="list-style-type: none"> <li>• Aftermarket devices are fully covered now</li> <li>• Changed attribute (i) to (#i)</li> <li>• Introduced new attribute (#a) (which expresses whether a requirement is relevant to allow for a communication technology agnostic implementation)</li> <li>• Detailed regular driving dynamics</li> </ul>

2052	Reference list	<p>Updated ASN.1 reference of:</p> <ul style="list-style-type: none"> <li>• [TS 102 894-2]</li> </ul> <p>Updated normative reference of:</p> <ul style="list-style-type: none"> <li>• [C-ITS Message Profile]</li> </ul> <p>Added as informative reference:</p> <ul style="list-style-type: none"> <li>• [ITSTF 20001]</li> <li>• [ISO 21219-15]</li> <li>• [ISO 14819-2]</li> <li>• [EN 16157-3]</li> <li>• [TS 102 894-2 V2.2.1]</li> </ul>
2053	Glossary	<ul style="list-style-type: none"> <li>• Changed entry of: BSP</li> <li>• Added VSP</li> </ul>
2056	Protection Profile V2X Hardware Security Module	<ul style="list-style-type: none"> <li>• No content changes <ul style="list-style-type: none"> <li>○ Certificate is linked in the document</li> </ul> </li> </ul>
2077	Automotive Requirements for the Traffic Light Manoeuvre (TLM) and Road and Lane Topology (RLT) Services	<ul style="list-style-type: none"> <li>• Removed from release</li> </ul>
2080	Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service	<ul style="list-style-type: none"> <li>• Clarification in several requirements</li> <li>• Detailing of RCC requirements</li> <li>• Zones covering the full carriageway</li> </ul>
2086	Conventions used	<ul style="list-style-type: none"> <li>• Added description for tag (#a) and updated (i) to (#i)</li> </ul>
2302	Protection Profile Vehicle C-ITS Station	<ul style="list-style-type: none"> <li>• Initial release</li> <li>• Will be made available after certification</li> </ul>
2305	Mapping between DENM and other message formats	<ul style="list-style-type: none"> <li>• Initial release</li> </ul>

### 5.3 Per requirement

The following table shows the changes since the last release per requirement:

**Table 5: Change history per requirement**

Note: Requirement changes due to removal or initial release of whole documents are not listed here. For such information please refer rather to clause 5.2.

Change			
Affected requirement	Kind of change		
ID	Added	Changed	Removed
RS_ARI_100	X		
RS_ARI_101	X		
RS_ARI_102	X		
RS_ARI_17		X	
RS_ARI_18		X	
RS_ARI_19		X	
RS_ARI_2		X	
RS_ARI_28		X	
RS_ARI_30		X	
RS_ARI_30		X	
RS_ARI_35		X	
RS_ARI_40		X	
RS_ARI_42		X	
RS_ARI_45		X	
RS_ARI_48		X	
RS_ARI_52		X	
RS_ARI_56		X	
RS_ARI_60		X	
RS_ARI_61		X	
RS_ARI_66		X	
RS_ARI_68		X	
RS_ARI_73			X
RS_ARI_75		X	
RS_ARI_76		X	
RS_ARI_82		X	
RS_ARI_86		X	
RS_ARI_90		X	
RS_ARI_90		X	
RS_ARI_95		X	
RS_ARI_95		X	
RS_ARI_97	X		
RS_ARI_98	X		

Change			
Affected requirement	Kind of change		
ID	Added	Changed	Removed
RS_ARI_99	X		
RS_BSP_158		X	
RS_BSP_265		X	
RS_BSP_449		X	
RS_BSP_514		X	
RS_BSP_520		X	
RS_BSP_538		X	
RS_Refs_00151		X	
RS_Refs_00152		X	
RS_Refs_00427		X	
TR_ConV_159		X	
TR_ConV_163	X		
TR_Glos_01000		X	

Also available as Excel file for C2C-CC members:

- <https://collab.car-2-car.org/index.php/f/78908>

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## 6 Known issues

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The *Protection Profile Vehicle C-ITS Station (UID 2305)* will only be made available after certification