

Release Overview

CAR 2 CAR Communication Consortium



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 (C2C-CC). 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 C2C-CC has evolved to be one of the key players in preparing the initial deployment of C-ITS in Europe and the subsequent innovation phases. C2C members focus on wireless V2V communication applications based on Direct Communication 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 C2C-CC and its members work in close cooperation with the European and international standardisation organisations.

Disclaimer

The present document has been developed within C2C-CC and might be further elaborated within C2C-CC. C2C-CC and its members accept no liability for any use of this document and other documents from C2C-CC for implementation. C2C-CC documents should be obtained directly from the C2C-CC.

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media. © 2025, C2C-CC.

Intellectual Property Rights – Essential patents

IPRs essential or potentially essential to profiles or specifications may have been declared to the C2C-CC. The declarations pertaining to these essential IPRs, if any, are publicly available for the C2C-CC members and non-members, and can be found in "Essential or potentially Essential IPRs notified to the C2C-CC in respect of C2C-CC profiles or specifications" ([C2CCC IPR R]), which is available with the latest update from the webpage (<https://www.car-2-car.org>) of the C2C-CC.

Pursuant to the C2C-CC's IPR Policy [C2CCC IPR P], no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by the C2C-CC. No guarantee can be given as to the existence of other IPRs not referenced in [C2CCC IPR R] (or the updates on the C2C-CC web server) which are, or may be, or may become, essential to the present document.

Document information

Number:	2000	Version:	n.a.	Date:	2025-12-19
Title:	Release Overview			Document Type:	TR
Release	1.6.9				
Release status:	Public				
Status:	Final				

Table 1: Document information

Changes since last release

Release	Date	Changes	Edited by	Approved
1.6.9	2025-12-19	Updated according to R1.6.9	Release Management	Steering Committee
1.6.8	2025-07-11	Updated according to R1.6.8	Release Management	Steering Committee
1.6.7	2024-12-13	Updated according to R1.6.7	Release Management	Steering Committee
1.6.6	2024-07-12	Updated according to R1.6.6	Release Management	Steering Committee
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

Table of contents	
About the C2C-CC	1
Disclaimer	2
Intellectual Property Rights – Essential patents	2
Document information	3
Changes since last release	4
Index	5
List of figures	5
List of tables	5
1 Introduction	6
2 Scope	7
3 Conventions used	8
4 Deliverables	9
5 Change history	11
5.1 In general	11
5.2 Per document	11
5.3 Per requirement	14
6 Known issues	16

List of figures

None

List of tables

Table 1: Document information	3
Table 2: Changes since last release	4
Table 3: Deliverables	9
Table 4: Change history per document	11
Table 5: Change history per requirement	14

1 Introduction

Other (informational)

TR_RelOv_00147

The CAR 2 CAR Communication Consortium is pleased to provide the release 1.6.9 on the 19th of December 2025.

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.

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 (1.6.9):

Table 3: Deliverables

UID	Abbreviation	Symbol for Referencing		Long Name	File Name
2000	RelOv	[C2CCC RelOv]		Release Overview	C2CCC_TR_2000_ReleaseOverview.pdf
2002	tcAdWe	[C2CCC tc Docs]	[C2CCC tcAdWe]	Triggering Conditions and Data Quality Adverse Weather Conditions	C2CCC_RS_2002_AdverseWeather.pdf
2003	tcDaSi		[C2CCC tcDaSi]	Triggering Conditions and Data Quality Dangerous Situation	C2CCC_RS_2003_DangerousSituation.pdf
2004	tcIRC		[C2CCC tcIRC]	Triggering Conditions and Data Quality Exchange of IRCs	C2CCC_RS_2004_ExchangeofIRC.pdf
2005	tcSpVe		[C2CCC tcSpVe]	Triggering Conditions and Data Quality Special Vehicle Warning	C2CCC_RS_2005_SpecialVehicle.pdf
2006	tcStVe		[C2CCC tcStVe]	Triggering Conditions and Data Quality Stationary Vehicle Warning	C2CCC_RS_2006_StationaryVehicle.pdf
2007	tcTrJa		[C2CCC tcTrJa]	Triggering Conditions and Data Quality Traffic Condition	C2CCC_RS_2007_TrafficCondition.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_AutomotiveRequirements
2086	ConV	[C2CCC ConV]		Conventions used	C2CCC_TR_2086_Conventions
2302	VCS	[C2CCC VCS]		Protection Profile Vehicle C-ITS Station	C2CCC_PP_2302_VCS

UID	Abbreviation	Symbol for Referencing		Long Name	File Name
2305	DENM M	[C2CCC DENMM]		Mapping between DENM and other message formats	C2CCC_TR_2305_DENM_Mapping
2309	AS	[C2CCC AS]		Assessment Sheet for C-ITS standards conformity	C2CCC_TR_2309_AssessmentSheet
2310	AG	[C2CCC AG]		Guide for C-ITS standards conformity	C2CCC_WP_2310_AssessmentGuide
2311	AT	[C2CCC AT]		Template for the declaration on C-ITS standards conformity	C2CCC_TR_2311_AssessmentDeclarationTemplate
2321	URD	[C2CCC tc Docs]	[C2CCC tcURD]	Triggering Conditions and Data Quality Unresponsive Driver	C2CCC_RS_2321_UnresponsiveDriver
2322	WWD		[C2CCC tcWWD]	Triggering Conditions and Data Quality Wrongway Driver	C2CCC_RS_2322_WrongwayDriver

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:

- Significant improvement of PTW support,
- New DENM Triggering Conditions:
 - Triggering Conditions and Data Quality Unresponsive Driver
 - C2CCC_RS_2321_UnresponsiveDriver.docx
 - Triggering Conditions and Data Quality Wrongway Driver
 - C2CCC_RS_2322_WrongwayDriver.doc
- New support of IPR notification handling according to C2C-CC's IPR Policy

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"> Adapted according to release 1.6.9
2002	Triggering Conditions and Data Quality Adverse Weather Conditions	Added PTW specific information: <ul style="list-style-type: none"> RS_tcAdWe_194
2003	Triggering Conditions and Data Quality Dangerous Situation	<ul style="list-style-type: none"> No changes
2004	Triggering Conditions and Data Quality Exchange of IRCs	<ul style="list-style-type: none"> No changes
2005	Triggering Conditions and Data Quality Special Vehicle Warning	In context of improved PTW support, changed: <ul style="list-style-type: none"> RS_tcSpVe_133 RS_tcSpVe_155 RS_tcSpVe_240 RS_tcSpVe_143
2006	Triggering Conditions and Data Quality Stationary Vehicle Warning	In context of improved PTW support, the following requirements have been changed: <ul style="list-style-type: none"> RS_tcStVe_118 RS_tcStVe_140 RS_tcStVe_120 RS_tcStVe_142 RS_tcStVe_164 In context to the two new triggering conditions: <ul style="list-style-type: none"> Triggering Conditions and Data Quality Unresponsive Driver Triggering Conditions and Data Quality Wrongway Driver

		<p>the following requirements have been changed:</p> <ul style="list-style-type: none"> • RS_tcStVe_133 • RS_tcStVe_120 • RS_tcStVe_123
2007	Triggering Conditions and Data Quality Traffic Condition	<p>In context of improved PTW support, changed:</p> <ul style="list-style-type: none"> • RS_tcTrJa_94 • RS_tcTrJa_96 • RS_tcTrJa_105 • RS_tcTrJa_108 • RS_tcTrJa_122 • RS_tcTrJa_124 • RS_tcTrJa_131 • RS_tcTrJa_134
2035	Objectives	<ul style="list-style-type: none"> • No changes
2036	Features	<ul style="list-style-type: none"> • No changes
2037	Vehicle C-ITS station profile	<p>In context of improved PTW support, changed:</p> <ul style="list-style-type: none"> • RS_BSP_534 • RS_BSP_321 • RS_BSP_449 • RS_BSP_583 • RS_BSP_445 • RS_BSP_572 • RS_BSP_448 • RS_BSP_457 • RS_BSP_511 • RS_BSP_444 <p>added:</p> <ul style="list-style-type: none"> • RS_BSP_586 • RS_BSP_587 • RS_BSP_588 • RS_BSP_589
2052	Reference list	<p>Added as informative references:</p> <ul style="list-style-type: none"> • [UNECE R79] <p>Updated normative references:</p> <ul style="list-style-type: none"> • C-Roads [C-ITS Message Profile]
2053	Glossary	<ul style="list-style-type: none"> • No changes
2056	Protection Profile V2X Hardware Security Module	<ul style="list-style-type: none"> • No changes
2080	Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service	<ul style="list-style-type: none"> • Changed document status to obsolete

2086	Conventions used	<ul style="list-style-type: none"> • TR_ConV_159 extended to allow property lists
2302	Protection Profile Vehicle C-ITS Station	<ul style="list-style-type: none"> • Will be made available after certification
2305	Mapping between DENM and other message formats	<ul style="list-style-type: none"> • No changes
2309	Assessment Sheet for C-ITS standards conformity	<ul style="list-style-type: none"> • Adapted according to release 1.6.9
2310	Guide for C-ITS standards conformity	<ul style="list-style-type: none"> • No changes
2311	Template for the declaration on C-ITS standards conformity	<ul style="list-style-type: none"> • No changes
2321	Triggering Conditions and Data Quality Unresponsive Driver	<ul style="list-style-type: none"> • Initial release
2322	Triggering Conditions and Data Quality Wrongway Driver	<ul style="list-style-type: none"> • Initial release

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_BSP_448		X	
RS_tcTrJa_122		X	
RS_Refs_00427		X	
RS_BSP_444		X	
RS_BSP_589	X		
RS_BSP_511		X	
RS_BSP_588	X		
RS_BSP_457		X	
RS_BSP_572		X	
RS_BSP_445		X	
RS_BSP_583		X	
RS_BSP_449		X	
RS_BSP_587	X		
RS_OBJ_00149		X	
RS_BSP_321		X	
RS_BSP_534		X	
RS_tcTrJa_134		X	
RS_tcTrJa_131		X	
RS_tcTrJa_124		X	
RS_tcTrJa_108		X	
RS_tcTrJa_105		X	
RS_tcTrJa_96		X	
RS_tcTrJa_94		X	
RS_tcStVe_164		X	
RS_tcStVe_142		X	
RS_tcStVe_120:		X	
RS_tcStVe_118		X	
RS_tcStVe_140		X	
RS_tcSpVe_143		X	
RS_tcSpVe_240		X	
RS_tcSpVe_133		X	
RS_tcSpVe_155		X	

Change			
Affected requirement	Kind of change		
ID	Added	Changed	Removed
RS_tcAdWe_194	X		

Also available as Excel file for C2C-CC members:

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

6 Known issues

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