
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. 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.

Disclaimer

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Document information

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|------------------------|------------------|-----------------------|------|--------------|------------|
| Number: | 2000 | Version: | n.a. | Date: | 2021-12-17 |
| Title: | Release Overview | Document Type: | TR | | |
| Release | 1.6.1 | | | | |
| Release Status: | Public | | | | |
| Status: | Final | | | | |

Table 1: Document information

Changes since last version

| Title: | | CAR 2 CAR Communication Consortium Release Overview | | |
|---------------|-----------------------------|--|--------------------|--|
| Date | Changes | Edited by | Approved | |
| 2021-12-17 | Updated according to R1.6.1 | Release Management | Steering Committee | |
| 2021-07-23 | Updated according to R1.6.0 | Release Management | Steering Committee | |
| 2021-03-12 | Updated according to R1.5.3 | Release Management | Steering Committee | |
| 2021-12-16 | Updated according to R1.5.2 | Release Management | Steering Committee | |
| 2020-07-31 | Updated according to R1.5.1 | Release Management | Steering Committee | |
| 2020-03-27 | Initially provided | Release Management | Steering Committee | |

Table 2: Change history

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1 Introduction

Other (informational)

TR_ RelOv_00147

The CAR 2 CAR Communication Consortium is pleased to provide the release 1.6.1 on the 17th of December 2021.

2 Scope

Other (informational)

TR_ RelOv_00146

This Release Overview provides information on the specification 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 (1.6.1):

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 Jam | C2CCC_RS_2007_Traffic Jam.pdf |
| 2066 | tcPCI | | [C2CCC tcPCI] Triggering Conditions and Data Quality Stationary Vehicle Warning | C2CCC_RS_2066_Pre-Crash Information |
| 2035 | OBJ | | [C2CCC OBJ] | 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_RS_2056_HSM |
| 2067 | PCIASN | [C2CCC PCIASN] | ASN.1 extension for Pre-Crash Information | C2CCC_RS_2067_Pre-Crash Information_Asn Extension |
| 2077 | ARSM | [C2CCC ARSM] | Automotive Requirements for the Traffic Light Manoeuvre (TLM) and Road and Lane Topology (RLT) Services | C2CCC_RS_2077_TLM_RLT_Automotive Requirements |

| UID | Abbreviation | Symbol for Referencing | Long Name | File Name |
|------|--------------|------------------------|---|--|
| 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 |

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:

- Added marking of requirements, in the vehicle C-ITS station profile and the Triggering Conditions, indicating relevance for interoperability according to [CPOC]
- Significant improvements of:
 - Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service
 - Inclusion of the RCC, further detailing of road and zone representation
 - Introduction of a new clause for preliminary content
- Update of versions of referenced standards (for more details, refer to: [C2CCC Refs])

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 | Adapted according to release 1.6.1 |
| 2002 | Triggering Conditions and Data Quality Adverse Weather Conditions | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2003 | Triggering Conditions and Data Quality Dangerous Situation | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2004 | Triggering Conditions and Data Quality Exchange of IRCs | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2005 | Triggering Conditions and Data Quality Special Vehicle Warning | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2006 | Triggering Conditions and Data Quality Stationary Vehicle Warning | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2007 | Triggering Conditions and Data Quality Traffic Jam | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2035 | Objectives | No changes |
| 2036 | Features | No changes |
| 2037 | Vehicle C-ITS station profile | <ul style="list-style-type: none"> • Added marking of requirements, indicating |

| | | |
|------|---|--|
| | | <p>relevance for interoperability according to [CPOC]</p> <ul style="list-style-type: none"> Update of versions of referenced standards (for more details, refer to: [C2CCC Refs]) |
| 2052 | Reference list | <p>Updated version of:</p> <ul style="list-style-type: none"> [EN 302 636-5-1] to V2.2.1 [EN 302 663] to V1.3.1 [TS 102 965] to V1.5.1 [TS 103 248] to V1.3.1 [TS 103 301] to V2.1.1 [IEEE 802.11] to 2016 <p>Added</p> <ul style="list-style-type: none"> [CPOC] |
| 2053 | Glossary | No changes |
| 2056 | Protection Profile V2X Hardware Security Module | <p>No content changes</p> <ul style="list-style-type: none"> Certificate is linked in the document |
| 2066 | Triggering Conditions and Data Quality Pre-Crash Information | Added marking of requirements, indicating relevance for interoperability according to [CPOC] |
| 2067 | ASN.1 extension for Pre-Crash Information | No changes |
| 2077 | Automotive Requirements for the Traffic Light Manoeuvre (TLM) and Road and Lane Topology (RLT) Services (former: Automotive Requirements for SPaT and MAP) | No changes |
| 2080 | Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service (former: Automotive Requirements for IVIM) | <ul style="list-style-type: none"> Inclusion of the RCC, further detailing of road and zone representation Introduction of a new clause for preliminary content Minor improvements |
| 2086 | Conventions used | <ul style="list-style-type: none"> Introduced marking of requirements, indicating relevance for interoperability according to [CPOC] Clarified that British English is used in C2C-CC documents |

5.3 Per requirement

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

Table 5: Change history per requirement

| Change | | | |
|----------------------|----------------|---------|---------|
| Affected requirement | Kind of change | | |
| ID | Added | Changed | Removed |
| RS_ARI_14 | | X | |
| RS_ARI_19 | | X | |
| RS_ARI_23 | | X | |
| RS_ARI_34 | | | X |
| RS_ARI_39 | | | X |
| RS_ARI_45 | | X | |
| RS_ARI_60 | | X | |
| RS_ARI_64 | | X | |
| RS_ARI_69 | | | X |
| RS_ARI_73 | | X | |
| RS_ARI_75 | | X | |
| RS_ARI_78 | | | X |
| RS_ARI_80 | | X | |
| RS_ARI_84 | X | | |
| RS_ARI_85 | X | | |
| RS_ARI_86 | X | | |
| RS_ARI_87 | X | | |
| RS_ARI_88 | X | | |
| RS_ARI_89 | X | | |
| RS_ARI_90 | X | | |
| RS_ARI_91 | X | | |
| RS_BSP_169 | | X | |
| RS_BSP_170 | | X | |
| RS_BSP_170 | | X | |
| RS_BSP_225 | | X | |
| RS_BSP_235 | | X | |
| RS_BSP_235 | | X | |
| RS_BSP_266 | | X | |

| Change | | | |
|----------------------|----------------|---------|---------|
| Affected requirement | Kind of change | | |
| ID | Added | Changed | Removed |
| RS_BSP_397 | | X | |
| RS_BSP_416 | | X | |
| RS_BSP_434 | | X | |
| RS_BSP_443 | | X | |
| RS_BSP_443 | | X | |
| RS_BSP_545 | X | | |
| RS_Refs_00152 | | X | |
| RS_Refs_00427 | | X | |
| RS_tcStVe_116 | | X | |
| RS_tcStVe_120 | | X | |
| RS_tcStVe_123 | | X | |
| RS_tcStVe_138 | | X | |
| RS_tcStVe_142 | | X | |
| RS_tcStVe_145 | | X | |
| RS_tcStVe_162 | | X | |
| RS_tcStVe_166 | | X | |
| TR_ConV_159 | X | | |
| TR_ConV_161 | X | | |
| TR_ConV_425 | X | | |

Also available as Excel file for C2C-CC members:

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

6 Known issues

none