

# 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**

| Number:                       | 2000             | Version: | n.a. | Date:          | 2022-12-16 |
|-------------------------------|------------------|----------|------|----------------|------------|
| Title:                        | Release Overview |          |      | Document Type: | TR         |
| Release                       | 1.6.3            |          |      |                |            |
| Release<br>Status:<br>Status: | Public<br>Final  |          |      |                |            |

**Table 1: Document information** 



## **Changes since last release**

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

Table 2: Changes since last release



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## 1 Introduction

#### Other (informational)

**TR\_ RelOv\_00147** 

The CAR 2 CAR Communication Consortium is pleased to provide the release 1.6.3 on the 16th of December 2022.



## 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 (1.6.3):

**Table 3: Deliverables** 

| UID  | Abbrev iation | Symbol for Referencing |                   | Long Name  | File Name  |  |
|------|---------------|------------------------|-------------------|--|--|--|
| 2000 | RelOv         | [C2CCC RelOv]          |                   | Release Overview   | C2CCC_TR_2000_Release<br>Overview.pdf            |  |
| 2002 | tcAdW<br>e    |                        | [C2CCC<br>tcAdWe] | Triggering Conditions and Data<br>Quality Adverse Weather<br>Conditions  | C2CCC_RS_2002_Adverse<br>Weather.pdf             |  |
| 2003 | tcDaSi        |                        | [C2CCC<br>tcDaSi] | Triggering Conditions and Data<br>Quality Dangerous Situation  | C2CCC_RS_2003_Dangero usSituation.pdf            |  |
| 2004 | tcIRC         | [C2CCC                 | [C2CCC<br>tcIRC]  | Triggering Conditions and Data Quality Exchange of IRCs  | C2CCC_RS_2004_Exchang eofIRC.pdf                 |  |
| 2005 | tcSpVe        | tc Docs]               | [C2CCC<br>tcSpVe] | Triggering Conditions and Data<br>Quality Special Vehicle<br>Warning   | C2CCC_RS_2005_SpecialV ehicle.pdf                |  |
| 2006 | tcStVe        |                        | [C2CCC<br>tcStVe] | Triggering Conditions and Data<br>Quality Stationary Vehicle<br>Warning  | C2CCC_RS_2006_Stationar yVehicle.pdf             |  |
| 2007 | tcTrJa        |                        | [C2CCC<br>tcTrJa] | Triggering Conditions and Data<br>Quality Traffic Condition  | C2CCC_RS_2007_TrafficC ondition.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_Referen ces                        |  |
| 2053 | Glos          | [C2CCC Glos]           |                   | Glossary   | C2CCC_TR_2053_Glossary                           |  |
| 2056 | HSM           | [C2CCC HSM]            |                   | Protection Profile<br>V2X Hardware Security Module   | C2CCC_PP_2056_HSM                                |  |
| 2077 | ARSM          | [C2CCC ARSM]           |                   | Automotive Requirements for<br>the Traffic Light Manoeuvre<br>(TLM) and Road and Lane<br>Topology (RLT) Services | C2CCC_RS_2077_TLM_RL<br>T_AutomotiveRequirements |  |
| 2080 | ARI           | [C2CCC ARI]            |                   | Automotive Requirements for<br>the Infrastructure to Vehicle<br>Information (IVI) Service                        | C2CCC_RS_2080_IVI_Auto motiveRequirements        |  |
| 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:

- Adapted former Triggering Conditions and Data Quality Traffic Jam document:
  - Improved detection quality of traffic conditions
  - Detailed self-declaration of features by:
    - Renaming of document from Triggering Conditions and Data Quality
       Traffic Jam to Triggering Conditions and Data Quality Traffic Condition
    - Changing the phrases:
      - traffic jam to traffic condition
      - · dangerous end of queue to sudden speed drop
      - traffic jam ahead to local slow down
- Further improvement of: Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service

#### 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 1.6.3  |  |
| 2002 | Triggering Conditions and Data Quality Adverse Weather Conditions | No changes  |  |
| 2003 | Triggering Conditions and Data Quality Dangerous Situation        | No changes  |  |
| 2004 | Triggering Conditions and Data Quality Exchange of IRCs           | Minor corrections   |  |
| 2005 | Triggering Conditions and Data Quality Special Vehicle Warning    | Minor changes   |  |
| 2006 | Triggering Conditions and Data Quality Stationary Vehicle Warning | No changes  |  |
| 2007 | Triggering Conditions and Data Quality Traffic Condition          | <ul> <li>Improved detection quality of traffic conditions</li> <li>Changed phrases:         <ul> <li>traffic jam to traffic condition</li> <li>dangerous end of queue to sudden speed drop</li> <li>traffic jam ahead to local slow down</li> </ul> </li> <li>Renamed document from Triggering Conditions and Data Quality Traffic Jam to Triggering Conditions and Data Quality Traffic Condition</li> </ul> |  |





| 2035 | Objectives  | No changes  |
|------|---|---|
| 2036 | •   | No changes  |
| 2037 | Vehicle C-ITS station profile   | Minor changes   |
| 2052 | Reference list  | Added as informative reference: [TS 103 831] V2.1.1   |
| 2053 | Glossary  | No changes  |
| 2056 | Protection Profile<br>V2X Hardware Security Module  | No content changes  |
| 2066 | Triggering Conditions and Data Quality Pre-<br>Crash Information  | Removed from release  |
| 2067 | ASN.1 extension for Pre-Crash Information   | Removed from release  |
| 2077 | Automotive Requirements for the Traffic Light<br>Manoeuvre (TLM) and Road and Lane<br>Topology (RLT) Services                   | No changes  |
|      | (former: Automotive Requirements for SPaT and MAP)  |   |
| 2080 | Automotive Requirements for the Infrastructure to Vehicle Information (IVI) Service  (former: Automotive Requirements for IVIM) | <ul> <li>Phrasing corrections (e.g., replacing "carriageway" in many occurrences)</li> <li>Integration of preliminary requirements to full requirements</li> <li>New requirement on laneWidth in RCC</li> </ul> |
| 2086 | Conventions used  | Added description of release numbering schema   |



## **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_22            |                | Х       |         |  |  |
| RS_ARI_22            |                | Х       |         |  |  |
| RS_ARI_45            |                | Х       |         |  |  |
| RS_ARI_46            |                | Х       |         |  |  |
| RS_ARI_47            |                | Х       |         |  |  |
| RS_ARI_48            |                | Х       |         |  |  |
| RS_ARI_50            |                | Х       |         |  |  |
| RS_ARI_84            |                |         | X       |  |  |
| RS_ARI_85            |                |         | X       |  |  |
| RS_ARI_86            |                | Х       |         |  |  |
| RS_ARI_89            |                | Х       |         |  |  |
| RS_ARI_96            | X              |         |         |  |  |
| RS_BSP_214           |                | Х       |         |  |  |
| RS_BSP_544           |                | Х       |         |  |  |
| RS_BSP_546           |                | Х       |         |  |  |
| RS_BSP_547           | Х              |         |         |  |  |
| RS_Refs_00151        |                | X       |         |  |  |
| RS_tcIRC_151         | X              |         |         |  |  |
| RS_tcTrJa_105        |                | X       |         |  |  |
| RS_tcTrJa_105        |                | Х       |         |  |  |
| RS_tcTrJa_105        |                | X       |         |  |  |
| RS_tcTrJa_108        |                | X       |         |  |  |
| RS_tcTrJa_121        |                | X       |         |  |  |
| RS_tcTrJa_131        |                | X       |         |  |  |
| RS_tcTrJa_131        |                | Х       |         |  |  |
| RS_tcTrJa_134        |                | Х       |         |  |  |
| RS_tcTrJa_135        |                | Х       |         |  |  |
| RS_tcTrJa_142        |                | Х       |         |  |  |
| RS_tcTrJa_148        |                | Х       |         |  |  |
| RS_tcTrJa_158        |                | Х       |         |  |  |
| RS_tcTrJa_93         |                | Х       |         |  |  |
| TR_ConV_162          | X              |         |         |  |  |

Also available as Excel file for C2C-CC members:

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



#### **Known issues** 6

none