

# OCORA

Open CCS On-board Reference Architecture

## Release Notes

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## Revision history

| Version | Change Description                       | Initial | Date of change |
|---------|--|---------|----------------|
| 0.90    | ▪ DRAFT version for Review               | RM      | 21.06.2021     |
| 1.00    | Official version for OCORA Delta Release | RM      | 30.06.2021     |
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# 1 Release Delta

The OCORA Delta Release is the fourth release (after Alpha, Beta and Gamma) of documents prepared by the OCORA cooperation.

- OCORA Delta adds new content and provides deeper insight into a selection of topics.
- It completely replaces the OCORA Alpha, Beta and Gamma Release.

OCORA Delta provides its content in a structured manner and provides topic specific documents. An overview is given in chapter 5 Content, highlights are:

- OCORA Delta continues to include feedback from sector dialogue with various stakeholders.
- OCORA Delta contains for the first-time the Economic Model
- OCORA Delta contains for the first-time a baseline of structured requirements
- OCORA Delta contains for the first-time a view into Testing

OCORA Delta is the fourth release and it is still in a preliminary state.

# 2 Imprint

- Publisher: OCORA Cooperation
- Channel: OCORA publishes exclusively over <https://github.com/OCORA-Public/Publication>
- OCORA liaison partners: UIC TOBA, RCA, CER
- Any feedback for OCORA is welcome! If you would like to attend a workshop or give a feedback, please contact [jean-baptiste.simonnet@sncf.fr](mailto:jean-baptiste.simonnet@sncf.fr) . For specific feedback the *OCORA-BWS01-040 – Feedback Form* shall be used.
- For active collaboration (within the OCORA framework) the OCORA Code of Conduct must be accepted and signed. In case of interest for active collaboration and you are eligible to become a partner according to the OCORA Code of conduct, please drop a "interest of becoming a OCORA member by E-mail" to [rolf.muehlemann2@sbb.ch](mailto:rolf.muehlemann2@sbb.ch) .
- All OCORA deliverables and work will be published and licensed under the dual licensing Terms EUPL 1.2 (Commission Implementing Decision (EU) 2017/863 of 18 May 2017) and the terms and condition of the Attributions- ShareAlike 3.0 Unported license or its national version (in particular CC-BY -SA 3.0 DE).

# 3 Capella Model publishing Announcement

In addition to the official OCORA releases, frequent publications of the Capella Model shall facilitate discussions with other initiatives (e.g. RCA, X2Rail4, LinX4Rail) and/or potential suppliers without overreaching someone. Model updates will be available for download on OCORA public GitHub.

# 4 Authors and Reviewers

The OCORA Delta Release has been reviewed by several technical experts, approved by the OCORA Coreteam and endorsed for publication by the OCORA Steering Committee.

## 5 Content

| Doc ID   | Doc Title   | Content  |
|--|---|--|
| <b>Release Documentation from Business Workstream BWS01</b>        |   |  |
| OCORA-BWS01-010  | Release Notes   | General information about the release: why and what to read / feedback possibilities / etc.                                |
| OCORA-BWS01-020  | Glossary  | The within OCORA used terms and definitions, as well as abbreviations and acronyms / Polarion Export of Definitions        |
| OCORA-BWS01-030  | Question and Answers                                    | Collection of frequently asked questions and related answers   |
| OCORA-BWS01-040  | Feedback Form   | Feedback form to structure internal and extern feedbacks   |
| <b>Communication Material from Business Workstream BWS02</b>       |   |  |
| OCORA-BWS02-010  | Executive Summary Slide Deck                            | Update based on Gamma Release including Delta content (e.g. ER JU)   |
| OCORA-BWS02-020  | Program Slide Deck                                      | Update based on Gamma Release including Delta content (e.g. liaison and time plan ER JU)                                   |
| OCORA-BWS02-030  | Technical Slide Deck                                    | Update based on Gamma Release including Delta content  |
| OCORA-BWS02-040  | Program Posters   | Minor refinements  |
| OCORA-BWS02-050  | Technical Posters                                       | Update based on Gamma Release including Delta content  |
| OCORA-BWS02-060  | Confidentiality Clause                                  | OCORA Confidentiality Clause   |
| <b>Program Documentation from Business Workstreams BWS03-09</b>    |   |  |
| OCORA-BWS03-010  | Introduction to OCORA                                   | Minor refinements and carve out of guiding principles  |
| OCORA-BWS03-020  | Guiding Principles                                      | New document separating the guiding principles from the general Introduction to OCORA                                      |
| OCORA-BWS04-010  | Problem Statements                                      | Minor refinements  |
| OCORA-BWS05-010  | Road Map  | Update   |
| OCORA-BWS05-020  | Minimal Viable Product                                  | Minor refinements  |
| OCORA-BWS06-010  | Economic Model – Introduction & Overview                | Update based on Gamma Release including Delta content  |
| OCORA-BWS06-020  | Economic Model  | New document containing the actual model   |
| OCORA-BWS07-010  | Alliances   | Minor refinements  |
| OCORA-BWS07-020  | CCS On-board for Europe's Rail Joint Undertaking        | Update based on Pre-Delta Gamma Release  |
| OCORA-BWS08-010  | Methodology   | Update based on Gamma Release including Delta content (e.g. Interlinking of CENELEC, Requirements Mgmt and MBSE)           |
| OCORA-BWS08-020  | Tooling   | Update based on Gamma Release including Delta content  |
| OCORA-BWS09-010  | Acceptance of Global Standards                          | New document after skipping this subject matter in the Gamma Release   |
| OCORA-BWS09-020  | Acceptance of Global Standards – Focus on Safety in CCS | New document   |
| <b>Technical Documentation from Technical Workstreams TWS01-15</b> |   |  |
| OCORA-TWS01-030  | System Architecture                                     | Update based on Gamma Release including Delta content  |
| OCORA-TWS01-040  | Capella Modelling                                       | Update based on Gamma Release including Delta content  |
| OCORA-TWS01-050  | Capella Model Export                                    | Capella zip file from sandbox work   |
| OCORA-TWS01-910  | CENELEC Phase 1 – Concept                               | New document   |
| OCORA-TWS02-010  | CCS Communication Network – Evaluation                  | Update based on Gamma Release including Delta content  |
| OCORA-TWS02-020  | CCS Communication Network – Proof of Concept (PoC)      | New document   |
| OCORA-TWS03-010  | Computing Platform – Whitepaper                         | Minor refinements including RFI results  |
| OCORA-TWS03-020  | Computing Platform – Requirements                       | Polarion Export of corresponding D-Level Building Block Requirements (after RFI update, valid for both on-board & wayside) |
| OCORA-TWS04-010  | Functional Vehicle Adapter – Introduction               | Update based on Gamma Release including Delta content  |
| OCORA-TWS04-011  | Functional Vehicle Adapter – Requirements               | New document / Polarion Export of corresponding D-Level Building Block Requirements  |

|                 |   |  |
|-----------------|---|--|
| OCORA-TWS04-012 | Functional Vehicle Adapter – Standard Communication Interface Specification | New document after redefining the scope of the document            |
| OCORA-TWS04-013 | Functional Vehicle Adapter – Design Guideline                               | New documents  |
| OCORA-TWS05-010 | Requirements – Management Guideline   | New document after redefining the scope of the document            |
| OCORA-TWS05-020 | Stakeholder Requirements  | New document / Polarion Export of A-Level Stakeholder Requirements |
| OCORA-TWS05-021 | Program Requirements  | New document / Polarion Export of B-Level Program Requirements     |
| OCORA-TWS05-022 | Design Requirements   | New document / Polarion Export of B-Level Design Requirements      |
| OCORA-TWS06-010 | (Cyber-) Security – Project Security Management Plan                        | New document   |
| OCORA-TWS06-020 | (Cyber-) Security – Guideline   | Adjusted document  |
| OCORA-TWS07-010 | Modular Safety – Strategy   | New document   |
| OCORA-TWS09-010 | Testing – Strategy (Guideline for Modular testing)                          | New document   |
| OCORA-TWS09-020 | Testing – Benchmarking Report Modular Testing                               | New document   |
| OCORA-TWS15-010 | Prototyping – ATO Demonstrator - Case Study - S2R-IP-5-ARCC                 | Update finalizing the report of this prototyping activity          |
| OCORA-TWS15-020 | Prototyping – CCS-TCMS-Interface-ETCS-Functionality                         | Update explicitly for prototyping activity                         |
| OCORA-TWS15-021 | Prototyping – CCS-TCMS-Interface-ATO-Functionality                          | Update explicitly for prototyping activity                         |
|                 |   |  |

**Table 1** Release Documents and Content