Release notes
RCA Baseline set 0, Release 2

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1.   RCA Baseline set 0, Release 2

RCA BL0 R2 is an internal release (after Alpha, Beta and Gamma, BL0 R1) of the documents prepared by the RCA initiative.

- This release includes updates to previously released documents and several new documents. Content which belongs to the specification in strict sense is being prepared in a MBSE (model-based systems engineering) approach.
- The documentation structure is described in "RCA Documentation Plan" [RCA.Doc.6].
- Access: RCA releases are made directly available here: https://public.3.basecamp.com/p/Kee-hzqFmXv5R2N7tGDjaEokq or through links on the EUG or EULYNX websites.
- This release is not yet a complete or precise specification of RCA. It is likely that the architecture will change/evolve, based on feedback we expect from within and outside of the RCA group.

2.   Imprint

- Publisher: RCA (an initiative of the ERTMS Users Group and EULYNX Consortium)
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3.   New or updated content of RCA Baseline set 0, Release 2

The complete documentation plan can be found in [RCA.Doc.6]

Id	Name	Short description	Update BL0 R1
RCA.Doc.1	**RCA White Paper**	The rationale for starting RCA. Foundation for MoU between EUG and EULYNX.	Unchanged
RCA.Doc.3	**RCA Process Overview**	How the RCA group works to prepare, maintain and bring the RCA specification to the sector.	Unchanged
RCA.Doc.5	**RCA Release Notes**	Description of current release of RCA deliverables.	Update 07/2021 0.3
RCA.Doc.6	**RCA Documentation Plan**	Overview of the documentation set of RCA	Update 07/2021 0.4 (0.A)

RCA.Doc.7	**RCA FAQ**	Frequently asked questions and answers regarding RCA. Useful for a quick overview.	Unchanged
RCA.Doc.8	**Concept: Modular Safety**	A modular architecture requires and enables concepts to reduce the safety workload.	Unchanged
RCA.Doc.10	**Concept: RCA Effects - Business Case**	The economic effects (savings) of an RCA-based implementation, based on smartrail 4.0 and extrapolated to other IMs.	Unchanged
RCA.Doc.11	**Concept: Plattform Independence**	The need to achieve more modularity between applications and the platfforms.	Unchanged
RCA.Doc.12	**Concept: RCA Effects - Capacity**	The effects on traffic capacity for an RCA-based system.	Unchanged
RCA.Doc.13	**Concept: Architectural approach / System-of-systems perspective**	Architectural principles for the RCA.	Unchanged
RCA.Doc.14	**RCA Glossary**	Definition of used terms.	Update 07/2021 0.3 (0.A)
RCA.Doc.15	**RCA System Concept**	A high-level description of the goals and fundamental concepts of RCA:	Unchanged
RCA.Doc.18	**RCA Domain knowledge**	Defines important domain concepts used in the specification.	Update 07/2021 0.3 (0.A)
RCA.Doc.28	**Migration**	Illustrates how migration towards an RCA-based system can be planned, including examples of different IMs.

Includes a summary of results in presentation format (Migration Results v0.9). | Update 07/2021 1.2 |
RCA.Doc.29	**Concept: LSL - Enhanced L3, Supervision, Localisation**	Evolution of ETCS, rationale for submitted TSI CRs.	Unchanged
RCA.Doc.30	**Concept: Principles of the safety logic**	Geometric-based interlocking for more capacity and flexibility.	Unchanged
RCA.Doc.31	**Concept: Operational plan**	Concept for the standardized interface between RCA and a TMS.	Update 07/2021 1.1 (0.A)
RCA.Doc.32	**Concept: Degraded modes**	The role of degraded modes in specifying RCA.	Unchanged
RCA.Doc.34	**RCA Roadmap**	Overview planned development for RCA.	Unchanged
RCA.Doc.35	**RCA System Architecture (merged): System Def, System Reqs, Sys Arch**		Update 07/2021 0.3 (0.A)
RCA.Doc.36	**RCA Documentation plan - Annex**	Visualization of the documentation plan.	Unchanged
RCA.Doc.37	**Concept: RCA effects overview**	Overview of potential the effects / benefits of an RCA-based system.	Unchanged
RCA.Doc.40	**RCA Architecture Poster**	Diagram of the interface architecture of RCA.	Update 07/2021 0.2 (0.B)

18E112	**LWG: Railways Localisation System HL Users' Requirements**	Provided by the Localisation Working Group of the EUG.	Unchanged
RCA.Doc.43	**Concept: Informal Architecture Over-view**	Provides an informal overview, until the MBSE-generated documents are officially published.	Unchanged
RCA.Doc.45	**(Cyber) Security Guideline**	A guideline to and definition of a harmonized Security Risk Assessment for System Design process	Unchanged
RCA.Doc.46	**Concept : Digital Map**	Concept for provision of track and trackside infrastructure information in the form of structured map data.	New 07/2021 1.1 (0.A)
RCA.Doc.47	**Concept : Plan Execution**	Overview and the principles of plan execution.	New 07/2021 0.1 (0.A)
RCA.Doc.48	**Realization of RCA goals**	Description of the goals and objectives of RCA	New 07/2021 1.0 (0.A)

Related documents:

- RCA white paper: the rationale for starting RCA, accessible here https://ertms.be/workgroups/ccs_architecture and here https://www.eulynx.eu/index.php/home2/37-reference-ccs-architecture-white-paper.
- Command and Control 4.0 by Josef Doppelbauer (ERA): https://www.era.europa.eu/sites/default/files/library/docs/command_and_control_en.pdf

4. Feedback for RCA

Feedback for RCA is welcome! If you would like to attend a workshop or give feedback, please contact rca@eulynx.eu.

RCA will inform if and how feedback is integrated in future work. RCA will continue to provide regular updates in the form of new releases.

5. Authors and Reviewers of RCA

The RCA initiative is initiated and supported by EUG and EULYNX.