



# Release notes RCA Baseline set 0, Release 1

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## 1. RCA Baseline set 0, Release 1

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

- This release includes several new architecture 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 <u>https://public.3.basecamp.com/p/Kee-hzqFmXv5R2N7tGDjaEokq</u> or through links on the EUG or EULYNX websites.
- The RCA Roadmap including planned releases for 2020 can be found in the [RCA.Doc.34].
- 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) ERTMS User Group (<u>www.ertms.be</u>) and EULYNX (<u>www.eulynx.eu</u>)
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### 3. New or updated content of RCA Baseline set 0, Release 1

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

Id	Name	Short description	Update BLO 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 pre- pare, maintain and bring the RCA specification to the sector.	Unchanged
RCA.Doc.5	RCA Release Notes	Description of current release of RCA deliverables.	Update 0.1
RCA.Doc.6	RCA Documentation Plan	Overview of the documentation set of RCA	Update 0.1 (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	Unchanged
		and enables concepts to reduce	
		the safety workload.	
RCA.Doc.10	Concept: RCA Effects - Business Case	The economic effects (savings) of	Unchanged
		an RCA-based implementation,	
		based on smartrail 4.0 and extrap-	
		olated to other IMs.	
RCA.Doc.11	Concept: Plattform Independence	The need to achieve more modu-	Unchanged
		larity between applications and the platfforms.	
RCA.Doc.12	Concept: RCA Effects - Capacity	The effects on traffic capacity for an RCA-based system.	Unchanged
RCA.Doc.13	Concept: Architectural approach /	Architectural principles for the	Unchanged
	System-of-systems perspective	RCA.	
RCA.Doc.14	RCA Glossary	Definition of used terms.	Update 0.2 (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 con-	New
		cepts used in the specification.	0.2 (0.A)
RCA.Doc.28	Migration	Ilustrates how migration towards	Unchanged
		an RCA-based system can be	
		planned, including examples of different IMs.	
RCA.Doc.29	Concept: LSL - Enhanced L3, Supervi-	Evolution of ETCS, rationale for	Unchanged
	sion, Localisation	submitted TSI CRs.	
RCA.Doc.30	Concept: Principles of the safety	Geometric-based interlocking for	Unchanged
	logic	more capacity and flexibility.	
RCA.Doc.31	Concept: Operational plan	Concept for the standardized in-	Unchanged
		terface between RCA and a TMS.	
RCA.Doc.32	Concept: Degraded modes	The role of degraded modes in	Unchanged
		specifying RCA.	
RCA.Doc.33	Methods and Tooling	Describes the methods and tools used for developing the RCA speci- fication.	Unchanged
RCA.Doc.34	RCA Roadmap	Overview planned development	Unchanged
	<b>r</b>	for RCA.	
RCA.Doc.35	RCA System Architecture (merged): Sy	1	New
			0.2 (0.A)
RCA.Doc.36	RCA Documentation plan - Annex	Visualization of the documenta-	Unchanged
		tion plan.	
RCA.Doc.37	Concept: RCA effects overview	Overview of potential the effects /	Unchanged
		benefits of an RCA-based system.	
RCA.Doc.40	RCA Architecture Poster	Diagram of the interface architec-	Update
		ture of RCA.	0.2 (0.A)
18E112	LWG: Railways Localisation System	Provided by the Localisation	Unchanged
-012	HL Users' Requirements	Working Group of the EUG.	Shendinged
DCA D 42	Concept: Informal Architecture Over-	Provides an informal overview, un-	Unchanged
	- Concept. mormar Architecture OVEI-		Inchanged
RCA.Doc.43	view	til the MBSE-generated docu-	

#### **Related documents:**

- RCA white paper: the rationale for starting RCA, accessible here
  <u>https://ertms.be/workgroups/ccs\_architecture</u> and here <u>https://www.eulynx.eu/index.php/home2/37-</u>
  reference-ccs-architecture-white-paper.
- Command and Control 4.0 by Josef Doppelbauer (ERA): <u>https://www.era.europa.eu/sites/de-fault/files/library/docs/command\_and\_control\_en.pdf</u>

## 4. Feedback for RCA

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

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 (see "RCA roadmap" [RCA.Doc.34]).

### 5. Authors and Reviewers of RCA

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

RCA BL0 R1 has been reviewed by members of the RCA Core Group and third parties including: DB, Pro-Rail, SBB, Infrabel, BaneNOR.