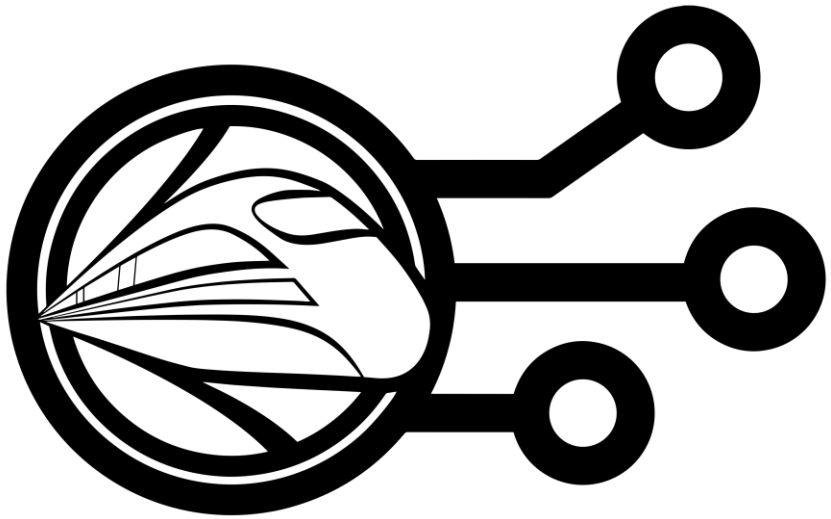

# OCORA

# Minimum Viable Product – MVP Definition

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# OCORA Minimum Viable Product - MVP

## MVP Introduction

The MVP is proposed as a milestone for OCORA development roadmap reaching a sufficient level of readiness of OCORA for large scale deployment. **The OCORA MVP is about a step for OCORA architecture maturity and not (only) about product or system definition and technical readiness.**

The MVP should allow to gain valuable return of experience for future/complementary developments. It will drive the need to:

- Prioritize development without endangering the overall OCORA scope
- Be based on a realistic development path, involving mock ups, simulators, prototypes and first certified configuration(s)
- Partnering with the Supplying Industry
- Gain feedback on OCORA solutions

The MVP is used as scenario for comparison purpose in the OCORA economic model to compare state of the art ERTMS deployment to a situation where OCORA provide foundation for easy retrofit and upgrades

# OCORA Minimum Viable Product - MVP

## MVP Definition for OCORA release R1 (and ERJU)

The Main targets of MVP are :

1. MVP step 1 Independence between train and CCS, through reference testable solution for FVA and bus
2. MVP step 2 Capabilities for upgradable CCS onboard modules under compatibility control

The MVP should be delivered in 2 steps and foresee intermediate releases. MVP outcomes should be about:

- FIS and FFFIS for CCS components supported by a reference model
- An executive configuration and change management process for industry standard
- Demonstrated technical solutions
- Resolving regulatory gaps for modularity (e.g. upgrade SS 26)

Elements that are **not** in the scope of the MVP (i.e. no need to wait for final outcomes):

- ❑ Advanced and debugged ATO an ATP application
- ❑ Full hardware independency and vendor independent software portability
- ❑ Train Integrity, localization and perception technology (but interface is in MVP)
- ❑ Fully-standardized off-the-shelve solutions for interfacing with any Train Control Management System

The capabilities to be resolved by OCORA MVP are :

- Support ETCS applications up to L3 and ATO up to GoA4
- Reference interface for automation enablers: localization, perception and remoted driving
- Technology for interchangeability : FRMCS readiness, upward ERTMS compatibility, modular safety, computing platform APIs