



OCORA

Minimum Viable Product – MVP Definition

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OCORA **Minimum Viable Product** - MVP

MVP Introduction

The MVP should be a set of product that covers a minimum but representative set of functionalities allowing to gain valuable return of experience for future/complementary developments.

A MVP should allow 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

OCORA Minimum Viable Product - MVP

MVP Definition for OCORA 1st Iteration

Elements that need to be in the scope of the MVP:

- **CCS universal bus** with capabilities to manage plug-and-play software components and peripherals (STMs, sensing,...)
- **Open computing platform** maximizing the level of hardware independency
- **Standard Train Interface** covering ERTMS and ATO GoA2 needs (i.e. complementing and tuning ERTMS and ATO subsets)
- **Functional models for ETCS, ATO GoA2** (i.e. semi formal model and then full formal model)
- **Train Integrity** covering solutions for multiple units & loco + driver cab trains, requested adaptation I/F TCMS-CCS (CRs for TSI-CCS 2022)
- **Split between application and communication** from GSM-R to Radio Evolution (i.e. FRMCS)

Elements that are **not** in the scope of the MVP (i.e. elements may be integrated in products to be certified after the MVP):

- Middleware allowing full hardware independency
- ERTMS L3 application
- Train Integrity Management System covering solutions for freight trains, requiring additional technical solutions (i.e. End of Train Device)
- ATO GoA3/4 applications and related peripherals (e.g. perception, localization)
- Legal enhanced acceptance process for plug and play evolution
- Fully-standardized off-the-shelve solutions for interfacing with any Train Control Management System