









INTRODUCTION











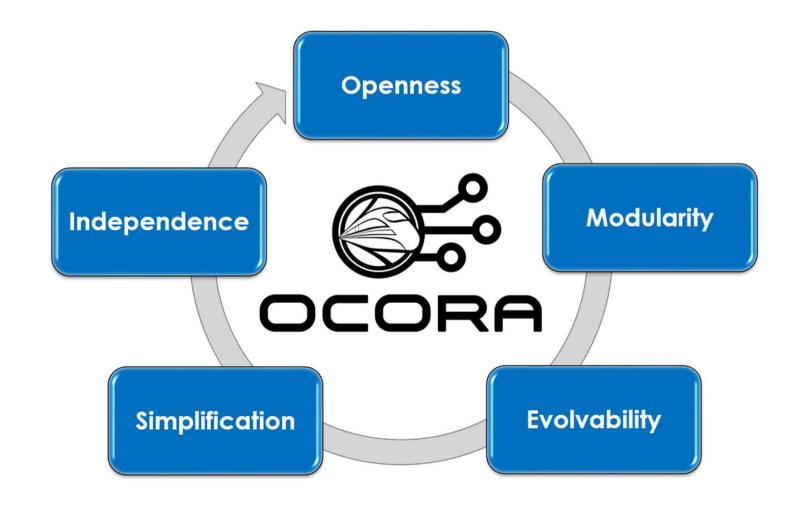


Open CCS On-Board Reference Architecture

European Initiative

Open Standardized Architecture for CCS On-Board

KEY PRINCIPLES







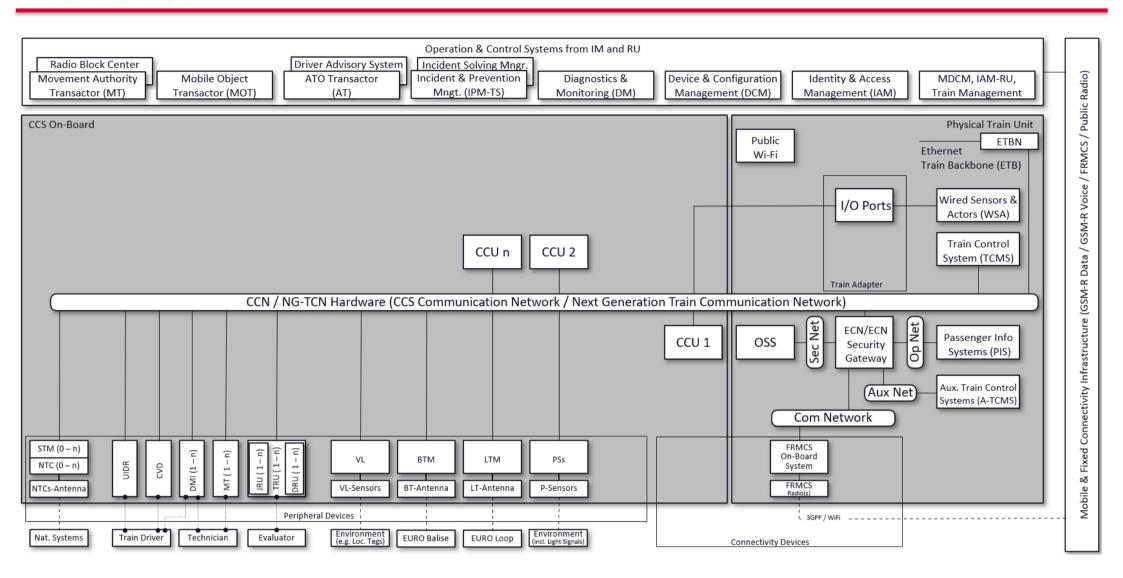






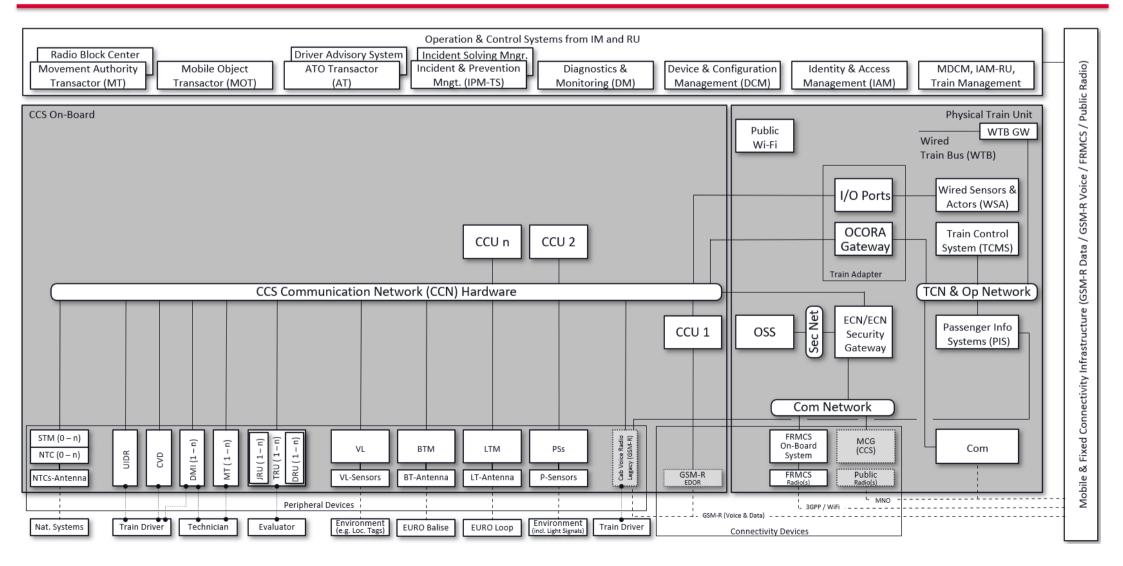


PHYSICAL ARCHITECTURE - FINAL VIEW



The OCORA architecture assumes for its FINAL VIEW that no legacy constituents (e.g. GSM-R) are present and a single train network is available. For the transition phase and especially for deploying updated CCS On-Board systems on legacy trains an architecture as presented in the TRANSITION VIEW is developed.

PHYSICAL ARCHITECTURE – TRANSITION VIEW







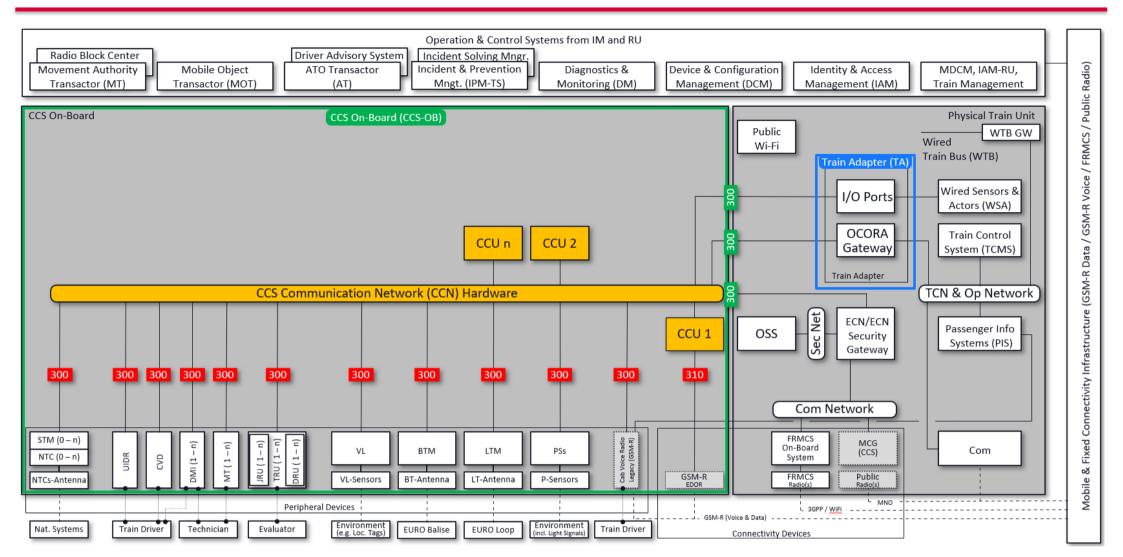








PHYSICAL ARCHITECTURE – SCOPE & INTERFACE IDENTIFICATION



Defining the "Green" and "Red" Interfaces is one of the focuses of OCORA.

This is to allow each Building Block to be "Plug & Play"-Like exchangeable.





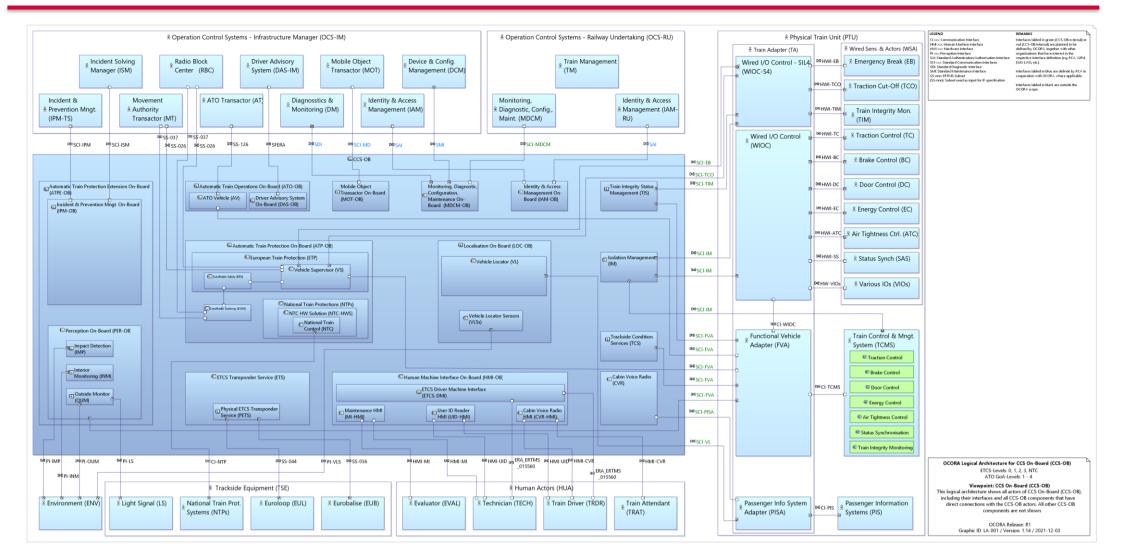








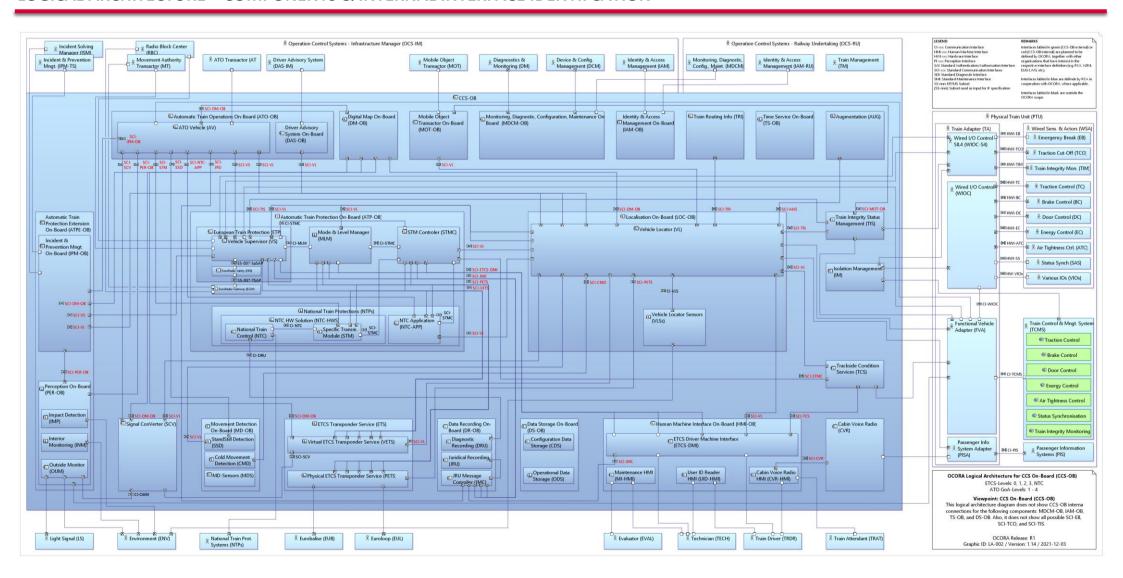
LOGICAL ARCHITECTURE - ACTORS AND EXTERNAL INTERFACE IDENTIFICATION (ONLY CCS-OB COMPONENTS WITH EXTERNAL INTERFACES ARE SHOWN)



Defining the "Green" and "Red" Interfaces is one of the focuses of OCORA.

This is to allow each Building Block to be "Plug & Play"-Like exchangeable.

LOGICAL ARCHITECTURE - COMPONENTS & INTERNAL INTERFACE IDENTIFICATION











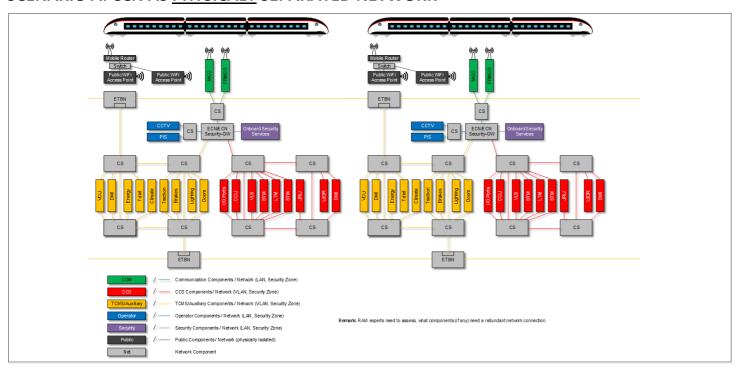




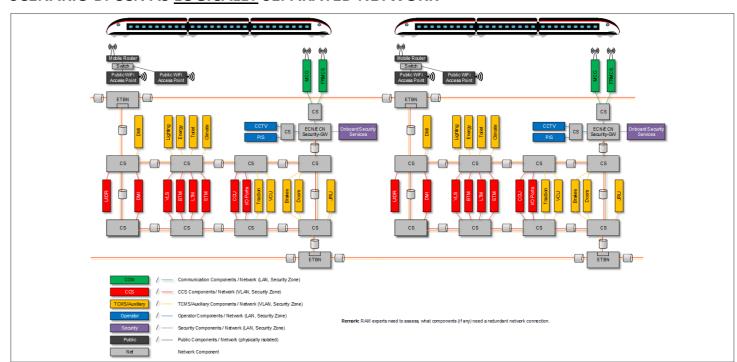
DB

NETWORK INTEGRATION SCENARIOS – NEW GENERATION TRAIN

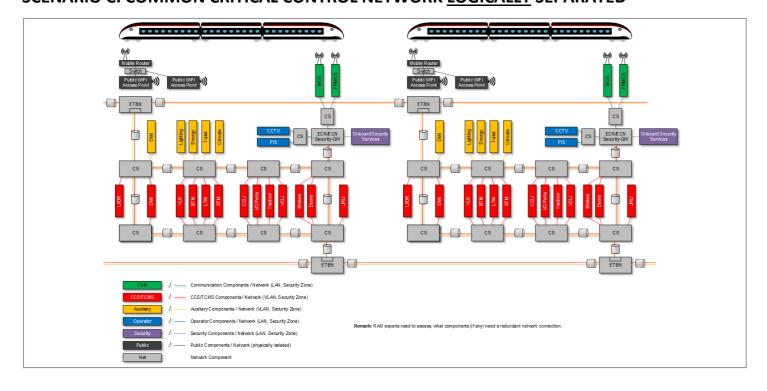
SCENARIO A: CCN AS PHYSICALY SEPARATED NETWORK



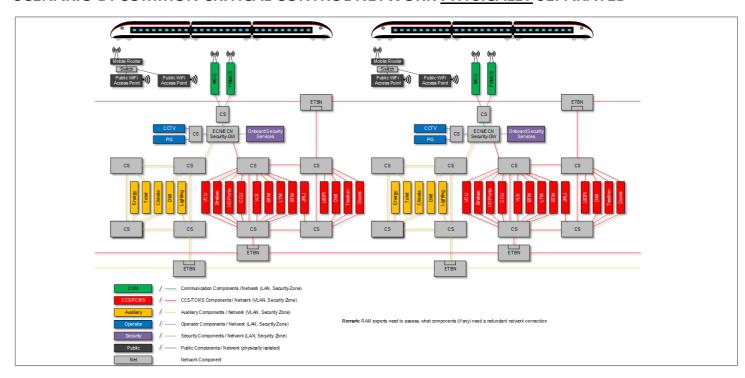
SCENARIO B: CCN AS LOGICALLY SEPARATED NETWORK



SCENARIO C: COMMON CRITICAL CONTROL NETWORK LOGICALLY SEPARATED



SCENARIO D: COMMON CRITICAL CONTROL NETWORK PHYSICALLY SEPARATED















NETWORK INTEGRATION SCENARIOS - LEGACY TRAIN - INTEGRATION WITH OCORA-GW

