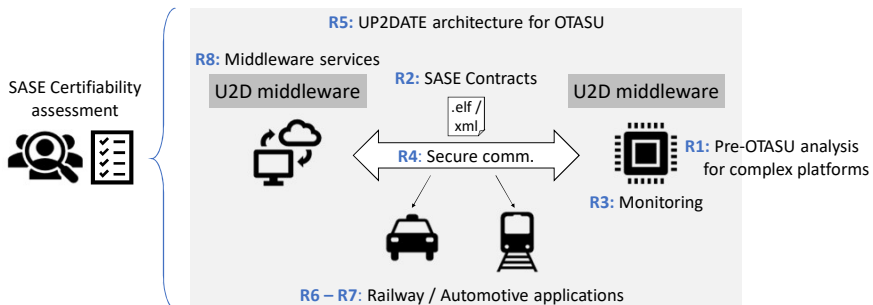


Motivation

Bringing together the trend towards **Over The Air Software Updates (OTASU)** and **heterogeneous computing platforms in Mixed Criticality Cyber-Physical Systems (MCCPS)**

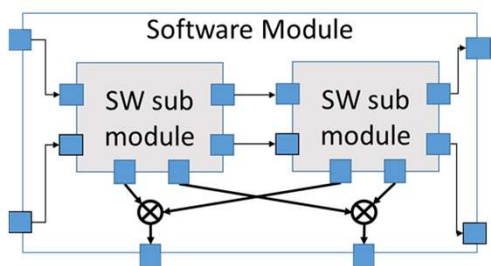
Objectives

- O1:** Provide **design strategies** to tackle down safety/security issues for MCCPS implemented on complex hardware platforms (R1).
- O2:** Define **SASE contracts** outlining the main foundations, modularity and composability, to support MCCPS update continuum (R2, R5).
- O3:** Elaborate **observability, controllability and feedback strategies** (R3, R5).
- O4:** UP2DATE **software architecture** integrating: SASE criteria for contracts, UP2DATE middleware to support the update cycle, and Secure communication library (R4, R5).
- O5:** UP2DATE architecture **demonstrator** applied to two case-studies: automotive and railway (R6, R7, R8).
- O6:** **Assessment** of safety and security certifiability of the concepts for OTASU in MCCPS (R6, R7).
- O7:** foster **dissemination and technology transfer** activities.

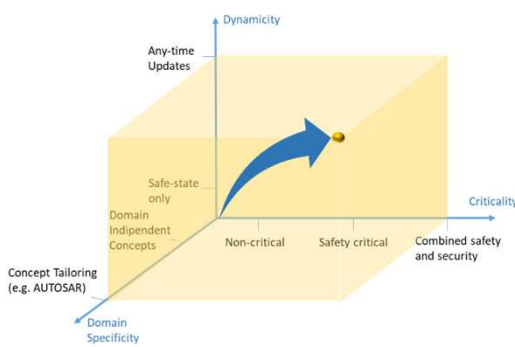


UP2DATE Main Concepts

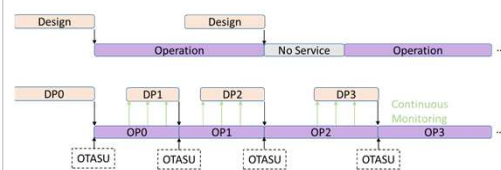
SASE CONTRACTS



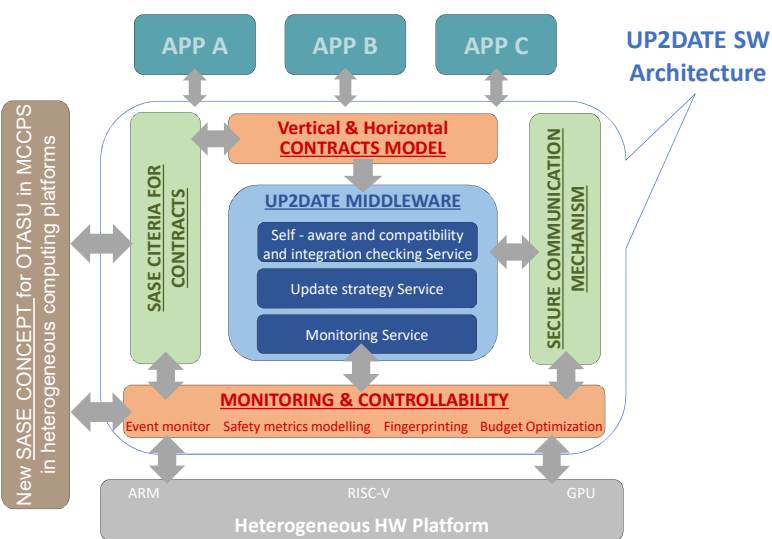
UPDATE CONTINUUM



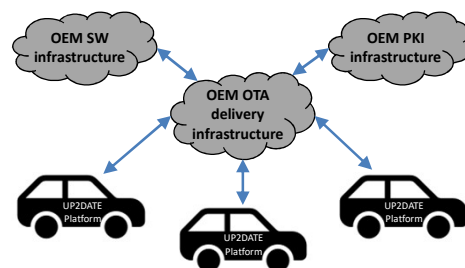
DEVOPS DEVELOPMENT



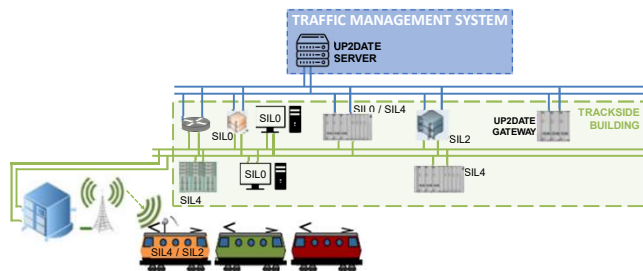
UP2DATE Software Architecture



Automotive



Railway



IKERLAN (Coordinator), Spain – BSC, Spain – OFFIS e.V., Germany – TTech Auto, Austria – IAV, Germany – MARELLI, Italy – CAF Signaling, Spain
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