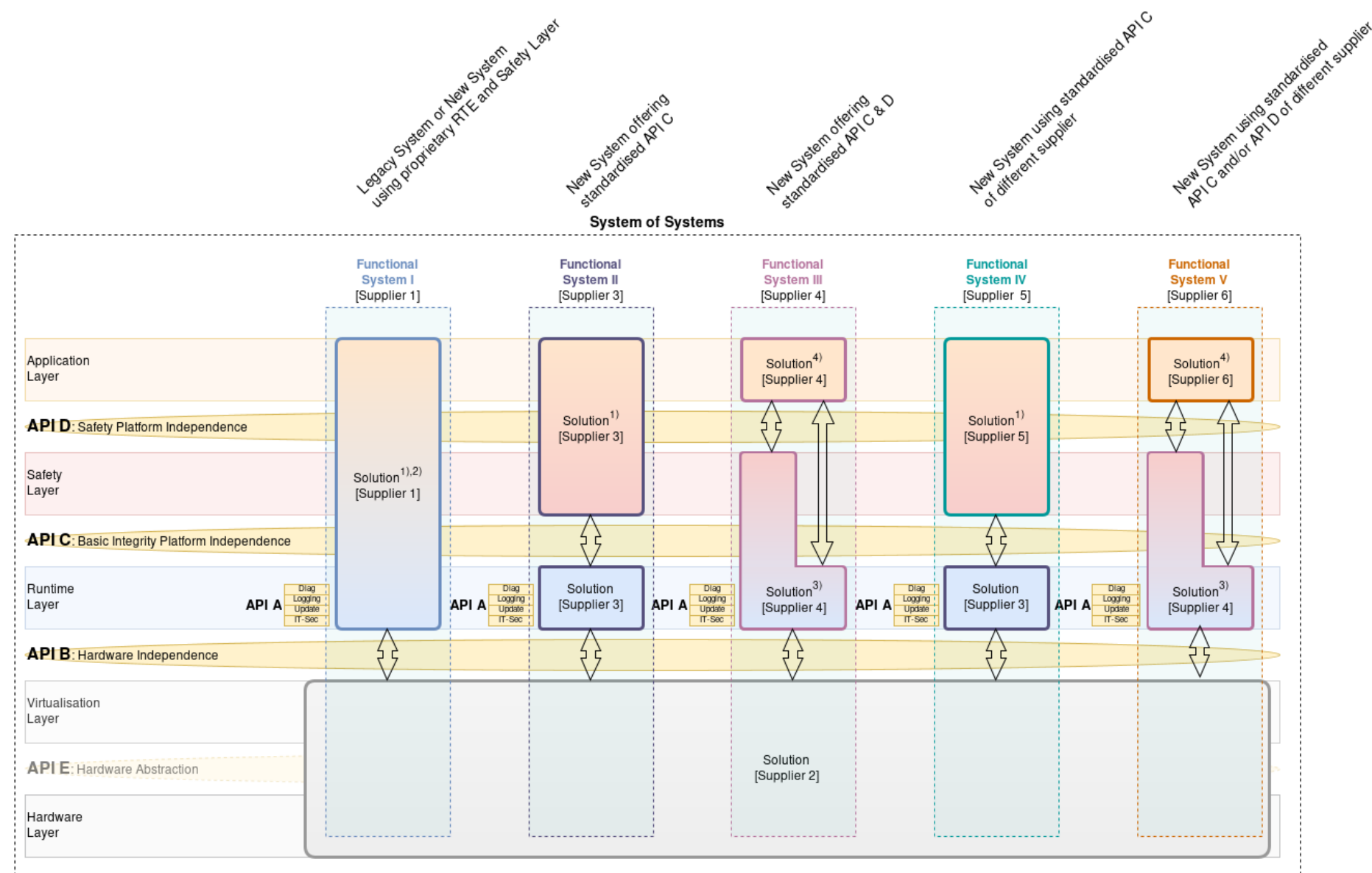


Task 2: Computing Environment

The Task 2 Computing Environment is responsible for finding solutions to simplify software installation, hardware configuration and life-cycle processes such as upgrades, updates, or replacements with different hardware and software products. These solutions can include standardized API(s) related to the runtime environment and/or hardware on which CCS applications are hosted.

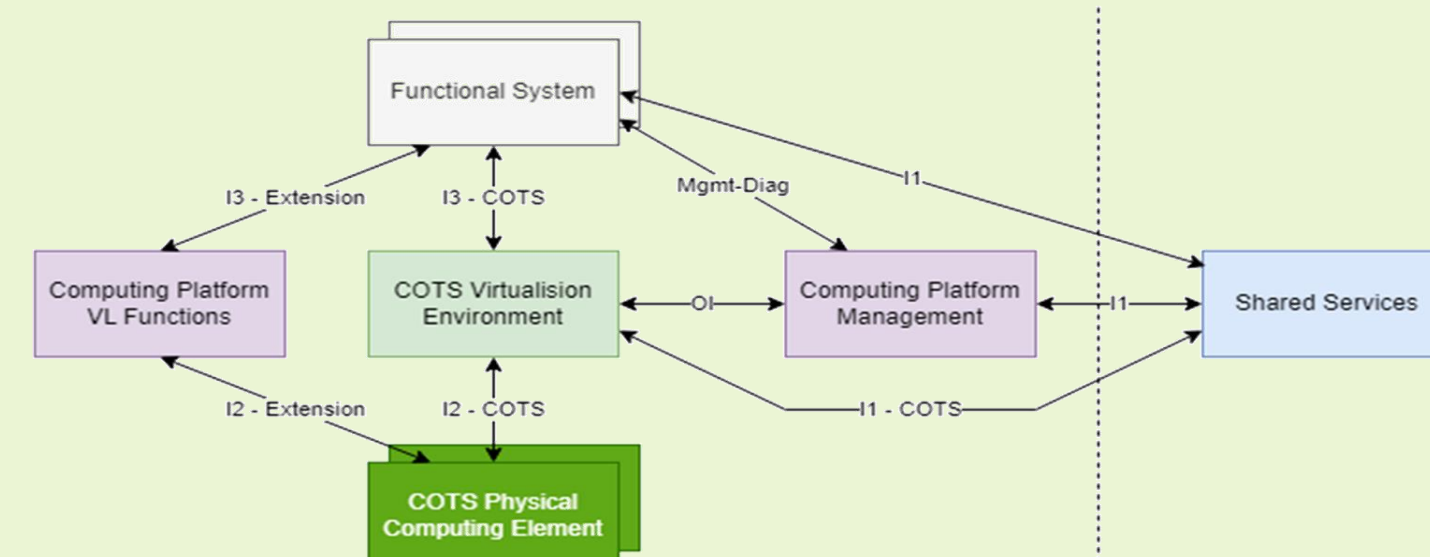
Hence, the next steps for this domain is to deliver based on the decided “Recommendation on Interfaces to be standardized” the specifications for the interfaces I2/3, as well as I1 through contribution to the TCCS Domain specifications for diagnostic and configuration management specific to Computing Environment.

Communication between Systems (standardized communication interfaces SCI*)



¹⁾ In case the box implements a safe function, it includes a safety layer that may be proprietary.
²⁾ This box could implement an existing legacy function or a new function.
³⁾ This box implements a RTE and safety layer and exposes API C and D.
⁴⁾ In case the box implements a safe function, it would use API D, otherwise it would use API C

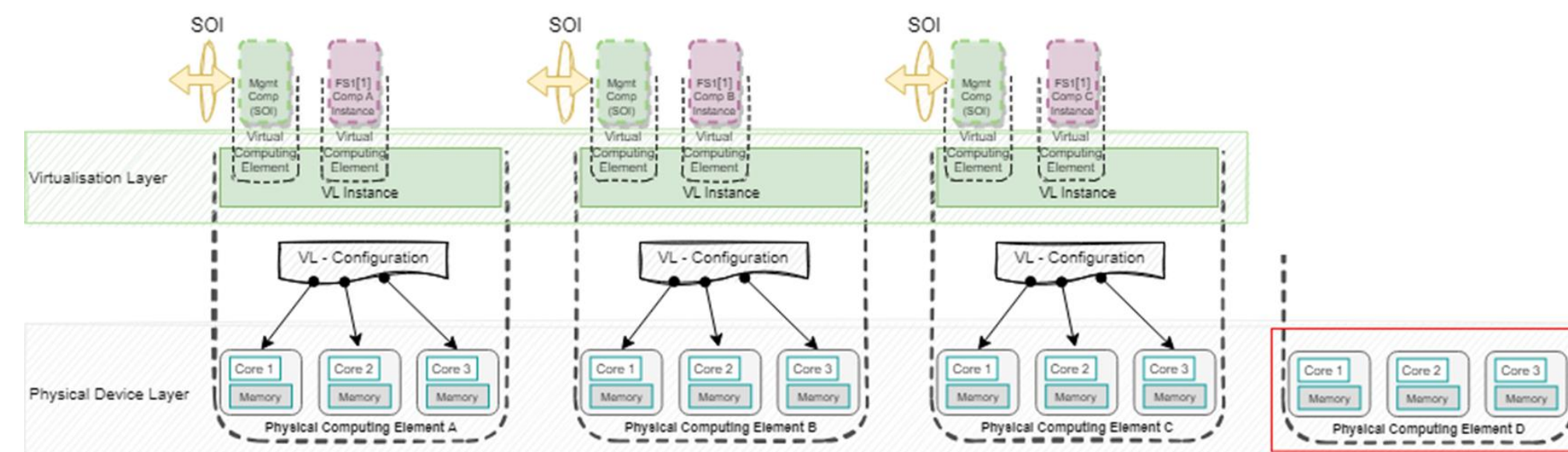
Computing Platform System of System



The Task 2 Computing Environment Team will focus on specifications and standardizing of Computing Environment platform and technical enablers for the “**Harmonized European Rail Operation**” migration plateau:

- I2- Hardware Abstraction interface specification
- I3-Virtualisation interface specification
- I1-external interface specification including contribution to SMI, SDI, SSI interfaces for the CE architecture
- ERA interaction and Ontology support.

Proposal to prepare additional Physical Computing Element



Task 2: Comp. Environment

Zeeshan Ansar (*EUG/DB Netz*) – Railway Lead

Virgil Lostun (*Hitachi*) – Supplier Lead

Lead STIP Deliverables

- **STIP_4: Standardisation of Computing Environment –**
 - I2- Hardware abstraction interface
 - I3- Virtualisation interface
 - I1- External interface for configuration, maintenance and security

Deliverables Request for Service (SC2.4) – Year 3 [Oct-24 – Oct-25]

D01 Computing Environment System capabilities and functions – System Analysis (FRS CONEMP, Functional Requirement specification) - June 2025

D02 Specification of concrete APIs in the context of Computing Environments - Sept 2025

Latest Achievements, Challenges and Design Decisions *(to be filled periodically by the domain)*

- **Latest Achievements:** The following achievements have been accomplished by the Computing Environment domain:
 - **Achievement #1** System analysis of the CE including I1, I2 and I3 design, functions and requirements
- **Domain Current challenges:** The domain is facing the following challenges:
 - **Challenge #1:** Resource constraint
- **Design Decisions:** The domain has made the following design decisions that impact the Overall Model:
 - **Decision:** : description

Expected outcomes for sector review in the next 3 months

• Closeout Phase 2.4

- Specification of interface I2- Hardware abstraction interface
- Specification of interface I3- Virtualisation interface