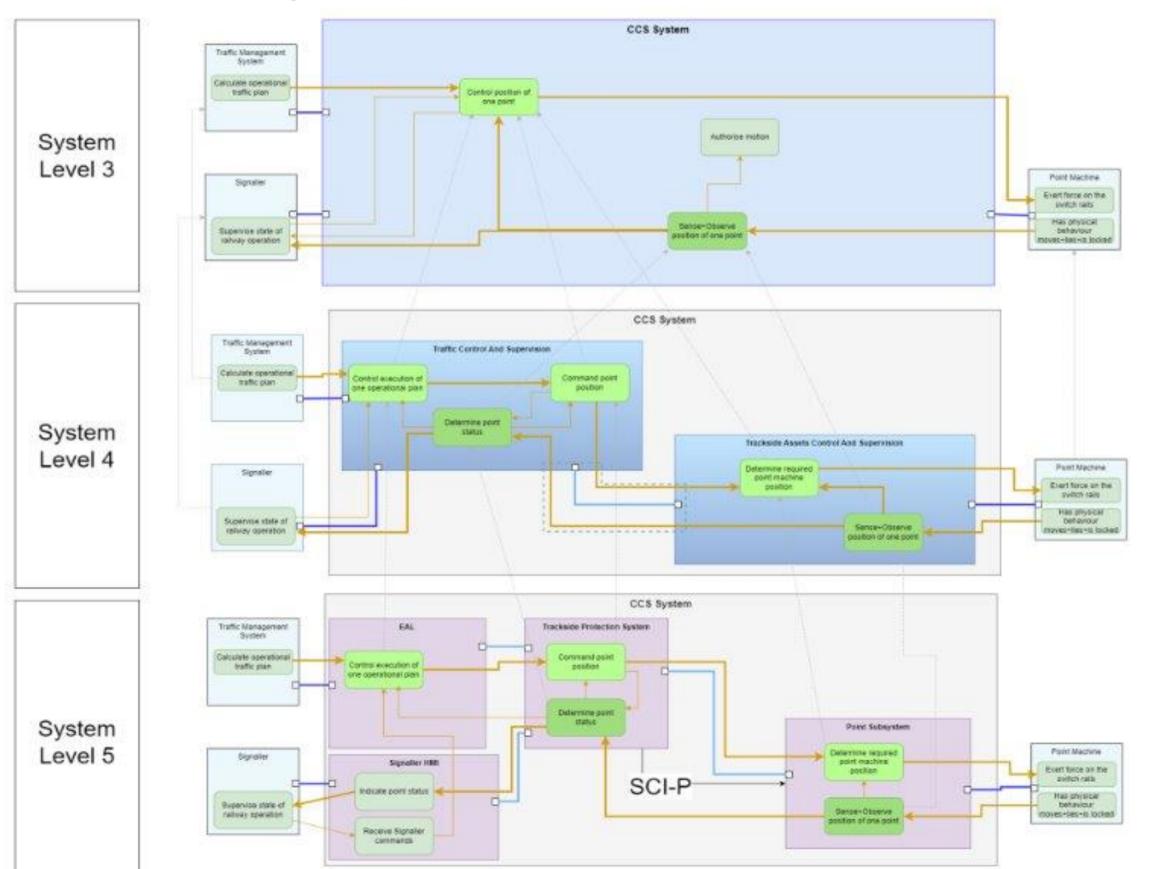


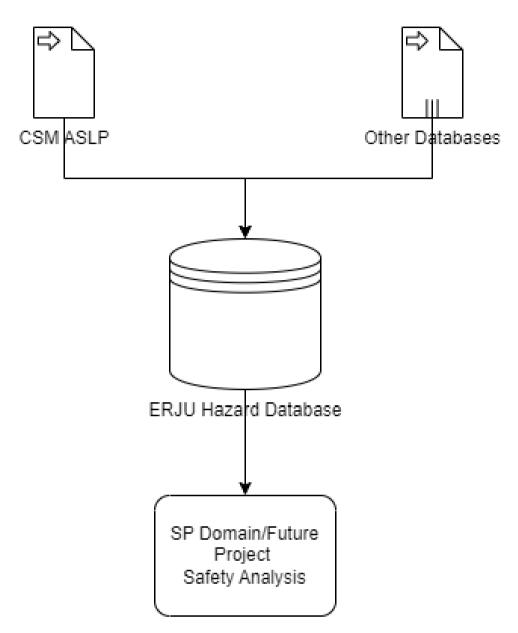
PRAMS

The PRAMS team is in charge to define the strategy, policies, methods, and principles to be followed by the other Tasks and Domains during the design activities as well as to coach and support implementation. This team has also the task to identify changes or improvements to be brought to existing European safety standards to support modularity in the System Pillar Target Architecture.

PRAMS domain will focus on:

- 1. 'Horizontal' activities: Maintain and Evolve what has been developed during the Y1 and Y2 (i.e. improvements of current safety legislation),
- 2. '<u>Vertical' activities</u>: Safety and PRAM provide a "safety toolbox" and a V-cycle considering HOF aspects for the Domains to develop and support their PRAMS resources to realise their related deliverables (e.g. how to safety process imbricated control throughout the different levels of SP modelling activities).





The PRAMS Team will focus on supporting the following new functions and technical enablers for the "Harmonized European Rail Operation" migration plateau:

- Creation of a ERJU Hazard Database (i.e. based on different operational and system hazard lists used in Europe),
- Definition of generic design safety cases at different levels (i.e. focus is done on the technical activities building the System Pillar Target Architecture),
- Realisation of a process to handle evolutions of safety-related modular systems (i.e. how to fasten and ease the deployment of updates of critical and interoperable items).



PRAMS

Julien Bois (UIC) – Railway Lead Giuseppe De Nicola (Hitachi) – Supplier Lead

Lead STIP Deliverables

- STIP_79: Modular Safety Case Structure
- STIP 80: EU Hazard Database
- STIP_81: Evolution Management in a Modular Architecture
- STIP_82: creation of MTBSF criteria (on hold for SC2.4)
- STIP_83: P- RAM Req. / guidelines (on hold for SC2.4)
- STIP_84: CBM Req. (on hold for SC2.4)

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

- Latest Achievements: The following achievements have been accomplished by the PRAMS domain:
- Achievement #1: Evolution Management: definition of a set of PRAMS requirements for the Computing Environment domain
- Achievement #2: HAZOP: analysis of the first accident cases
- Domain Current challenges: The domain is facing the following challenges:
- Challenge #1: Evolution Management: harmonize expectations from Train CS team regarding homologation aspects (under consolidation)
- Challenge #2: Propose a standardized Fault Tree Analysis process for SP with the different knowledge and experience from the PRAMS experts
- Challenge #3: planification of the SC2,5 to SC2,7 remits with drastically limited resources

Deliverables Request for Service (SC2.4)

D02 Generic Design Safety Case – Q3 2025

D03 EU Hazard Database – Q3 2025

D04 Risk assessment template and safety guideline – Q3 2025

D05 Evolution Management in a Modular Architecture – Q3 2025

D09 Human Organizational Factor: – Q3 2025

Expected outcomes for sector review in the next 3 months

Closeout Phase 2.3

•Document spread outside ERJU and get feedbacks from external reviewers to be integrated into SC2.4 deliverables

Close collaboration with NB Rail and AsBo corporation group

•Following the F2F WS in Budapest with the two organisations, it is expected that the PRAMS team will develop a strong connection to get review o its deliverables