1. **Welcome from the Chair and adoption of the Agenda**

On behalf of the JU, Ian CONLON welcomed the participants to the 5th meeting of the System Pillar Steering Group. He reminded that the agenda and documents had been circulated before the meeting. He also informed that agenda item on radio, which had been reported initially as an item for decision, was moved to the section on items for discussion.

2. **Approval of the meeting minutes**

The minutes of the fourth meeting were adopted.

3. **Update (JU and Commission)**

Giorgio TRAVAINI discussed the activities of the JU since the last SP-STG meeting. He informed the group that the JU had signed the MoU with RNE. He briefly discussed the scope of cooperation and mutual interest, i.e., in terms of capacity management, optimization of international travels. As stressed, the JU had identified a need to cooperate, specifically within the scope of traffic management and FAI. The MoU would be published on the JU website and the text would be circulated to the SP STG after the meeting. He also referred to the updated MoU with UIC to include the cooperation on FRMCS topic. The revised MoU would be discussed with the JU Governing Board on 23 June 2023.

Giorgio TRAVAINI informed about the ongoing exercise of transferring the knowledge from S2R projects into FPs and SP. He stressed that the JU monitored the process to facilitate such transfers. In terms of the EU-Rail programme, the SP STG was informed that all FPs had launched activities. No significant issues were reported up to date, except for certain delays within the FP5 (operational requirements).

On behalf of the Commission, Keir FITCH updated the participants on the recent activities. He indicated that the Commission had launched evaluating activities after the conclusion of the last TSI revision package. He informed that the ERA would be organising a feedback session for the relevant stakeholders in the coming weeks, including feedback from the MS. The Commission would also reflect on how to insert the output from the EU-Rail into TSI revision process. He briefly discussed the TSI revisions in terms of TAP/TAF specs.

**ITEMS FOR DECISION OF THE SP-STG**

4. **SP Trackside Asset Specification Release – Eulynx B4R2**

Ian CONLON introduced the decision topic. He stressed that the SP STG would take a decision to adopt the presented specifications as a SP document.
Malik BENAMEUR and Mirko BLAZIC presented the document, proving the context, publication impact, results, and next steps (for details, please refer to the presentation).

Bardo SCHETTINI endorsed the document in terms of content. He expressed the concerns raised by the EIM Members regarding the publication of document and future maintenance of document (i.e., ownership of the document maintenance).

The Chairman of the SRG, Miroslav HALTUF commented on the specs. He expressed the position of the MS that the priority should go towards the stabilisation of the existing technologies and specifications before new specs and technologies would be released. He commented on backward compatibility and resources in terms of the DAC, EGNOS or ECTS.

Klaus MINDEL appreciated the document and the work done to prepare the final results. He stressed that the document was an important step in terms of implementing the target architecture (i.e., guidance for projects in migration towards the target architecture). He also appreciated clarity of document in terms of responsibilities.

Giorgio TRAVERAINI asked about the content of document and whether the proposed specs enabled the additional issues or reflected the status quo. Keir FITCH added that certain elements reflected in the specs were not a part of the SP (i.e., security). He suggested to elaborate more how these elements would be evolving in the future within the SP. In terms of maintenance of document, he referred to the next steps indicated and intention to contribute to and support standardisation and TSI input plan. He asked for reflection when such specs could be adopted and implemented in future products.

Ian CONLON answered the questions. On TSI, he reminded that the process of TSI revision was led by the Agency and Commission. The proposed document would be published as a SP document, meaning as guidelines for sector. This was in line with the objective of the SP to give the sector umbrella for system architecture. In terms of content of specs, he indicated the need for publication of the specs and discussed the benefits expected from the publication.

Mirko BLAZIC commented on the stabilisation of existing specs/technologies and new standards. He indicated that the elements covered by the proposed specs were not covered by any other existing standards (i.e., signalling or track side domain). He discussed the past initiatives and opportunities coming from the publication of proposed specs.

Bardo SCHETTINI commented on the nature of SP documents. He stressed that the SP document was a document to be voluntary used by the sector. In the current shape, the specs would not fit the TSI. He insisted that the SP STG should be clear about the nature of document.

Ian CONLON commented on parallel processes. He confirmed that at the current stage the document would be a SP document, not fitting TSI. However, there would be nothing precluding using the document as a base for future TSI/standardisation if such need would be expressed by the sector. As for the date there was no parallel processes, however, there were not precluded.

Michel RUESEN commented on the paper. He stressed that not all elements developed in the SP impacted interoperability. Thus, not all inputs of SP would fit the TSI, which concerned interoperability specifications. Klaus MINDEL agreed that the presented document was not related to interoperability, thus, it was fitting as a SP document with impact on market.

The Chairman of the SRG commented on the MS involvement in the process of standardisation. He stressed that the MS should be informed about developments in drafting documents for standardisation as the MS were deciding on the standards.

⇒ SP-STG Decision 2023/03 was adopted. The document was endorsed by the SP STG as a SP document.
5. **EU Rail Harmonisation and Standardisation and TSI input plan**

Keir FITCH reminded that the template was circulated to the SP STG well advance before the meeting. The feedback was collected, and the final version was released in early June. Ian CONLON reminded that the idea would be to reach an agreement on the content. Based on this, an exercise would be launched to collect the feedback from other stakeholders, including the IP.

On behalf of the SP, Sönke KRAFT presented the main comments received, the remaining issues and next steps *(for details, please refer to the presentation)*. Ian CONLON added that based on the agreement, the JU would prepare a first version of document to be distributed to the Commission and Agency for the discussion. The aim was to have a validated view (by the Agency and standardisation bodies in cooperation with the JU) and come up with indicative planning for relevant outputs and standardisation.

Nicolas FURIO thanked for the work done. On behalf of UNIFE, he discussed pending topics, including the role of RASCOP, overlapping discussions at different fora, consultations on harmonisation criteria, and maturity criteria. He stressed that UNIFE was in favour of the document and endorsed it.

In terms of RASCOP, Keir FITCH explained that the alignment would be needed. The key question was whether it served its purposes or not in the SP context. In terms of maturity check, it was reminded that such activities were under responsibility of the Agency. In terms of the review process, it was explained that the issue was open up to date. The idea behind the exercise was to have a plan endorsed by the SP STG. The review was to be discussed with the sector for setting up a process.

On behalf of CER, Enno WIEBE endorsed the document. He stressed that a decision should be taken at this stage, and then the review could be considered after some time from the release. He also discussed the better description of the role of Agency in the document.

Johannes GRAEBER discussed the necessity to agree on telematic approach. He also underlined the necessity to have a continuous discussion on the plan between the SP Core Group and FPs. He referred to the sector alignment and cooperation during the preparatory phase.

On behalf of EIM, Bardo SCHETTINI appreciated and endorsed the document. He stressed the important of maturity criteria to be taken into account.

On behalf of the SRG, Miroslav HALTUF asked to cooperate with the Agency on keeping the registers and databases open.

➔ SP-STG Decision 2023/04 was adopted. The document was endorsed by the SP STG.

### ITEMS FOR DISCUSSION OF THE SP-STG

6. **Radio Report**

Ian CONLON updated the participants about the status, providing context and actions taken. He briefly described the main categories of comments received *(for details, please refer to the presentation)*. He proposed that the JU would continue to work with the UIC and UNITEL to address the comments. The next version would be circulated by the end of June. After that, the document would be launched for approval in the written procedure. If needed, a dedicated meeting would be organised.
On behalf of CER, Enno WIEBE commented on the importance of the document. He stressed that the more the publication would be delayed, the more disruptive for the sector it would be. He also underlined that the preferred approach would be to have FRMCS in the text TSI.

Keir FITCH discussed the funding. He indicated the Commission was working on the solution. Up to date there was no solution to be proposed.

Bardo SCHETTINI commented on timeline and related concerns and challenges, including the migration. He stressed that in order to achieve a successful migration, the process must be planned in advance.

Nicolas FURIO stressed the importance of the document and reminded that the comments made by UNIFE were shared with the JU. He stressed the importance of planning. He also underlined that for the successful implementation full programme would be needed (i.e., lab, testing).

On behalf of UIC, Jean-Michel EVANGHELOU agreed with the SP STG Members. He also indicated that the UIC was working on elaborated planning taking into account all related processes. The planning would be presented in a form of paper by the end of June as a base for discussion. He also stressed that at this stage it was too early to discuss the migration. He mentioned other challenges and activities undertaken by UIC (i.e., chipsets).

In terms of planning, Keir FITCH added that it would be necessary to establish a process at the European level with all relevant stakeholders.

➔ The JU will continue to work on the document, with the aim to release for approval by written agreement on 30 June. #

Addendum (18/7/2023)

Following the request for written approval to the members of the SP STG by 14/7/2023, it was confirmed that the Decision 2023/05 was adopted (no objections were raised).

Three members provided additional statements, which are minuted here:

EIM

EIM approves the Report with the following comments:

1. The level of support to MNOs deserves attention (i.e.: usability of MNOs shall be ensured)
2. It is important to ensure that potential EU Rail trials (see MORANE 2) include scenarios using MNOs

CER

Please find below the CER statement on the EU RAILJU System Pillar - Report on FRMCS V2 and V3 Scope and Planning -Version 1.3 (version sent for written approval to the SP STG):

Summary of the CER position
The CER endorses the ERJU report on FRMCS V2 and V3 Scope and Planning in order to boost all upcoming joint sector activities on FRMCS. CER recommends to further develop this subject by specifying a migration strategy, migration planning and associated migration capability.

Need for further work
This migration strategy shall lead to an economically viable migration for all concerned railway stakeholders. We call for a concerted development of ETCS and FRMCS, i.e. product, functions and interfaces.

CER believes that the technical and economic constraints and framework conditions of a migration have significant influence on the architecture of the target system and that such elements must therefore always be considered and evaluated in advance or at least at the same time as the system development.

We call the ERJU to further elaborate the following four elements:
1. Migration strategy & planning with corresponding milestones to the technical deliverables,
2. Planning for each deliverable,
3. Content regarding the test specification to be carried out from V2 to V3,
4. Added features included in V3, especially potential mandatory interoperability points to be added.

CER would appreciate to receive feedback at the next ERJU SP SG on how the above-mentioned needs for a migration strategy, migration planning and associated migration capability can be considered and until when this can be realistically delivered.

More detailed CER comments
The CER members have identified areas of improvement in the text that will help to increase the overall quality. We are happy to hand these comments over to you at a later stage.

CER support
No CER comment shall hamper or at all delay the publication of the ERJU report on FRMCS V2 and V3 Scope and Planning.

Unife
With this email, I kindly inform you that UNIFE endorse the version of the Report on FRMCS V2 and V3 Scope and Planning circulated on 05 July with the following comments:

• The market requirements regarding the migration to FRMCS shall drive the priorities and timing for the activities to validate and consolidate the FRMCS specifications. We understand that this subject is outside the scope of the FRMCS report and therefore ask the JU to consider this as an objective in any related JU call.
• We think the report is not sufficiently committed with the idea of reducing specificities to the minimum. The report supports the idea of re-using the existing trackside radio infrastructure. To maintain the current trackside radio sites, the necessary power of the signal would need to be increased significantly because of the new frequency (1.900 MHz) impacting the design of the chipset, and even this might not be enough to meet the current Quality of Service without increasing the number of posts/base stations. In our opinion this kind of statements or design decision should be discussed with chipset manufacturers to assess the feasibility/cost of the whole solution and their willingness to produce chipsets under these conditions.

➔ SP-STG Decision 2023/05 was adopted. The document was endorsed by the SP STG.

7. Task and Domain/Lot1 and Lot RfS/Governance and Working Arrangements

Ian CONLON discussed the request for services for LOT1 and LOT2 and described the processed to be undertaken by the SP (for details, please refer to the presentation). The RfS would be released in the coming weeks.
8. EGNOS/Absolute Train Positioning

On behalf of the EUSPA, Daniel LAPOUR provided a presentation on absolute train positioning and EGNOS, providing proposal of work breakdown structure and next steps (*for details, please refer to the presentation*).

Maria-Jose GARCIA-PRIERO discussed the importance of regulatory aspects, including the certification and the work to be done by the SP in terms of the on-board architecture. Klaus MINDEL added that there was an agreement in the sector in terms of using the satellite positioning for railway. As stressed, the remaining question was its impact on the architecture. He briefly discussed two approaches to using the satellite positioning in railway (with or without interaction).

9. AoB

The SRG Chairman, Miroslav HALTUF, proposed to discuss at the next meeting the issue with the electrical part of the DAC. It was proposed that the most appropriate forum for this would be the SRG.