1. Welcome from the chair and adoption of the Agenda

On behalf of the Commission, Keir FITCH welcomed the participants to the fourth System Pillar Steering Group meeting. He presented the agenda and discussed the items.

Enno WIEBE added a point to AOB to discuss a “status report” based on current SP progress and receive a strategic overview from the Commission and JU.

Keir FITCH mentioned the request from the AERRL to become a full member of the SP STG and recommended to accept the request.

On behalf of UITP, Umberto GUIDA discussed the interfaces with other systems (i.e., urban systems, city systems) foreseen in the Europe’s Rail programme. He pointed out that with the progress of work in the SP the time has come to consider this dimension (i.e., in terms of development of functionalities, support to information flow and data exchange). He suggested to start with reflection on how the SP could approach interfaces with other systems.

Keir FITCH confirmed that interfaces with the urban rail and other modal systems were priorities for the Commission. He underlined that in case of need the Commission could financially support certain studies on these topics. Josef DOPPELBAUER also confirmed support for these elements from the ERA’s side. He briefly discussed the specificity of interfaces with urban lines and necessity to analyse mixed operations (i.e., operations running on mainlines, regional lines and in downtowns).

Ian CONLON added that such considerations were under the remit of T1 as a part of the whole railway system (interfaces with other transport modes). He also confirmed that if such elements were not in the current planning, then they could be taken into account in the next cycle (October 2023 onwards).

2. Approval of the meeting minutes

The minutes of the third meeting were adopted.

UNIFE delivered its comment to SEMP which were attached to the previous minutes.

3. Update

Carlo BORGHINI thanked the SP STG for the work done in the recent months. He officially informed the Members about his decision to step down from the position of the Executive Director of the Joint Undertaking. He informed the Group that the Governing Board decided on 30 January 2023 to appoint
Giorgio TRAVAINI as Executive Director *ad interim* for the period of up to 12 months, until the closure of the official recruitment procedure that would be launched by the Commission in the coming weeks.

He provided the Group with an overview of the activities in the JU. He underlined that the programme of the Europe’s Rail was fully launched, with all Flagship Projects running. He also emphasized that the interactions between the IP and the SP became more visible. From the institutional side, there was an alignment reached with the ERA, JU and EC on the roles and responsibilities. The JU Governing Board was expected to adopt on 15 March 2023 a decision approving the list of projects to be funded under the second call for proposals launched by the JU in December 2022. He also informed about the consultation launched by the JU to collect the topics for the third call for proposal (exploratory research). He also discussed the benefits of inclusion in the projects some non-associated countries (i.e., UK and Switzerland).

➔ **The SP STG was asked to deliver any suggestions and ideas concerning topics for the second call for exploratory research directly to the JU. The call is expected to be launched in late 2023.**

The Group was also informed about the mid-term review of the JU that would be launched in 2023. The earlier review was caused by the decision of the Commission to revise the MFF 2021-2027 earlier than expected. The revision of the JU would have impact on the future budget.

On behalf of SRG, Miroslav HALTUF informed the Group about his discussion with the United Kingdom’s Ambassador to the Czech Republic. According to the latest arrangement, the UK government would support financially participants to the HE grants, until the formal association agreement was reached.

4. **Approach on future radio**

Keir FITCH provided an overview of the discussion with the UIC. He commented on the work done so far by the UIC in FRMCS project. It was important to have a clarity on the scope, objectives, and planning of the V2 specs, specifically in terms of future testing and validation (potentially elements of which are to be funded within the JU).

Ian CONLON provided detailed context and described proposed approach to be taken by the SP on V2 specs in terms of future TSI and standardization (*for details, please refer to the presentation*). He reminded that the work on FRMCS was ongoing under the leadership of UIC and UNITEL. He underlined that V2 specs would be a base for testing and validation. Based on that, the V3 specs would be presented, containing implementable solutions. At the moment, the work was focused on finalization of current TSI version (V1). He also mentioned the consideration regarding the timing of V2 specs’ development.

He highlighted that the main objective for the proposed work is to provide full clarity and transparency of the content of V2 specs and the planning for delivery of such specification for railway sector - to enable the correct planning, including the revision of TSIs, and to provide the basis on which certain testing and validation activities might be addressed within the EU-Rail programme (subject to members approval).

He informed the Group that after discussion between the UIC, ERA, JU and the Commission, the proposal was to use the SP resources and provide the report outlining the V2 specs and the rationale for the choice. The work would be carried out, using the resource within Task 2 communication domain (including UIC and Unitel) and Lot 3. The report would be a base for discussion for the SP Core Group and ERA. The report to be submitted to the SP STG.
Bardo SCHETTINI GHERARDINI (EIM) pointed out that a clear planning, deadlines, and milestones would be needed. He also mentioned that certain issues required further clarification (i.e., role of MNOs). He also mentioned that the EIM provided the JU with proposed changes to the text.

Nicolas FURIO (UNIFE) endorsed the proposal and provided the comments by UNIFE. Firstly, he pointed to the lack of planning and no draft version of V2. Secondly, he asked for clarification regarding the interactions with ETO and ETCS. He mentioned that the UNIFE insisted on aligning the technical content and timeline. Thirdly, in terms of MoU between the JU and UIC, he indicated that a clear description of responsibilities should be provided, and the SP STG should be consulted on the text of MoU (what would be done in the SP, and what would be followed by UIC). Lastly, he asked for the Commission’s support to transitional activities in authorization.

UNIFE’s detailed comments are included as an annex to this minute, and were accepted by the SP-STG.

Caroline COUNE (AERRL) proposed two changes to the text which would be circulated in email.

Keir FITCH commented on the interventions. In terms of MNO, he underlined that the use of MNOs should be considered. He also referred to the discussion with the DG DEFIS and EUSPA on this issue. He also mentioned the possibility of using GOVSATCOM as an alternative (under discussion). The overarching objective was to have an independent system. In terms of timeline, it was emphasized that not all work would be expected under the SP. He briefly discussed the DAC programme and the results of the CTO council in Switzerland.

Ian CONLON added that the objective of the document was to provide description of process, thus the document did not contain detailed planning.

Jean-Michel EVANGHELOU (UIC) supported the presentation and comments provided by the JU and the Commission. He also endorsed the document on behalf of the UIC. He agreed to share the text of the MoU with the SP STG.

➔ The text of MoU will be shared with the SP STG

Daniel LAPOUR (EUSPA) on behalf of EUSPA endorsed the approach and confirmed the alignment of the Agency. He also mentioned the new satellite constellation IRIS² for satellite communication.

Carlo BORGHINI summarized the decision to be taken. He underlined that at the moment the JU was considering how the SP could align with the work done in the FRMCS. He indicated an existing gap in the current FRMCS project, specifically in financial terms, and large-scale demonstration (under discussion with the JU Members). To take a decision regarding its engagement, the JU, EC, ERA and the sector should know the content of the V2 specs and have a clear picture of the FRMCS activities. The idea was not to take over the FRMCS specification work but to ensure that the work done in the FRMCS project was fully aligned and integrated in the JU activities, if relevant and necessary.

The SP STG discussed the changes to the text which were updated simultaneously during the meeting.

➔ The final text on the decision was agreed at the meeting.

5. Approach on advance train positioning/EGNOS

Ian CONLON discussed the topic in terms of context and proposed approach (for details, please refer to the presentation). It was proposed that the T2 architectural and on-board domain would provide an analysis of different approaches regarding advance train positioning and EGNOS, subject to consultation with ERA and EUSPA. The analysis would be a base for a proposal for the on-board architecture based on a consideration of the overall localization strategy.
Klaus MINDEL (UNIFE) appreciated the approach which was based on the work already done. He suggested to focus not only on the technical aspects but also to take under consideration the implementational aspects.

Enno WIEBE (CER) comment on the benefits of cooperation between the SP and EUSPA. He also referred to the work in FP2 and FP6 in this respect.

Carlo BORGHINI informed about the meeting between the JU, ERA, and EUSPA to be organised on 27 February 2023 to discuss and clarify the role of each body.

- The note will be circulated after the meeting for agreement by written procedure
- The SP STG is asked to send the comments to the note in March 2023

6. Finalised task and domain deliverables and milestones

Ian CONLON briefly overviewed the current state and planning for each task (for details, please refer to the presentation). He informed about the finalization of task and domain remits, approved by the Executive Director. He mentioned the resource shift between tasks and discussed the roadmap.

7. Standardization and TSI input plan

The SP STG was informed about the planning for the standardization and TSI input plan (for details, please refer to the presentation), which would provide a harmonized approach of the JU to the TSI process, including the inputs of the IP.

Sönke KRFAT informed the Group that the (unfilled) template and an explanatory document were designed and would be circulated to the SP STG for comments

- The documents will be sent to the SP STG in the coming days. The SP STG will have a month to provide the comments.

On behalf of the ERA, Josef DOPPELBAUER delivered a short presentation concerning the coordination between the EU-Rail research activities and ERA. He discussed the short-term, medium-term, and long-term objectives of the Agency. He also referred to the research needs of the Agency.

Francis PARMENIER pointed to the CCS subset and the link between the SP work in this respect and TSI documents. Keir FITCH clarified that the CCS subset would be incorporated as technical documents in TSI.

Enno WIEBE commented on the paper from ERA. He indicated that the document was a good starting point in terms of change request. He also asked about the cancelled workshop on TSI to be organised by the ERA and suggested to convene the meeting on other date. He indicated that discussion on experience would be critical to evaluate the process. Josef DOPPELBAUER confirmed that the meeting was not cancelled but postponed.

Bardo SCHETTINI also endorsed the document provided by the ERA. He discussed the importance of a clear definition of the “maturity criteria” of the SP deliverables, so that to ensure a smooth handing over from the SP to ERA.

Nicolas FURIO asked about standardization process and its scope (i.e., ISO standards, CEN/CENELEC). He also asked who would be responsible for the economic assessment (whether it would stay in the SP).
In terms of the economic assessment, Keir FITCH underlined that the Commission would further discuss this issue with the ERA and JU. Ian CONLON added that the economic assessment could be done also outside the SP.

Ian CONLON explained that the JU would circulate the document with description of work organised between the JU and the ERA and standardization bodies as well as the unfilled template for collecting inputs. In parallel, the work would start on filling the template. The SP STG would be given enough time to assess the document and later on the filled template to make comments on it.

Miroslav HALTUF (SRG) underlined the necessity of continuation of work not only on multimodal but also on intelligent transport system and urban mobility with focus on the European single data space. He indicated that the European operational rules were important for developing European technologies, for instance, the DAC. He also referred to necessity of elimination of the national specifics.

➔ **The document will be circulated after the meeting for comments**

8. **Energy**

Sönke KRAFT discussed the item. He provided the SP STG with the context, goal, and proposed approach (*for details, please refer to the presentation*).

Nicolas FURIO added that a request for services was sent to the SP consortium. He informed about the meeting with the UIC to discuss the detailed response. Jean-Michel EVANGHELOU confirmed that the offer would be delivered as soon as possible.

9. **TAF/TAP Advisory Group**

Enno WIEBE commented on possible interactions between the SP (Task 3) and TAP/TAF Advisory Group. He informed about the meetings of the group and proposed that Ian CONLON from JU would participate in the coming meetings.

➔ **The JU will organise internally and attend the meetings of TAP/TAF advisory group**

10. **AoB**

Upon request from Enno WIEBE, the SP STG discussed the work of the SP in the last 6 months.

Ian CONLON confirmed that in the last months the SP fulfilled the expectations in terms of conclusion of contracts, setting-up the activities, and execution of first tasks. He mentioned that the domains shall be agreed by October 2023 (the process would be launched in summer 2023). He also mentioned that by this time, no gap in service provision was detected. He also briefly discussed the next cycle of activities.

Carlo BORGHINI added that the alignments between the IP and SP were more visible and that was a good sign that the system was working together. He highlighted the importance of systematic review of such interactions. He also mentioned that the concrete artefacts would be critical to assess the work of the SP, as the SP shall come up with concrete products and solutions. He also mentioned that one of the visible results of the SP work by now was the alignment of the sector and willingness to cooperate.
The sector members of the SP STG thanked Carlo BORGHINI for this engagement and work for the System Pillar, and in general, the Europe’s Rail programme. They wished him best luck with the future endeavours.
**Annex: UNIFE position on the V2 specifications**

System Pillar Steering Group – Meeting on Wednesday 15th February afternoon

➔ **DECISION OF THE SYSTEM PILLAR STEERING GROUP** adopting the approach for the FRMCS V2 specifications N° 1/2023

**UNIFE’s position:**

UNIFE would like to thank the JU for having prepared and circulated the note on the approach for the FRMCS V2 specifications. The development of FRMCS is a priority for the European Rail Supply Industry and it is important to clarify the role and responsibilities of the various stakeholders including the Europe’s Rail Joint Undertaking.

After having reviewed this document, **UNIFE can endorse it with the following comments:**

1) It is disappointed that no planning for the delivery of the V2 and later V3 FRMCS specifications is included in the document. At least a draft could be proposed. It is of paramount importance to propose a realistic planning for the delivery of the V2 and V3 FRMCS specifications and to get it endorsed by the rail sector including the European Rail supply industry. Such a planning will also be useful for the preparation and implementation of potential FRMCS activities in the Joint Undertaking (both System and Innovation Pillars).

2) It is underlined in the note that “there is a need, for the right technical alignment of the FRMCS specifications for instance with ETCS and ATO, and the contribution to the EECT process, and that System Pillar resource will be considered as a means to support this (within available budget constraints)”. UNIFE would like to highlight that the alignment is also needed in terms of timeline. The Task 2 of the System Pillar and the FRMCS programme will run in parallel but will have to align especially regarding ATO and ETCS. Therefore it is expected that the alignment and interaction management process is managed by the task 2 of the System Pillar.

3) An amendment to the MoU between ERJU and UIC regarding the management of FRMCS specifications is under construction. It is of utmost importance, that this MoU is fully aligned with the Europe’s Rail decision proposal “DECISION OF THE SYSTEM PILLAR STEERING GROUP adopting the approach for the FRMCS V2 specifications”, in particular regarding the obligations and responsibilities of all concerned parties. UNIFE therefore expects the System Pillar Steering Group to be consulted before the MoU is signed. Depending on the content of the MoU, it might be necessary to amend the Europe’s Rail decision. This step shall be explicitly considered by the Europe’s Rail System Pillar Steering Group.

4) Regarding standardization and the role of ETSI in the delivery of ETSI FRMCS standards, UNIFE calls the European Commission to reinforce its support to ETSI by providing appropriate financial resources which are needed for the rail standardization activities within ETSI.