

System Pillar Steering Group Meeting 12

Meeting 13 March 2025

09h30 – 12h30 Minutes of the Meeting

Welcome from the Chair and Adoption of the Agenda – Approval of the 12th Meeting's Minutes

Joachim LUECKING (DG MOVE) welcomed the participants to the 12th System Pillar (SP) Steering Group (STG) meeting and briefly introduced himself.

The agenda was then agreed by the members after he asked to the participants if they have any other business point to add to it.

2. Approval of Meeting 11 Minute

The minutes of the 11th meeting of the SP Steering Group (STG) were adopted without further comments.

3. Update

Joachim LUECKING (DG MOVE) provided updates regarding the multiannual financial framework (MFF). He mentioned that a public consultation is ongoing in relation to the first sort of high-level paper that has been issued by the EC. He also invited the industry to make use of the public consultation, including on the question of the usefulness of continuing the activities of Europe's Rail and underlined the need for having a dedicated partnership for research in rail sector for the future. He also highlighted that the Commissioner Mr Tzitzikostas has already announced publicly that they are working intensely on the high-speed Master Plan, a document which should be adopted before the summer. They are also planning to start a public consultation soon to seek the input of all parties involved as well as the industry. Joachim LUECKING handed over to Giorgio TRAVAINI.

Giorgio TRAVAINI (Europe's Rail) welcomed the members and provided updates. First update was concerning the enlargement of the membership. He reminded that Europe's Rail has launched since June last year a call for expression of interest and the following week a notification will be sent to the applicants. A negotiation phase will follow with the selected new members of Europe's Rail. The second update was about the upcoming publication on the website of a draft high-level paper detailing the future of Europe's Rail Joint Undertaking and invited the members to use it and communicate it in the sector.

Bardo SCHETTINI GHERARDINI (EIM) asked about the level of maturity of this document since it is a draft version, so the members can communicate something which will not have many modifications afterwards.

Giorgio TRAVAINI (Europe's Rail) explained that the draft document can be shared, since it has already been discussed in the Governing Board.

Miroslav HALTUF (SRG) asked Giorgio TRAVAINI if the draft document will be approved in the next Governing Board and if SRG can receive it in advance for making comments, before its submission to the Governing Board.

Giorgio TRAVAINI (Europe's Rail) confirmed that the document has already been discussed with the SRG but it will be revised and improved based on its comments, which will be included on the agenda of SRG meeting in May.

Carole COUNE (AERRL) questioned Giorgio TRAVAINI's comment of 'one speaking voice sector' and asked why this is so important taking into consideration the current reality of a very diverse sector.

Giorgio TRAVAINI (Europe's Rail) answered that since many different sectors are asking support from the EU, it is advisable and recommended that the rail sector, represented by a partnership should speak in one voice in front of the decision maker so that it better promotes its own interest.

Joachim LUECKING (DG MOVE) agreed with Giorgio TRAVAINI's answer and he expressed his understanding that the sector is united especially on the need for a dedicated instrument for research into rail. He then suggested to move on with discussing the first item for decision, which was decision 2025-01 on Trackside Asset Control Systems and invited Malik BENAUMER from TACS to present.

ITEMS FOR DECISION OF THE SYSTEM PILLAR STEERING GROUP

4. TRACKSIDE ASSET CONTROL SYSTEM

Malik BENAUMER (TACS) introduced himself and excused Mirko BLAZIC who cannot join the meeting. He introduced to the Steering Group the two studies for decision. The first one concerned an analysis of standardisation potential for interfaces in the devices and the goal was to assess potential for further standardisation or harmonisation to improve interoperability and reduce costs. He mentioned that the diverse installed base of trackside field devices, shaped by historical developments, complicates efforts to achieve harmonisation. He emphasised that the point machine interface (light signals, train detection systems, level crossing, as well as generic input-output) was identified as having the strongest case for standardisation, but existing national quasi-standards and migration concerns make harmonisation economically and operationally impractical. He also added that the train detection system interfaces are supplier-specific, with technologies varying significantly. He concluded the first study mentioning that harmonising these interfaces could have a negative impact on innovation and is therefore not recommended.

Then, he presented the second study, which concerned power management and power supply which aimed to assess standardisation of potential of power supply interfaces as well as power management to reduce energy consumption. He mentioned that power management strategies, such as sleep and hibernate modes, offer potential energy savings but face operational challenges. Moreover, sleep mode has limited impact on power consumption, and hibernate mode poses risks to reliability, operational feasibility and also risks of missing critical system failures.

He eventually concluded mentioning that given the inconclusive benefits of standardisation and the absence of strong stakeholder demand, the proposal is for the Steering Group to not pursue any economic analysis for these topics and to close these studies. Future discussions could be considered if there is a sector-wide shift in interest or conditions.

Joachim LUECKING (DG MOVE) thanked Malik BENAUMER for his presentation and asked to the Members if they have any comments or an objection.

Bardo SCHETTINI GHERARDINI (EIM) thanked Malik BENAUMER and his team for the work they have done. He expressed his supports to these decisions and emphasised that if there is no real market demand to standardise, he agrees to save time and not continue working on these studies.

Klaus MINDEL (UNIFE) thanked Malik BENAUMER and expressed his support on the decision proposal on behalf of UNIFE.

Joachim LUECKING (DG MOVE) asked the members if there are any further objections, and since there were not, he <u>concluded that the decision was adopted</u>. He then suggested to move on the agenda item five regarding Decision 2025-02 on Traffic CS and invited Roman TREYDEL from EUG to present.

5. TRAFFIC CS

Roman TREYDEL (EUG) presented the system concept for Traffic CS and the activities that have been followed the STG meeting in December. He emphasised that this decision is to agree on a general direction forward for Traffic CS, as it is written in the system concept, and that is being used as the basis for all the work in writing specifications, in doing safety and migration analysis. He mentioned that the Traffic CS System Concept is designed to modernise railway Traffic management by introducing a modular architecture based on three key subsystems, ATO Trackside, Plan Execution System, and European Trackside Protection System. He noted that the specifications for Traffic CS are intentionally written in a solution-neutral manner. This approach ensures that the system can accommodate various implementation methods, fostering innovation and avoiding overly prescriptive requirements. He added that integration with existing railway systems is a critical aspect of Traffic CS as the system is designed to connect horizontally with legacy signaling systems, such as Class B and ATCS installations, while also ensuring compatibility with Traffic Management Systems.

He also referred to migration toward the Traffic CS architecture as the system concept which includes strategies for transitioning from current systems to the new architecture. He emphasised that regular progress updates to the Steering Group are important before any publication of a finalised Traffic CS specification. Moreover, he highlighted that the Deliverables of Traffic CS will be published as System Pillar documents which are not intended to be mandatory.

Roman TREYDEL (EUG) presented the Architecture from Traffic CS System Concept and referred to the document called Major Design Decisions which provides more background on key aspects behind System Concept from Traffic CS. The decisions were related with the topics of system architecture, authorisation and supervision of train movements, reduction of safety functionality, safe train extent based on sensor fusion and management of configuration data (*for further details, please refer to the slides*). Mr Treydel also provided a detailed explanation of what is the system pillar work and what can be done in the implementation.

He also summarised the decision process for the Traffic CS system concept. He emphasised on the main two conclusions of the sector workshops, attended by sector-bodied representatives and experts from different railways and suppliers, which were taken into consideration on the updated System Concept:

- Specification of integrated safety system ETPS allows different implementations forms
- Common view on specification level

Roman TREYDEL handed over to Ian CONLON (Europe's Rail) to provide further explanation to the updated version of the System Concept.

lan CONLON (Europe's Rail) gave an overview of the changes on the decision document that was circulated the previous days. The last version sent to the Steering group, included some comments received from DG MOVE, CER and EIM and the updated version was presented. The first point was related to the necessity of harmonisation for cost effective systems. He emphasised that the purpose of this work is to put in place a European approach and product for the Traffic Control System, which is leaner, more simplified, modular, and in the end more cost effective. He also explained the situation that is seen now across Europe which is not sustainable, neither in terms of cost nor future

development. He also emphasised that harmonisation, even though it doesn't solve everything is a necessary condition for the future evolution and successful implementation of CCS.

The second point was related to the removal of the highlighted companies within the approval and disapproval in the domain, which was accepted by the relevant representative associations.

The third point was related to adding an extra sentence which is linked to the wording in the CEN-CENELEC standard for the final specifications to be complete, precise, unambiguous, verifiable, testable, and maintainable.

The fourth point was related with a comment received from EIM, which is about the linking in of the specifications into the wider railway system. Ian CONLON confirmed that this point has been accepted and incorporated.

The last point was related to a comment received from DG MOVE, which highlights that the Traffic CS deliverables are intended to be published as System Pillar documents. He clarified that the initiation of a request to a change of the TSI is a Commission competence and the decision should be taken by the Risk Committee.

Ian CONLON concluded that this is an important step in having a cost-effective implementation of ETCS level 2 operations. He mentioned that this is highlighted in the decision in concert with the development of a harmonised operational rulebook and it's the first time that a complete European solution for the whole CCS system for ETCS level 2 is suggested.

Joachim LUECKING (DG MOVE) thanked Roman TREYDEL and Ian CONLON for their presentation and asked if there are any comments or questions from the Group.

Carole COUNE (AERRL) expressed concerns about any decision that could make ATO compulsory or unavoidable. She suggested that in the document should be an extra point related to the cost-benefit analysis which shall inform the design decisions of the Traffic CS approach. Specifically, she proposed that the sentence will be completed by adding that the CBA will cover the onboard part and will include the lessors if possible.

Miroslav HALTUF (SRG) asked clarification about the Traffic CS wording used and what is the difference between traffic and operation. He requested that this document will be accompanied with a glossary defining all the necessary wording. Furthermore, he asked clarifications about which is the future impact that is expected to the TSIs, if it's TSI OPE, CCS, or other TSIs, and in which area.

Bardo SCHETTINI GHERARDINI (EIM) mentioned that this draft decision is a result of an intense work that has been done. He expressed support on those decisions and highlighted those aspects such as migration considerations, business continuity and cybersecurity need to be discussed further in the future.

Aude CHAILLEY (CER), agreed with Bardo SCHETTINI GHERARDINI on how intensive the work for this draft decision was. She highlighted also that regarding the last modification that it's important for CER that the result is a System Pillar document and is not intended to be in the TSI as it's not the same level of maturity that has to be reached to be in the regulations. She lastly approved the decision on behalf of CER.

Klaus MINDEL (UNIFE) underlined that the agreement about the top-level Traffic Management System and CCS architecture, is an important next step to design the CCS Trackside Architecture. Also, he mentioned that as suppliers are convinced that the Traffic CCS System Concept document is appropriate to define the direction for the following specification activities. He emphasised that UNIFE fully approves the decision proposal. He also suggested that some further comments such as the Traffic CCS System Concept should be implemented on the entire European railway network. Moreover, he highlighted that UNIFE underlines the importance of the harmonisation of operation to reduce complexity and cost and that the migration approach included and introduced in the System Concept document is well-founded. However, he commented that during the refinement of the

migration approach, the technical feasibility and economic viability of the implementation should be reconsidered.

Ian CONLON (Europe's Rail) replied to Miroslav HALTUF that the intention is for the Traffic CS outputs to be published as System Pillar documents, which corresponds to a voluntary standard. He also stated that both in the System Concept itself, but within the associated documents, there are necessary glossary and link to the overall vocabulary. Furthermore, he clarified that there is joint work of the Operational Domain and the Traffic CS Domain in development of the overall system. Ian CONLON commented also on Carole COUNE concerns regarding the CBA. He emphasised that the document focuses on the Traffic CS and there is a consideration in terms of compatibility with the onboard. He would avoid introducing into the decision that there is some kind of dependency on the completion of an onboard CBA before continuing and that the considerations for the evolution of the onboard are part of the Train CS work. He also mentioned that the considerations for the overall business case for the migration to ETCS are outside of the scope of the System Pillar. He also invited Roman TREYDEL and Udo GOLEBNIAK to comment on this issue as well.

Roman TREYDEL (EUG) agreed on Ian's CONLON input. He also summarised that there is a proposal of a harmonised ETCS L2 implementation. He highlighted that ATO in the architecture is optional and the implementation of the Traffic CS can happen without ATO in principle.

Ian CONLON (Europe's Rail) reassured that he understands AERRL concerns, and he will add an additional sentence that ATO is optional. Carole COUNE (AERRL) agreed on this addition.

Wawrzyniec PERSCHKE (DG MOVE) also commented in regards with ATO that it is optional for infrastructure managers. He added that the infrastructure manager can expect to mandate the railway undertakings to be equipped with ATO after a period of five years, as there is a transition period. He also argued that they should simply refer to the Control Command and Signaling TSI and it cannot be mandated on the whole network, but it can be mandated on individual lines as reflected in the RINF database by the infrastructure managers with the necessary head time to inform and to allow planning. Finally, he highlighted that they should be able to see if it's reflected in the national implementation plans of CCS TSI, which should give a perspective longer than five years.

Udo GOLEBNIAK (TRAFFIC CS) added that the design work and the System Concept has the strategy not to change any existing TSIs which will not be affected by the Traffic System design.

Ian CONLON (Europe's Rail) drafted on the decision document Ms COUNE comment regarding ATO system and its optional implementation. Carole COUNE asked that it should be added that the CBA will also cover the onboard part and include the lessors. Ian CONLON disagreed on including on the decision text this suggestion and having a mandatory link to an in parallel onboard CBA.

Roman TREYDEL (EUG) and Bardo SCHETTINI GHERARDINI (EIM) agreed with Ian CONLON

Carole COUNE (AERRL) disagreed and abstained mentioning that AERRL will not vote in favor of the point.

Joachim LUECKING (DG MOVE) noted that the <u>decision was adopted</u> by the group and that AERRL has abstained from this decision.

6. CYBERSECURITY

Markus WISCHY (SP Security Domain Cybersecurity Domain) presented the work that have been done so far in the cybersecurity domain. During his presentation he focused on the remit and milestones as they finalised the cybersecurity specifications and they are planning soon to publish and disseminate the documents to the sector. He asked the formal approval from the Steering Group for publishing the System Pillar Cybersecurity Specification which is consisting of the four main specifications and seven

supporting documents which were approved by all 18 members of the domain, the Mirror groups & SP Core Group. He also referred to the timeline of the System Pillar Cyber Security Specs, emphasizing the review and approval process. Markus WISCHY continued his presentation focusing on the four key Deliverables in this specification (Secure Component Specification, Secure Communication Specification, Shared Cybersecurity Services Specification and Security Program Requirements) and their interconnection (for further details, please refer to the slides). He emphasised the fact that ERA asked them to do the gap analysis for all eight TSIs that are security relevant and therefore, although they started with rail automation as the TSI as the main topic, they made the specs more generic to also be as a reference for certain aspects of security for the other TSIs. This was also the reason why they added HTTPS, in the secure communication spec.

Regarding the Cybersecurity Security Services Specifications, Mr Wischy highlighted the fact that Europe standardised cybersecurity services installation so the industry can build products that are fitting to different markets (so to make the products simpler and cost effective and for operators to source compatible products). Therefore, he stated that this drives the harmonisation in this quite new field in cyber security. Then, he continued his presentation with the **SP Cybersecurity-Supporting documents**, and specifically the Regulatory Requirement tracing, the Supporting documents required for CEN TS 50701 and IEC PT 63452 and the Product Documentation template, emphasising that their goal is to implement the legislative regulations from EU. Finally, he presented the outlook, mentioning that they are preparing the dissemination of this specification to public articles and training materials, and they are currently being prepared for rail security conferences, making tutorials and trainings. He also stated that they will also focus on the specification maintenance as they have received already some comments to investigate upcoming legislation because the Cyber Resilience Act is not finished yet. He also highlighted that there is an implantation act is which is coming up and a Harmonised Standard, which is not available yet, but a draft version will be available in May/June. He concluded his presentation mentioning that they started on February a Gap analysis for all ERA TSIs.

Joachim LUECKING (DG MOVE) thanked Markus WISCHY for his presentation and open the space to the Steering Group for questions.

Miroslav HALTUF (SRG) asked about the Regulatory Requirement Tracing to four EU regulations and whether should be considered as regulations or legal documents because NIS2 is not a regulation, is the directive with a different impact to the member states and it needs to be transposed to the national legal systems.

Markus WISCHY (SP Security Domain Cybersecurity Domain)) replied and confirmed that NIS2 is a directive.

Joachim LUECKING (DG MOVE) asked Bardo SCHETTINI GHERARDINI (EIM) if they are adopting the slides.

Bardo SCHETTINI GHERARDINI (EIM) replied that the directive is not adopted. However, he mentioned that they are supporting those documents, as they have already been reviewed. He also highlighted that CER, EIM and UNIFE, have a joint Working Group on cybersecurity which is working on the cyber resilience acts and implementation, and they could consider creating a link in the future activities.

Markus WISCHY (SP Security Domain Cybersecurity Domain) thanked Bardo SCHETTINI GHERARDINI for his notice and he confirmed that they are already in touch with the sector initiative. He also underlined that there is an overlap with these standardisation groups, including the sector initiative and that a need to coordinate all these groups to come to a common voice from the rail to the CRA exists.

Joachim LUECKING (DG MOVE) confirmed that there isn't any opposition to the proposed decision from the Steering Group.

Nicholas SHRIMPTON (UNIFE) supported the decision and mentioned that they will closely follow up on how these specifications go forward towards TSI reference in the context of the full cyber regulation framework.

Joachim LUECKING (DG MOVE) confirmed the <u>decision was adopted</u>. He mentioned that they should publish a system for documents on the ERA website, the **ERA System Pillar Cybersecurity specification V1.0**. He also highlighted the need to publish an update, once the training material is complete in the ERA GitHub GitLab for additional information. The agenda item has been closed.

ITEMS FOR DISCUSSION OF THE SYSTEM PILLAR STEERING GROUP

7. FRMCS – update of System Pillar report

Joachim LUECKING (DG MOVE) welcomed back the participants after a short break. He introduced the next item for discussion which is related to the FRMCS update of the System Pillar report. He handed over to Wawrzyniec PERSCHKE (DG MOVE) for introducing the topic.

Wawrzyniec PERSCHKE (DG MOVE) started his presentation by reminding that the issue is complex since the ERA technical opinion confirms that initial time planning and scope described on the System Pillar FRMCS report is not any more valid and a revision of the timing and the scope of development of the FRMCS specifications are needed. His proposal was to update the System Pillar FRMCS report, based on a common effort of the entire sector to come to a consensus view on how to proceed. He also informed the Steering Group that the draft of the updated report, which includes a summary, a vision of the context and an indication of the revised scope of FRMCS specifications as a proposal, has been drafted by DG MOVE, ERA and EU RAIL and will be soon available. Furthermore, he expressed his concerns regarding the estimated timeline based on past performance which will lead to a late TSI approval. Consequently, he presented the accompanied risks and asked the Group to provide additional risks that they might foresee as well as mitigation measures.

Finally, Mr PERSCKE presented next steps regarding scope and timeline (for further details, please refer to the slides). He concluded his presentation by comparing the past timeline vs the new estimates. UIC haddelivered a draft of FRMCS V2 according to the timeline set, as this was less mature than originally planned despite the reduced scope, the delivery date of all the other items have been delayed. Regarding the future governance based on ERA recommendations, he suggested a more detailed timeline of delivery of V3 specifications with a more direct involvement of the industry on drafting these specifications. Then he briefly explained the risks (for further details, please refer to the slides) and he proposed to discuss next steps based on the revised version of the FRMCS report.

He concluded by requesting to the Steering Group their input on the draft version of the report by the **14th of April** to be able to validate the report by mid-May during and ad-hoc meeting. Then, he opened the floor for comments and discussion on the topics of timeline, scope and governance.

Joachim LUECKING (DG MOVE) thanked Wawrzyniec PERSCHKE for his presentation and opened the floor for questions and comments.

Francois DAVENNE (UIC) agreed with the radio scope proposal. He confirmed that within ERIG, the sector is fully represented for the development of specification with ERA.

Bardo SCHETTINI GHERARDINI (EIM) stated that he was not able to provide specific feedback on the scope. He explained that an internal assessment is needed to determine which functionalities to maintain or not.

Enno WIEBE (UNIFE) emphasised the need of a focus on GSM-R replacement as outlined in the position paper. He confirmed that for UNIFE, the focus is on functional equivalency to GSM-R, particularly regarding ETCS, ATO, and essential voice functions. He agrees to follow the suggested timeline.

Miroslav HALTUF (SRG) expressed full support for the topic. He proposed that Member States consider national studies on implementation and migration from GSM-R to FRMCS. He referred to the study conducted in the Czech Republic available to the European Commission, ERA and the System Pillar Group. He mentioned that the study includes reflections from the sector in the Czech Republic, including the ministries and the telecommunication authority regarding FRMCS and the migration process. He concluded by stating their effort to be more interoperable in the entire European scope.

Aude CHAILLEY (CER) stated that it is difficult to have a precise position on the scope at this meeting. She emphasised that FRMCS is still a priority for operators and the need for a strong planning and schedule exists. Lastly, she confirmed that they will provide feedback on the requested deadline.

Carole COUNE (AERRL) confirmed that FRMCS is a priority, as long as it is compatible with the existing ETCS. She also asked if the compatibility with existing ETCS can be included in the future specifications.

Wawrzyniec PERSCHKE (DG MOVE) replied that although the question has been in discussion for more than two years, efforts continue to find a solution to make the migration to an ETCS, which is compatible with FRMCS, at the lowest possible cost. He explained that due to technical differences, immediately compatibility is not possible, but the goal is to find a more affordable and interoperable solution without major risks. He expressed hope to provide concrete information by summertime. He emphasised the focus on efficiency and cost of ETCS and that the FRMCS specifications are being covered and the compatibility challenge lies withing the ETCS specifications. He concluded that this work should proceed in parallel, without making FRMCS depend on ETCS, to avoid derailing FRMCS progress.

Francois DAVENNE (UIC) commented on the radio scope, emphasizing that it must be future proof. He mentioned that FRMCS is a 5G system, and while focusing on key functionality, it must remain upgradable. He underlined that the radio scope must be easily upgradable to all the functionalities including TCMS, video, and other features.

Carole COUNE (AERRL) requested some clarifications on how the procedure will be, whether a draft exists and who is responsible for writing it.

Joachim LUECKING (DG MOVE) confirmed that a draft has been prepared by Wawrzyniec PERSCHKE together with ERA and Europe's Rail. He added that the current meeting will be used to update the draft based on the discussion. He added that the updated draft will be circulated, and comments will be requested by the **14th of April** and in the **mid-May** an **ad-hoc meeting** will be organised to approve this report. He also opened the floor for any further questions regarding the estimated timeline.

Nicholas SHRIMPTON (UNIFE) stated that the information shared is clear, confirming that Morane 2 field testing is planned. He highlighted the importance of having a clear timeline including a key date for the recommendation to the Commission, originally set for December 2026. He noted that if this is pushed to October 2028, it will significantly impact the scope that can be included in the timeframe. He emphasised the importance of knowing the final target date to work backwards. He also suggested discussing the implications of the 2026 and 2028 recommendations, and whether they should be shifted or combined. He questioned the relevance of having a separate October 2028 recommendation for FRMCS and a December 2028 recommendation for other topics, including CCS. He highlighted the need to understand how these dates integrate for the 2029 TSI and stated that combining them efficiently will be essential.

Bardo SCHETTINI GHERARDINI (EIM) agreed that a timeline adaptation is necessary, emphasizing the need for strong governance. He recalled the discussion from the last high-level Deployment Group Meeting and stated that shortening the timeline should be a priority.

Sverre KJENNE (EUG) highlighted his recent operational responsibility for providing radio services for the railway in Norway. He supported Bardo SCHETTINI GHERARDINI's statement, emphasizing that the situation is critical. He referred to Norway and neighboring countries, stating that product end of

life is set for 2028, with only best-effort support from suppliers until 2033, and no guarantees beyond that. He clarified that the issue lies with the sector, not suppliers. He stressed the urgency of the situation and the need to shorten the timeline. He warned against excessive discussion on functionality and pointed out the substantial financial burden on countries to extend product life. He underlined that quality of operation cannot be guaranteed beyond the end of life.

Francois DAVENNE (UIC) mentioned that UIC has been delivering the specification and began by addressing the timeline. He explained that the current delay of 12 months is due to the delay in Morane 2, where testing was expected mid-2024 but the pre-selection concluded in July 2024 and the contract was signed in December 2024, causing an eight-month delay not attributable to UIC; He addressed comments on the quality of the V2 specification, stating such remarks are misplaced, as V2 was innovative and required building the specification from scratch. He acknowledged the EECT process took longer than anticipated but expressed confidence that the process for V3, being a tested version, would be faster. He confirmed that UIC proposed to the agency earlier this week an agile development approach to have V3 ready for testing with all open points settled by November 2026. He stated that commitment from all sector stakeholders is needed and confirmed the sector's commitment through the Morane 2 architecture and UIC group. He concluded by emphasizing the need for sector reflection on managing the transition from GSM-R to FRMCS.

Pio GUIDO (ERA) expressed appreciation for the cooperation with UIC and all sector stakeholders. He stated that the agency process, including the EECT, comes at the end of the complex specification development. He emphasised that their role is to find consensus among technical experts, which requires mature input. The reason for the longer than expected EECT process was because of the lower than expected maturity of the input. He noted that in addition to technical specifications, elements related to impact assessment, including migration aspects outlined in chapter seven of the TSI, must also be addressed. He stressed the need to devise sustainable migration strategies that consider the diversity across Europe, mentioning that while some countries have had GSM-R in operation for nearly 25 years, others are just now issuing contracts. He concluded by confirming that governance, as mentioned by Bardo SCHETTINI GHERARDINI, is the key.

Giorgio TRAVAINI (Europe's Rail) reminded the participants of the Morane 2 process, and he stated that the call deadline was extended from May to June at the sector's request, with the condition that the project could start upon submission, at the consortium's risk. He clarified that the Grant Agreement being signed in December is not the reason for the project not starting in June. He added that the consortium was informed of its selection in July and that the real reason for the delay was the technical specifications not being finalised with the technical opinion. He emphasised that the delay is not linked to the GA and he agreed on the urgency and supported revisiting the estimates. He also stressed the need for common agreement and sector commitment with resources.

Bardo SCHETTINI GHERARDINI (EIM) welcomed Francois DAVENNE statement that UIC permits delivery of FRMCS version 3 specification in November 2026 instead of October 2027 as estimated by the EC. He asked if this is a formal commitment. He requested a formal commitment to communicate to other relevant groups and stakeholders, including members. He emphasised also that if this ambition is maintained, the quality of version 3 will allow the agency to make its recommendation rapidly. He referred to past lessons and asked Francois DAVENNE to confirm whether this commitment is reliable and can be shared with members

Francois DAVENNE (UIC) confirmed that this is a firm commitment from UIC side, to deliver Version 3 by the end of 2026 which will be the final one and it should be treated as an operational document. He also stated the need to improve the operational reporting and to have consistency check throughout the delivery process. He also proposed to have a bimonthly dashboard including progress, risks to be shared with the UIC instances, including the Rail System Forum and the European Management Committee. He stressed the importance of shared understanding and validation by sector representatives. He underlined that dedicated resources and people are needed to manage

and validate this process. He concluded that with better reporting, dedicated resources, and collaboration, the 2026 deadline for V3 testing is achievable.

Miroslav HALTUF (SRG) highlighted that he recognises FRMCS as the number one priority not only due to technical aspects like developing and testing the specification but also because member states must now ensure and protect investments in upgraded lines according under the TEN-T revision process and new high-speed lines. He emphasised on the need for clarity on available technology at the project start to avoid increased cost later. He noted that many projects are planned as PPPs, which may face risks without available solutions.

Giorgio TRAVAINI (Europe's Rail) replied to Francois DAVENNE by mentioning that he acknowledged the key role in organising the next steps and appreciated the mention of better reporting and a risk register to track status. He proposed going further by sharing a clear Gantt Chart and project outlook to allow the sector to allocate additional resources if needed. He expressed concern about a shared understanding of what constitutes V3. He stated that version 2 is what will be tested in the Morane 2 project until July 2027, and that the testing results will validate and potentially modify V2, leading to the creation of V3 to be submitted to the Agency. He emphasised that if this process is done correctly and V3 includes all necessary elements, there should be no repeat of the March submission of V2 with many open points, which led to a one-year review by the agency. He concluded by questioning whether it is realistic to say V3 will be ready by the end of 2026, since it can only be finalised after testing results are available.

Francois DAVENNE (UIC) replied that there is a plan to close all open points, including those requiring testing and others that are more complex. He stated that with proper solidification of open points, V3 delivered by the end of 2026 will have those questions resolved as the testing will have been completed. He outlined that by the end of 2028, a final tested V3 will be available for ERA validation and entry into the TSI. He concluded by stating that this process will be further detailed in comments to the table, supported by improved reporting and upstream involvement of EECT, to ensure that V3 is fully tested and ready for implementation.

Joachim LUECKING (DG MOVE) suggested to stop at this point before drawing conclusions and proposed to give the floor to Wawrzyniec PERSCHKE for the final comments.

Wawrzyniec PERSCHKE (DG MOVE) thanked the participants for the discussion, and he emphasised the need to address the issue of governance and mentioned that resolving this will allow the timeline to be reviewed. He noted that if the necessary reassurances are in place and the process leads to qualitative improvement, the UIC proposal is a step in the right direction and should be included in the document. He also mentioned that the sector should work on migration. The Deployment Group of EU-RAIL was set up for this purpose. Lastly, he thanked UIC for its involvement and technical expertise and highlighted that the future governance development now lies with the sector.

Enno WIEBE (UNIFE) addressed the question of industry involvement, asking for clarification on whether the "industry" refers to the rail supply industry or the broader sector. He expressed willingness as UNIFE to contribute and make an extra effort recognizing the pressing need, particularly for the rail operating community. He noted that progress has already started on the past two years and mentioned that further details would be provided in a more elaborated document. He proposed a distinction between Functional Requirement Specifications and System Requirement Specifications. He supported UIC and ERA coordinating on functional specifications at the macro level, based on their existing agreement. He suggested that system specifications should involve new governance, coordinated by the agency, with the rail supply industry making a firm commitment to contribute. He referenced the ERA regulation, where the agency is defined as the ERTMS system authority and noted that radio-based communication includes FRMCS. He stated support for the agency as coordinator and EU-RAIL as the workbench. He concluded that under this new governance, the rail supply industry is committed to making an extra effort, in cooperation with UNITEL and UNIFE to move the process forward.

Joachim LUECKING (DG MOVE) concluded the discussion and summarised the main discussion points that there is agreement on the urgency of the topic and its priority status. He highlighted a shared assessment that a decision timeline leading to 2029 is not a good outcome and efforts should be made to accelerate it. He welcomed UIC's commitment to return with a more detailed proposal to potentially shorten the timeline. He identified that governance as the key point and indicated that the draft paper will call on the sector to return with a governance proposal. He clarified that no governance model will be proposed in the paper, and it is up to the sector to present a common view on how governance can be improved to deliver earlier and realistic deployment. He confirmed that current discussion will inform the draft report, which will be shared with the sector. Based on that, the sector is asked to reflect and provide feedback. He announced an ad-hoc meeting of the Group will be organised in mid-May and requested that a date be fixed soon. He closed the point, inviting any further remarks.

Francois DAVENNE (UIC) mentioned that he agrees with the conclusion. He added that he would like to have a more precise discussion with UNITEL regarding the points raised. He noted that UNITEL is already part of the overall process, particularly in Morane 2 and in defining the system specifications, including work with ETSI. He confirmed that UIC will provide a paper explaining how the pace will be accelerated.

Joachim LUECKING (DG MOVE) invited stakeholders to continue discussions and emphasised the importance of presenting a unified sector view rather than separate positions from different stakeholders. He encouraged efforts to seek common ground on the way forward. He then moved to agenda item 8 concerning the second phase of the contract and the strategic direction of the next contract, introducing the presentation by Ian.

8. Second phase of the contract/strategic direction of next contract

Ian CONLON (Europe's Rail) mentioned that the first point is informational regarding that the System Pillar Tasks and Domains run from October to October, structured in two contract phases. The current four-month review is underway and will confirm the second phase. He highlighted that work is progressing broadly with expected minor issues. He highlighted a key focus for the second phase: ensuring that the Operational and Traffic CS domains proceed as quickly as possible, especially considering the recent decision. He mentioned delays in the factory belt process, which produces the specifications, and stated this will be addressed with the consortium. He then continued with the strategic direction for the next Lot 2 contract. Though the contract runs October to October, scope definition begins around May-June. He recalled a previous request for Steering Group input on strategic direction. He requested comments and input on prioritisation within the current structure by the end of March, noting the tight deadline but possibility of slight extension if needed. He added that the next System Pillar Steering Group meeting could also include formal discussion, though much work would already be underway. He concluded by highlighting that prioritisation must be based on the existing structure and Deliverables, and due to a reduced budget, the scope for adding new priorities is limited. He concluded mentioning that focus should be given on where to keep effort, as some current elements will need to be reduced.

Aude CHAILLEY (CER) addressed the second part of this year's contracts, emphasising that for the OD domain, it is not only about technical specification work but also the significant operational impact. She highlighted the need for advisors and sector review before finalising results. Then she continued referring to the strategic direction of the Lot 2 and confirmed that comments will be provided before the end of March. She proposed including in the next contract an improved interface between the System Pillar no idea Domains and the Innovation Pillar, as well as with receiving agencies and standardisation channels, to allow early visibility on necessary modifications. She requested openness to newly arising short-term benefits where relevant, suggesting a focus on shorter term, necessary steps for the sector.

Ian CONLON (Europe's Rail) acknowledged the input and explained that the short deadline for comments is to allow sufficient time to write the contract and then consult the sector as previously requested. He also mentioned the short-term Deliverable point, confirming he understands the interest. However, using the Traffic CS work as an example, the focus on migration has been agreed. He noted that to frame any additional work effectively, it would be helpful to receive concrete requests specifying what additional elements of analysis are needed beyond what is already planned. He requested detailed input (even after the 28th of March) that will be part of the ongoing discussion before the contract is produced. He stressed that precise and targeted input.

Michel RUESEN (EUG) presumed that if a Steering Group meeting is planned for mid-May, there will be substantial information by then on the request for service as a kind of a draft. He highlighted that this would help address concerns about having enough time to respond.

Ian CONLON (Europe's Rail) mentioned that if the Steering Group agrees to extend the extraordinary meeting into a regular meeting, then that would be acceptable. He supported the idea of covering both FRMCS and the new contract.

Joachim LUECKING (DG MOVE) noted that the meeting is nearing the end of the allocated time, and that one AOV point remains. He asked Ian how he would prefer to deal with the agenda points nine and ten—whether to postpone them or provide short information.

9. STIP

10. ASTP

Ian CONLON (Europe's Rail) presented briefly the STIP and ASTP topics. He stated that regarding the Standardisation and TSI input plan the first version was published last year and integrated in the Commission's request to the agency on TSIs revision. A revised version is now being prepared with input from the entire Joint Undertaking, aiming to provide updated information to the Commission before the June RISC committee. He informed that the first round of assessment is ongoing and that the updated draft will be circulated in mid-April for comments ahead of finalisation at the June System Pillar Steering Group. The revised draft as a result of input provided by the Innovation and System Pillar will be sent around mid-April for feedback.

He continued referring to ASTP and specifically to the basic ASTP, which is about the enhanced odometry in terms of the systems and stated that a questionnaire will be submitted to the overall sector. He mentioned that he counts on representative associations and their members to provide responses for the future TSI revision. The questionnaire will assess the potential for improving the $\pm 5\%$ performance requirement of odometry in the TSI. He emphasised that this is a key area of ETCS performance and improving it could significantly enhance the system.

Aude CHAILLEY (CER) expressed her alignment with the proposed way forward on ASTP and thanked for the presentation. However, she raised a concern about how consensus has been reached. She reminded that System Pillar Domains operate on a consensus basis and emphasised that governance and implementation must support progress through sufficient lead time for comments and balanced proposals. She reaffirmed that decisions presented in the System Pillar Steering Group transparently reflect the state of discussions and display a holistic view of the topics. Lastly, she expressed confidence that the sector remains collectively committed to achieving an optimal level of modularity, as supported by the two-step approach of ASTP.

Ian CONLON (Europe's Rail) thanked Aude CHAILLEY for the comment and referred to the second slide on ASTP, explaining that the original planning in the standardization and TSI input Plan (STIP) and the

agency's TSI request included two steps - basic and advanced ASTP, -with a proposal to define a triple FIS specification between the EVC and odometry function. He informed the Steering Group that the status of this element is currently uncertain. A different approach may be proposed, which could affect what included in the TSI in the end. He emphasised the need for a full consideration within the Train CS domain.

Klaus MINDEL (UNIFE) introduced the point that the System Pillar is operating for around three years as a joint platform to develop harmonised specifications, operational technical standards for the future of railways and stated that the railway supply industry highly values this effort. However, he highlighted the existence of parallel projects running outside the System Pillar, which may produce specifications or requirements potentially conflicting with those developed jointly. He suggested that the System Pillar Steering Group should briefly discuss and confirm the System Pillar as the agreed joint platform for specification development in the sector. He referred to the OCORA project as an example for avoiding conflicts on parallel efforts.

Bardo SCHETTINI GHERARDINI (EIM) expressed agreement with the statement, emphasising that it is a matter of governance. He underlined the importance of optimizing resources and avoiding duplication or potential conflicts in specifications. He confirmed support for reaffirming the role of the Joint Undertaking and the System Pillar in defining technical specifications.

Matthias Moritz (System Pillar Core Group) brought also OCORA at the attention of the Steering Group as a relevant example. He explained that OCORA aims to convert specifications developed for migration target one into tender specifications and requirements and has invited industry input on this. He described OCORA as a spin-off rather than a parallel effort, noting that such procurement-level discussions are not addressed in the STIP. Mr Moritz also added that tender documentation is needed to procure what is defined in the System Pillar, and that this brings mutual benefit. He clarified that the goal is not to develop conflicting or parallel specifications, but to elevate the work to a level that enables implementation.

Ian CONLON (Europe's Rail) summarised the discussion by stating that the request from the supplier side is clear. He proposed that a statement can be made on the OCORA side along with a plan of action on the Train CS side to clarify the relationship. He concluded that this is a reasonable request and confirmed it will be followed up on.

Joachim LUECKING (DG MOVE) closed the meeting by thanking participants for their presence and the interesting discussion. He noted that certain decisions were taken and confirmed that there will be follow-up actions, regarding the preparation of the ad hoc meeting. He concluded by expressing that he looks forward to seeing everyone again in May.