



Thirteenth meeting of the Shift2Rail States Representatives Group

25 September 2020

Remote connection

Minutes

09:30- 09:45	1. Introduction - Roundtable
	<p>The meeting was chaired by Mr Haltuf, Vice-Chairperson of the SRG, in the Chairperson's absence. The Vice-Chairperson welcomed the participants and did a brief tour de table. The ERA observer also attended the meeting. A list of participants is attached.</p> <p>The DG MOVE representative indicated that the Commission proposal had passed the Regulatory Scrutiny Board in June. The impact assessment of the proposal will be submitted with some changes but keeping the concept of an institutionalized partnership. He emphasized the current intensive exchanges on the progress of the legislative proposal for the future partnerships under Horizon Europe, which is to be a single basic act for all institutionalized partnerships, with specific sections for each partnership. The European Commission will put forward the proposal for adoption by the Council - after consultation of the European Parliament and the Economic and Social Committee. This will take the form of a common Regulation establishing all the Joint Undertakings foreseen under Horizon Europe. The inter-service consultation of the Commission is foreseen to be launched early October. It is expected the Member States will receive the Commission Regulation proposal in view of the Competitiveness Council on 27 November. After negotiations, the Regulation should be adopted just after the summer 2021, with a start of activities foreseen in September 2021.</p> <p>The DG MOVE representative underlined that the Commission has published a letter for expression of interest addressed to private and public entities that are interested in becoming</p>

a founding member in this European Partnership (the Invitation to manifest the interest to become candidate founding member of the Transforming Europe's Rail System European Partnership). The interested entities are requested to manifest their interest before 1 October 2020. The proposed Rail European Partnership aims to bring together a wide range of actors in the rail system, from across the rail supply industry and operational sectors in order to develop a "system of systems" approach. The future Partnership aims at transforming rail's system architecture, increasing emphasis on freight and digitalisation and enhancing focus on deployment of innovative solutions. For that purpose, it needs to involve key partners and their co-investment to deliver such a programme, including testing results at different levels before bringing them at European large scale, subject to the relevant socio-economic business case.

He indicated that the underlying idea is to have a preliminary screening on who would be interested in committing to the future partnerships, in terms of budget and topics to be covered, and to enhance the transparency of the process. Once applications are received, a more formal procedure of selection of members will take place.

Regarding the budget, he underlined that the Commission is keen on increasing the budget and on matching the high ambitions with a high budget. He stressed however the absence of agreement of the European Council and European Parliament on the Multi-Annual Financial Framework, and the fact that the Horizon Europe budget had been cut, with discussed figures varying from 600 M euros to 1 B euros.

Work is also ongoing to prepare the technical content of the future rail Partnership, in particular on the Strategic Research and Innovation Agenda (SRIA) and Master Plan. In terms of content, the future Partnership will have to focus on a limited number of priority areas (automation, digitalisation and freight) while ensuring the widest possible stakeholder participation, adequate geographical balance and success in term of innovations. A key focus must be on continuing digital railway development with a functional system architecture that supports automation, more efficient traffic management and future ERTMS.

In answer to the Turkish representative's question concerning the timing and chosen selection approach, the DG MOVE representative indicated that the approach will depend on the number of expressions of interest received. If approximately twenty are received, the process will be smooth. One of the assessed elements will be whether the 30 million commitment is present or not. Feedback will be provided in October 2020.

The Dutch representative asked whether consortiums are possible. The DG Move representative answered they would like to see applications from single entities with possibly linked parties. The S2R ED added that for the Netherlands, companies that today have business relations going beyond the JU can present themselves, one taking the commitment as a member, and indicating the companies they are working with in order to deliver the programme. The objective is to accelerate the impact of the work. If Prorail comes with an operator like NS, they will be able to test on-board solutions on the Dutch network. The linked business party concept is similar to the concept of LTP in H2020. Consortia encompass a constellation of companies who decide to work together to answer a specific call or project,

	<p>but legally speaking they are not linked. With a linked business party there is a clear accountability of membership and then the possibility to enlarge and modify the composition with additional business parties. The logic will be to assess what is the added value of new business partners, and target the delivery of the work. This model fosters cross-collaboration.</p> <p>The ED indicated that under the current S2R, if a member cannot match the expectations in terms of in-kind contributions, possible solutions are threefold: i.) Terminate the membership; or ii.) Ask if another member can take over the contribution; iii.) Or integrate a linked third party. We can look at opportunities to create the expected leverage effect.</p> <p>In answer to the Turkish representative’s question enquiring whether founding members can only be private companies or also Member States and research organisations, the DG Move representative indicated that the idea is to open to research organisations but not to Member States as such.</p> <p>The Norwegian representative asked to what extent detailed elaboration should be brought to the description of the topics, and whether the call structure will be open or mixed. The DG Move representative indicated the level of detail should be as much as possible within 2 pages. Regarding the call structure, open calls will be the general rule. The organisation is still under discussion, striving to guarantee a mixed approach with open calls and allocated funding.</p>
<p>09:45-09:50</p>	<p>2. Approval of the meeting agenda and minutes of previous meeting</p>
	<p>The SRG members agreed on the provisional agenda, which was circulated on 4 August 2020 (document attached, as updated on 24 September 2020).</p> <p>The declarations of absence of conflict of interest and confidentiality of the S2R JU Governing Board Decision n°07/2018 were made available to the participants The members of the SRG signed the declarations and handed them in to the Secretariat.</p> <p>The minutes of the previous meeting were approved. The minutes of all SRG meetings are available on the S2R website (https://shift2rail.org/about-shift2rail/structure-of-shift2rail-initiative/states-representatives-group/)</p>
<p>09:50-10:30</p>	<p>3. State of play – information from the S2R JU and the European Commission– latest developments and ongoing activities</p>
	<p><i>Please refer to the PowerPoint presentation</i></p>
	<p>The Executive Director provided an update on programme activities since the last SRG meeting in March 2020. He indicated that the S2R JU has been up and running despite the Covid-19 restrictions and that there have not been any major delays.</p>

He thanked the Swiss authorities for allowing the test on ATO GA02, as the results were very positive.

The Governing Board of 22 June 2020 - GB saw the adoption of the Final Annual Accounts 2019 and the AAR 2019. On 25 June, the S2R Call 2020 Evaluation Consensus Meetings took place. On 17 July, the Extraordinary Governing Board Meeting dedicated to the award of the Call 2020 was held. In September, the Call 2020 Grant Agreement Preparation phase was kick-started. On 19 November 2020, the 26th Governing Board meeting will focus on the adoption of the AWP 2021 as well as on discussions on the S2R successor programme.

Concerning the adopted AAR 2019, the ED highlighted that the S2R JU is performing according to plan -with even some accelerations in a few areas. The document provides a detailed overview on the progress on all activities, all detailed TDs, as well as an Executive Summary summarizing the overall situation of the programme. He underlined that some TDs are running behind due to a combination of factors. However, there is no criticality questioning the delivery path. All projects are targeting finalization by end 2022, to allow the phasing-out of the current programme and the phasing in of the new programme. The Executive Director stated that by the end of 2019, the Programme reached a pivotal milestone in terms of Programme implementation: more than 50% of the Programme has been delivered in view of the TRL6/7 operational demonstrations planned for conclusion in 2022.

In 2019 the JU:

- awarded 17 Grant Agreements for a total R&I value of 148,6M€;
- managed 84 running projects for a total estimated R&I implementing value of 577M€;
- implemented 43 official controls (24 project reviews of 18 CFM projects, 19 project reviews of 17 OC projects) → increase of 80% of workload on controls which is significant (JU staff did not increase nor any other activities ended) → 2019 (and 2020 is expected too) is at the apex of the overall operational JU activities;
- elaborated on KPIs and Standards, reviewed of the technical part of MAAP (MAAP-B), managed of 6 quarterly IP Steering Committees and followed up the grants implementation (amendments, reporting, etc.).

The ED stated there were some issues on IP3, mostly linked to legal and administrative issues, and with IP5, with the appropriate mitigation measures introduced.

He mentioned the work on IPX; the functional system architecture which is to be the basis of the creation of the system pillar in the S2R successor programme. The aim is to maximize available resources in order to have return on investment.

Concerning the on-going cooperation with regions and international organizations, he indicated that the signing of the MoU with CUTRIC is foreseen on 23/10 at the S2R Innovation Days. The MoU with UIC is in its final drafting stage, under review by the European

Commission. The MoU with CEN/CENELEC has been approved by the Commission and will be sent to the GB. Concerning the MoU with ACRI, the Governing Board consultation process has been launched until 17 July. The signature of the Cooperation Agreement with the Permanent Secretariat of the Western Balkan Transport Community is foreseen on 26/10 at the Western Balkan Ministerial Meeting.

The ED then provided participants with an update on S2R participation in events. He highlighted the two key dates where S2R will be showcasing activities: the online S2R Innovation Days in October 2020 and Innotrans on 27-30 April 2021.

The S2R Innovation Days will be a digital event with limited onsite participation held on **22-23 October**. It will provide the opportunity for the European railway community to see how far innovations have come and what can be expected at InnoTrans 2021. Plenary sessions on the key issues facing the future of rail will include the following:

- Open speech from **Adina Vălean, Commissioner for Transport** on the European Union's priorities for the future of rail research and innovation
- High-level panel on the Future of Rail Research & Innovation
- Presentation of the ERTMS Coordinator's work plan
- Panel on Delivering Innovation Capabilities for the European Railway of the Future
- Freight Innovation Forum

Parallel webinars on concrete project results that are building the future of rail will also take place, as well as a virtual exhibition displaying S2R latest technological demonstrators and the launch of the Shift2Rail Research & Innovation Awards (2020 Prizes postponed to the next InnoTrans) and Train Tracker Prize.

An online session on "The Role of Rail in Member States' Innovation Strategies" is scheduled from 13:30-14:30:

- interactive panel: confirmed participation from AL, AT, CH, CZ, DE, NO, ES and SE
- moderator: MONIQUE VAN WORTEL from the S2R JU
- questions to be discussed:
 - 1. Which are the objectives and priorities of your MS rail innovation strategy
 - 2. What is the link with S2R and how could we (S2R & MS) cooperate.

The event will close with two key aspects: the launch of the European year of rail 2021 and the launch of the prize for train tracker. The prizes are of a value of 2 million euros.

Furthermore, the following key events are scheduled: Innotrans 2021 and the SRG meeting in this context; as well as the launch of the S2R successor end of 2021, with the end of the European Year of Rail (EYoR).

The ED indicated the final agreement of the European Parliament and the Council are pending on the European Year of Rail for 2021, with a possibility to postpone the launch to 1st June

2021. The ED emphasized that the main events are the following: i.) Innotrans 2021; ii.) An event under discussion with Europalia and Alstom, to have a hydrogen train running on the Bruxelles-Malines train tracks to showcase a combination of the oldest infrastructure/newest technologies, and iii.) A third event on the launch of the S2R successor. He also underlined the possibility to organize hackathons on the future of the digital interlocking or future of rail operations, bringing together universities and companies to raise public awareness on rail innovations.

He summarized the ideas put forward by the S2R Scientific Committee (SC) members for the EYoR. The first idea is a hackathon or challenge activity, with SC intervening as a jury. The second idea gravitates around the idea an annual S2R innovation day, hosted by different universities, and bringing together the full rail community (a European event, moving around Europe). The third idea is to bring back rail as a first choice of transport, linking the past, present and future, with a visible train in Europe, travelling through all the capitals of Europe and illustrating the logic of linking the past with an art exhibition, the present with a hackathon, and the future with visible high-speed train.

He emphasized that the European Year of Rail will also represent a crucial opportunity for Member States.

The Executive Director indicated that following the deadline for submission of proposals to the call H2020-S2R JU-2020 on 27 May 2020, 17:00 (Brussels time), a remote evaluation was carried out according to the rules on proposal submission and evaluation laid down in the S2R JU Annual Work Plan 2020. The Executive Director indicated that 43 proposals were received in response to the call for proposals, for a total of €187.3m (€113.4m co-funding). 35 proposals were submitted for the open call, requesting almost three times the available budget. All open call topics were covered. 42 proposals were declared eligible.

The Executive Director provided details on the outcome of the Call 2020, with 8 CFM proposals and 11 OC proposals invited to start the grant preparation as presented in the ranked list in Annex 1 to the GB Decision 07/2020:

- CFM, 8 Projects, €127.2m (co-funded €55.4m)
- OC, 11 Projects, €22.0m (co-funded €19.9m)

The Executive Director indicated that the Grant Agreement Preparation phase was launched officially beginning of September with the objective of signing the Grant Agreements on 1st November 2020.

The Executive Director provided details on the number of participations by country in proposals evaluated and considered for funding by type of action, as well as information of country share in the total S2R JU requested contributions in proposals evaluated and considered for funding. The Executive Director highlighted a much wider participation of countries from the EU-13, in particular in the open call. This reflects a positive trend going in the right direction. He underlined that the actions put in place helped to widen the

	<p>participation, and should be followed up in the next period. He stated that S2R is considering the possibility of translating the S2R website to increase awareness and attraction.</p> <p>Moreover, he indicated that the companies involved are operating in different MS and that this is not reflected in the slides. He stressed that one redress procedure is currently on-going and examined by the appointed redress committee.</p> <p>The Executive Director underlined that the AWP2020 targets were to reach TRL 7, and that this was mostly reached, as well as to introduce new concepts in view of the S2R successor. He summarized the proposals received, underlining that the average score this year is higher than previous years.</p>
<p>10:30-11:00</p>	<p>4. European DAC Delivery Programme</p>
	<p>Mr ALARCON ESPINOSA Manuel - IP5 Programme Manager, presented the current status of IP5 developments. He showed how IP5 projects are impacting all the steps within a normal Freight Trip From Rail Freight Terminals (Loading / Unloading / Intermodality) to marshalling yards and sidings in Freight Hubs. IP5 focuses on developing technology and innovation during the actual freight trip, researching on the future freight rail wagon, to ensure it is lighter, connected and able to fit on Long Freight Convoys with distributed traction. IP5 has also worked in depth on improving Freight Rail Reliability by developing Condition Based Monitoring technologies.</p> <p>He introduced the DAC Technologies which has been developed within IP5 in the FR8RAIL projects and is now joining forces with similar Initiatives from BMVI to develop the EU DAC Delivery Program. The EU DAC Delivery program aims to deliver a common DAC for application on the whole EU Freight network, therefore being a real game changer for the sector. DAC will not only mean to put EU at the same level as other countries where Rail is key in the freight transport (USA, Russia, etc), but it will also represent a major leap forward by offering Power and Data line as a backbone for the whole convoy, which opens the automation and digitalization to the freight business.</p> <p>This program focuses on deriving an open and fully tested and common standard for the DAC as well as a migration plan to unfold it upon the whole EU fleet, by the means of new wagon fleet or retrofits. This migration program plus the financing are also paramount elements for the success of the venture. The EU DAC Delivery Programme was presented to the audience, which is composed of the Supervisory Board, Program Board, Program Manager, and WP leaders. Each element was briefly introduced and the floor was handed over for the Q&A session.</p> <p>The Vice-Chairperson developed on the SRG proposal for the creation of an SRG DAC sub-group. He indicated that he fully supports the proposal and will be the representative for the Czech Republic Ministry of Transport. The Austrian representative also indicated the support of Austria. The ED indicated that the ministries of transport underlined the importance of changing rail freight in the next decade and highlighted the importance of rail freight with</p>

	<p>DAC as a key element and a major enabler. He highlighted it is fundamental that a link with the ministries of transport be ensured to guarantee awareness concerning the progress. This dedicated WG should consist of representatives of the Ministries of Transport or others with knowledge of the type of activity, in order to ensure the link with national programmes. He called upon Member States to appoint representatives to this group to ensure the liaison with the European DAC delivery programme and the activities of MS. The deadline for Member States to submit their appointed representatives to the European DAC delivery programme SRG subgroup was set for end of November. The first meeting should take place before year end and ensure a strong connection between the national and European levels to arrive to a concrete justified migration plan within the next decade. Member States' involvement is a key condition for the DAC success story.</p> <p>The Vice-Chairperson highlighted the need to be in line with national strategies for implementation and to coordinate interoperability and he called for Member States' active cooperation.</p> <p>The Portuguese representative asked the ED whether this group would be a subgroup of the SRG or whether it would be independent, and he enquired about the frequency of meetings and the required skills. The ED indicated that it is to be a subgroup of the SRG (SRG DAC). The minutes will reflect the discussion and invite Member States to indicate by end of November the name of their representative. The idea would be to have quarterly meetings, with the ED, IP5 PM and Head of R&I to present the progress and enhance synergies.</p> <p>The S2R ED underlined the meetings would take place largely online and for those taking place on-site, the amended RoP will apply, with the revised rules of reimbursement.</p> <p>In answer to the Turkish representative's question on whether associated countries to H2020 can participate, the ED underlined they could indeed contribute.</p> <p>The Dutch representative enquired how technical the representative's expertise should be. The ED indicated it is necessary to appoint a representative working on freight matters. The connection with infrastructure should be made, because the DAC will have a system impact on how freight is managed.</p>
<p>11:00-11:05</p>	<p>5. Mandates for the SRG Chairperson and Vice-Chairperson – proposal for extension until S2R successor</p>
	<p>The S2R ED indicated that taking into account the fact that the mandates of the current SRG Chairperson and Vice-Chairperson run until 1st January 2021, the proposal for extension of the current mandates is submitted as follows:</p> <ul style="list-style-type: none"> - Extension of the mandates of the Chairperson and Vice-Chairperson up to the start of the S2R successor programme, e.g. extension of 6 months to maximum 9 months; - Alternatively, should the launch of the S2R successor be postponed to after January 2022, the election of the new SRG Chairperson and Vice-Chairperson will take place at the Extraordinary SRG meeting of 17 December 2020, in line with Art. 2 of the Rules

	<p>of Procedure (<i>“Elections shall take place at the last meeting of the SRG under the chairpersonship of the outgoing Chairperson”</i>).</p> <p>The S2R ED suggested a written procedure be launched on this matter in accordance with article 8 of the Rules of Procedure on written procedures and article 2 on the mandates of Chairperson and Vice-Chairperson.</p> <p>The SRG representative agreed to the launch of the written procedure.</p>
<p>11:05-11:30</p>	<p>6. Update on S2R Successor</p>
	<p>The Vice-Chairperson indicated that the DG Move representative covered this point under agenda item n° 1.</p> <p>The ED indicated a specific page was created on the S2R website for the preparations of the S2R successor programme: https://shift2rail.org/shift2rail-successor/</p> <p>The Proposal for a European Partnership transforming Europe’s rail system was approved by the European Commission and published on the S2R website. He stressed that budget below a certain threshold will make it difficult to tackle all the aspects and combine exploratory research and have major impact via large scale demonstrators. He emphasized that Member State support is paramount in this respect.</p> <p>The SRG Vice-Chairperson underscored the strong interest of the Czech Republic actors to contribute to the new partnership.</p> <p>The Dutch representative enquired how Member States can support the process. The DG Move representative underlined that the Commission proposal will be discussed with the Council and the European Parliament. The Council will play a key role, so Member State representatives should mobilize their contacts at institutional level in Member States at three levels: transport; research and budgetary affairs - with a high-level of ambition translating into a significant budget for the proposal.</p> <p>The ED reiterated that the Invitation to manifest the interest to become candidate founding member of the Transforming Europe’s Rail System European Partnership has also been published, with the deadline set on 1st October</p> <p>In order to ensure that the entities joining the European Union -represented by the Commission, in the establishment of the Partnership, collectively cover the different areas of expertise relevant to the rail partnership and are representative of the European Union rail system, the following additional aspects will be considered in assessing the candidates:</p> <ul style="list-style-type: none"> • demonstrated know-how in rail and, more specifically, in rail research and innovation;

- capacity to implement multi-annual and multi-stakeholders' projects, part of an integrated programme;
- readiness to embrace a long term vision of this European Partnership, which shall result in a long term commitment to it;
- participation as a single entity, which may present itself with linked business parties;
- commitment of at least EUR 30 Mio indicative net contribution, of which 5% to be expected in the form of financial contribution to the running costs of the partnership;
- geographical establishment. It is expected that the core membership of the Rail European Partnership would consist of indicatively 20 entities representing, in a balanced manner, the following stakeholder categories (noting that some stakeholders may have the capacity to cover several categories):
 - ✓ infrastructure managers
 - ✓ rail passenger operators, including urban
 - ✓ rail freight operators
 - ✓ rolling stock manufacturers
 - ✓ signalling systems' manufacturers
 - ✓ infrastructure manufacturers
 - ✓ ICT solutions providers (ticketing and data)
 - ✓ rail research centres can also apply

Membership will be confirmed at a later stage, possibly via their listing in the basic act, subject to the acceptance of the new European Partnership rules and regulations. The membership agreements will be negotiated by the Executive Director of the new Joint Undertaking, but designed to ensure the necessary continuity of research and innovation with Shift2Rail while looking for new models for implementation.

The ED highlighted a more transparent process compared to the establishment S2R.

He underlined that the first action of the next JU will be to establish the new Master Plan. This will require the involvement of the SC, SRG, GB, Commission, ERA and ERRAC. The organisation will be built around 2 main pillars; on the one hand, the innovation pillar (similar to the current S2R), and on the other hand a system pillar (extrapolated from LINX4Rail, supervised by the Commission), to converge the sector towards a unique set of operational rules. A full system approach has been introduced in the S2R successor.

11:30- 11:50	<p align="center">7. Information on railway R&I activities – Norway and Germany</p>
	<p><i>Please refer to the presentations</i></p> <p>The Norwegian SRG representative indicated Norwegian entities are preparing a letter of interest to participate.</p> <p>The Norwegian representative’s presentation focused on ENTUR, on various actors in the transport sector, and on the common analytics platform for mobility, underlining the hope to integrate this into European solutions as well. Moreover, she shared details on the project on pilot concepts for autonomous shunting operations</p> <p>The S2R ED underlined that this shows the importance of collaboration at a European level. He emphasized the connection to DAC and IP4, the importance to mutualize feedback and experience to accelerate deployment to the market.</p> <p>The Swiss representative indicated Switzerland is going in a similar direction for the creation of a multi-modal transport system. He stressed it would be interesting to have an exchange on all initiatives going in the same direction. He indicated in Switzerland there is a government mandate to establish a National Data Infrastructure on Mobility as a service providing public and private data sources to mobility platforms and other backend users.</p> <p>The German representative provided an update on the German Centre for Rail Traffic Research, including an update on the activities and what they would like to emphasize for the coming years both nationally and at European level, including on the DAC.</p> <p>The S2R ED thanked the DE representative and enquired how to ensure efforts are not duplicated. On cybersecurity; the German research centre’s study should be based on the S2R cybersecurity study. He underlined that scouting of existing work is fundamental. The S2R successor will be driven by society, not by industry. Member States should have clear role in shaping this. He emphasized the need to bring together all national R&I and maximize the synergies and th return on investment at national and European levels.</p> <p>The German representative highlighted that departmental research is different than S2R because it focuses on legal frameworks, standardisation, and environmental frameworks. She underlined that the alignment of activities is indeed important.</p> <p>The ED proposed as part of the Master Plan to launch an activity offering the opportunity for departmental research to come together for the alignment of programmes and help the S2R successor address these areas. This would create a leverage effect in the S2R successor programme.</p> <p>The Norwegian representative indicated this is an important issue regarding the step-by-step approach and bringing R&I in line in S2R and S2R2. It also illustrates the importance of involving a broad group of members in the ongoing and successor partnerships, in order to avoid potential overlapping and conflicting R&I activities.</p>

	The ED thanked the representatives for their presentations.
11:50-12:45	<p style="text-align: center;">8. Innovation Programme Results: IPX and IP5</p>
	<p><i>Please refer to the presentation.</i></p> <p>The S2R PM for IPX, Gorazd Marinic gave an overview of the status of the activities.</p> <p><u>2018 projects (all open-call)</u></p> <p>FLEX-RAIL: forecasting the evolution of key fundamental technologies & technical risks. Delivered the first work: Review of trends and transport sector innovations</p> <p>MVDC-ERS: creating a next generation DC power electrification systems, also using renewable sources Delayed start (PhD recruitment), but first results available: https://projects.shift2rail.org/s2r_ipx_n.aspx?p=MVDC-ERS</p> <p>B4CM: developing a blockchain-based testbed for rail Delayed start (PhD recruitment), project extended for 12 months</p> <p>TER4RAIL: investigating new opportunities for innovative research and cross-fertilisation from other disciplines Good progress, results available: https://ter4rail.eu/</p> <p><u>2019 projects</u></p> <p>Translate4Rail: braking language barriers with IT tools and providing predefined standardised messages for the communication between driver and the traffic manager Work initiated, no results public.</p> <p>RAILS: investigating Artificial Intelligence for rail automation, predictive maintenance and defect detection, traffic planning and capacity optimisation Delivered Definition of a reference taxonomy of AI in railways.</p> <p>LinX4Rail (CFM): developing a railway Functional System Architecture and a Conceptual Data Model (CDM) – following a system-of-systems approach and improving data exchange Currently investigating technical and business implications for 7 change subjects (ATO alignment with RCA and OCORA, new CCS on-board architecture and alignment with OCORA, SWOC, Moving Block alignment with RCA and OCORA...), coordinating S2R, EUG and UNISIG input for on-board CCS/game changers in TSI2022 update. Running workshops to define a new functional system architecture – a first public version will be available in December 2020</p> <p><u>2020 projects – planning to start in November 2020</u></p> <p>HYPERNEX (CSA): gathering hyperloop promoters to define clarity on operational concepts and standardisation possibilities, identify transferability and synergies with railways</p> <p>TAURO (CFM): Use of Artificial Intelligence for ATO</p> <p>LinX4Rail-2 (CFM): continuation of the work started in December 2019 (LinX4Rail)</p> <p>The Vice-Chairperson enquired on the Linx4rail project and its continuation; as well as the link to the technical specifications for interoperability with freight and passengers. Mr Marinic</p>

	<p>indicated that for LINX4RAIL 2 it is not certain there will be a specific contribution to TSI, at least not before the materialization of the system pillar.</p> <p>The S2R ED underlined that LINX4RAIL 1 and 2 are very connected. At the moment, as LINX4RAIL 2 has not started, all resources are used to develop the application and ensure a holistic approach of architecture linked to the specific needs of pieces of architecture used for interfaces. He stated the work is also supported via contracts under the S2R procurement activities, <i>inter alia</i> the ERTMS framework contract for the development of specifications and requirements for ERTMS, as well as the railway operators framework contract, where initiatives are developed at different horizontal levels. LINX4RAIL brings together all S2R activities, but also other aspects like common control signalling.</p> <p>Mr Marinic emphasized that LINX4RAL is very forward looking, and ensures all the activities feeding TSU is aligned with the long-term vision developed within LINX4RAIL</p>
<p>12:45-13:00</p>	<p>9. Closing remarks and AoB</p>
	<p>The Vice-Chairperson indicated that the Georgian Ministry of Economy and Sustainable Development sent a letter to become a member of S2R SRG. Georgia is a H2020 associated country The ED specified that in accordance with the S2R Council Regulation, after receipt of the official letter of nomination, there is no need to proceed with a vote of the other SRG members. The S2R representatives did not express any objections.</p> <p>The following dates were agreed upon for the next meetings:</p> <ul style="list-style-type: none"> - 14th SRG extraordinary meeting: 17 December at 9:30 AM <ul style="list-style-type: none"> • If necessary, election of Chairperson • Discussion on single basic act submitted by Commission to Member States - 15th SRG meeting: Innotrans, 28 April 2021 16:00-18:00 PM <p>The Chairperson brought forward the idea that 2021 as European Year of Rail should provide ample opportunities to organize events in certain regions or Member States on transnational activities, and dissemination events on S2R.</p> <p>To conclude, the S2R ED thanked the participants for their active participation and in particular for the various presentations. He indicated that this is the heart of the relation of the SRG within S2R, and he hoped it will be the basis for strengthening the SRG in the next S2R successor programme. He thanked the S2R PMs for their presentations and indicated such presentations on IPs will continue. He recalled the invitation for appointment of Member State representatives to the European DAC subgroup. He reiterated the invitation to participate in the S2R R&I days, in particular in the session on Member States. He indicated that the extension of the mandates of the SRG Chairperson and Vice-Chairperson will be launched via written procedure. He warmly thanked the Commission representative, as well as the ERA representative for ensuring the trait d'union with ERA. Finally, he wished the Chairperson a prompt recovery.</p>