



# Eleventh meeting of the Shift2Rail States Representatives Group

23 September 2019

S2R JU Premises

Avenue de la Toison d'Or, 56-60, B-1060, Brussels

## Minutes

<b>13:00-13:15</b>	<b>1. Introduction - Roundtable</b>
	<p>The meeting was chaired by Mrs Sarah Bittner Krautsack, Chairperson of the SRG. The Chairperson welcomed the participants and introduced the newly appointed representatives of the SRG, namely the representatives from the Netherlands – Mr Marcel Tijs, and the representative from Norway – Mr Eric Syversten. The respective representatives briefly introduced themselves. The ERA observer also attended the meeting.</p> <p>A list of participants is attached.</p>
<b>13:15-13:20</b>	<b>2. Approval of the meeting agenda and minutes of previous meeting</b>
	<p>The SRG members agreed on the provisional agenda, which was circulated on 30 August 2019 (document attached, as updated on 17 September 2019). The Chairperson suggested the elements of agenda item 10 of the AoB on the positions and proposals of the Czech Republic and Portugal regarding the preparation of S2R2 be addressed under agenda item 5.</p>

	<p>The declarations of absence of conflict of interest and confidentiality of the S2R JU Governing Board <a href="#">Decision n°07/2018</a> 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 (<a href="https://shift2rail.org/about-shift2rail/structure-of-shift2rail-initiative/states-representatives-group/">https://shift2rail.org/about-shift2rail/structure-of-shift2rail-initiative/states-representatives-group/</a>)</p>
<p><b>13:20-13:50</b></p>	<p><b>3. State of play - information from the S2R JU and the European Commission- latest developments and ongoing activities</b></p>
	<p>The Commission representative provided participants with an update on the developments regarding the new incoming Commission. Regarding content, he emphasized the enhanced focus placed on climate change and the Green Deal. He indicated that the new President elect appointed her team of Commissioners, and mentioned the Commissioner for Transportation Rovana Plumb and the Commissioner for Innovation and Youth, Mariya Gabriel. He underlined that these appointments may represent an opportunity to take up the challenge of increased participation of eastern European countries in S2R. The Commission representative stated that the Impact Assessment on S2R is on-going, with a public consultation running until 6 November. He stressed that the role of Member States will be addressed throughout the Impact Assessment, in S2R JU as well as in other JUs. During the summer of 2019, an Inception Impact Assessment was published. Feedback provided by stakeholders revealed a strong opinion in favour of an institutionalized partnership. Contributions from various stakeholders in different Member States were provided, as well as from one Member State (Germany). He further indicated that the Impact Assessment should be finalized by early 2020, by which time the form of the new partnership will be clearer. Inputs regarding content will be fed into the Commission proposal - including the Master Plan and the technical content on partnerships. The aim will be to ensure a smooth transition from S2R to SR2 and a start of operations in 2021. He signalled that if the process is delayed, the transition will not be impacted, since according to the S2R basic act, S2R is in operation until December 2024. Furthermore, the Commission representative provided participants with details on two on-going studies: i.) a study focussing on the form of partnerships and encompassing operational elements, coordinated by DG RTD; and ii.) a study aimed to feed the future technical content of the Master Plan, coordinated by DG MOVE.</p> <p>The representative from Germany asked which ministers will be involved in the negotiation on the Regulation for S2R2. The Commission representative indicated that the negotiation should involve the Ministers of Transport, of Budget/Economics and of R&amp;I/University.</p> <p><i>Please refer to the PowerPoint presentation</i></p>

The S2R JU Executive Director indicated that the results of the [S2R JU 2019 call](#), launched with a deadline of 18<sup>th</sup> June 2019, were decided by the S2R JU Governing Board on 4 September 2019. The [Governing Board Decision 07/2019](#) was published on the S2R JU website and all counterparts were informed. The redress procedure is running until 4 October. The Executive Director emphasized that 48 proposals were received for a total value of €148.6 Million, with 116.7 Million co-funding available. 43 Open Call proposals were received, which represents a 34% increase compared to last year. One OC topic was not covered: *Support to the development of technical demonstrators for the next generation of brake systems (TD1.5)*. The respective €2 Million will be transferred to the 2020 budget. The final recommendation will therefore be the following:

- CFM, 6 Projects, €130.9 Mio (co- fund €57.6 Mio)
- OC, 11 Projects, €17.7 Mio (co-fund €17.2 Mio)

The evaluation was conducted with the support of 11 S2R Staff, 27 independent experts, 3 independent financial experts, 6 recorders, 1 independent observer, 3 ethics reviewers, as well as EC, ERA, GSA and IP Coordinators as observers.

Moreover, the Executive Director indicated S2R was phasing into the second year as pioneer of the lump sum approach.

He provided the SRG representatives with the 2019 call related statistics for the 2019 members' call, the open call, SME participation, country applicants, and requested EU contribution versus budget received. The statistics reveal, *inter alia*, a high participation of SMEs in the 2019 call, a less than optimal participation from Eastern European countries, as well as the fact that funding is largely in Member States whose operators are active in S2R. The Executive Director stressed the need for solutions to be found under S2R2 to attract entities established in the EU-13.

The Executive Director indicated that under IPX, the LINX4Rail proposal will develop the new concept of "functional system architecture", in coordination with IP2 and IP5. A new project addressing language barriers for drivers will also be developed. The rest of the open call proposals should aim to support the CFM projects in achieving the highest TRL.

The list of 2019 activities were presented, including the upcoming Governing Board of 14 November 2019, which will address, *inter alia*, the adoption of the AWP 2020 and developments on S2R2.

The Vice-Chairperson indicated that the presentation of the conceptual data mode of LINX4Rail should include coordination with the telematics join sector group, as well as other groups. The Executive Director answered that the objective of the S2R JU conceptual data model is to strive for an EU convergence of the knowledge currently developed in a silo-based approach by the different sectors involved. He further

	emphasized the role of the <a href="#">S2R JU call for tenders S2R.19.OP.01 on “railway operators, staff and passengers’ expertise”</a> , which seeks to bring on board entities which are not S2R JU members. He stressed that the conceptual data mode will be a success only if all EU Members States are around the table.
<b>13:50-14:30</b>	<b>4. AWP2020 Preparation</b>
	<p>The Executive Director underlined that the final phase of preparation of the AWP2020 is on-going, with three workshops held at the Governing Board meeting of 4 September, including one on the AWP2020. The need for this workshop arose as it became clear that the AWP2020 was overbooked by 10 Million Euros compared to the available budget, with a subsequent need for prioritization. Three criteria were identified in this respect: i.) the focus on delivering technological demonstrators, taking into consideration Innotrans 2020; ii.) a shift of focus to activities that have reached TRL 7; and iii.) the continuation of other activities with a lower TRL, to bridge towards the next programme. The final decision on the prioritization will take place at the Governing Board of 14 November.</p> <p>Input on the AWP2020 is still expected <b>until 4 October</b> from the Commission, some Member States, the Scientific Committee and ERA.</p> <p>The Executive Director further indicated that the 2020 call will be launched end of 2019 or beginning of 2020, with the possibility of a mini-call end of 2020. If resources are still available during 2021-2024, they will be used to bridge the gap between the two programmes.</p> <p>The Swedish representative enquired on how to modernize the AWP and include new technologies. The Executive Director answered that the AWP is largely extracted from the MAAP and the Master Plan, even though new concepts were introduced, such as AI, digitalisation, language barriers, etc. Moreover, 27 S2R JU members signed Membership Agreements, committing to deliver identified solutions. The open calls are linked to these. He concluded by stating that S2R2 should place an enhanced focus on the final-user, with windows of opportunities to introduce modifications along the way. Nevertheless, he indicated that any proposals to further “modernize” the AWP content will be considered in the final preparation of the AWP 2020.</p>
<b>14:30-15:00</b>	<b>5. S2R2 preparatory process, Horizon Europe state of play</b>
	The Commission representative emphasized that S2R2 will be negotiated alongside the other partnerships, with a common timeframe and alignment of policy priorities. Beginning of 2020, clarity will be gained on the form of partnerships, and throughout 2020, the content will be elaborated. The budgetary lines are still under discussion. Member States will also be contacted for input in this process.

The Executive Director stressed the need for total coherence between programmes, e.g. referring to the recent call for proposals for 5G test beds covering cars and/or trains, under coordination by DG CONNECT.

The Executive Director answered the question from the Norwegian representative relating to S2R JU involvement in the S2R2 preparatory process. He indicated that S2R JU is providing full support to the Commission in this process, organizing workshops (e.g. workshop on the future of S2R held in Pardubice in April 2019, the two Governing Board workshops on S2R2, etc.). S2R is also accompanying the process with a series of events, inter alia the Digital Transport Days in Helsinki under the Finnish Presidency, with the hosting of a side-event on railway, the S2R JU info day of 10 December, TRA 2020, TEN-T days in May 2020 and Innotrans 2020 under the German Presidency. Moreover, the Executive Director stressed the need for a more focused programme, evolving around how the rail system can support mobility in a sustainable manner. Regarding the legal form, he underlined that an institutionalized partnership provides a competitive advantage and the added-value of guaranteeing dialogue and transparency - especially in the rail sector, where a large part of the key companies are state-owned. A clear mandate should also be granted in the basic acts to the Executive Directors of the JUs to exploit the synergies between various EU programmes. In addition, the Executive Director underlined the heavy rotation of staff in S2R due to a lack of alignment between grades in different JUs and Agencies, and recommended a more harmonized approach be adopted in this respect across Union bodies in the future. The Executive Director concluding by emphasizing the full support of S2R to the Commission in the preparatory process of S2R2 – including the Impact Assessment by rendering all the necessary data, KPIs and input available, whilst keeping the priority on delivering S2R and building on its success.

The SRG Vice-Chairperson indicated that in his opinion the AWP2020 would benefit from enhanced integration of digitalisation in IP4 and IP5.

The Turkish representative asked whether the rules for participation would be harmonized across the various partnerships. The Commission representative answered that work is taking place in this direction under the coordination of DG RTD.

The Portuguese representative presented the position and proposal of Portugal to the preparation of S2R2. The S2R program is nearing completion, with expected results likely to reach the prototype level. In order to be placed on the market, solutions' validation will be necessary, which will be achieved by demonstrating the developed solutions and products. This phase is already beyond the timeframe covered by the S2R. The Portuguese representative emphasized it is therefore important to ensure the continuity of the S2R program, which is vital to the pursuit of the initial objectives, allowing the whole process to culminate by performing the trials on developed solutions and integrating them in the market at international level. S2R2 should be a program more easily accessible to all interested parties, equally open to Railway Undertakings, Infrastructure

Managers and Industry. The guarantee of this ease of access is fundamental for Portugal. Large Projects should be developed, supporting larger initiatives, with faster results and with special focus on specific pilot projects and prototypes. The formation of consortia has to be balanced in an equal share of Railway Undertakings, Infrastructure Managers, Industry and Research & Development entities (Universities, etc.). Large projects must have a clear structure, consisting of several subprojects of different dimensions resulting in interoperable prototypes. Participation in other consortia of large projects may be possible and supported, but somehow limited, and active cooperation between major projects with cross-cutting themes and activities should be supported.

Joining the program should be along the lines of an inclusive model (particularly for small/medium (rail) companies) without the need for large sums of investment. This aspect is vital for the participation of the Portuguese sector in the Program.

In view of the above, the Portuguese representative argued that the New Shift2Rail2 Program, an Institutional Partnership, should: i.) enable the participation of all EU and associated countries; ii.) allow participation as individual entities or as a consortium, but in the case of the latter, size should be limited to 5-6 entities in order to be manageable; iii.) cap the maximum value of the investment of a consortium around 12-15 M € for the duration of the program. He stressed that these points are fundamental to ensure that the Portuguese Railway Cluster and the National Scientific System can continue to be part of the Research Program which will define the guidelines of the rail and integrated mobility of the future, and through which most of the European funding for innovation of the rail transport of the future will be channelled.

The Portuguese representative added that the work programme for S2R2 should be based on 12 major areas of development, called the 12 Capabilities. These were discussed at European level with the active participation of railway undertakings and infrastructure managers on the scope of UIC and its Research & Innovation Coordination Group (RICG). The most relevant topics for the participation of Portugal are the following:

1. Automated Train Operations (ATO)
2. Mobility as a service
4. Higher valuation of data
5. Optimization of energy use
6. Service managed to the second
7. Lower cost railway
8. Assurance of good functioning and availability of assets
10. Stations and smart urban mobility

11. Environment and social sustainability

12. Quick and reliable R & D results

The Dutch representative iterated his full support to this intervention, especially with regard to smaller organisations and a user-oriented approach.

The Vice-Chairperson then presented the position and proposal of the Czech Republic to the preparation of S2R2. He stated that the Czech Republic gives great importance to the exploitation of research results and promoting marketable innovation to deploy cutting-edge and disruptive solutions, for example in areas such as industrial decarbonisation, digitalisation, artificial intelligence or smart mobility. The Czech Republic successfully implemented funding schemes at national level for both the SME Instrument and MSCA Seal of Excellence holders. Further harmonisation of rules in this field is needed. The Vice-Chairperson indicated that Member States should be involved extensively in the process of strategic planning, feeding into design and preparation of relevant national programmes. The Czech Republic wishes to continue promoting synergies with the EU Framework Programme and National Smart Specialisation Strategy. This will lead to a more efficient allocation of funding and the strengthening of innovation capacities in the prioritised areas. Furthermore, the Czech Railway Cluster is being established in order to motivate the Czech railway sector to be more active and to target technologies of the future such as AI, digitalisation and smart mobility. Enhanced focus should be placed on protection of investments, the replacement of GSM – R by 5G technology and implementation of OCORA. The Czech Republic will organize an event for the EU-13 with the support of all Member States in this respect. Furthermore, significant changes should be brought to the basic act. These proposals will be put forward by the Czech Republic at the Competitiveness Council on 27 September.

The Executive Director indicated that regarding the participation of new Member States, the socio economic environment of these Member States should also be taken into account. He stressed that there will be an interest of the EU-13 to discuss their needs and requirements in S2R2. This could be designed in S2R, to attract the EU-13 experts to contribute to the work of S2R and connect with the deployment phase. He also indicated that a strong committed core of Members is nevertheless needed to deliver the required long-term investment of the next programme. This can be combined with the idea of a network of research centres. The Executive Director further emphasized the need to use the rules of the Financial Regulation on grants and procurement to address the different needs for participation.

The Commission representative stated that the Portuguese and Czech representatives' proposals highlight the different aspects of the same problem, which is that of broadening the participation in S2R. He stressed that this issue is under the Commission's radar and will be addressed.

	<p>The Chairperson concluded by reiterating the importance of Member State participation in the consultation process open until 6 November 2019. She suggested an SRG workshop be organized in the spring of 2020, in parallel to one of the scheduled SRG meetings, in order to pinpoint the official SRG position as regards S2R2's form and content, and provide it to the Commission.</p>
<b>15:00-15:30</b>	<b>6. S2R Regional cooperation workshop status</b>
	<p>Monique Van Wortel, SNE at the S2R JU, explained the strategical background of the synergies between the H2020 funds of the S2R JU and the European Structural and Investment Funds (ESIF) in a Smart Specialisation Strategy (S3) context. Synergies between funds could lead to a win-win situation promoting rail research and innovation in Europe. To promote this approach, a dedicated workshop will be organised in Brussels at the JU premises on 9 October 2019. Mrs Van Wortel explained the set-up of this workshop and encouraged the SRG members to promote the concept and the workshop with relevant regional administrations, including their EU offices in Brussels. Agenda and factsheet are available at: <a href="https://shift2rail.org/news/register-now-for-our-regional-cooperation-workshop/">https://shift2rail.org/news/register-now-for-our-regional-cooperation-workshop/</a></p>
<b>15:30-16:15</b>	<b>7. Information on on-going/planned railway R&amp;I activities.</b>
	<p><i>Please refer to the power point presentations</i></p> <p>The representative from Switzerland provided a presentation on the ongoing activities in Switzerland on ERTMS. The Swiss network is and must be integral part of the interoperable European Rail-Network. In Switzerland, the migration from the Class B Systems has been completed in 2018. Mostly to ETCS L1 Limited (Baseline 3). The newly build tunnels and some other Lines are equipped with ETCS L2 (Baseline 2). Experiences with Cab-Signaling-L2 have proven promising. On comparable tracks with similar complexity, cab-signalling has proven to work much better than conventional Systems - based on the mean distance between Failures. However further developments are still needed to improve the overall conditions. Therefore, the representative from Switzerland indicated that the Federal Office of Transport (FOT) would like to build on a solid and sustainable basis, which can be rolled out industrially for the further migration steps. The strategic implications of these lessons learned will be addressed in a future ERTMS-Strategy. For the FOT, the key issue is that ERTMS has to be treated as an integral System and has to include the Operators and Infrastructures (wayside and onboard). Focus will lie on how to ensure harmonized operation processes, modular concepts and replacing End of life products. The targets are of course improved use and higher capacity in operations and internationally harmonized and accepted solutions (interoperability).</p> <p>The representative from Switzerland indicated that the FOT has grouped the future technical-operational tasks into two groups and priorities. The immediate priority should be to work on the technical-operational Basics (like specifications for cab-</p>



signalling, prescriptions for operations or basics for breaking-performance). In addition, immediate action is necessary for upgradable vehicle on-board equipment. As a next step, focus will be set on the connectivity-issue (FRMCS). The second group of tasks contain innovations to enable moving block or safe shunting. These tasks should be addressed primarily by the railway sector (operators, infrastructure and industry). He indicated that S2R could also play its role in this field.

To tackle the above-mentioned tasks, the Railway sector has created an organisation called "SmartRail 4.0" which is in charge of concepts, Specifications, Interoperability, Prototyping and Migration. The FOT on the other hand is responsible for overall strategy, prove of concept, financing decisions and monitoring. Between the two organisations, there is exchanges on professional and strategic level. The FOT would like to enable innovation - not only by granting the necessary funds, but also by taking strategic decisions on the overall direction of developments. The conceptual phase of "SmartRail 4.0" / Railway Operation 25 will last until 2020. The next phase will prepare the modular rollout, which will be starting around 2025.

The representative from Germany delivered a presentation on the establishment of the German Centre for Rail Traffic Research at EBA (DZSF) by MOT in May 2019 in Dresden as an independent scientific body acting at the interface between science, the railway sector and policy. Its main tasks are to give scientific support to the German government in all railway related issues, to implement research results into practice, to support national and international standardization as well as to coordinate existing national railway research activities. The new centre has signed a MoU with ERA to support further standardisation, to identify research demands of mutual interest and to exchange project specifications and results on project level. The German representative emphasized that the new German Centre for Railway Traffic Research does not compete with Shift2Rail or Horizon Europe activities nor does it compete with industry or university-led research activities. The aim is to support interoperability, fill existing gaps per specific departmental research, bring together existing testing facilities to avoid parallel developments and retain and develop expertise of the sector and NSAs.

The German representative, answering a question from the Vice-Chairperson, acknowledged that DZSF will also be tackling cyber security.

The Chairperson and representative from Austria gave an overview on ongoing national railway and innovation activities. Within a Call for Proposals in 2018, with a budget of about 5 M € on topics related to automation and digitalisation in the rail system, ten projects were selected for funding and started in the beginning of 2019. Among the projects , two relate to the topic of automatic marshalling yard, one on automatic railway systems on secondary lines, one on automatic train operation, two on intelligent measuring technologies and four on condition-based maintenance. All projects are cooperative projects with a broad range of partners from manufacturing companies and/or research organisation and/or operators like the Austrian Federal

	<p>Railways or the Public Transport Operator of the City of Vienna. In addition to these projects, a Call for Proposal was launched on a Cooperative Technology initiative on automation and digitalisation in the rail system, with a focus on railway operation and infrastructure.</p> <p>The Executive Director highlighted that these activities are fundamental for pushing rail R&amp;I for the next programme, and that their synergies could be exploited to multiply their effect and enhance the performance of the rail system.</p>
<b>16:15-16:30</b>	<b>8. S2R Communication Activities</b>
	<p><i>Please refer to the PowerPoint presentation</i></p> <p>The Executive Director presented the various events S2R will be participating in or hosting in 2019 and 2020. For the remainder of 2019, these include the following: the R&amp;I days end of September, the regional cooperation workshop on 9 October, the S2R Dialogue at the Digital Transport Days in Helsinki on 7 October, the 12<sup>th</sup> WCRR in Tokyo on 28 October, the S2R Israeli Info Day on 17 December in Jerusalem, the S2R Info day on 10 December in Brussels. The key 2020 events include TRA in Helsinki end of April, TEN-T in Croatia on 13 May and Innotrans 2020 in Berlin on 22-25 September.</p> <p>The Vice-Chairperson added that S2R will also be present at the World Congress on ITS in Singapore in October 2019 and the international rail conference in Prague in April 2020.</p>
<b>16:30-16:35</b>	<b>9. Closing remarks</b>
	<p>The Chairperson thanked the participants for their active participation and the various presentations and wished for equally fruitful discussions to take place during the Spring workshop on S2R2.</p>
<b>16:35-16:45</b>	<p><b>10. <u>AoB</u></b></p> <ul style="list-style-type: none"> <li>• The 12th SRG meeting will take place on 3/4 March 2020 in Brussels, coupled with a workshop on the SRG position on S2R2.</li> <li>• The 13<sup>th</sup> SRG meeting will take place during Innotrans in Berlin on 23 September.</li> </ul>