



# Ninth meeting of the Shift2Rail States Representatives Group

19 September 2018

Deutsche Bahn AG

Europaplatz, 1, 10557 Berlin

Conference Room 19, 8th Floor

## Minutes

<b>09:00-09:15</b>	<b>1. Introduction</b>
	<p>The meeting was chaired by Mr Haltuf, Chairperson of the SRG. The Chairman welcomed the participants. The respective representatives briefly introduced themselves and highlighted the interest of their countries in the deliberations of the SRG.</p> <p>Mr Carlo Borghini, S2R JU's Executive Director, stressed that the SRG is a key partner of S2R and he appreciated the interest shown by the group in S2R's activities.</p> <p>A list of participants is attached.</p>
<b>09:15-09:20</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 8 August 2018 (document attached, as updated on 17 September 2018) and they all signed a declaration of absence of conflict of interest and confidentiality.</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/wp-content/uploads/2018/06/minutes_8th-meeting-SRG_18-04-2018-Final.pdf">https://shift2rail.org/wp-content/uploads/2018/06/minutes_8th-meeting-SRG_18-04-2018-Final.pdf</a>)</p>

09:20-09:50	<p align="center"><b>3. State of play - information from the S2R JU and the European Commission - latest developments and ongoing activities</b></p>
	<p>The Executive Director invited the Commission (DG RTD) to provide the SRG representatives with an update on the Horizon Europe programme.</p> <p>The Commission (DG RTD) presented the Commission proposal for the “Horizon Europe” programme, the next EU R&amp;I programme for 2021-2027. Horizon Europe is the Commission proposal for a € 100 billion research and innovation funding programme for seven years (2021-2027) to strengthen the EU's scientific and technological bases, to boost Europe's innovation capacity, competitiveness and jobs and to deliver on citizens' priorities and sustain Europe’s socio-economic model.</p> <p>The specific objectives of the Programme are to: i.) Foster all forms of innovation and strengthen market deployment; ii.) Strengthen the impact of R&amp;I in supporting EU policies; and iii.) Support the creation and diffusion of high-quality knowledge.</p> <p>To optimise the Programme’s delivery for impact in a strengthened ERA, these objectives are structured into three pillars, respectively: (i.) pillar 1 on open science; (ii.) pillar 2 on global challenges and industrial competitiveness; (iii.) and pillar 3 on open innovation. Pillar two “global challenges” is itself divided into five clusters. The Commission highlighted two of these five clusters: “climate, energy and mobility” and “digital and industry”. In terms of budget, half of the budget is dedicated, in the Commission’s proposal, to global challenges and industrial competitiveness.</p> <p>Key novelties involve the European Innovation Council, <u>R&amp;I missions</u>, extended association possibilities; open science policy; and a new approach to <u>partnerships</u>.</p> <p>In particular, the new approach to <u>partnerships</u> seeks to promote a rationalization, e.g. a new generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives. This new approach to partnerships presents a three-fold operational implementation. The first means of implementation is to achieve objectives via <i>co-programming</i>, i.e. based on Memoranda of Understanding / contractual arrangements, and implemented independently by the partners and by Horizon Europe. The second priority means of implementation should be <i>co-funding</i>, i.e. based on a joint programming agreed by partners; commitment of partners for financial and in-kind contributions &amp; financial contribution by Horizon Europe. And finally, the third means of implementation is that of <i>institutionalized partnerships</i>, i.e. based on long-term dimension and a need for high integration partnerships.</p> <p>For the latter to be mobilized, there should be evidence that institutionalized partnerships are: a.) more effective to reach scientific and technical objectives; b.) characterized by transparency; and c.) coherent with the ecosystem of programmes in Member States. Each partner needs to demonstrate long-term commitments and a minimum share of investments.</p> <p>Regarding the <u>budget</u>, the Commission underlined that the budget allocated to the “climate, energy and mobility” cluster within pillar 2 of the Commission’s proposal for Horizon Europe is 15 Billion Euros, the same as for the proposed cluster on “digital and industry”. To strengthen the European Research Area, resources have been doubled in the Commission proposal for “sharing excellence”, which encompasses</p>

teaming (institution building); twinning (institutional networking); ERA chairs bringing excellence to institutions; and COST.

As regards strategic planning to define multiannual work programmes and calls for proposals, the Commission is keen on involving stakeholders in the design of R&I actions, and seeks to enhance transparency, prioritisation and flexibility to align to political priorities, as well as internal programme coherence & synergies with other programmes.

In this respect, a document entitled "Multiannual Strategic R&I Plan" will be presented by the end of 2018, stating the multiannual orientations and priorities, and identifying areas for partnerships and missions, with the provision of indicative budgets for the next seven years and the targeted sectors of action. As the accompanying legislative proposals on the upcoming Multiannual Financial Framework will not enter in specific details on Joint Undertakings - only including criteria for partnerships without providing details on the areas nor forms of partnerships, this "Multiannual Strategic R&I Plan" will prove essential in providing both budgetary indications and targeted areas for partnerships.

The next steps will involve the on-going European Parliament and Council negotiations on the EU budget 2021-2027, including the Horizon Europe budget, as well as the European Parliament and Council negotiations on the European Commission's proposal for Horizon Europe. In the second half of 2018, spanning through 2019, work will be carried out to design strategic planning to prepare the first work programmes under Horizon Europe, including the co-design of missions and setting up of partnerships.

The Impact Assessment on the Commission proposals on Joint Undertakings will be launched beginning of 2019 and the proposal will then be adopted by the next College. The envisaged start of Horizon Europe is set for 1<sup>st</sup> January 2021.

Finally, the Commission called upon the SRG representatives to act as ambassadors of the future EU R&I Programme.

The S2R JU Executive Director invited the SRG members to the S2R JU stand at the Innotrans trade fair to witness the progress accomplished by S2R in the past two years, including preliminary Demonstrations (quick wins). The S2R JU Executive Director then presented the state of play of the S2R JU (presentation attached).

In terms of project reviews, more or less 50 projects are running. 39 reviews have been completed - involving 26 projects, and 21 projects have received payment. In total, more than 26 million euros have been paid to projects so far. The S2R JU invested 157 million in R&I cumulatively from 1/09/2016 to the end of the year.

Four lighthouse projects are undertaken for final review. All are due to be completed by end of September 2018.

The Executive Directive then provided an update on the main issues discussed and decision approved by the Governing Board during the meeting held on 29 June 2018. Regarding the matter of the HaCon membership to the S2R JU, following the acquisition of HaCon by Siemens, the consultation of the Legal Service of the Commission concluded that there is no legal basis for ceasing the Associated Membership of HaCon following the acquisition by Siemens. The provisions on

changes to membership (Article 4 of the Annex to the Regulation) do not cover this kind of cases. Therefore HaCon should maintain their status as Associated Member and be entitled to a seat in the Governing Board. This requires a limited amendment of the Decision on outcome of the Invitation to the Associated Members and a discussion with HaCon on their participation to the 2018 projects resulting from the outcome of the 2018 Call. The final legal issues linked to the membership and the invitation to the Associated Members will be dealt with in the next couple of weeks and the activities will be awarded in the upcoming weeks.

As regards the AWP2019, the Executive Director stressed that the aim is to develop an AWP2019 and an AWP2020 coherent with the key policy priorities and requirements of the IM/RU; subsequently to accelerate on specific items, i.e. in principle without a Call in 2021. Focus will be placed on the evolving needs of operators, e.g. on digitalization and automation, advanced signalling system. The AWP2019 and 2020 represent an opportunity to focus the programme on these key priorities, and to ensure the convergence of the operators and infrastructure managers on future key priorities.

In terms of AWP2019, there is a need for a thorough revision of the topic contents before adoption by the GB to ensure consistency with the ongoing work on the MAAP and budget availabilities. Discussions are ongoing namely with respect to IP2. The SRG Chairperson highlighted that the first draft version of the AWP2019 was distributed to the SRG and that comments were sent to the S2R JU. The next steps are for the S2R JU to release the full draft version to the SRG by 15<sup>th</sup> October 2018. The SRG opinion on the full draft version is then expected by 24<sup>th</sup> October 2018.

The Executive Director called for the support of the SRG members, emphasizing that national resources are available in project development, and that digital railway programmes implemented in the SRG Member States should be connected in order to foster the Single European Railway Area, inter alia with regard to the convergence of standards and interfaces. In this respect, he highlighted the SNCF project replacing manual control of braking systems with a digital braking system. This is a national project that will be further developed in the S2R JU with the aim of fostering an interoperable system in Europe.

The Executive Director then provided the representatives with an update on the event “S2R Dialogue on the future of Rail R&I” held on 19 June 2018. The event successfully kick-started the public discussion on the future of rail R&I beyond 2020 and was an ideal platform for railway stakeholders to address policy and industry expectations. Participants expressed their strong support for the continuation of rail research and innovation within the Shift2Rail Joint Undertaking during the next EU programming period 2021-27. The Executive Director asked for the SRG members’ input to deliver a programme built for people and freight business, highlighting digitalization, automation and sustainability. The Member States’ views on the future targets of rail R&I is needed in this respect.

The next Governing Board meeting will be held on 4 December 2018. The AWP2019 will be submitted to the GB for approval.

The Executive Director presented the ongoing work on international cooperation agreements signed by the S2R JU, namely the cooperation agreement signed with

SEESARI in the presence of Commissioner Bulc at Innotrans on 18<sup>th</sup> September, as well as the upcoming agreements to be signed with the Czech Republic, CUTRIC-CRITUC and ETSI.

The Executive Director presented the results of the S2R R&I awards:

- Women in rail R&I Award – awarded on the 18<sup>th</sup> of September to Network Rail
- The S2R Rail Research & Innovation Awards – awarded on the 18<sup>th</sup> September to CONNECTA for project management, to OPEUS for decarbonisation and to IT2RAIL for digitalisation.
- PhD Grants’ signature (part of Call 2018) – postponed, as the award results of the call were postponed.

Finally, the Executive Director mentioned the ECA and IAS audits on the S2R JU.

Following the presentation of the Executive Director on the state of play of the S2R JU, the SRG Chairperson emphasized the need for Member States to play a significant role in improving national rules and national procedures. He recommended in this respect that SRG members visit the automated brake test demo at the S2R JU stand at Innotrans.

Questions were put forward by the AT and NL representatives. The AT representative asked how the “missions” in the Commission’s Horizon Europe proposal were linked to partnerships. The Commission (DG RTD) stated that missions embodied the aim, whilst partnerships were to be designed as the mechanism to achieve these aims. The AT representative furthermore requested precisions on the 2018 and 2019 calls. The Executive Director underlined that as soon as the results of the 2018 call were published, the statistics of the call would be shared with the SRG representatives. As regards the 2019 call, he emphasized that operators and infrastructure managers are revising their needs for 2030 and stressed the necessity for IP2, IP1 and IP5, in particular, to be fully connected to these needs, in order to broaden the system architecture (digital rail system components). He stated that two possibilities exist in this regard; either to delay the call by 4 months in order to better shape the AWP2019, or to follow the normal calendar of calls with publication in January 2019 and call closure deadline in April 2019.

The NL representative asked how the Commission proposal for Horizon Europe would deal with the occasionally voiced perception that partnerships lack transparency. The Commission (DG RTD) answered that statistics relevant to EU Joint Undertakings reveal that they benefit a wide range of actors and do not operate as closed clubs. The Commission also reminded the general principles governing subcontracting. The Executive Director stated that there are 343 participants in S2R JU at the end of 2017, and that efforts are currently undertaken to ensure a broader participation in the future too. The Commission highlighted that the requisite balance between strong commitment on the one hand and openness on the other will be further discussed in the European Parliament. The Executive Director expressed the strong will to have a more balanced approach and the involvement of a wider range of actors in the formulation of S2R2. He indicating that some very specific activities can only be carried out by some specific companies, and that subcontracting can also be an instrument for enhanced participation.

<b>09:50-10:00</b>	<b>4. Testing facilities - latest developments</b>
	<p>The Chairperson of the States' Representatives Group reminded the analysis conducted by the SRG on existing test facilities, subsequent to the request formulated on this matter during the 16<sup>th</sup> Governing Board meeting (see presentation attached).</p> <p>The SRG Chairman thanked AT, ES, NL, NO, PT, RO, SE, TR, UK, DE, PL, CZ and all SRG members for providing their input to this analysis. AL and HU also contributed, at the moment in written form only. Their contribution will be taken into account at the TF WG which was established.</p> <p>The Commission (DG RTD) then provided an update on the progress of the Staff Working Document on technology facilities opportunities for the EU (scheduled for publication in January 2019) and the questionnaire to collect the needs for testing facilities. A workshop will be organized on 14<sup>th</sup> November to analyse with stakeholders the results identified with the mapping, gap analysis and feasibility study.</p> <p>A S2R JU working group was set up to prepare the position paper on R&amp;I TF and their capabilities, identifying needs and gaps, to be shared with the European Commission. The first meeting of the working group will take place on 9<sup>th</sup> October.</p> <p>The S2R visit of the Pueblo facility in the United States was mentioned, with the Executive Director indicating that on the one hand the use of Pueblo facilities by European companies is costly, but on the other hand no similar holistic testing facilities exist in Europe, emphasizing that Pueblo facilities run 24/7 in a desert environment. A system approach towards an integrated vision of testing facilities is needed in this respect in order to reduce costs.</p>
<b>10:00-10:30</b>	<b>5. S2R2, Horizon Europe</b>
	<p>The Chairperson presented the SRG Opinion on the preparation of Shift2Rail2. He suggested the proposed opinion content focus on the analysis of Regulation 642/2014 and of existing Shift2Rail Rules of procedures. In this respect, he proposed the following documents be taken into account: (i.) Shift2rail Mid-term evaluation report; (ii.) EP Resolution of 9 June 2016 on the competitiveness of the European rail supply industry (2015/2887(RSP); (iii.) Commission Decision of 30.5.2016 establishing horizontal rules on the creation and operation of Commission expert groups (C(2016) 3301 final); (iv.) Notice to stakeholders - Withdrawal of the United Kingdom and EU rules in the field of industrial products of 22/01/2018.</p> <p>The Chairperson then presented members with an update on the Prague workshop on Horizon Europe preparation.</p>
<b>10:30-10:45</b>	<b>6. Presentation of the draft Strategic Research and Innovation Agenda (STRIA)</b>
	<p>The SRG Chairperson invited Vincent Blervaque (Head of Program Autonomous Train, FCS Railenium) to present the draft Strategic Research and Innovation Agenda (STRIA) for Connected and Automated Transport, commissioned by DG Research &amp; Innovation. An update of the first roadmap was published on 9 November 2016. The Commission Staff Working Document "Towards clean, competitive and connected mobility: The contribution of Transport Research and Innovation to the Mobility</p>

Package” was published in May 2017. The STRIA’s aim is to deliver strategic guidance to the European Commission for future research and innovation programs.

Mr. Blervaque presented the nine thematic areas of the draft roadmap:

1. Rolling stock enablers for remote control of train operation and autonomous train operation
  - Reliable environment perception to detect trackside signals and to identify all external hazards enabling on-board decision-making intelligence
  - Reliable train positioning
  - Enhanced Train Control and Management System
2. Environment and operational monitoring
  - Reliable external and internal environment perception (outside ATO)
  - Enhanced Decision and Advisory Support
  - Interactions with all road users
3. Large scale demonstrations to enable deployment
  - Deployment of autonomous passenger trains in real conditions and mixed railway traffic environment
  - Deployment of autonomous freight trains in real conditions and mixed railway traffic environment
  - EU-wide common experiment/testing agenda and common framework on testing and deployment
4. Railway network information, management, maintenance and control
  - Smart maintenance and asset management
  - Logistics on demand and increased last mile handling
  - Smart traffic management
  - Mobility as a service and Intelligent stations
  - Management of interactions with passengers for safe and secure operation
5. Socio-economic impacts –User/public acceptance
  - Impact assessment of connected and automated train (passenger & freight)
6. Human factors
  - Driver tasks for remote train operation and highly automated train operation
  - Communication and interaction between automated passenger train / tramway and users / workers
7. Physical and digital infrastructure & secure connectivity
  - Development of digital model of railway infrastructure
  - Fast, safe, reliable and high-capacity connectivity between all parts of the rail system and its environment
  - Cyber security for connected and automated railway system
8. Big data, AI and their applications
  - Create more value from data in connected and automated railway system
  - Further development and use of AI in connected and automated railway system
9. Safety and security

	<ul style="list-style-type: none"> <li>▪ EU-wide testing procedures for connected and automated train</li> <li>▪ EU-wide safety assessment program for connected and automated train</li> </ul> <p>The SRG Chairperson thanked Mr. Blervaque for the highly interesting presentation and the possible follow-up to be given by the SRG.</p>
<b>10:45-11:20</b>	<b>7. SRG activities in the next period (AWP2019; info days; S2R2 preparation, WCRR, etc)</b>
	<p>The Chair invited the S2R Executive Director to update members on this agenda item. The Executive Director indicated that the info day for the 2019 call is foreseen on 20<sup>th</sup> December 2018.</p> <p>The S2R JU will release the full draft version of the AWP2019 to the SRG by 15<sup>th</sup> October 2018. The SRG opinion on the full draft version is then expected by 24<sup>th</sup> October 2018.</p> <p>Building upon the results achieved during 2019, the S2R JU intends to bring demos to events such as the Transportation Research Board Annual Meeting, on 13-17<sup>th</sup> January in Washington DC, the Global Public Transport Summit in Stockholm on 9-12 June 2019 and the 12<sup>th</sup> World Congress on Railway Research (WCRR) on 28 October -1<sup>st</sup> November in Tokyo.</p> <p>In this respect, the Executive Director indicated that the following WCRR papers were submitted:</p> <p>IP1:PLASA: Smart Planning Simulation Model</p> <p>IP2:</p> <ul style="list-style-type: none"> <li>• One Adaptable Communication System for all Railways</li> <li>• SHIFT2RAIL IP2: Communication &amp; Signalling Innovations.</li> <li>• Comprehensive and standardised approach for railway cyber security</li> </ul> <p>IP3/CCA: Approach for integration of maintenance planning into capacity management</p> <p>IP4/CCA: A methodology to assess the impact of end-user centric innovations on railway transportation attractiveness.</p> <p>The Chairperson thanked the S2R JU Executive Director for providing the SRG with this information and for his presentation. The S2R JU Executive Director being expected at Innotrans, he was replaced in the SRG meeting by the S2R JU Head of Innovation and Research.</p>
<b>11:20-11:40</b>	<b>8. Election of the Chairperson and Vice-Chairperson</b>
	<p>The Chairperson indicated that the SRG Rules of Procedure do not allow the same Chairperson to hold three consecutive mandates. The SRG members should therefore elect a new Chairperson and a new Vice-Chairperson, to be effective as of 1<sup>st</sup> January 2019.</p>



	<p>The SRG members, S2R JU and the Commission warmly thanked the Chairperson for his commitment, excellence and pro-active stance throughout his two consecutive mandates, effectively fostering cross-collaboration at national level.</p> <p>According to Regulation 642/2014 and the Shift2Rail JU SRG Rules of procedures, for the positions of Chairperson and Vice-Chairperson, the applicant has to be a member of the SRG and send a CV to the S2R JU secretariat.</p> <p>For the position of Chairperson, according to the deadline, no applications were received.</p> <p>For the position of Vice-Chairperson, according to the deadline, two applications were received and are eligible. The applicants to be subject to the election process for the position of Vice-Chairperson are:</p> <ul style="list-style-type: none"> <li>• Sarah Bittner – Krautsack (AT)</li> <li>• Miroslav Haltuf (CZ- present Chairperson of S2R JU SRG)</li> </ul> <p>However, the S2R Head of Research of Innovation indicated that a recent change occurred, as the Austrian Ministry indicated their willingness to support the candidacy of Sarah Bittner-Kraustack to the position of SRG Chairperson.</p> <p>The SRG members indicated their desire to proceed to the vote, based on the above-mentioned information, by written procedure. The S2R JU secretariat agreed to launch the written procedure in the coming weeks for the election of the SRG Chairperson and Vice-Chairperson.</p>
<b>11:40-11:50</b>	<b>9. Closing remarks</b>
	The S2R Head of R&I reiterated the invitation to invite the SRG members to the S2R stand at Innotrans.
<b>11:50-12:00</b>	<b>10. AOB</b>
	<p><u>Next meeting:</u></p> <p>The Chairperson invited the S2R Head of R&amp;I to present the suggested dates for the next meeting. An SRG meeting was proposed in Tel Aviv in May 2019 (exact date tbd and meeting tbc). Moreover, it was suggested to organize another SRG meeting in Brussels in March 2019 in order to discuss the opinion on the AWP2020. The Chairperson recommended a final decision be taken on the exact dates and place before the end of 2018.</p>

**Actions for the members:**

Members are invited to send their input for the AWP 2019 by 24<sup>th</sup> October 2018 to the Chairperson ([miroslav.haltuf@hcomp.eu](mailto:miroslav.haltuf@hcomp.eu)) and copy to the JU ([Valerie.LORGE@s2r.europa.eu](mailto:Valerie.LORGE@s2r.europa.eu)).