# Second meeting of the Scientific Committee of Shift2Rail JU

15 October 2015 White Atrium building, Meeting Room no 4 10:30-14:30

# **Draft minutes**

10:30 - 10:40	Welcome by the chair		
	The Chair, Mr Pereira, welcomed the participants at the second meeting of the Scientific Committee (SC) and explained that no comments were received on the minutes of the previous meeting and therefore these were approved.		
	The Chair recalled that the main purpose of this 2 <sup>nd</sup> meeting was to discuss the 1 <sup>st</sup> draft S2R Multi Annual Action Plan (MAAP,) but also to provide to the Committee an update on the state of play of the S2R JU and on the work plan for 2015-2016.		
	He then welcomed the IP/CCA shadow Steering Committee Coordinators, who were invited at the meeting in order to facilitate the understanding of the first draft MAAP circulated prior to the meeting. A list of participants is attached (Annex 1).		
	The SC members agreed on the draft agenda, as circulated on 22 September 2015 (Annex 2).		
10:40 - 11:00	Information on the state of play of the Shift2Rail JU		
	C. Economou, the Executive Director ad interim of S2R JU, presented the latest developments related to the activities of the JU and in particular with regard to the results of the call for the selection of Associated Members (AM), the development of the S2R Multi Annual Action Plan (MAAP) and the recruitment of staff.		
	He provided an overview of the successful AM candidates per IP/CCA and highlighted that the Governing Board reserves the right to launch a second call for associated members in the future if the negotiations result in a situation in which the JU lacks key competences to carry out strategic activities.		

With regard to the first draft MAAP, he mentioned that the document should be seen as a guidance document, a "second layer" of the Master Plan, serving as the main reference point for the future Annual Work Plans of the JU and for the evaluation of proposals submitted in response to calls for proposals launched by the S2R JU. He continued by saying that the MAAP may be regularly updated to take into account project results.

In reply to a question if the open calls are considered within the draft MAAP, he confirmed that the open calls are part of the MAAP and that in line with the provisions of the S2R Regulation at least 30% of the total EC contribution to S2R should be dedicated to open calls.

#### 11:00 – 11:30 | S2R Draft Annual Work Plans 2015 and 2016

The S2R JU Programme Office presented the latest developments related to the development of the annual work plans (AWPs) of the JU for 2015 and 2016. The JU highlighted how the specific feedback provided by the SC has been addressed in the current version of the annual work plans. The SC took note of the fact that the draft AWP 2015 and AWP 2016 needed to be adopted by Governing Board as the basis for the Financing Decision (the two draft WPs were adopted last August while the final ones will be adopted by the Board in December).

Responding to questions on the operational budget included in the AWPs, it was mentioned that 45M€ EU contribution has been earmarked for AWP 2015 and the same amount for AWP 2016 out of which around 26.1M€ will be allocated to open calls.

The Commission highlighted that the figures above refer to budgetary commitments and that the payment will only be due once the grants are signed. Furthermore, it was underlined that the percentage for open calls included in the S2R Regulation (at least 30% of the Union financial contribution to the S2R Joint Undertaking dedicated to operational costs) has to be respected at programme level and thus the percentage may differ in the annual AWPs or across Innovation Programmes.

It was pointed out that the discussions on the detailed topic descriptions are currently in progress and the S2R JU is consulting with the IP/CCA coordinators, shadow Steering Committees, ERA and the Commission services in this respect.

Answering a question on the timeframe for the publication of the calls and start of the grants, it was noted that the adoption of the final AWPs is foreseen at the GB meeting in December that would enable the launch of the calls mid-December. The calls would be open 3 months following the standard practice in H2020 with expected starting date of the activities in

autumn 2016.

It was also outlined that the JU intends to launch at the same time the call for proposals for JU members and the open call for proposals for the broader rail research community.

Responding to questions on the relatively low budget per topic than the standard practice in H2020, it was highlighted that based on various feedback including from the SRG to start as soon as possible the activities in all the IPs, it was decided to launch operational activities in various IPs/CCA with lower amounts, that match the initial building blocks that would be required for further more resources-intensive phase of prototyping or demonstrating different solutions.

It was emphasised that the relatively low value projects are not equivalent of a low activity but are dedicated to studying very specific parts of a high value long term programme.

On a question with regard to the review of the grants for members and the grants following the open calls, it was noted that the standard H2020 rules would apply in both cases.

In reply to a question on the possibility to increase the budget of an area if the activities so require, it was explained that the overall Union financial contribution to the S2R Joint Undertaking dedicated to operational costs is fixed by the Founding Regulation. However, as the activities will progress, and some of the solutions might prove to have more innovation potential than others, it will also be possible to re-allocate some budgets from one topic to another. It was pointed out that in this respect, it is important to have SC's support in checking if the priorities in the AWPs are well set taking into consideration the evolving needs of the sector.

In their comments, the SC members expressed the need of having meaningful projects with tangible results.

It has been also confirmed that the development of the AWP 2017 will start by the end of 2015, so that the JU can enter in the regular rhythm of drafting and adoption of the AWPs and associated budgets.

# 11:30-13:00 S2R Draft Multi Annual Action Plan: Discussion and preliminary opinion

S2R JU Programme Office provided further details on the MAAP development such as the related estimated budget and the timetable for the finalisation of the document.

This was followed by the presentation of the shadow Steering Committees IP/CCA coordinators on the scope, content, examples of open calls and estimated budget each of the five IPs and CCA.

Examples of desired input from SC were mentioned:

- information on research results of value for S2R from other non-rail related National or European Research Projects, transfer of technologies, new research questions and ideas, avoid for S2R 'reinvents the wheel'
- input on areas with a high percentage of open calls such as safety and smart materials

The following observations were made by the SC members:

#### **General observations:**

- The MAAP should to follow a top down approach and present the different components tackled by the programme and how they will be integrated to help achieving the final target of the S2R programme, notably the optimisation of the railway system
- In this respect, the cross-linkages both within the same IP and with other IPs/TDs should appear in the MAAP
- The open calls should follow a structured logic, long-term planning and prioritisation taking into consideration the evolving needs of the sector and already existing results from previous projects.
- Key Performance Indicators (KPIs) need to be established in order to measure the impacts of newly developed technologies and their contribution in achieving the objectives expressed in the Master Plan.
- the business case for the innovations within S2R in terms of reducing life cycle costs, improving attractiveness of the rail services for customers and the wider benefits for society should also be considered
- Having common methodologies is a welcome addition, i.e. as proposed in the CCA energy. In addition the use of common test facilities and simulation techniques should be sought
- The MAAP should contain realistic targets. i.e. in some sections, the MAAP targets 'zero tolerance'
- Table of contents is homogenous but the draft MAAP content should be reviewed to focus on the expected demonstrations and deliverables
- A glossary and bibliography would be welcome addition to facilitate the flow of information

#### On IP1:

- Focus on the line capacity looking at the future braking distance coupled with the new technology of S2R. Due consideration should be given to safety. Brakes TD could look into non-adhesion affected brakes technology other than eddy-current brakes.
- Research on running gear should be carefully sought as the past application of mechatronics could lead to unforeseen issue

## On IP2:

- ERTMS the evolution of GSM-R should be taken into account
- TD 2.7 mainly technology-oriented and less operational rules, it would be necessary in the future to have the interrelationship between the different tasks. Some results might already be available.
- Virtual coupling the intended results may not be achievable, it is clearly risky research
- Cyber security the intended scope of work should be clarified

#### On IP3:

 work on the possible increase of the loading gauge and the axle load is important in tackling capacity increase

#### On IP4:

 Important to address the variety of new comer operators and not only taking into account the opinion of incumbent national railway undertakings. This new market competition evolution on operations needs to be taken into account

#### On IP5:

 Customer-oriented freight research is an important aspect to be taken into account in the MAAP. The demand of freight customers relates mainly to the reliability and information and to a lesser extent to the travel time.

#### On CCA

- safety: the links between human operating in an automated environment and possible ways of joining the two should be tackled.
- evaluation of impacts puts emphasis on KPIs but the list should be wider (see also general comment)
- human capital: education and skills, brain drain and what the

railways can do to attract students in the sector is an important element that can be included in this area and the SC would be a forum to tackle this concern.

### Next steps: SC's feedback on the MAAP

The SC agreed on a list of members per IP/CCA for the review of the MAAP. It was pointed out that the comments should be focusing on the high level objectives and scientific aspects of the MAAP and to a lesser extent on implementation. A rapporteur was nominated per IP/CCA who is expected to provide the consolidated feedback from the members to the Chair and Vice-chair no later than 26 October. The Chair is expected to provide to the JU/EC the consolidated feedback of the SC on the MAAP no later than 2 November.

In the process of reviewing the MAAP, it was agreed that the SC members may contact the IP coordinators for clarifications.

The JU will circulate the presentations of the IP/CCA coordinators to the SC members. The Chair will circulate the list of members per IP/CCA to the SC.

# 14:00-14:30 SC General Working Methods

Cooperation with the S2R States Representatives Group

The SC examined the participation of the SC Chair in the SRG meetings following the request of the SRG Chair and vice-versa. Given the different nature of the two advisory groups to the S2R JU, it was agreed that the Chairs may attend the meetings of the other advisory body on an ad hoc basis and if the subjects justify this. Therefore, the SC Chair, in consultation with S2R JU, will decide when it is appropriate to invite the SRG Chair. Briefings between the 2 Chairs may be arranged as appropriate.

- Cooperation with ERRAC
- Synergies with the Horizon 2020 Transport Programme Committee

The SC examined the possibility to interact with ERRAC and respectively H2020 Transport Work Programme Committee.

The SC members participating in the above-mentioned groups agreed to inform the SC of any synergies with rail-related calls and propose S2R interested domains to be considered in the context of SC meetings.

Furthermore, meetings may be organised in the near future with the Permanent Advisory Group of ERRAC, in the context of ERRAC, to discuss joint subjects and to establish possibly an agenda for exchange of information.

• SC planning of activities for 2016

The Chair following consultation with the JU will circulate to the members

a proposed agenda for the SC's work within the next year. This should be

14:30 – 15:00 Any other business and date of next meeting

discussed in the next SC meeting.

One of the SC members asked the JU to examine the possibility of having a public registry where the SC members could notify a potential conflict of interest. The JU pointed out that the confidentiality arrangements stipulated in the Rules of procedure of the SC apply. It was agreed that the JU will check the legal aspects of this request which are the provisions of the standard Confidentiality arrangements to be approved by the JUs and investigate what is done in this respect in the other JUs. This should be discussed in the next SC meeting.

Answering a question on the need for visibility of the SC's role and members, the JU highlighted that these were indeed made public on Europa Transport website pending the setting up of the new S2R web site. It was agreed that the relevant weblink will be circulated to the members.

The SC agreed to fix already an indicative date for its next meeting, notably the 13 April 2016, with starting time at 10h30.

# Annex List of participants

PEREIRA	Manuel	University of Lisbon
SANZ BOBI	Juan de Dios	UNIVERSIDAD POLITÉCNICA DE MADRID
DI FEBBRARO	Angela	DIME - University of Genoa
PIERIEGUD	Jana	Warsaw School of Economics
SCHNIEDER	Eckehard	Technische Universität Braunschweig
PYRGIDIS	Christos	Aristotle University of Thessaloniki

IWNICKI	Simon	University of Huddersfield
SÖYLEMEZ	Mehmet	ITU Graduate School of Sci. Eng. And Tech.
LACÔTE	François	
NASH	Chris	University of Leeds
STICHEL	Sebastian	КТН
MOLKOVA	Tatiana	University of Pardubice
TRAVAINI	Giorgio	Shift2Rail Joint Undertaking
HALTUF	Miroslav	Chair of the SRG
ECONOMOU	Christos	Shift2Rail Joint Undertaking
SMIT	Rachel	DG MOVE
KEDZIERSKI	Antoine	DG MOVE
PATRIS	Georgios	Shift2Rail Joint Undertaking
GURAU	Alexandra	Shift2Rail Joint Undertaking
SZELIGOWSKA	Dorota	Shift2Rail Joint Undertaking
BIRD	William	DG RTD
PEREZ	Xabier	IP1 Shadow Coordinator (CAF)
MONTI	Claudio	IP2 Shadow Coordinator (Ansaldo STS)
LEWIS	James	IP3 Shadow Coordinator (Network Rail)
BARNES	Thomas	Network Rail
PEREAL	Yves	IP4 Shadow Coordinator (Thales)
BERGSTRAND	Jan	IP5 Shadow Coordinator (Trafik Verket)
LETH	Siv	CCA Shadow Coordinator (Bombardier)