

Minutes of meeting

Scientific Committee meeting SC(M)06-2023

Friday, 1 December 2023 (9h00 to 13h00)

Sevilla, Spain

Item 1. Welcome & review of actions

The SC Chair, TBO, welcomed all participants to the sixth meeting of the SESAR 3 JU Scientific Committee (SC).

ABO welcomed all the SC members and thanked for their participation to the SESAR Innovation Days event, which was a very good networking event for research entities working on SESAR and ATM topics. He expressed his appreciation for the high-quality works of the young scientists.

He informed that the DES programme is progressing according to the schedule.

On the ATM Master Plan, he stressed the importance of the SC views in the update campaign process.

He informed that as of 1 January 2024, UK will be associated to the Horizon Europe Programme. This would allow UK applicants to the call for expression of interest to become a member of the Scientific Committee to be appointed. SC members confirmed that Mr Cook's complimentary expertise would bring additional competencies and a real benefit to the body.

Item 1. Conclusions:

The SESAR 3 JU will draft a decision on the appointment of an additional members to the Scientific Committee to be tabled at the GB meeting of 14 December (action SC06/01).

Item 2. Outlook on the future of ATM research beyond 2028

SC members had a discussion on the draft paper prepared by TBO on the outlook on the future of ATM research beyond 2028, suggesting modifications to better cover:

- Environmental policy context to make a distinction between elements related to the aviation in general and those related to ATM,
- To specify that there is the need to look at not only environmental but climate impact,
- Aircraft performance issues stemming from the integration of new types of aircraft into ATM, network, including on the passenger mobility.
- Integration of new military air vehicles and platforms into ATM,
- Better integration of existing cybersecurity experiences into future ATM solutions, and coexistence with legacy systems
- Need for better framed data sharing between aviation stakeholders and for the general public, on the road to the green Digital European Sky
- Further considerations on the inclusion of AI into future ATM
- Research on the impact of higher airspace operations on the ATM
- Importance of public investment for the coordinated European approach to the ATM, to enable and facilitate shortening of the innovation cycles and the benefits to be obtained at European level, not only locally.

TBO asked the SESAR 3 JU to have information on beneficiaries participating in the ongoing projects (e.g. category). It is agreed that this version of the document will serve as an initial input into the MP, to guide the future R&I priorities for the ATM modernisation in Europe.

Item 2. Conclusions

The SC Members agreed to provide contributions to the paper by 6th December 2023 (action SC06/02). IVA will provide information to TBO on beneficiaries by December 2023 (action SC06/03).

Item 3. SIDs update

DSC, the SIDs Programme Committee chair, provided a presentation on the SIDs positive evolution in terms of participation and submission of technical papers, since the beginning of the event in 2011.

Regarding the 2023 SIDs event organisation, he commented that the quality of papers submitted was very high, the cooperation within the SIDs' committee is very constructive, many posters and interesting panels with a good balance in terms of topics and number, and several papers from non-EU countries were presented. DS informed that novelty this year is that DOI numbers are added to all papers, which is in line with EC open research policy.

For the next editions, he suggested that posters presentation could be improved to make it more interactive and the scope could be clarified. He asked if the number of posters should be limited, considering the high number of posters this year, although this might be due to the fact that many projects have started this year.

On the SIDs special issue in the European Journal of Transport and Infrastructure Research (EJTIR), published by University of Delft, he reminded that the objective is to publish 6 – 10 best papers from the SIDs2023. Invitation will be sent out to 12-15 papers and the timeline, and the necessary coordination will be done in the next months with the EJTIR. The peer review will be performed by reviewers nominated by guest editors (DSC and TBO).

The advantages of the selected journal are that it is both open and has an impact factor.

DSC also presented the timeline for the SIDs paper submission and evaluation process that will have to be shortened by two weeks for the 2024 edition as the SIDs event will take place at mid-November.

Item 3. Conclusions

The SC Members took note of the information provided by DSC.

Item 4. Report on the Master Plan update Steering Group

PHE, in his role of representative of the Scientific Committee to the Master Plan Steering Group, reminded the SC Members about the 8 success criteria to be taken into account for developing the MP. He also presented the organisation structure composed of 6 working groups feeding into the Content Integration team and in the Steering Group.

He presented the group participants, the work approach and the main milestones for the ATM MP update to reach the document adoption at the Governing Board meeting of December 2024.

He added that at the last meeting the SG concluded that the future ATM system should be designed to:

- Avoid any negative climate impact due to ATM on the ground and in the air. As the challenge to achieve climate neutrality goes beyond CO₂, the future design of the system should be able to adapt to minimise the total climate impact of aviation, while addressing noise and local air quality.
- Help transform the way capacity is delivered enabling service providers to dynamically and

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collaboratively scale up or down capacity in line with all demand (both civil and military, manned and unmanned). These capacity adjustments should be implementable within minutes and ensure an optimal and cost effective use of resources at any moment (airspace, data, infrastructure and human/machine teaming).

- Further increase safety levels as the traffic will become more complex to manage.
- Ensure that data flows in an effective and secured manner across trusted users.
- Improve the overall passenger experience.

PHE asked if the Deployment Manager had been included in the MP SG and if the MP SG material could be shared with the SC Members.

Item 4. Conclusions

The SC Members took note of the information provided by PHE and IVA agreed to revert to PHE on the above questions (action SC06/04).

Item 5. Young Scientist Award 2023 update

RSO and PHE reported that the quality of the candidatures submitted (12 PhDs, 6 MSc/BSc) was extremely high and the scoring presented some challenges. To improve the evaluation process, they suggested:

- that the evaluation criteria of the next call for expression of interest are described with an increased level of granularity,
- to clarify in advance the approach to be adopted (assign points according to positive elements vs deducting points according to weaknesses/shortcomings),
- encourage the submission of thesis in English language: an appropriate wording in the notice of competition should be found to ensure equal treatment, on the one hand, and to facilitate the thesis assessment, on the other hand. Some members were in favour of making this an “eligibility condition”, considering that candidates having an English *version* (e.g. translation of thesis) of their thesis should benefit from a greater impact.

Item 5. Conclusions

The SC Members took note of the information provided by RSO and PHE and asked the SESAR 3 JU to consider from the legal point of view the request of having thesis in English language submitted for next YSA edition (action SC06/05).

Item 6. Open data task force

TBO briefly presented the paper [“Roadmap for a European open science alliance for ATM research”](#), underlying the background, the opportunities and barriers to opening data, the Engage 2 approach. The paper is a result of the Open data task force’s efforts and collaboration with wider Scientific Community.

TBO explained that project Engage 2 plans to apply Open science and FAIR approach, with different collaborations proposed and plans to develop an “open science alliance”, as proposed in the paper, and with the support of SC. Engage 2 will design and administer a survey to past and current ER and IR projects to cover different types of data, explore data ownership and best way of data and code sharing.

Item 6. Conclusions:

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The SC Members took note of the information and timeline provided. The Open data task force will look into establishing a meeting with EUROCONTROL DG in the next year to further develop the 'open science alliance' (action SC06/06).

Item 7. Performance Task Force and joint SC meetings with Europe's Rail and Clean Aviation Joint Undertaking

Due to the fact that transversal projects are currently ramping up, TBO did not have specific activities to report yet, but will be in contact with the projects in Q1 2024. She underlined that the MP update is also an opportunity to look at the performance research framework and ABO also invited the SC members to take this perspective into account in their contribution to the MP update.

Regarding the plan to contact the Clean Aviation JU and Europe's rail Scientific Committee to organise a joint meeting: TBO and IVA will contact CAJU; for Europe's Rail, the SC was just set up and activities will only start only in 2024.

Item 7. Conclusions:

IVA will check the room availability at the WAC to host the SC meeting (SC06/07).
TBO will approach the CAJU SC Chair and IVA the Secretary (SC06/08).

AOB

The proposed SC meetings for 2024:

- SC07: 20 March – physical in Geneva (during Airspace World 2024)
- SC08: physical in Brussels back-to-back to the GB (dates TBC)
- SC09: Tuesday 17/09 online 14 to 17
- SC10: November after the SIDs in Rome

TBO closed the meeting thanking all for their participation.

Signature of the Chairperson



Annex I – List of participants

MEMBERS

Arnaldo Rosa (RAR)

Bagassi Sara (SBA)

Besada Juan (JBE)

Bolic Tatjana (TBO)

Delahaye Daniel (DDE)

Hecker Peter (PHE)

Malakis Efstathios (SMA) - online

Netjasov Fedja (FNE)

Somogyi Rita (RSO)

SESAR 3 JU

Andreas Boschen – SESAR 3 JU Executive Director (ABO)

Peter Hotham – SESAR 3 JU Deputy Executive Director (PHO) - excused

Alain Siebert – SESAR 3 JU Chief Economist and Master Planning (ASI) – excused

GUESTS

Dirk Schaefer – Eurocontrol – SIDs Programme Committee Chair (DSC)

Annex II - List of actions

Please note that closed actions from past meetings have been removed from the list.

Actions	Responsibility	Description	Due Date	Status
SC03/08	SESAR 3 JU	To facilitate information exchange between the SC and the SESAR 3 Transversal project as part of the follow up of the Performance Task Force work in the previous S2020 Scientific Committee	Q1 2023	Open
SC04/04	SC Members	Reflecting on the future of ATM research (beyond 2028) and produce a White paper	End of 2024	Open
SC05/01	SJU	To provide the template for outlook on the future of ATM research beyond 2028	Mid-October	Closed
SC05/02	SC Members	To discuss the outlook on the future ATM research	End of October	Closed with Item 2
SC05/03	SC Members	To provide an input to the outlook on the future of ATM research beyond 2028	Mid-January	Open
SC05/04	SJU	To provide BAWP for comments	Mid-October	Closed
SC05/05	SC Members	To provide comments on BAWP for December GB	December	Closed
SC05/06	SC Members	Produce a paper supporting Scientific Agenda focusing on ER for the MP. SC06 produced a draft paper, to be fine-tuned in 2024.	February 2024	Ongoing
SC05/07	TBO	To report about the Performance Task Force	December	Closed (item 7)
SC05/08	PHE	To approach representatives of Clean Aviation for experience exchange		Closed

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SC06/01	SESAR 3 JU	Propose appointment of additional member to the SC	asap	Open
SC06/02	SC Members	Contribute to the paper on Outlook of research beyond 2028	December 2024	Open
SC06/03	IVA	Provide information on project beneficiaries category	December 2023	Open
SC06/04	IVA	Check if Deployment Manager had been included in the MP SG and if the MP SG material and be shared with the SC Members.	asap	Open
SC06/05	SESAR 3 JU	For the YSA award 2024: Consider requesting thesis in English language	Q1/Q2 2024	Open
SC06/06	TBO	meeting with EUROCONTROL DG in the next year to further develop the 'open science alliance'	Q1/Q2 2024	Open
SC06/07	IVA	Check room availability for SC meeting on 20/03 in Geneva	asap	Open
SC06/08	IVA+TBO	Contact CA JU SC to plan a joint meeting in 2024	Q1 2024	Open