





SCI Panel Unveils Quarterly Newsletter!

Announcing insights, progress, and achievements

Dear SCI Panel Community,

With immense pleasure, we introduce the inaugural edition of our quarterly newsletter, a platform designed to capture our latest developments. Within these pages, you'll find snapshots of our activities, shedding light on initiatives and progress towards our goals.

With the completion of our SCI-52nd PBM in October 2023, we will begin another year of collaboration filled with activities and symposia. Stay tuned for insights into upcoming STO and SCI events, offering opportunities for participation and networking that contribute to research and advancement.

We invite you to explore these sections, each encapsulating a unique facet of SCI evolution.

Best regards, Tuan and Carlotta Quarterly Newsletter

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THE SCI TIMES SYSTEMS CONCEPTS AND INTEGRATION PANEL



2023 Q4, 15 Dec 2023

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Message from the Chairs Mr Allan Chan & Dr Nick Law

Building on Success

Firstly we'd like to thank Tuan and Carlotta for launching The SCI Times and for all their work and enthusiasm supporting the SCI Panel to develop and deliver the program of work!

Looking back over 2023 we have made good progress on updating our Strategy to maintain S&T relevance to the Warfighter, our customers and support the CPoW 2030 initiative. We have also celebrated a number of awards that highlight our impact. SCI-264 RTG on "High Energy Laser Weapons: Tactical employment in the shared battlefield" won the STO Excellence Award (SEA) 2022 – an amazing achievement! Dr Mathias Anneken was awarded the SCI Panel Early Career Award. Our SCI Panel Executive Assistant Carlotta Rossi was awarded Women Supporting Science Award in recognition of her outstanding contribution. Cadets supporting SCI-SAS-351 RTG were bestowed Commendation of Recognition Awards highlighting the quality and importance of expanding the early career network to encourage innovation.



SCI-264 Research Task Group (RTG)

On 27 November we attended the Semi-Annual Brief to STO/CSO leadership. This session discussed major focus items for the next 6 months, informed CSO leadership on primary outcomes of the business meeting, providing feedback from the PBM and programme of work, and inputs into the CSO planning cycle.

Enabling Multi-Domain Operations was highlighted as a key focus area which fits well within the scope of the SCI Panel given the complex system-of-systems and integration challenges.

Looking forward to 2024, we are very excited to conduct our 53rd Panel Business Meeting on 13-15 May in Copenhagen, Denmark. Panel members and invited guests are encouraged to participate in the SCI-356 RSY on 'Radio-Frequency Directed Energy Weapons – Status and Perspectives' which will take place following the PBM on 16-17 May 23.

The SCI Panel continues to develop new technical activities to support the CPoW 2030 initiative with a strong focus on exploitation. Thank you everyone for your contributions. Both Nick and I are looking forward to working with you in the new year.

Best regards, Allan and Nick







Quarterly Newsletter

Updates from the Executive Office Lt Col Tuan Tran and Ms Carlotta Rossi

Successful Conclusion of SCI 52nd Panel Business Meeting

Sofia, Bulgaria, 16-20 October 2023. The Systems Concepts and Integration (SCI) Panel held its 52nd Panel Business Meeting last month in Sofia, Bulgaria, bringing together more than 45 participants from 18 Nations. Discussions focused on the CPoW 2030 initiatives and the implications of the Science and Technology Trends 2023-2043 report, in addition to discussions on multi-domain autonomy operations, and digital transformation. Special thanks to COL Emil Ivanov, the staff, and our Bulgarian hosts for their incredible dedication and support throughout the entire PBM.

The meeting was opened by Major General Todor Dochev, Commandant of Rakovski National Defence College. The PBM featured an internal workshop on developing an SCI strategy to complement the NATO Warfighting Capstone Concept. The Panel concluded the week by endorsing one Research Task Group, one workshop and four new Exploratory Teams.

Towards the end of the PBM, Dr. Nick Law was elected as the Chair, and will begin his term at the closure of the Spring 2024 PBM, succeeding Mr. Allan Chan. MAJ Anders Furu, has been voted in the Vice-Chair role.



SCI 52 PBM in Sofia Bulgaria

Got activity? Submit your budget request

CPPs and CEPs due to SCI Panel Office

Through the Cooperative Planning Program (CPP) budget, CSO can offer funding support of up to 50% of your total request for Field Collaborative Trials/Tests (FT) or Demonstrations of Technology (CDT). In Consultant & addition, the Exchange Programme (CEP) budget can offer funding support to provide specific expertise in carrying out the STO Collaborative Programme of Work.

Submit your anticipated funding needs for your activity for the 2024 calendar year as soon as needs are identified, at least two months before the start of your activity. Contact the SCI Panel Office for more information.



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Updates from the Executive Office, cont'd Lt Col Tuan Tran and Ms Carlotta Rossi

NATO STB wants your feedback!

Science and Technology Trends 2023-2043 survey deadline on 14 January 2024

All NATO STO Panels and Group members (Levels 2 and 3) are invited by the NATO Chief Scientist to complete a survey to indicate the implications of the S&T Trends on their respective Programmes of Work. The information will be used to steer the development of the STO's Programme of Work, identify gaps, propose any new Technical Activity Proposals, and to draw the connection to ongoing, already mandated, Tech Watch activities. **Closing Date: 14 January 2024**.

Survey: https://forms.office.com/r/dXrV9vYXNz

Link to the STT23 Report Vol.1: https://www.nato.int/nato_static_fl2014/assets/p df/2023/3/pdf/stt23-vol1.pdf

Vol.2:

https://www.nato.int/nato_static_fl2014/assets/p df/2023/3/pdf/stt23-vol2.pdf



Level 2 Coordination Committee (L2CC) Holds Virtual Meeting

Paris, France, 11 December 2023. The CSO Director John-Mikal Størdal virtually hosted the L2CC, with attendance from the Panel/Group Chairs and Vice-Chairs, and all Panel/Group Executives, OCS representative(s), CMRE representative(s) and ACT representative(s). The L2CC aims to discuss a broad range of relevant topics and to share information on current activities and initiatives in the STO and CSO.



L2CC Virtual Meeting

Save the Dates – STB Spring 2024

The 2024 Spring STB meeting will be held over four days from Monday 18 to Thursday 21 March, at NATO HQ in Bruxelles, Belgium. The meeting dates are planned to include a STB Workshop on Research Security.







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Outcome of the SCI 52nd PBM

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16-20 October 2023, Sofia, Bulgaria

The SCI 52nd PBM held several workshops in support of programme development and ratified four new Exploratory Teams (ET). The Panel also endorsed, for Board approval, two new activities and two extensions. We anticipate the Board will approve these activities before the end of the year.

If you have any questions or need additional information regarding the outcome of the 52nd PBM, please reach out to the SCI Panel Office. We have also posted the finalized 52nd PBM Decision Sheet and the slides that were briefed at the PBM on Science Connect.

NEW SCI EXPLORATORY TEAMS

<u>Countermine Technologies of the Future</u> Activity Type: ET Chair: A. SCHOOLDERMAN, NLD SCI Activity Number: SCI-ET-066

<u>Countering Autonomy/AI Threat</u> Activity Type: ET Chair: G. CAGNÉ, CAN SCI Activity Number : SCI-MSG-ET-067

Virtual Reality for Distributed Planning, Analysis and Exploitation of 3D Geospatial Data Activity Type: ET Chair: F. VAN DE CAMP, DEU SCI Activity Number : SCI-MSG-ET-068 Overarching Quantum Technology Military Roadmap Activity Type: ET Chair: L. WOERNER, DEU SCI Activity Number: SCI-SET-ET-069

NEW SCI ACTIVITIES

<u>Standards for Maritime Situational Awareness</u> (<u>MSA</u>) Activity Type: RWS Chair: E. SARIDOGAN, NCIA *SCI Activity Number: SCI-363 RWS*

Electronic Support (ES) Techniques Enabling Cognitive Electronic Warfare (EW)--SCI-326 RTG follow on Activity Type: RTG Chair: KALFF (NLD) CHRISTIANSON (USA) SCI Activity Number : SCI-SET-362 RTG

EXTENSIONS

Real-time Coalition Electromagnetic Battle Management (EMBM) Chair: B. EDDINGER USA SCI Activity Number : SCI-348 RTG

Optimised and Reconfigurable Antennas for Future Vehicle Electronic Counter Measures Chair: S. BOYES GBR SCI Activity Number : SCI-304 RTG

Interested experts are invited to sign-up via Appoint at: <u>https://scienceconnect.sto.nato.int/tap/signup</u>.

Contact the SCI Panel Office for more information if you are interested in joining any of our activities.







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SCI Activities

SCI-321 RTG on UAV Applications for Military Search (28-29 Nov 23) The 8th and final meeting of the SCI-321 Task Group focused on 'UAV Applications for Military Search' took place at the Collaboration Support Office (CSO). SCI-321 Task Group gained recent recognition in a NATO TV feature for organizing a trial at DRDC Suffield's test site in Canada. Attendees from DEU, FRA, GBR, NLD, SWE, TUR, USA reviewed the trial's outcomes and outlined a plan for the final report. This report will encompass the trial results and offer conclusions and recommendations concerning the potential, limitations, and challenges in advancing small UAVs equipped with suitable sensors for detecting IEDs and landmines in military search operations. Chair: Dr. A.J. (Arnold) Schoolderman (NLD).

SCI-343 RTG on Enabling Federated, Collaborative Autonomy (4-8 Dec 23) The SCI-343 Research Task Group recently concluded its final meeting, focusing on developing a communication protocol to facilitate collaboration among autonomous nodes from various nations, especially in environments with limited communication capabilities. Building upon the groundwork laid by SCI-288 RTG (Autonomy in Communications-Limited Environments), the group dedicated three years to refining and testing the Collaborative Autonomy Tasking Layer (CATL). Through exercises like the annual REPMUS, they validated CATL's effectiveness in sharing tasks and situational awareness across platforms, even in severely restricted acoustic communication settings. The team is summarizing its findings to craft a comprehensive technical report. This report aims to share insights and advancements made with the wider NATO community, particularly focusing on integrating CATL into STANAG 4817. This integration will play a pivotal role in formulating a new NATO standard for the seamless command and control of maritime unmanned systems. Co-chairs: Thomas Furfaro (CMRE) and Andrew Bouchard (USA).







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Upcoming Events

Powering Up: Get Ready for 53rd PBM

The SCI 53rd PBM is scheduled for *13-15 May 2024*. As a reminder, the **deadline** for submitting **cross-panel TAPs is 1 February 2024**, while the deadline for SCI Panel TAPs is 1 April 2024.

Stay tuned for updates on registration information.



Call for Papers: SCI-356 Research Symposium

Submit your abstracts and papers

Following the 53rd PBM, the SCI-356 Research Symposium (RSY) on Radio-Frequency Directed Energy Weapons - Status and Perspectives will be held on 16-17 May 2024. The Symposium will go up to NR level and is open to NATO Nations and Enhanced Opportunity Partners (EOPs), Sweden, Australia and Japan.

Contact the SCI Panel Office or the Programme Committee (PC) members for more information.







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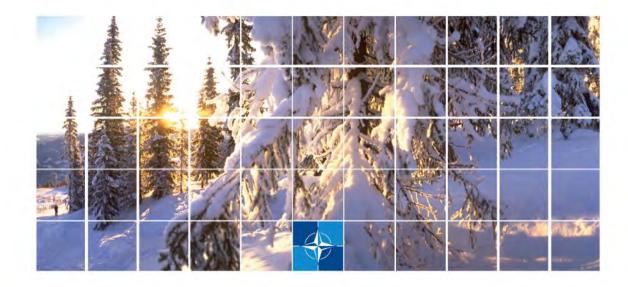
| Key Dates for 1st Quarter of 2024 | |
|--|---|
| 22-25 Jan 2024 | STO-ACT Coordination Meeting, Norfolk VA USA |
| 12-14 Feb 2024 | Plans and Programmes Workshop, Paris France |
| 15 Feb 2024 | Level 2 Coordination Committee (L2CC), Paris, France |
| 18-21 Mar 24 | Science & Technology Board Spring Executive Session, NATO HQ Belgium |
| | |
| Activities Meetings at CSO (excluding on-going activities at other locations) | |
| 15-16 Jan 2024 | SCI-ET-064 Design and Test of Multispectral Decoys for Land Warfare |
| 30-31 Jan 2024 | SCI-ET-066 Countermine Technologies of the Future |
| 6-7 March 2024 | Cross-Panel Collaborative Experimentation for Improved Space Situational Awareness (SSA) |
| 16-17 April 2024 | SCI-352 Flight Test Technical Team |







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With best wishes for the Festive Season Meilleurs Voeux, Joyeuses Fêtes

NORTH ATLANTIC TREATY ORGANIZATION SCIENCE AND TECHNOLOGY ORGANIZATION COLLABORATION SUPPORT OFFICE - B.P. 25 - 92200 NEUILLY-SUR-SEINE - FRANCE www.sto.nato.int

Contact us

Mr Allan Chan SCI Panel Chair **Dr Nick Law** SCI Panel Vice-Chair **Lt Col Tuan Tran** SCI Panel Executive Office Ms Carlotta Rossi SCI Panel Assistant

For feedback, contributions, and questions, please contact <u>SCI@cso.nato.int</u>.



