



SCIENCE AND TECHNOLOGY ORGANIZATION
INFORMATION SYSTEMS TECHNOLOGY PANEL



CALL FOR PAPERS

NATO Science and Technology Organization (STO)

INTERNATIONAL CONFERENCE ON MILITARY COMMUNICATION AND INFORMATION SYSTEMS (ICMCIS)

to be held in
Koblenz, Germany
23–24 April 2024



DEADLINE FOR RECEIPT OF PAPERS:

22 December 2023

This Conference is Public Release, open to NATO Nations, NATO bodies and STO Enhanced Opportunity Partners (Australia, Japan, Sweden), Mediterranean Dialogue nations (Algeria, Egypt, Israel, Jordan, Mauritania, Morocco, Tunisia), Austria, Bosnia and Herzegovina, Ireland, Korea (the Republic of), New Zealand, Singapore, Switzerland, Ukraine.

You can also find this Call for Papers at
<https://events.sto.nato.int/> and <https://www.icmcis.eu/>
as well as on LinkedIn here: <https://www.linkedin.com>

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A. INTRODUCTION

The International Conference on Military Communication and Information Systems (ICMCIS) will take place on **23 and 24 April 2024** in **Koblenz, Germany**, in conjunction with the 53rd IST Panel Business Meeting. Held as an STO Information Systems Technology (IST) Panel activity (IST-205 RSY), ICMCIS 2024 will be organised by the Federal Office of Bundeswehr Equipment, Information Technology, and In-Service Support (BAAINBw) in Koblenz, with support from Fraunhofer FKIE.

Authors are invited to submit papers addressing the military challenges related to the topics listed in Section D and in the format specified in Section E. All papers will be peer reviewed by at least three reviewers. It is anticipated that ICMCIS 2024 will obtain support from the Institute of Electrical and Electronics Engineers (IEEE), as it has since 2012, **for publication of accepted papers in IEEE Xplore.**

There is also an opportunity to submit 'position' papers from which the Programme Committee will select.

Authors of selected papers will need to provide final versions and associated presentations, of changes communicated to them, by the dates noted in Section H and in accordance with the detailed instructions for the presentation, publication of papers, release forms, etc. (see section E, and F).

Attendance at and contribution to the event will require registration (section G).

All sessions will be conducted at **PUBLIC RELEASE** level and the event is open to NATO Nations, NATO Bodies, STO Enhanced Opportunity Partners, Mediterranean Dialogue nations, Austria, Bosnia and Herzegovina, Ireland, Korea (the Republic of), New Zealand, Singapore, Sweden, Switzerland and Ukraine.

Note: The Meeting Proceedings published will be Public Release

B. BACKGROUND

The ICMCIS is the largest scientific conference in Europe on military CIS. It provides a forum for exchanging ideas and knowledge on the development and implementation of advanced ICTs for military systems (see section C for details).

The ICMCIS strives for high scientific quality of the papers by triple peer reviews and IEEE technical sponsorship. The IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. Its journals are the preferred publication route for many universities to gain higher recognition, and citations of their high-quality research.



C. OBJECTIVES

The objectives of ICMCIS are:

- Provide a forum to identify and gain input on and resolution of issues associated with NATO Command, Control and Communications (C3) Policy and focus for NATO collaborative research as through the IST Panel Programme of Work.
- Provide an overview of current NATO C3 activities as well as wider state-of-the-art research, pertaining to both the development and effective employment of ICT solutions.
- Provide a forum for sharing ideas and knowledge on the development and implementation of advanced information and communications technologies (ICTs) for defence and military systems.

D. TOPICS

ICMCIS covers important scientific topics and technologies relevant for defence C4I (Command, Control, Communication, Computing and Information). The subjects include military information exchange, processing, storage, protection, and presentation. Papers should address high quality research in the following topics:

Architectures for Distributed C2 Systems

- Cloud and Edge Computing
- Interoperability Solutions for Heterogeneous Systems and Multi-Domain Operations
- Military Internet of Things
- Data-Centric Security and Zero-Trust Architectures

Intelligent Information Systems for C2 and Intelligence

- Data Management, Quality, Access
- Big Data Analytics and Artificial Intelligence
- Multimodal and XR-based Human-Machine Interfaces
- Human-Machine Teaming

Military Communication & Networks

- Wireless Terrestrial and Satellite Transmission (including antenna technology)
- Resilient Tactical Networks
- Network Orchestration and Management
- Non-EM Communications: Quantum, Optical, Acoustic

Cyber Security & Information Assurance

- Cyber and Electromagnetic Activity (CEMA) Countermeasures
- Counter / Adversarial AI
- Homomorphic and Quantum-Safe Encryption
- Information Assurance & Digital Trust



E. PAPERS

ICMCIS is open for both scientific papers and position papers. All papers for ICMCIS should be PUBLIC RELEASE and submitted in the format defined by the IEEE – Manuscript Templates for Conference Proceedings with the addition of the following sentence in the paper:

“This paper was originally presented at the NATO Science and Technology Organization Symposium (ICMCIS) organized by the Information Systems Technology (IST) Panel, IST-205-RSY – the ICMCIS, held in Koblenz, Germany, 23-24 April 2024”.

Length: 6 pages minimum, 10 pages maximum for the whole paper.

Content:

- Introduction/relevance to the Conference topics
- Rationale for military relevance
- Related work
- Description of methods employed, and results obtained
- Conclusions

Word and LATEX templates are available at:

<https://www.ieee.org/conferences/publishing/templates.html>.

Authors' names, affiliations, and email addresses must be included with the paper. Submissions without name(s), affiliation and email addresses of author(s) will not be considered.

Papers should be submitted to EasyChair NLT 22 December 2022 via <https://easychair.org/conferences/?conf=2024icmcis>. This date must be met to ensure consideration.

When applicable, authors are requested to indicate early career scientist major contributions (age < 30yr) in the bio.

Presentations, Papers and Publication Release Forms from U.S. authors or authors affiliated to U.S. organizations must be sent ONLY to NATO S&T Organization U.S. National Coordinator (osd.pentagon.ousd-atl.mbx.usnatcor@mail.mil)

F. PAPER ACCEPTANCE / PUBLICATION CLEARANCE

All papers will be peer reviewed in accordance with IEEE review guidelines and checked for plagiarism. The selection of papers will be based on the following evaluation criteria: **Military relevance and significance, Scientific value, Originality, Technical quality (Construction/Readability/Legibility)** leading to an overall assessment. All authors will be notified soon after the paper submission date whether or not their papers have been selected, with a constructive feedback summary from the evaluation. When applicable, authors are encouraged to update their paper based on the review recommendations before submitting the camera-ready copy. Only papers that meet the criteria and associated quality will be accepted. For papers that just fail to meet the criteria and are thus rejected, the authors will be given the opportunity for a poster presentation.

Position papers will not be peer-reviewed and mainly valued on their military relevance. They will be published in the NATO proceedings only.



After the paper selection is completed, all authors will be informed before **23 February 2024** on the decision of the Programme Committee.

Authors will have the opportunity to revise their papers based on the comments received and should submit their updated paper NLT **10 March 2024**.

Authors will receive their final appreciation NLT **22 March 2024**.

Authors of accepted papers will be requested to provide the following NLT **12 April 2024**:

- Presentation (20 min + 5 min Q&A),
- Final paper in accordance with peer review comments,
- STO Publication Release Form and IEEE copyright transfer,
- Biography (<100 words) for all presenters.

The Meeting Proceedings, containing an abstract of the conference, position papers and (poster) presentations, will be published on the NATO STO website after all content is checked and the administrative conditions are met. Accepted papers will be submitted for inclusion in IEEE Xplore.

Only papers for which a valid, completed and signed FORM13 has been submitted in EasyChair are eligible for presentation during ICMCIS and publication in the NATO meeting proceedings. The authors of papers selected for publication in IEEE eXplore will need to transfer copyright to IEEE as well. The FORM13 and IEEE form will be made available with the notification of acceptance.

G. REGISTRATION AND FEES

All authors and visitors must register at the STO Events website available as per dates in section H, following these steps:

- Create account (if not existent) at <https://events.sto.nato.int/>
- When account is accepted (may take some days), register to the event
- Payment instructions will be given after accepted registration
- Pay for the event as by received instructions

Applicable fees will be indicated on the ICMCIS website (<https://www.icmcis.eu/> and ICMCIS LinkedIn profile). Registration is complete and valid only when the payment has been received. Validated registration to ICMCIS gives access to: the Icebreaker (Monday 22 April), lunch (2x), dinner (Tuesday 23 April), coffee breaks during the event, the proceedings.

NOTE: Authors submitting papers / posters / demonstrations and other attendees must ensure their own financial support for participation to the ICMCIS.

H. PRELIMINARY SCHEDULE

22 December	2023	Papers due in electronic form in EasyChair
22 January	2024	Online registration open for visitors and authors
23 February	2024	Notification of Acceptance
10 March	2024	Revised papers due in electronic form in EasyChair
22 March	2024	Final notification of acceptance Registration to ICMCIS closed
12 April	2024	Camera ready copy, Form13, and bio due in electronic form in EasyChair



23-24 April 2024 ICMCIS

I. PROGRAMME COMMITTEE

Any questions on the technical aspects of the scientific programme should be addressed to the chairs or Programme Committee Members as listed below.

Co-Chairs

Mr Antoine SMALLEGANGE Antoine.smallegange@tno.nl TNO	Dr Michael Gerz michael.gerz@fkie.fraunhofer.de Fraunhofer FKIE
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Members of the Programme Committee

Prof Bob MADAHAR (Award Committee) bkmadahar@mail.dstl.gov.uk DSTL	Dr Markus Antweiler (host nation science) markus.antweiler@fkie.fraunhofer.de Fraunhofer FKIE
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Dr Michael STREET (host nation 2025) michael.street@ncia.nato.int NCIA	Dr Niranjan SURI (member) nsuri@ihmc.org Army Research Lab
Tbd (TER Author)	Ms Latasha SOLOMON (member) Latasha.i.solomon.civ@army.mil Army Research Lab

J. POINT OF CONTACT

Questions on the organizational aspects of this event and requests for further information on STO activities should be addressed to the IST Panel Office (IST@cs0.nato.int).

K. ADDITIONAL INFORMATION

Additional information, Instruction to the authors, templates, payment instructions and updates on the event can be found on the ICMCIS website: <https://icmcis.eu>.

The General Information Package with travel, accommodation and administrative details will be visible and downloadable upon acceptance of the registration to the event by the IST Panel Office.

Registration to the event will be made available at <https://events.sto.nato.int>.



ANNEX A

SPECIAL NOTICE TO U.S. AUTHORS
AND NON-U.S. CITIZENS AFFILIATED WITH U.S. ORGANISATIONS
Ref.: IST-205-RSY, Koblenz, Germany

Papers from the U.S. must be sent ONLY to the following POC:

NATO STO U.S. National Coordinator
OASD(R&E)/International Technology Programs
4800 Mark Center Drive
Suite 17D08
Alexandria, VA 22350-3600
Tel: +1 (571) 372 6539 / 6538
Email: usnatcor@osd.mil

All U.S. Authors must submit timely one electronic copy to this POC

The POC will download all U.S. papers to EasyChair.

In addition to their paper, all U.S. authors must provide:

- A) A certification (can be signed by the author) that there are no proprietary or copyright limitations.**
- B) Internal documentation from their local public affairs or foreign disclosure office (or equivalent) that clearly shows:**
 - Title of the paper or presentation
 - Level of clearance (i.e., approved for Public Release)
 - Name, title, and organization of the approval authority
 -
- C) Full details of authors**