



SCIENCE AND TECHNOLOGY ORGANIZATION
INFORMATION SYSTEMS TECHNOLOGY PANEL



CALL FOR PAPERS

NATO SCIENCE AND TECHNOLOGY ORGANIZATION INTERNATIONAL CONFERENCE ON MILITARY COMMUNICATION AND INFORMATION SYSTEMS (ICMCIS)

to be held in
Oeiras, Portugal
13–14 May 2025



DEADLINE FOR SUBMISSION OF PAPERS:

22 December 2024

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

*This Call for Papers is also available at
<https://www.icmcis.eu/>*

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A. INTRODUCTION

The International Conference on Military Communication and Information Systems (ICMCIS) will take place on **13 and 14 May 2025, in Oeiras, Portugal**, in conjunction with the 55th NATO Science & Technology Organization (STO) Information Systems Technology (IST) Scientific and Technical Committee (STC) Business Meeting. A NATO STO IST STC activity, ICMCIS 2025 is organised by the NATO Communication and Information Agency (NCIA) Academy, with the support of the Portuguese Ministry of Defence.

Authors are invited to submit papers that address military challenges related to the topics listed in section D of this Call for Papers and in the format specified in section E. All papers will be peer reviewed by at least three reviewers. It is anticipated that ICMCIS 2025 will obtain support from the Institute of Electrical and Electronics Engineers (IEEE), as it has since 2012, **for the publication of accepted papers in IEEE Xplore.**

Authors of selected papers will need to provide final versions of the papers, alongside presentations, with the changes requested, by the dates noted in Section H and in accordance with the detailed instructions (see section E and F).

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

All main ICMCIS sessions will be **PUBLIC RELEASE**.

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 papers with 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:

- To 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 STO Programme of Work;
- To 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;
- To 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:

Intelligent Information Systems for C2 and Intelligence



- Data Management, Quality, Access
- Big Data Analytics and Artificial Intelligence
- Multimodal and XR-based Human-Machine Interfaces
- Interoperability Solutions for Heterogeneous Systems and Multi-Domain Operations
- Human-Machine Teaming

Military Communication & Networks

- Wireless Terrestrial and Satellite Transmission (including antenna technology)
- Resilient Tactical Networks
- Communication and Network Protocols
- Network Orchestration and Management
- Military Internet of Things
- Cloud and Edge Computing
- Non-EM Communications: Quantum, non-RF (e.g. optical), Acoustic

Cyber Security & Information Assurance

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

E. PAPERS

ICMCIS is open for scientific papers at PUBLIC RELEASE level, to be submitted in the [IEEE - Manuscript Templates for Conference Proceedings](#), with the addition of the following sentence in the abstract:

“This paper was originally presented at the NATO Science and Technology Organization Symposium (ICMCIS) organized by the Information Systems Technology (IST) Panel, IST-209-RSY – the ICMCIS, held in Oeiras, Portugal, 13-14 May 2025”.

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

Content:

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

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

Papers should be submitted by **22 December 2024**, the link will be made available **November 8th** on <https://www.icmcis.eu>.

When applicable, authors shall indicate early career scientist major contributions (age < 37yr) in their bio.

Presentations, Papers and Publication Release Forms from U.S. authors or authors affiliated to U.S. entities 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 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 fail to meet the criteria and are thus rejected, the authors will be given the opportunity for a poster presentation.

All authors will be informed on the Programme Committee's decision regarding the paper selection and revision **by 28 February 2025**. Authors will have the opportunity to revise their papers based on the comments received and should submit their updated paper by **23 March 2025**. Authors will receive their final appreciation by **31 March 2025**.

Authors of accepted papers will be requested to provide the following until **27 April 2025**:

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

The Meeting Proceedings, with an abstract of the conference, position papers and (poster) presentations, will be published on the NATO STO website, upon verification of the content and of the administrative requirements. Accepted papers will be submitted to IEEE Xplore.

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

G. REGISTRATION AND FEES

All authors and visitors must register as per dates in section H, the link will be made available on <https://www.icmcis.eu>, following these steps:

- Create account (if not existent)
- 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
- Registration is completed when payment has been confirmed.

Applicable fees will be indicated on the ICMCIS website (<https://www.icmcis.eu>/ and ICMCIS LinkedIn profile). Registration is complete and valid upon the payment confirmation.

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

H. PRELIMINARY TIMELINES

08 November	2024	Submission link available
22 December	2025	Papers due electronically
17 February	2025	Online registration open for visitors and authors
28 February	2025	Initial Notification of Acceptance
23 March	2025	Revised papers due in electronically
31 March	2025	Final notification of acceptance
13 April	2025	Registration to ICMCIS closed
27 April	2025	Presentation, final paper, Release Forms, IEEE copyright transfer, and bio due in electronic form
13-14 May	2025	ICMCIS



I. PROGRAMME COMMITTEE

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

Co-Chairs

Mr Antoine SMALLEGANGE Antoine.smallegange@tno.nl TNO	Dr Michael STREET Michael.Street@ncia.nato.int NCIA
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Members of the Programme Committee

Prof. Bob MADAHAR (Award Committee Chair) bkmadaha@mail.dstl.gov.uk DSTL	Dr Michael GERZ (Member) Michael.gerz@fkie.fraunhofer.de Fraunhofer FKIE
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Tbd (lead Cyber Security & Information Assurance) pm	Dr Peter Lenk (TER author) Rocketman365@gmail.com

J. POINT OF CONTACT

K. ADDITIONAL INFORMATION

Questions on the administrative aspects of this event and requests for further information on STO activities should be addressed to the IST STC Office via IST@cso.nato.int.

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

The Global Information Package with travel, accommodation and administrative details will be made available by NATO/CSO upon validation of the registration to the event.



ANNEX A

SPECIAL NOTICE TO U.S. AUTHORS

AND NON-U.S. CITIZENS AFFILIATED WITH U.S. ORGANISATIONS

Ref.: IST-209 RSY, Oeiras, Portugal, 13-14 May 2025

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: osd.pentagon.ousd-atl.mbx.usnatcor@mail.mil

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

The POC will forward all U.S. papers as required by the Technical Programme Committee.

In addition to their abstract, 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**

Note that only complete packages (abstracts + items listed above) will be accepted by the U.S. POC. After review and approval, the U.S. POC will forward all U.S. abstracts to the IST panel office, who will send them to the Programme Committee. U.S. authors are encouraged to address questions and concerns to the POC as early as possible. Delays in meeting deadlines will impact the timely submission of your abstract.