



SCIENCE AND TECHNOLOGY ORGANIZATION
NATO MODELLING AND SIMULATION GROUP



MSG-159-RSY

17 January 2018

CALL FOR PAPERS

For the 2018 NATO MODELLING & SIMULATION GROUP (NMSG) SYMPOSIUM

Theme:

**Multinational Interoperability:
Agility for Military Training and Operational Applications
Innovation in Enterprise Level Consortiums and M&S Technology Development**

to be held in

OTTAWA, CAN



11-12 October 2018

This activity is open to NATO, PfP, Global Partners and Invited Contact Countries
All sessions will be **Unclassified/Unlimited**

DEADLINE FOR RECEIPT OF ABSTRACTS: 13 APRIL 2018

BP 25 - F-92201 Neuilly-sur-Seine Cedex - France
Tel: +33 (0)1 55 61 22 00 - Fax: +33 (0)1 55 61 22 99 - E-Mail : mailbox@cs0.nato.int

NATO SCIENCE & TECHNOLOGY ORGANIZATION

The NATO Science & Technology Organization (STO) is a NATO subsidiary body to the North Atlantic Council (NAC) established with a view to meeting to the best advantage the collective needs of NATO, NATO Nations and partner Nations in the fields of Science & Technology (S&T).

The mission of the NATO STO is to help position the Nations' and NATO's S&T investments as a strategic enabler of the knowledge and technology advantage for the defence and security posture of NATO Nations and partner Nations, by:

- a) Conducting and promoting S&T activities that augment and leverage the capabilities and programmes of the Alliance, of the NATO Nations and the partner Nations, in support of NATO's objectives;
- b) Contributing to NATO's ability to enable and influence security- and defence-related capability development and threat mitigation in NATO Nations and partner Nations, in accordance with NATO policies;
- c) Supporting decision-making in the NATO Nations and NATO.

The STO performs its mission with the support of an extensive network of national and international experts. It also ensures effective coordination with other NATO bodies involved in S&T activities.

The total spectrum of S&T activities is covered by the following bodies:

| | | | |
|-------|--|-------------|--|
| AVT: | Applied Vehicle Technology Panel | MSG: | NATO Modelling and Simulation Group |
| CMRE: | Centre for Maritime Research and Experimentation | SAS: | Systems, Analysis and Studies Panel |
| HFM: | Human Factors and Medicine Panel | SCI: | Systems Concepts and Integration Panel |
| IST: | Information Systems Technology Panel | SET: | Sensors and Electronics Technology Panel |

The Mission of the NATO Modelling and Simulation Group (NMSG) is to function as a management body in which the full range of Modelling and Simulation (M&S) interests can be represented; and to promote the coherent management and co-ordination of M&S across all Alliance activities in the principal application areas of defence planning, technology development and armaments acquisition.

The scope of activity under the NMSG is: a) M&S policy management. Promote exchange between the nations and Alliance organisations on M&S standards and best practice, which will co-ordinate and harness individual M&S capabilities and activities for the long-term systematic benefit of NATO. This exchange must be responsive to varied interests and respond to NATO roles and missions. b) Management and co-ordination of M&S activities. Develop, maintain and integrate a co-ordinated long-term strategy for NATO M&S activities. Identify and co-ordinate opportunities for M&S activities across the whole of the Alliance, including the NATO Military Authorities, the International Staff, technology development organisations, and application development organisations. Co-ordinate these activities to the best extent possible with the NATO nations and include the activities and interests of partner nations. Develop M&S project work plans and associated resource requirements for forwarding to NATO budget authorities via the Science and Technology Board (STB).

NATO MODELLING AND SIMULATION GROUP OFFICERS

CHAIRMAN

Ing Agatino MURSIA
Leonardo SpA
ITA

VICE-CHAIRMAN

Dr Robert SIEGFRIED
Aditerna GmbH
DEU

NATO MODELLING AND SIMULATION COORDINATION OFFICE

Head MSCO

CDR Federico PEREZ-DUENAS
federico.perez-duenas@csso.nato.int

**Deputy Head and
Executive Officer MSCO**
VACANT

MSCO Technical Officer

Mr. Adrian VOICULEȚ
adrian.voiculescu@csso.nato.int

MSCO Assistant

Ms. Ileana GANZ
ileana.ganz@csso.nato.int

NMSG 2018 SYMPOSIUM

Multinational Interoperability: Agility for Military Training and Operational Applications Innovation in Enterprise Level Consortiums and M&S Technology Development

The NATO Modelling and Simulation Master Plan highlights the requirement for modelling and simulation (M&S) education in NATO. This conference will provide attendees a forum to advance M&S in the Alliance. The combination of M&S users and developers concentrated in this one forum will not only educate attendees, but also provide fresh ideas for the advancement and effective use of M&S in NATO.

THEME

Modelling and Simulation (M&S) has become a critical technology in NATO and Partner Nations. M&S provides training opportunities where mission complexity or limited resources restrict live exercising possibilities. Analysis and Mission planning tools use M&S to support operational decision making. Simulation technology is still rapidly evolving – the past years have shown significant progress, not in the least in the consumer and civilian market. These technological advancements create opportunities for new and innovative applications that can counteract the threats our military organisations face, as well as the fiscal realities. Simulation standards can improve interoperability within the Alliance and enable even more effective use and sharing of NATO and national assets. New technologies and standards allow easy access to simulation assets for a broader community than ever before; thus making M&S a truly pervasive technology.

This Symposium will look at developments to help expand NATO's M&S capabilities in order to provide cost-effective and valid simulation tools. Lessons learned on challenges and successes in the creation of Enterprise Level Consortiums (Industry/Academia/Government) focused on

provision of M&S for Defence applications will be a focus area. Developments of special interest include (but are not limited to):

- Real-World Modelling (terrain and behaviour)
- M&S as a Service
- Composable simulations
- C2-Simulation interoperability
- Interoperability verification testing
- Technologies to reduce the cost of simulation event configuration, validation and execution

The Symposium will provide a forum to identify and gain input on and resolution of issues associated with NATO M&S Policy, provide overviews of current NATO M&S activities pertaining to both the development and effective employment of M&S, to highlight M&S impact assessments and lessons-learned.

During the 2018 NMSG Symposium, a specific topic of current interest for NATO/National priority will be chosen for the next year's edition of this event

It is anticipated the event will also pursue Keynote Addresses from the Host Nation and NATO representatives as well as Invited Papers.

2018 PROGRAMME COMMITTEE

Co-Chairs

Mr Wim HUISKAMP
Tel: +31 88 866 3965
Email: wim.huiskamp@tno.nl

Dr Kurtis SIMPSON
Tel: +1 613-998-2569
Email: Kurtis.Simpson@drdc-rddc.gc.ca

MEMBERS

Mr Horst BEHNER
Tel: +49 261 400 16231
Email: horstbehner@bundeswehr.org

Mr Niels KRARUP-HANSEN
Tel: +45 4046 4549
Email: nkh@mil.dk

Dr Robert SIEGFRIED
Tel: +49 89 608 755 825
Email: robert.siegfried@aditerna.de

Prof Andrzej NAJGEBAUER
Tel: +48 601 337 831
Email: anajgebauer@wat.edu.pl

Ms Julie TREMBLAY
Tel: +1 613 991 4300
Email: Julie.Tremblay-Lutter@forces.gc.ca

Mr Bharat PATEL
Tel: +44 2392 532 923
Email : bmpatel@dstl.gov.uk

Mr Lionel KHIMECHE
Tel: +33 1 79 86 45 46
Email: lionel.khimeche@intradef.gouv.fr

Col(R) Prof Vaclav PRENOSIL
Tel: + 420 549 496 236
Email: prenosil@fi.muni.cz

Dr Martin ROTHER
Tel: +49 89 6088 3974
Email: rother@iabg.de

Mr Leigh YU
Tel: +1 571 372 6681
Email: leigh.yu.civ@mail.mil

M&S COORDINATION OFFICE – POINT OF CONTACT

Ms Illeana GANZ
MSCO Assistant
Tel: + 33 1 55 61 22 94
Fax: + 33 1 55 61 96 19
illeana.ganz@cso.nato.int

CALL FOR PAPERS

1. INTRODUCTION

The Symposium will be held in **Ottawa, CAN** from **11 to 12 October 2018**, and is supported by the NATO Modelling and Simulation Group (NMSG) of the Science and Technology Organization (STO). All sessions will be **Unclassified/Unlimited**. The event is open to NATO, PfP, Global Partners and Invited Contact Countries. Attendance at STO meetings is by request only.

Authors are invited to submit papers for this event. The Programme Committee will select a number of papers that are considered suitable for presentation at the Symposium. The selection of papers will be completed by the 28 May 2018. Authors will be notified shortly thereafter whether or not their papers are selected. Authors of selected papers will also be provided with information in the Instructions for Authors, which contains detailed instructions for the presentation, transmission, etc. of papers.

The time allowed for each speaker is normally 30 minutes, including 10 minutes for discussion. Equipment will be available for PowerPoint presentations. Paper presentation times will be given in the Programme Announcement sent to all authors by MSCO and also included with General Information Package upon validation of website enrolment by the respective National Coordinator.

IMPORTANT: Authors of selected papers are to provide NATO MSCO with their complete manuscript (PDF file) **and** the source document (MS Word, etc.) **by email 30 days prior to the event, as well as the Publication Clearance Certificate**. Cleared papers, when available, will be put on the CSO Web site prior to the event, under the “Pre-Released” section of the “Reports” pages and will remain as such until officially published.

Note: The proceedings will be Unclassified/Unlimited.

2. ABSTRACTS

Unclassified abstracts of papers offered for the Symposium should be submitted in the following format:

2016 NATO MODELLING AND SIMULATION GROUP SYMPOSIUM

TITLE OF ABSTRACT/PAPER

Title/Rank, Full Name of Author/Co-Author(s)

| | |
|---------|---|
| LENGTH | - 200 words maximum for abstract, 5 pages minimum for a (short) paper |
| CONTENT | - Introduction/relevance to the Symposium - Rationale - Description of methods employed and results obtained - Conclusions |

Authors' names, complete mailing addresses and emails must be included with the abstract. Please use the Details of Authors Form (Attachment 1). Submissions without name(s) and complete address of author(s), or incompletely filled in Details of Authors Forms will not be considered.

Abstracts should be submitted by **email to the MSCO Assistant** (contact details on page 3) no later than **13 April 2018** for subsequent transmission to the Programme Committee Members. This date is important and **must be met** in order to ensure consideration.

The abstract must also contain a declaration from the author(s) that there are no restrictions regarding presentation neither during the event nor of the publication of the paper (as described in the abstract) in the Meeting Proceedings.

3. CLEARANCE OF PAPERS/ABSTRACTS

It is the responsibility of each contributor to fulfil the publication release requirements of his/her organisation/company and country and to obtain the mandatory clearance of abstracts, papers and presentations. An official clearance (Form 13) is mandatory in the United Kingdom and United States. Please contact your national PoC or the MSCO Assistant for further information and specific procedures.

4. INSTRUCTIONS FOR U.S. ABSTRACTS

U.S. abstracts, even though they are unclassified should be submitted by **16 March 2018 to the U.S. P.O.C. *ONLY*. (U.S. authors should refer to Attachment 1 for more details).**

In addition US abstracts must include:

- | | | |
|----------------|---|---|
| CONTENT | - | Your abstract should fully represent your contribution |
| IDENTIFICATION | - | Information on Attachment 1 must be provided with all abstracts |
| SUBMITTAL | - | By all authors |
| CLASSIFICATION | - | Abstracts must be Unclassified |

5. PRELIMINARY SCHEDULE

| | |
|----------------|--|
| 13 April 2018 | Abstracts due |
| 01 June 2018 | Abstract Rejection/Acceptance Notification |
| 15 June 2018 | Authors of Accepted Papers receive “Instructions for Authors Information |
| 16 July 2018 | Online registration opens; Authors receive notice |
| 07 Sept 2018 | Papers due in electronic form |
| 01 Oct 2018 | PowerPoint presentations due |
| 11-12 Oct 2018 | NMSG Annual Symposium |

6. ADDITIONAL INFORMATION

Authors will be notified by the MSCO of the opening of on line enrolment on **16 July 2018** and once validated will receive a General Information Package about the Symposium site and the host country .

Any questions on the technical aspects of the scientific programme should be addressed to the Programme Committee Members. Questions on the administrative aspects of this event and requests for further information on STO activities should be addressed to the **MSCO Assistant**, Illeana Ganz (illeana.ganz@cs0.nato.int) - Tel: +33 (0)1 55 61 22 94 - Fax: +33 (0)1 55 61 96 19).

NOTE

Authors of papers selected for presentation at NATO/STO events are not financially supported by this organisation

Thank you for your contributions which are most appreciated by all the NATO community.

(Original signed by)
Kurtis SIMPSON and Wim HUISKAMP
Programme Committee Co-Chairs

**SPECIAL NOTICE FOR U.S. AUTHORS AND
NON U.S. CITIZENS AFFILIATED WITH U.S. ORGANIZATIONS**

Abstracts of Papers from the U.S. must be sent **ONLY** to the following P.O.C.:

**NATO STO U.S. National Coordinator
OASD (R&E)/International Technology Programs
4800 Mark Center Drive
Alexandria, VA 22350-3600
E-mail: osd.pentagon.ousd-atl.mbx.usnatcor@mail.mil
Tel: +1 571 372 6538
Fax: +1 571 372 6548**

PLEASE NOTE THE FOLLOWING:

All U.S. Authors must submit one electronic copy to this P.O.C. by **16 MARCH 2018**

1. In addition to their abstract, all U.S. Authors must provide to the P.O.C:
 - A certification (can be signed by the author) that there are no proprietary or copyright limitations;
 - 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
2. After review and approval, the P.O.C. will forward all U.S. abstracts to MSCO Executive Office. All US abstracts must be received directly from the U.S. POC. US abstracts will not be accepted directly from authors.
3. In the event, there are any questions or concerns with these requirements, U.S. authors are encouraged to contact the P.O.C. as early as possible. Delays in meeting P.O.C. deadlines will impact the timely submission of your abstract.

ATTACHMENT 2

DETAILS OF AUTHORS FORM: (Unless otherwise specified, the first listed author will be presumed to be the Senior author, i.e. the author having a major responsibility for the content of the paper, and a major interest in the result of the selection of papers)

Title of Paper: _____

| | |
|---|-----------------|
| Title/Rank: Name: Surname: Nationality: Position: Affiliation: Telephone: Telefax: Email Address: | Office Address: |
| Title/Rank: Name: Surname: Nationality: Position: Affiliation: Telephone: Telefax: Email Address: | Office Address: |
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