



Science and Technology Organization
Collaboration Support Office

Neuilly-sur-Seine – France

NATO Science & Technology Organization (STO)
Collaboration Support Office (CSO)
Platforms Systems and Technology (PST)¹
Scientific and Technical Committee (STC)

Preliminary Meeting Announcement and

Call for Participation

for the AVT-448- Research Workshop Meeting (RWS)

on

Advancing Wildland Fire Science for Range Management: Strategies for Prevention, Mitigation and Risk Evaluation

Organised by the Members of the AVT-448 Programme Committee

to be held in **Lisbon, Portugal**

2 days (TBC) during the week 31 May 2027- 4 June 2027

Contributions and participation are invited from
NATO Nations, NATO STOs Science & Technology Enhanced Partnership Nations, and
Partnership for Peace Nations²

Deadline for submission of abstracts: 8 November 2026 (extended)

¹ Previously known as the **Applied Vehicle Technology (AVT) Panel** before 01 July 2026.

² Please check [Annex 2](#) for the full list of Nations included in the Science and Technology Partnership (STEP) and Partnership for Peace (PfP).

AVT-448 Research Workshop on Advancing Wildland Fire Science for Range Management: Strategies for Prevention, Mitigation and Risk Evaluation

Framework of the Meeting

The Platform Systems and Technology (PST) Scientific and Technical Committee (STC)³ of the NATO Science and Technology Organization is organizing a Research Workshop (RWS) focused on wildfire and climate-driven wildfire emergencies on military defence lands. The event will bring together NATO experts to exchange knowledge and identify capability gaps. The meeting is open to NATO Nations, NATO STO's Science & Technology Enhanced Partnership Nations (Australia, Japan, Republic of Korea, Switzerland and Ukraine), and NATO's Partnership for Peace (PfP) Nations.⁴ The meeting is to be held in **Lisbon, Portugal**, over 2 days during the week from **31st May to 4th June 2027** (exact dates to be announced ASAP).

General Scope and Meeting Objectives

Increasing severity of wildland fires, along with associated smoke impacts, are placing growing pressure on military training lands and operational ranges. Wildfire management on defence-controlled lands presents distinct challenges, including specialized requirements for prevention, detection, response, and mitigation.

Wildland fire incidents can disrupt critical training activities, pose risks to adjacent civilian communities, and affect surrounding critical infrastructure. As these risks intensify, there is a need for enhanced coordination and shared understanding among NATO partners.

The objective of this meeting is to provide a forum for participating nations to exchange knowledge, share best practices, and strengthen collaboration in the application of science, operational procedures, and emerging technologies to better anticipate, manage, and mitigate wildland fire risks affecting defence operations.

Workshop Topics

The scientific topics addressed in this RWS are, among others:

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⁴ Please check [Annex 2](#) for the full list of Nations included in the Science and Technology Partnership (STEP) and Partnership for Peace (PfP).

- Wildland fire risk assessment and modelling for defence installations and training areas
- Prevention, detection, and mitigation strategies specific to military lands
- Impacts of wildfire smoke on military operations
- Defence support to civil authorities in wildfire response and evacuation operations
- Mobility, logistics, and sustainment challenges in wildfire-affected environments
- Integration of emerging technologies (e.g., sensors, autonomous systems, data analytics) for wildfire management
- Protection of critical military infrastructure and adjacent civilian communities
- Emerging threats, including deliberate fire-setting (pyroterrorism).

Background and Justification - Relevance to NATO

Recent wildfire seasons across NATO nations have demonstrated a clear trend toward increased frequency, geographic spread, and severity of wildland fire events, driven in part by climate change, prolonged drought conditions, and extreme weather variability. These events are no longer isolated environmental incidents but are evolving into complex, multi-domain crises with direct implications for national security, civil resilience, and defence operations.

Wildfires are increasingly affecting military training lands, testing ranges, and key defence infrastructure, leading to disruptions in readiness, reduced training availability, and increased maintenance and recovery costs. Smoke and degraded air quality further compound these effects by impacting aviation operations, intelligence, surveillance, and reconnaissance (ISR) capabilities, and personnel health. In parallel, fires originating on or near defence lands can pose risks to adjacent civilian communities, while fires encroaching from surrounding regions may threaten critical military assets and installations.

At the operational level, large-scale wildfire events are placing growing demands on defence organizations to provide support to civil authorities, particularly in areas such as strategic and tactical airlift, logistics, engineering support, communications, and command and control integration. These demands are often amplified in remote or austere environments, including northern regions, where civilian capacity is limited and evacuation operations depend heavily on-air mobility and coordinated federal support.

In addition to natural drivers, there is increasing recognition of deliberate fire-setting as a potential security concern. The prospect of malicious actors exploiting wildfire conditions to create disruption, particularly in or near critical infrastructure or defence installations



introduces, an emerging threat dimension requiring improved detection, attribution, and interagency coordination.

These converging factors highlight the need for a comprehensive and coordinated approach among NATO Nations to better understand, anticipate, and manage wildfire-related risks. Addressing this challenge will require strengthened collaboration across the science, defence, industry, and academic communities to advance research, develop innovative technologies, and translate knowledge into operational capability. This includes improving predictive modelling and situational awareness, enhancing data integration and decision-support tools, and accelerating the development and fielding of resilient mobility platforms, sensing systems, and mitigation techniques.

The Platform Systems and Technology (PST) Scientific and Technical Committee (STC) is uniquely positioned to serve as a catalyst for this collaboration by bringing together multidisciplinary expertise across land, air, and integrated vehicle systems. By fostering cooperation between government, academia, and industry partners, this activity supports NATO priorities related to resilience, climate security, and the protection of critical infrastructure, while strengthening the Alliance's ability to maintain operational readiness and effectively support civil authorities in the face of increasingly complex and persistent wildfire threats.



AVT-448 Technical Programme Committee

CO-CHAIRS

Mr Miguel ALMEIDA

University of Coimbra – Association for
the Development of Industrial
Aerodynamics
Portugal
Tel: +351 964437136
Email: miguelalmeida@adai.pt

Mr Rick DUNNING

Canadian Department of National
Defence
Canada
Tel: 1-873-354-7322
Email: Rick.Dunning@Forces.gc.ca

TECHNICAL EVALUATOR

Mr Kim CONNORS

Former Executive Director of
Canadian Interagency Forest Fire
Centre
Email: KG.Connors@outlook.com

PANEL MENTOR

Dr Allison NOLTING

Defence R&D Canada
Canada
Email: Allison.nolting@forces.gc.ca

MEMBERS

GERMANY

Mr Rene Feix
German Armed Forces
Email: renefeix@bundeswehr.org

NETHERLANDS

Dhr. Rob Melisse
Netherlands Armed Forces
Email: RJR.Melisse@mindef.nl

SPAIN

Mr David Caballero
MeteoGrid S.L.
Email: david@meteogrid.com



Deadlines and Preliminary Schedule

July 2026

Distribution of Call for Participation

To solicit abstracts from NATO nations, STEP Nations and PfP Nations

After: authors to send their abstracts to the Programme Committee

11 Oct 2026

**Extension until
8 Nov 2026**

Deadline for Abstract Submission

Deadline for all authors to submit abstracts to the Programme Committee

After: Programme Committee to select abstracts and to create the Meeting Agenda from selected abstracts

27 Nov 2026

Authors Informed of Selection Decision

Programme Committee to inform selected as well as rejected authors

PST Office to dispatch Authors' Information Package to selected authors

After: selected authors prepare their presentations and clearances

15 Dec 2026

Final Agenda Approved by the Programme Committee

Programme Committee to finalize the Programme

After: PST to prepare and publish the official Meeting Announcement

15 Mar 2027

Deadline for Submission of Draft Presentation

Deadline for all authors to submit an advance copy of their presentation to PST Office

After: Technical Evaluator to review all submitted presentations

3 May 2027

Submission of Final Version of all Presentations

Deadline for all authors to submit final cleared presentations and other author submissions to PST Office

**Week of 31 May
- 4 June 2027**

Workshop to be held in Lisbon, Portugal over 2 days during the 2nd PST STC Meeting week (exact dates to be announced)

20 June 2027

Submission of Corrected Manuscripts

Deadline for corrected presentations to be submitted to PST office in order to be included in the Meeting Proceedings, which will be made accessible through the STO website

Procedures

Invitation and Abstract Submission

The abstract should describe in approximately 600 words the content to be included within the presentation such as the aim, results and conclusions of the work. Inclusion of 1 to 2 figures and/or photographs to support the abstract is recommended. Authors' names, complete email addresses and other pertinent information must be included with the abstracts. For this purpose, please use the Abstract Submittal Form ([Annex 1](#)) and keep the size of files less than 10 MB and in the PDF format.

Please submit your abstract along with the Abstract Submittal Form ([Annex 1](#)) no later than 8 November 2026 via email to the Programme Committee Co-Chairs:

Mr Miguel ALMEIDA

University of Coimbra – Association for the
Development of Industrial Aerodynamics
Portugal
Tel: +351 964437136
Email: miguelalmeida@adai.pt

Mr Rick DUNNING

Canadian Department of National Defence
Canada
Tel: 1-873-354-7322
Email: Rick.Dunning@Forces.gc.ca

Publication and Presentation Clearance Considerations

It is the responsibility of each author to obtain, prior to presentation or publication, any permissions, approvals or clearances required by their organization, company, affiliation or national authorities for the information contained in their abstract, paper and/or presentation.

Authors whose submissions are selected for presentation and/or publication will be required to sign a **Publication and Presentation Clearance Certificate** confirming that they have obtained all necessary permissions and clearances and are authorized to share the information contained in their submission.

For NATO STO events, a signed clearance certificate is required before any presentation or publication can take place. Accordingly, authors who are unable to provide the required signed clearance certificate by the final submission deadline will not be permitted to present their paper or have it published as part of the event's Meeting Proceedings.

Authors selected to present at the event will be notified by the Programme Committee no later than **27 November 2026**. The PST Executive Office will then provide each lead author with an Authors' Information Package containing templates, detailed instructions



for preparing presentations and submissions, and information and documentation concerning the clearance process.

Eligibility and Participation

Participation to this event is open to nationals from NATO Nations, NATO STOs Science & Technology Enhanced Partnership Nations, and Partnership for Peace Nations.⁵ For details concerning the participation of nationals of Partner Nations, please consult the *NATO and Partner Nations Overview* ([Annex 2](#)). Authors are responsible for verifying their eligibility based on their nationality before submitting an abstract. Submissions from nationals of non-invited nations will not be considered, in accordance with the Notice Call and accompanying documentation.

Travel and Logistics

Authors whose contributions are selected for presentation will **not receive financial support from NATO**. Authors are responsible for making their own hotel and travel arrangements, taking into account the recommendations provided in the **General Information Package**, which will normally be issued approximately four months prior to the event, following confirmation of the author's registration.

Travel, accommodation and *per diem* expenses are the responsibility of each author's organization and/or nation.

Important Notice: Selected authors are required to confirm with their organizations that **they will be available to travel to the event and present their contribution in person**. Last-minute withdrawals can affect the successful delivery of the event and may result in the matter being brought to the attention of the relevant National Coordinator.

Authors are strongly encouraged to wait until they receive official confirmation of their registration before making any travel or accommodation arrangements. The PST Executive Office cannot be held responsible for expenses incurred by authors prior to receiving such confirmation.

Best Presentation Award

⁵ Please check [Annex 2](#) for the full list of Nations included in the Science and Technology Partnership (STEP) and Partnership for Peace (PfP).



Presentations will be evaluated by the Technical Evaluator and Program Committee Members, based on their originality, technical quality, clarity of presentation, and significance of the research in context of NATO PST STC. Based on these evaluations, the Co-Chairs will propose to the PST Executive Office the best presentations to receive the AVT-448 Best Presentation Award. The awards will be announced and awarded during the event.

Contact Information

Any questions about the technical aspects of the scientific programme or the contents of papers should be addressed to the Programme Committee Co-Chairs, listed above.

Questions on the administrative aspects of this event, or requests for further information about STO activities, should be addressed to:

Ms Isabel BIANCA

PST Executive Office

NATO/STO Collaboration Support Office

Tel: + 33(0)1 55 61 22 18

Email: isabel.bianca@csso.nato.int

The NATO Science & Technology Organization

The NATO Science & Technology Organization promotes and conducts co-operative scientific research and exchange of technical information amongst NATO nations and NATO partners. Being the largest such collaborative body in the world, the STO encompasses over 5000 scientists and engineers addressing the complete scope of defence technologies and operational domains. This effort is supported by the Collaboration Support Office, which facilitates the collaboration by organising a wide range of studies, workshops, symposia, and other for a in which researchers can meet and exchange knowledge.

For further information, please consult the STO website: www.sto.nato.int

The STO website provides a wide variety of information and on-line services ranging from overview information on the organization's mission to news regarding upcoming events. You will find on-line access to more than 1800 scientific publications, as well as, information about current activities.



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Thank you for your contributions they are very much appreciated by the NATO community.

Annex 1

Abstract Submittal Form

AVT-448 Workshop on Advancing Wildland Fire Science for Range Management:
Strategies for Prevention, Mitigation and Risk Evaluation

Please attach a copy of this form to each abstract.

TITLE OF PRESENTATION:	
PRINCIPAL AUTHOR INFORMATION	
TITLE/RANK:	
FIRST NAME:	
LAST NAME:	
NATIONALITY:	
FULL MAILING ADDRESS:	
MOBILE NUMBER:	
EMAIL ADDRESS:	

2ND AUTHOR INFORMATION	
TITLE/RANK:	
FIRST NAME:	
LAST NAME:	
NATIONALITY:	
FULL MAILING ADDRESS:	
MOBILE NUMBER:	
EMAIL ADDRESS:	

3RD AUTHOR INFORMATION	
TITLE/RANK:	
FIRST NAME:	
LAST NAME:	
NATIONALITY:	
FULL MAILING ADDRESS:	
MOBILE NUMBER:	
EMAIL ADDRESS:	

Please copy as required – recommended not more than 5 authors.

Note bene:

Authors should be listed in the order they will appear on the programme and in the final manuscript. Unless specified otherwise, the first listed author is presumed to be the lead author having the major responsibility regarding content of the paper.

Annex 2

NATO and Partner Nations Overview with Geographical Abbreviations

NATO NATIONS			
ALBANIA	ALB	LITHUANIA	LTU
BELGIUM	BEL	LUXEMBOURG	LUX
BULGARIA	BGR	NORTH MACEDONIA	MKD
CANADA	CAN	MONTENEGRO	MNE
CROATIA	HRV	NORWAY	NOR
CZECH REPUBLIC	CZE	POLAND	POL
DENMARK	DNK	PORTUGAL	PRT
ESTONIA	EST	ROMANIA	ROU
FINLAND	FIN	SLOVAKIA	SVK
FRANCE	FRA	SLOVENIA	SVN
GERMANY	DEU	SPAIN	ESP
GREECE	GRC	SWEDEN	SWE
HUNGARY	HUN	THE NETHERLANDS	NLD
ICELAND	ISL	TURKEY	TUR
ITALY	ITA	UNITED KINGDOM	GBR
LATVIA	LVA	UNITED STATES	USA
EAPC/PARTNERSHIP for PEACE NATION (PfP)			
ARMENIA	ARM	MALTA	MLT
AUSTRIA	AUT	MOLDOVA	MDA
AZERBAIJAN	AZE	SERBIA	SRB
BOSNIA & HERZEGOVINA	BIH	SWITZERLAND*	CHE
GEORGIA	GEO	TAJIKISTAN	TJK
IRELAND	IRL	TURKMENISTAN	TKM
KAZAKHSTAN	KAZ	UKRAINE*	UKR
KYRGYZSTAN	KGZ	UZBEKISTAN	UZB
MEDITERRANEAN DIALOGUE NATION (MD)			
ALGERIA	DZA	MAURITANIA	MRT
EGYPT	EGY	MOROCCO	MAR
ISRAEL	ISR	TUNISIA	TUN
JORDAN	JOR		
ISTANBUL COOPERATION INITIATIVE (ICI) NATION LIST			
BAHRAIN	BHR	QATAR	QAT
KUWAIT	KWT	UNITED ARAB EMIRATES	ARE
PARTENERS ACROSS THE GLOBE (GP)			
AUSTRALIA*	AUS	KOREA (Republic Of)*	KOR
COLUMBIA	COL	MONGOLIA	MNG
JAPAN*	JPN	PAKISTAN	PAK
OTHER NATIONS (including CONTACT COUNTRIES)			
ARGENTINA	ARG	CHINA	CHN

BRAZIL	BRA	INDIA	IND
CHILE	CHL	SINGAPORE	SGP

* **Australia, Japan, Republic of Korea, Switzerland and Ukraine** are referred to as NATO STOs Science & Technology Enhanced Partnership Nations (STEP Nations).