2024 - NATO Chief Scientist Grants - Application Form

<mark>INTRODUCTION</mark>

(1) Before starting this application, I confirm I have read the latest version of the Administrative and Financial Procedures of the NATO Chief Scientist Grants Programme. You will find them **here**!

◉ Yes

(2) Before starting this application, I confirm I am aware of the 2025 NATO Office of the Chief Scientist S&T Themes:
Please make sure you check all boxes in order to advance in the survey

☐ **Deterrence & defence:** As set out most recently in the 2024 Washington Summit Declaration, NATO continues to enhance NATO's deterrence and defence against all threats and challenges, in all domains, and in multiple strategic directions across the Euro-Atlantic area to deny any potential adversary any possible opportunities for aggression. Still, we cannot discount the possibility of an attack against Allies' sovereignty and territorial integrity.

Initiatives supporting this S&T theme will address how Emerging and Disruptive Technologies may support NATO's deterrence and defence posture to remain credible, flexible, tailored and sustainable.

☐ **Diversity in Science, Technology, Engineering, and Mathematics (STEM) careers to ensure NATO's strategic advantage:** Seeking to adapt to the ongoing fourth industrial revolution, the scientific revolution that underlies it and the biotechnology-driven future beyond, the Alliance is cognizant that this adaptation is not independent of humanity's biological, social and physical realities. Against this background, the diversity of professionals supporting NATO's mission is key to address complex problems, provide alternative perspectives and innovative solutions for the future.

Initiatives supporting this S&T theme shall aim to enhance the diversity of professional backgrounds and schools of thought of the S&T community supporting NATO's mission and drive the development of technologies and innovations, critical for enhancing a competitive edge in defence. In addition, initiatives under this S&T theme will strive to address the integration of gender perspectives into military development and operations.

☐ **Emerging and Disruptive Technologies (EDT) support to Multi Domain Operations (MDO):** Technology and the science that underlies it provides the edge required by Alliance forces to respond to security, crisis response, and collective defence challenges. The nature of conflict is changing, driven in no small measure by advances in technology, tools, and scientific understanding. At its core, MDO refers to the push for NATO to orchestrate military activities across all operating domains (Maritime, Land, Air, Space, and Cyberspace) and environments. These actions are synchronized with non-military activities and enable the Alliance to create desired outcomes at the right time and place.

Initiatives supporting this S&T Theme will strive to address how EDTs will impact military operations increasing the speed, range and scale of threats as well as their damage potential.

☐ **Resilience from an S&T perspective:** In a NATO context, resilience is the individual and collective capacity to prepare for, resist, respond to and quickly recover from shocks and disruptions, and to ensure the continuity of the Alliance's activities.

Initiatives supporting this S&T theme will provide insights and guidance on how S&T can support Allies' national and collective resilience to fulfil NATO's three core tasks and safeguard the Alliance's nations, societies, and shared values.

☐ **S&T foresight:** Anticipating the future security environment better than potential adversaries is one way the Alliance has maintained a competitive advantage. S&T foresight is a critical aspect of this preparation. It does not attempt to predict the future in detail (a difficult task at best and impossible at worst). Instead, it seeks to provide a context for anticipating technology's potential development and impact on the Alliance and to increase the potential for S&T outcomes to enhance or threaten Alliance military operations.

Initiatives supporting this S&T theme will aim to provide insights in understanding how technology will develop in the future, thereby supporting NATO R&D portfolio management, innovation activities, and capability planning.

☐ **Other:** Applicants are welcomed to submit applications of any other topics that they may judge as being important for NATO according to the NATO S&T Strategy.

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Eligibility Criteria

The NATO Chief Scientist Grants programme is open to nationals from <u>NATO Allies</u> working for:

- Organizations affiliated with or part of a NATO Allied government.
- Organizations affiliated with research Institutes, NGOs or private or public companies etc. residing in a NATO country.

In addition, the applicants need to be resident in the NATO country where the institution they are working for is located.

(1) Are you a national of one of the following 32 countries (*Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Türkiye, United Kingdom, United States of America*)?

- ● Yes
- ○ No

(2) If yes, could you please specify which is your primary nationality?

[   ]

(3) Could you please indicate which organization type are you working for?

- ○ Organization affiliated with or part of a NATO Allied government.
- ○ Organization affiliated with research Institutes, NGOs or private or public companies etc. residing in a NATO country.
- ○ Other (please specify)

(4)Could you please specify the name of the organization you are working for?

[   ]

(5) Could you please specify the NATO Allied country where your institution is located?

[   ]

(6) Could you please confirm that you reside in the same country as the insitution you are working for?

- ○ Yes
- ○ No
- ○ Other (please specify

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Personal details of the project director:

Project directors are the principal organisers of the activity as identified in the application. The Project Director:

- Shall be employed by an institution in a NATO country;
- Shall be resident in the NATO country where their institution is located;
- Must hold the nationality of a NATO Ally.

(1) Title

(2) First Name

(3) Last Name:

(4) Gender:

○ Male

○ Female

○ Not specified

(5) Email address

(6) Phone Number:

(7) Current Job title:

(8) Mailing address of Project Director institution:

(9) Relevant employment history:

(10) Education and academic titles:

(11) Relevant publications:

(12) Research focus and expertise:

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Project proposal

In 2025 the NATO Chief Scientist Grants funding will be directed towards two types of initiatives:

- S&T Studies on Emerging Topics
- S&T Awareness Initiatives

S&T Studies on Emerging Topics
One of the primary purposes of the STO OCS is the dissemination to NATO Allies of timely, clear, and up-to-date scientific advice and technical information related to defence activities. On a yearly basis, the NATO STO OCS will publish a list of S&T themes and will invite applicants to submit research proposals on those topics. If selected, applicants will have to produce a research report on that topic.

S&T Awareness Initiatives
In a world where NATO S&T efforts continue to make great headways in improving the security of its Allies, the STO aims for an increased awareness of its S&T prowess and for an inclusive and diverse reinforcement of its community of experts.

As such, under the S&T Awareness Initiative, two type of activities are envisaged:
- Events and projects established to raise awareness of STO's efforts and mission; and,
- Initiatives that widen the STO scientific knowledge base, attracting under-represented talent from the STEM ecosystem to deliver cutting edge S&T.

(1) Could you please indicate which type of project are you applying for?

○ S&T Studies on Emerging Topics
○ S&T Awareness Initiatives

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S&T Studies Application

One of the primary purposes of the STO OCS is the dissemination to NATO Allies of timely, clear, and up-to-date scientific advice and technical information related to defence activities. On a yearly basis, the NATO STO OCS will publish a list of S&T themes and will invite applicants to submit research proposals on those topics. If selected, applicants will have to produce a research report on that topic.

(1) Project Title:

(2) Abstract (max 200 words):

(3) Please select from the list below the OCS S&T Theme that the project will be addressing:

○ **Deterrence & Defence:** As set out most recently in the 2024 Washington Summit Declaration, NATO continues to enhance NATO's deterrence and defence against all threats and challenges, in all domains, and in multiple strategic directions across the Euro-Atlantic area to deny any potential adversary any possible opportunities for aggression. Still, we cannot discount the possibility of an attack against Allies' sovereignty and territorial integrity.

Initiatives supporting this S&T theme will address how Emerging and Disruptive Technologies may support NATO's deterrence and defence posture to remain credible, flexible, tailored and sustainable.

○ **Diversity in Science, Technology, Engineering, and Mathematics (STEM) careers to ensure NATO's strategic advantage:** Seeking to adapt to the ongoing fourth industrial revolution, the scientific revolution that underlies it and the biotechnology-driven future beyond, the Alliance is cognizant that this adaptation is

not independent of humanity's biological, social and physical realities. Against this background, the diversity[1] of professionals supporting NATO's mission is key to address complex problems, provide alternative perspectives and innovative solutions for the future.

Initiatives supporting this S&T theme shall aim to enhance the diversity of professional backgrounds and schools of thought of the S&T community supporting NATO's mission and drive the development of technologies and innovations, critical for enhancing a competitive edge in defence. In addition, initiatives under this S&T theme will strive to address the integration of gender perspectives into military development and operations.

- **Emerging and Disruptive Technologies (EDT) support to Multi Domain Operations (MDO):** Technology and the science that underlies it provides the edge required by Alliance forces to respond to security, crisis response, and collective defence challenges. The nature of conflict is changing, driven in no small measure by advances in technology, tools, and scientific understanding. At its core, MDO refers to the push for NATO to orchestrate military activities across all operating domains (Maritime, Land, Air, Space, and Cyberspace) and environments. These actions are synchronized with non-military activities and enable the Alliance to create desired outcomes at the right time and place.

Initiatives supporting this S&T Theme will strive to address how EDTs will impact military operations increasing the speed, range and scale of threats as well as their damage potential.

- **Resilience from an S&T perspective:** In a NATO context, resilience is the individual and collective capacity to prepare for, resist, respond to and quickly recover from shocks and disruptions, and to ensure the continuity of the Alliance's activities.

Initiatives supporting this S&T theme will provide insights and guidance on how S&T can support Allies' national and collective resilience to fulfil NATO's three core tasks and safeguard the Alliance's nations, societies, and shared values.

- **S&T foresight:** Anticipating the future security environment better than potential adversaries is one way the Alliance has maintained a competitive advantage. S&T foresight is a critical aspect of this preparation. It does not attempt to predict the future in detail (a difficult task at best and impossible at worst). Instead, it seeks to provide a context for anticipating technology's potential development and impact on the Alliance and to increase the potential for S&T outcomes to enhance or threaten Alliance military operations.

Initiatives supporting this S&T theme will aim to provide insights in understanding how technology will develop in the future, thereby supporting NATO R&D portfolio management, innovation activities, and capability planning.

- **Other:** Applicants are welcomed to submit applications of any other topics that they may judge as being important for NATO according to the NATO S&T Strategy.

(4) How does the proposal contribute to the selected OCS S&T theme? (max 500 words)

(5) Please describe the scientific merit of the proposal (max 500 words).
Include a description of the research or activity and what makes it innovative. Outline the proposed methods and the expected results.

(6) Please outline the relevance and potential contribution to NATO of the proposed research or activity (max 500 words).
Include a description of the issues that will be addressed and the potentially transformational impact for NATO. We would suggest that you read NATO's Strategic Concept.

(7) What risks could make the proposal fail to deliver its expected results?

(8) How much money would you need to accomplish the project (in EUR)?

(9) Could you please describe a rough breakdown estimate of the full costs (in EUR)?

Category	Amount in EUR
Personnel	
Travel	
Facilities	
Materials	
Other	

(10) When in 2025 will you be able to deliver the final results for the project?

(11) Taking as a reference the date that you indicated above, could you please indicate when would you be able to showcase a middle project delivery milestone and what would that middle project delivery milestone look like?

(12) Could you please provide details regarding other potential team members? *Please limit the information to: Name/Last Name/ Academic Background/ Professional Expertise/ Nationality*

(13) Any additional information?

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[ ]

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[ ]

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Include a description of the issues that will be addressed and the potentially transformational impact for NATO. We would suggest that you read NATO's Strategic Concept.

[ ]

(7) What risks could make the proposal fail to deliver its expected results?

[ ]

(8) When in 2025 will the S&T Awareness initiative take place and how long will it last?

[ ]

(9) Where will the S&T Awareness initiative take place?

[ ]

(10) Could you please provide a draft of the S&T Awareness initiative programme?

(11) How will the organizers inform the public about the S&T Awareness initiative?

(12) How much money would you need to accomplish the S&T Awareness initiative (in EUR)?

(13) Could you please describe a rough breakdown estimate of the full costs (in EUR)?

Category	Amount in EUR
Personnel	
Travel	
Facilities	
Materials	
Other	

(14) Taking as a reference the date that you indicated above, could you please indicate when would you be able to showcase the final version of the event programme and the participants list?

(15) Could you please provide details regarding other potential team members? *Please limit the information to: Name/Last Name/ Academic Background/ Professional Expertise/ Nationality*

(16) Any additional information?