



# WOMEN & GIRLS IN SCIENCE 26

## STEM researcher? Share your knowledge with NATO

*Join a challenge geared towards impact in security  
and grow as a professional!*

The **NATO Science & Technology Organization (STO)** is proud to announce the third edition of the Women & Girls in Science (WGS) Challenge. This annual initiative aims to inspire young women to pursue careers in Science, Technology, Engineering and Mathematics (STEM) by providing a platform for them to share innovative research ideas that impact global security and defence.

### **About the challenge:**

The WGS26 Challenge calls for applications from young women who are university students (bachelor, master, PhD), early career researchers, or simply interested in starting a career in STEM and/or defence. Proposals should address one of five prescribed foresight scenarios, where a critical aspect of modern world's resilience is being tested.

### **How to apply?**

Applicants must be young women aged 18-35 years, affiliated with a university and nationals of NATO countries.

Applications must be submitted through the STO website (<https://www.sto.nato.int/>) guided by the following question: "How would your research idea provide a solution for one of the five fictional foresight scenarios?"

### **What happens after applying?**

NATO STO experts will evaluate the proposals and select 12 finalists to present their proposals at the Grand Finale, on 9 June 2026 at NATO HQ.

### **Awards:**

In addition to receiving formal recognition from the NATO Chief Scientist, the winners will gain access to an exceptional range of opportunities — including visits to the Centre for Maritime Research and Experimentation and entry into a community of world-class experts across the STO, NATO, and beyond.

All information can be found on the STO website (<https://www.sto.nato.int>) and any queries can be sent to [info@natostowgs.com](mailto:info@natostowgs.com).

# Introducing the five scenarios

The five foresight scenarios explore fictional “A Day Without...” disruptions that challenge key pillars of modern resilience. Each scenario imagines a sudden shock—removing access to space, power, antibiotics, connectivity, or human presence on the ground—to expose hidden dependencies and vulnerabilities. By outlining the situation, its impacts, and the core problem, these narratives support thinking on future risks and inspire research to strengthen NATO’s preparedness.

## A Day Without... Space

A chain reaction in orbit disables most low-Earth-Orbit satellites, heavily disrupting communications and space-based monitoring. Global operations—from defence to transport and emergency services—are disrupted. The challenge: develop systems that can function during space disruptions.

## A Day Without... Power

A cascading grid failure causes a 24-hour blackout during extreme winter conditions. Heating, healthcare, communications, and transport are severely affected, creating military information gaps. The challenge: design decentralised, resilient energy and alternative power solutions.

## A Day Without... Antibiotics

Geopolitical tensions halt supplies of key antibiotic ingredients, leaving several NATO Nations unable to treat common infections. Health risks rise, food production is threatened, and public fear spreads. The challenge: accelerate antibiotic alternatives and strengthen biomedical supply chains.

## A Day Without... Internet / Connectivity

Subsea cable damage cuts major data routes, forcing traffic onto limited satellite systems. Digital services—from banking to military operations—stall. The challenge: improve subsea infrastructure resilience and maintain essential functions during connectivity loss.

## A Day Without... Boots on the Ground

Exposure of a nuclear waste site makes human ground operations impossible due to radiation. All missions rely on autonomous systems. The challenge: develop robust robotic platforms able to operate safely in extreme environments with remote human oversight.