



### NOTE BY THE TECHNICAL SECRETARIAT

#### THE OPCW ARTIFICIAL INTELLIGENCE RESEARCH CHALLENGE

##### BACKGROUND

1. The OPCW and its Scientific Advisory Board (SAB) have been closely monitoring recent developments in artificial intelligence (AI) and considering both the risks they may pose and the opportunities they may offer. AI is a transformative technology with applications across various disciplines relevant to the Chemical Weapons Convention (the Convention), including robotics, cloud laboratories, drones, and biotechnology. The SAB recognises that AI could offer many benefits to the work of the Organisation, helping it achieve its mission to rid the world of chemical weapons.
2. Following the success of the pioneering OPCW Plant Biomarker Challenge, the Technical Secretariat (the Secretariat) wishes to inform Member States that a new research challenge, the “AI Challenge”, which is funded by the European Union and the United Kingdom of Great Britain and Northern Ireland, has recently been launched. Proposals from research teams in all OPCW Member States are strongly encouraged.

##### THE CHALLENGE

3. The objective of the AI Challenge is to identify how AI can be used to enhance the capabilities of the Organisation and contribute to ensuring that it is best equipped and prepared to address current and future challenges.
4. The OPCW is seeking proposals from researchers and scientists across its Member States that describe tangible approaches for leveraging AI to enable the Organisation to enhance its effectiveness, efficiency, and preparedness. The proposed AI solutions should build capabilities specifically relating to implementation of the Convention, such as document analysis to identify emerging threats or trends, data mining in chemical forensics, medical countermeasure design, and open-source data analysis to corroborate reports of chemical weapons use.

##### REQUIREMENTS FOR SUBMITTED PROPOSALS

5. Entering the challenge requires only a written proposal that clearly communicates how AI can be used to bolster existing capabilities within the OPCW, or establish new ones. **It should be noted that the proposed AI solutions should relate to implementation of the Convention and that proposals related to enhancing governance or business processes at the OPCW will not be considered under this call.**



6. There are no restrictions on the type of AI system proposed or the aspect of the Convention the model will be applied to. However, proposals should provide enough detail to indicate how the AI solution will be developed and ultimately what benefit it is meant to give.
7. The proposal should set out the project objectives, scope, methodology, approach, and implementation plan. Any risks should be identified, mitigations proposed, and limitations and constraints highlighted. The proposal should be supported by a selection of relevant scientific references.
8. Submissions from collaborating scientists and research groups are encouraged. A lead institution or investigator should be indicated since contracts may be awarded only to a single institution.

#### **SELECTION PROCEDURE**

9. All submissions will be evaluated against set criteria by the AI Challenge Technical Evaluation Team, made up of qualified Secretariat staff and members of the SAB. Four proposals will be awarded a fixed-price contract of up to EUR 65,000 with a duration of one year.

#### **SUBMISSION INFORMATION**

10. **The deadline for proposal submission is 16:00 CET on 9 August 2024.** Interested organisations, institutions, or companies should contact OPCW Procurement to receive the submission instruction documents. When requesting, please include the RFP reference number “OSP-2024 – AI Challenge Grant” in all enquiries. Formal endorsements from Member States are not required. An acknowledgement will be provided upon receipt of each submission.
11. Additional information and contact details for OPCW Procurement can be found on the OPCW webpage dedicated to this AI Challenge (<https://www.opcw.org/aichallenge>).
12. Late submissions and proposals that do not meet the requirements outlined in the submission instructions and the statement of work will not be considered.